



Dominion[®]

**Rebuttal Testimony,
Exhibits and Schedules of
Virginia Electric and Power
Company**

Before the State Corporation
Commission of Virginia

Surry-Skiffes Creek 500 kV
Transmission Line

Skiffes Creek-Wheaton 230 kV
Transmission Line

Skiffes Creek 500 kV-230 kV-115 kV
Switching Station

Application No. 257

Case No. PUE-2012-00029

Filed: March 14, 2013

PUBLIC VERSION

VOLUME III OF VI

Revised Study #	Study Year	Units Retired ⁶	Critical System Condition ⁵	Proposed Projects Included	Study
Alternative Analysis^{2,3,4}					
<u>Alternatives Studied</u>					
500 kV Proposed - Surry to Skiffes Creek 500 kV Overhead					
Alternative A - Single Circuit 230 kV UG Line based on 1000 MVA					
Alternative B - Double Circuit 230 kV UG Line based on 1000 MVA					
1	2015	All retirements	No CSC	Base ⁷	500 kV Proposed ⁹
2	2015	All retirements	SU2	Base ⁷	500 kV Proposed ⁹
3	2015	All retirements	No CSC	Base ⁷ + Project	500 kV Proposed ⁹
4	2015	All retirements	SU2	Base ⁷ + Project	500 kV Proposed ⁹
5	2015	All retirements	SU1	Base ⁷	230 kV Alternatives ⁹
6	2015	All retirements	No CSC	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV Alternatives ⁹
7	2015	All retirements	SU1	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV Alternatives ⁹
8	2021	All retirements	No CSC	Base ⁷	500 kV Proposed
9	2021	All retirements	SU2	Base ⁷	500 kV Proposed
10	2021	All retirements	No CSC	Base ⁷ + Project	500 kV Proposed
11	2021	All retirements	SU2	Base ⁷ + Project	500 kV Proposed
12	2021	All retirements	SU1	Base ⁷	230 kV Alternatives
13	2021	All retirements	No CSC	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV Alternatives
14	2021	All retirements	SU1	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV Alternatives
Generation Alternative Analysis^{2,3,4}					
<u>Special Study Condition</u>					
Yorktown Unit 3 to be used as proxy generation to study two 230 kV UG alternatives					
<u>Alternatives Studied</u>					
Alternative A - Single Circuit 230 kV UG Line based on 1000 MVA					
Alternative B - Double Circuit 230 kV UG Line based on 1000 MVA per circuit					
15	2015	All retirements	No CSC	Base ⁷	230 kV + Generation ^{8,9}
16	2015	All retirements	SU1	Base ⁷	230 kV + Generation ^{8,9}
17	2015	All retirements	No CSC	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV + Generation ^{8,9}
18	2015	All retirements	SU1	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV + Generation ^{8,9}
19	2021	All retirements	No CSC	Base ⁷	230 kV + Generation ⁸
20	2021	All retirements	SU1	Base ⁷	230 kV + Generation ⁸
21	2021	All retirements	No CSC	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV + Generation ⁸
22	2021	All retirements	SU1	Base ⁷ + Alt. A/Alt. B/Alt. C ¹	230 kV + Generation ⁸
Analysis of Proposed 500 kV Without Retirements^{2,3,4}					
<u>Alternatives Studied</u>					
500 kV Proposed - Surry to Skiffes Creek 500 kV Overhead					
23	2021	No retirements	No CSC	Base ⁷	500 kV Proposed
24	2021	No retirements	SU2	Base ⁷	500 kV Proposed
25	2021	No retirements	No CSC	Base ⁷ + Project	500 kV Proposed
26	2021	No retirements	SU2	Base ⁷ + Project	500 kV Proposed

Notes This matrix of studies is the same as that provided in Company Witness Peter Nedwick's Rebuttal Schedule 2, without the notes. See Company Witness Nedwick's Rebuttal Schedule 2 for the notes associated with this matrix.



PUE-2012-00029

**2013 Power Flow Cases
Requested by Hearing Examiner**

Additional Analyses Conducted

- **500 kV Proposed - Surry to Skiffes Creek**
500 kV Overhead
- **Alternative A – Hybrid Single Circuit 230 kV**
UG Line based on 1000 MVA
- **Alternative B – Hybrid Double Circuit 230 kV**
UG Line based on 1000 MVA/circuit
- **Alternative C - Rebuild of Lines #214 and #263**



Additional Analyses Conducted

- **Alternative A – Hybrid Single Circuit 230 kV UG Line based on 1000 MVA Plus Generation**
- **Alternative B – Hybrid Double Circuit 230 kV UG Line based on 1000 MVA/circuit Plus Generation**
- **Alternative C - Rebuild of Lines #214 and #263 Plus Generation**
- **Stand Alone Generation – Add generation to Yorktown**



Assumptions

- Consistent with Hearing Examiner's January 30 Ruling as set forth in Rebuttal Schedule 2 of Company Witness Nedwick's Rebuttal Testimony

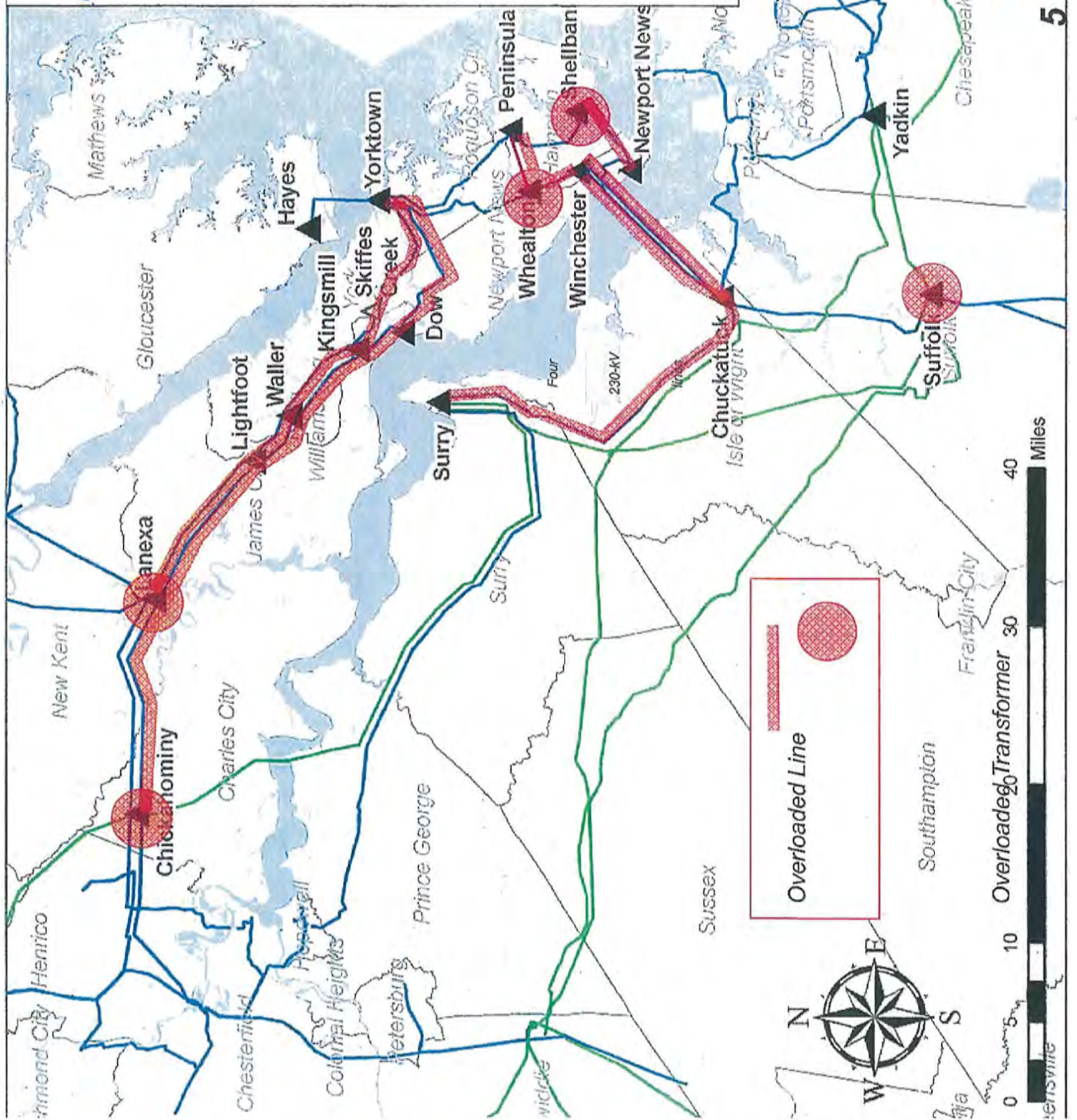


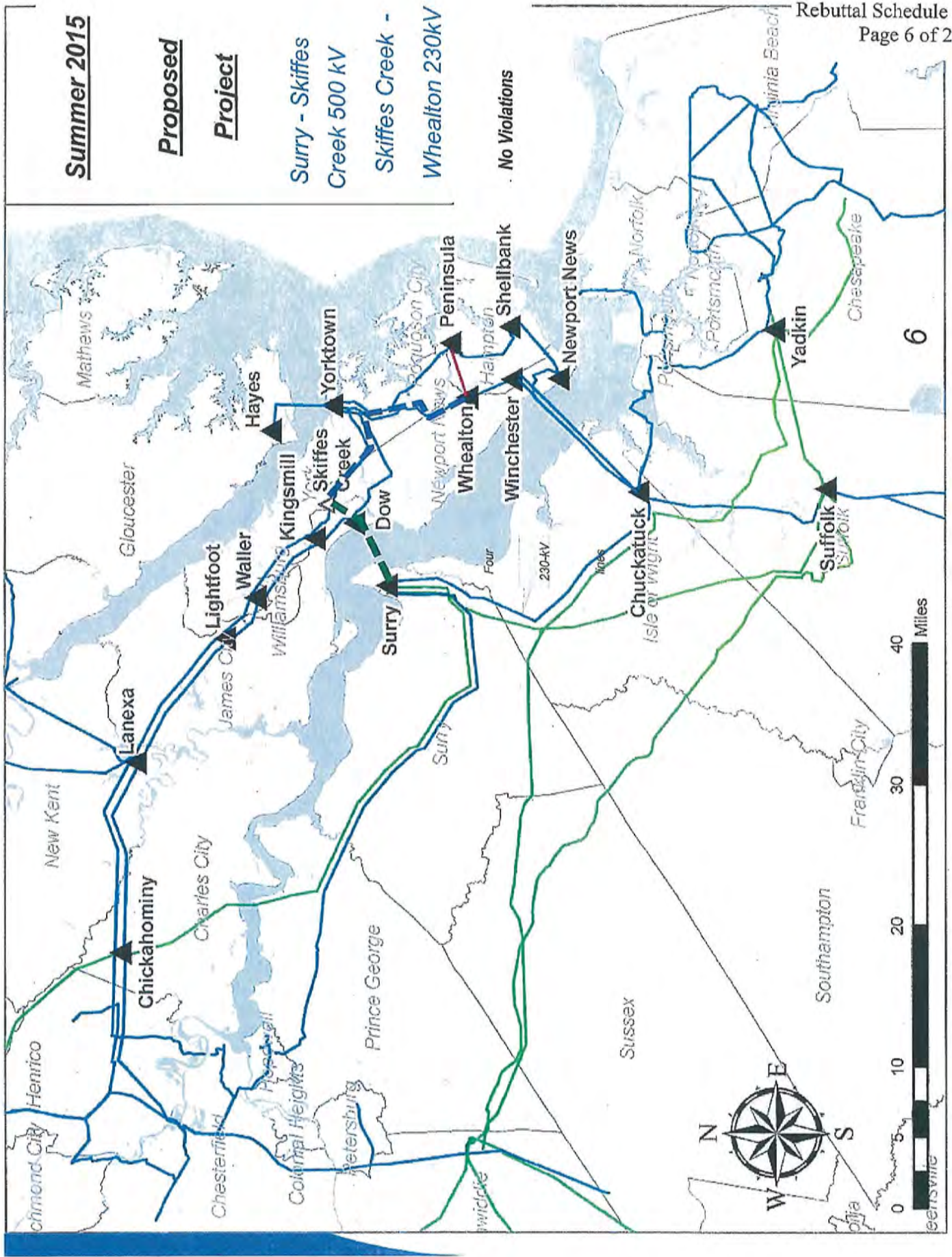
Summer 2015

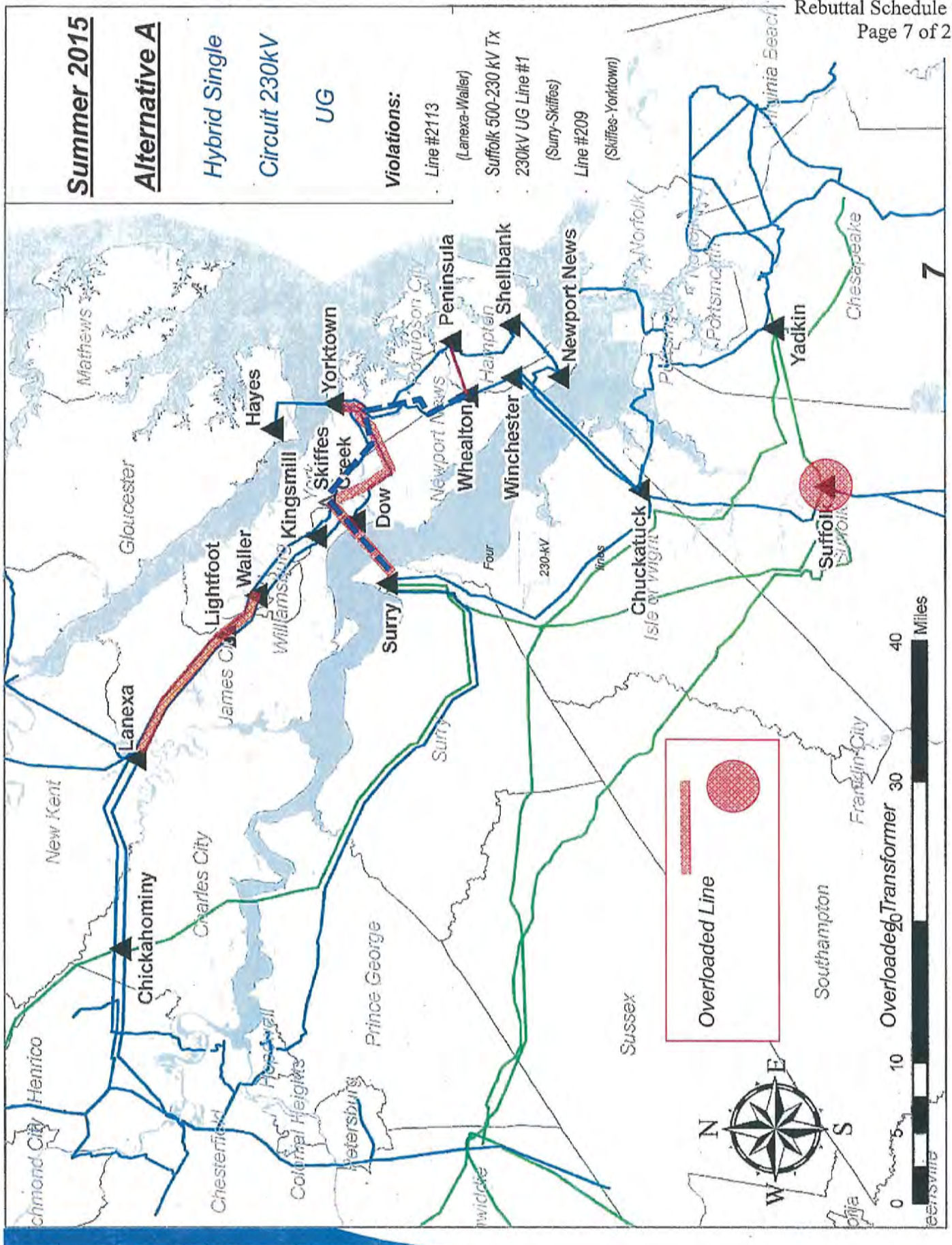
Generation Retirements (Basecase)

Overloads:

- Line #2113 (Lanexa-Waller)
- Line #2102 (Chickahominy - Waller)
- Line #214 (Surry - Winchester)
- Line #263 (Chuckatuck - Nprt. News)
- Line #209 (Waller - Yorktown)
- Line #285 (Waller- Yorktown)
- Suffolk 500-230 kV Tx
- Line #34 (Lanexa-Yorktown)
- Line #99 (Peninsula - Wheelton)
- Wheelton 230-115 kV Tx
- Shellbank 230-115 kV Tx
- Line #234 (Wheelton - Winchester)
- Line #261 (Newport News - Shellbank)
- Chickahominy 500-230 kV Tx
- Lanexa 230-115 kV Tx
- Line #292 (Yorktown - Wheelton)
- Line #289 (Chuckatuck - Suffolk)
- Line #2076 (Birchwood - No. Neck)







Summer 2015

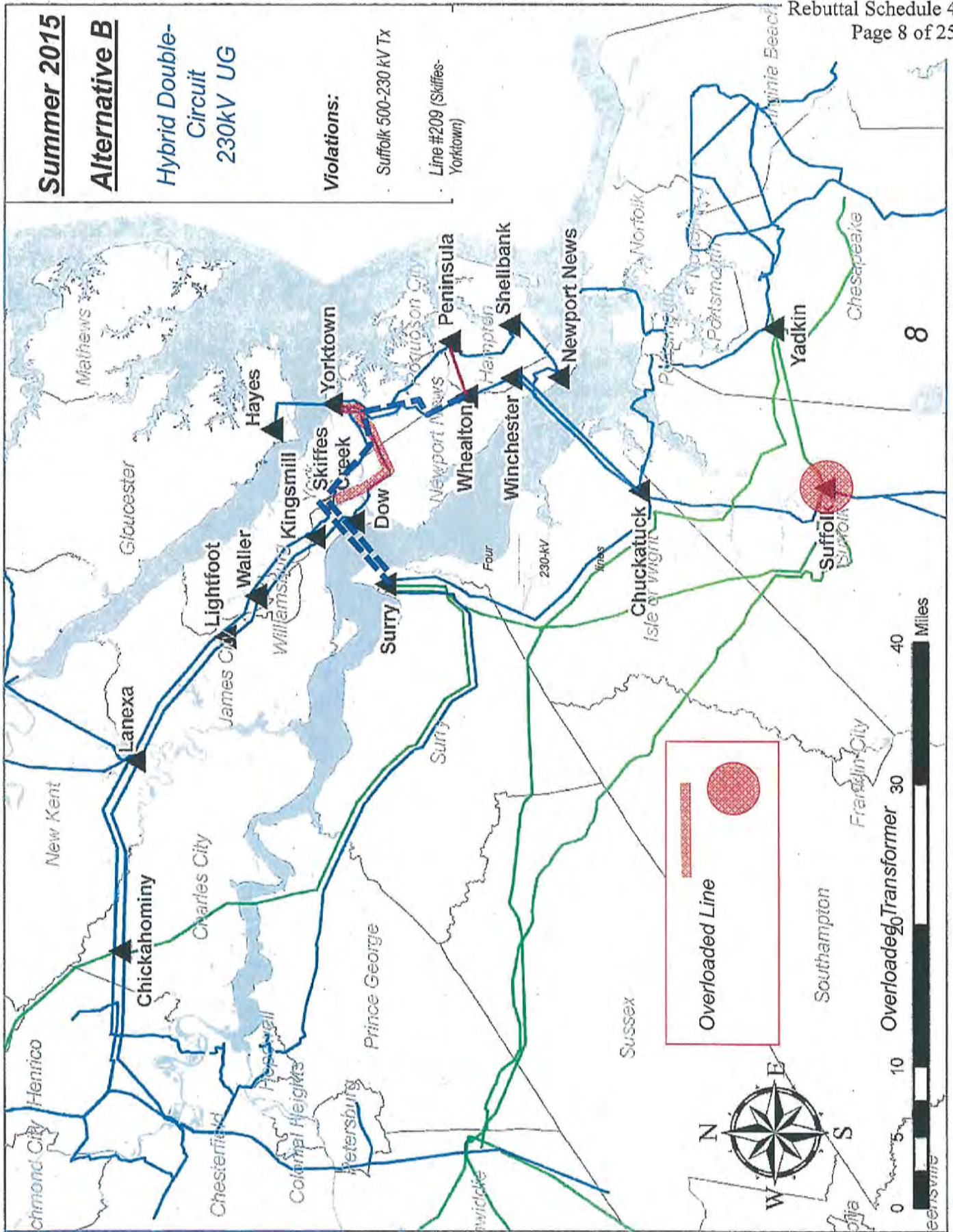
Alternative B

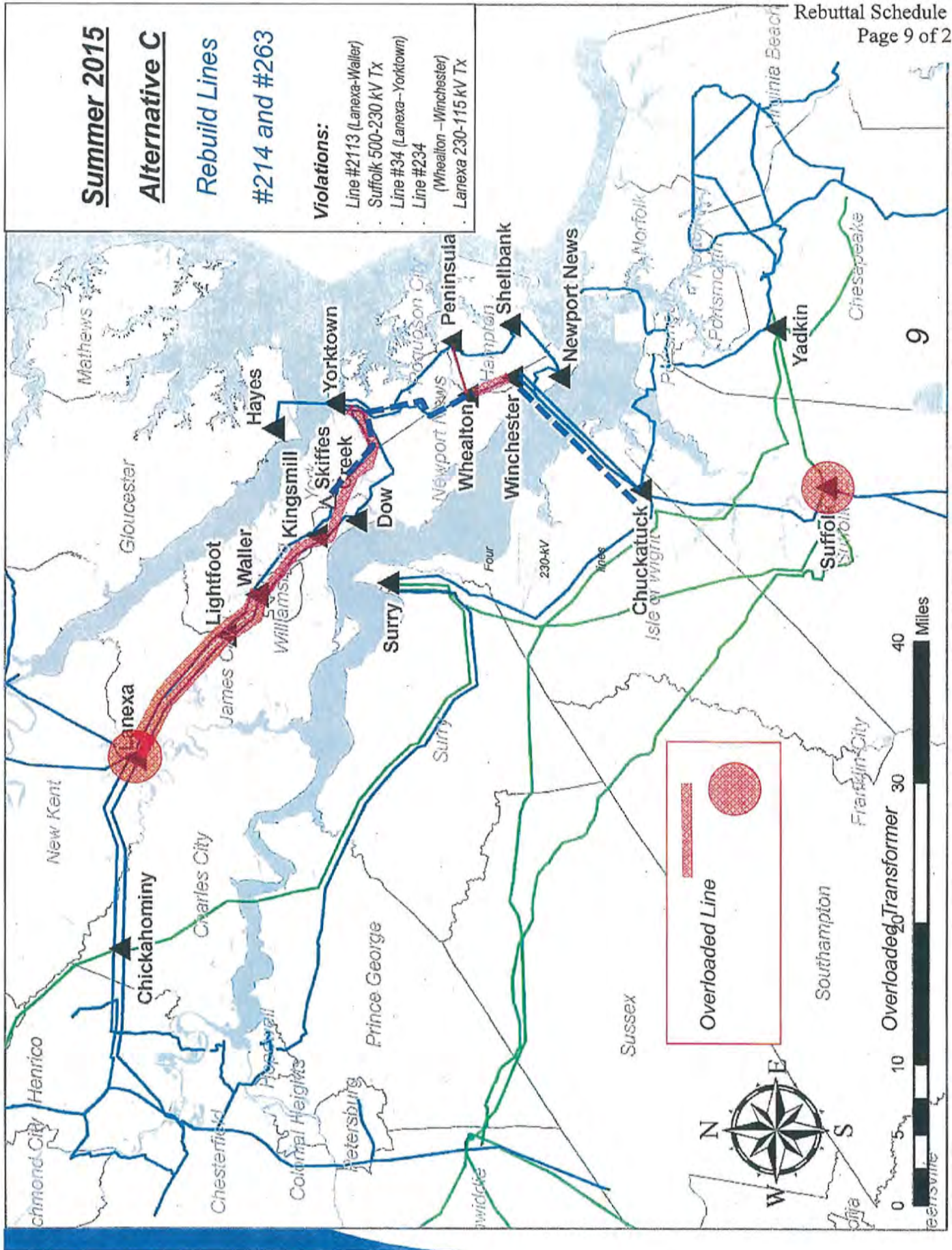
Hybrid Double-
Circuit
230kV UG

Violations:

Suffolk 500-230 kV Tx

Line #209 (Skiffes-
Yorktown)

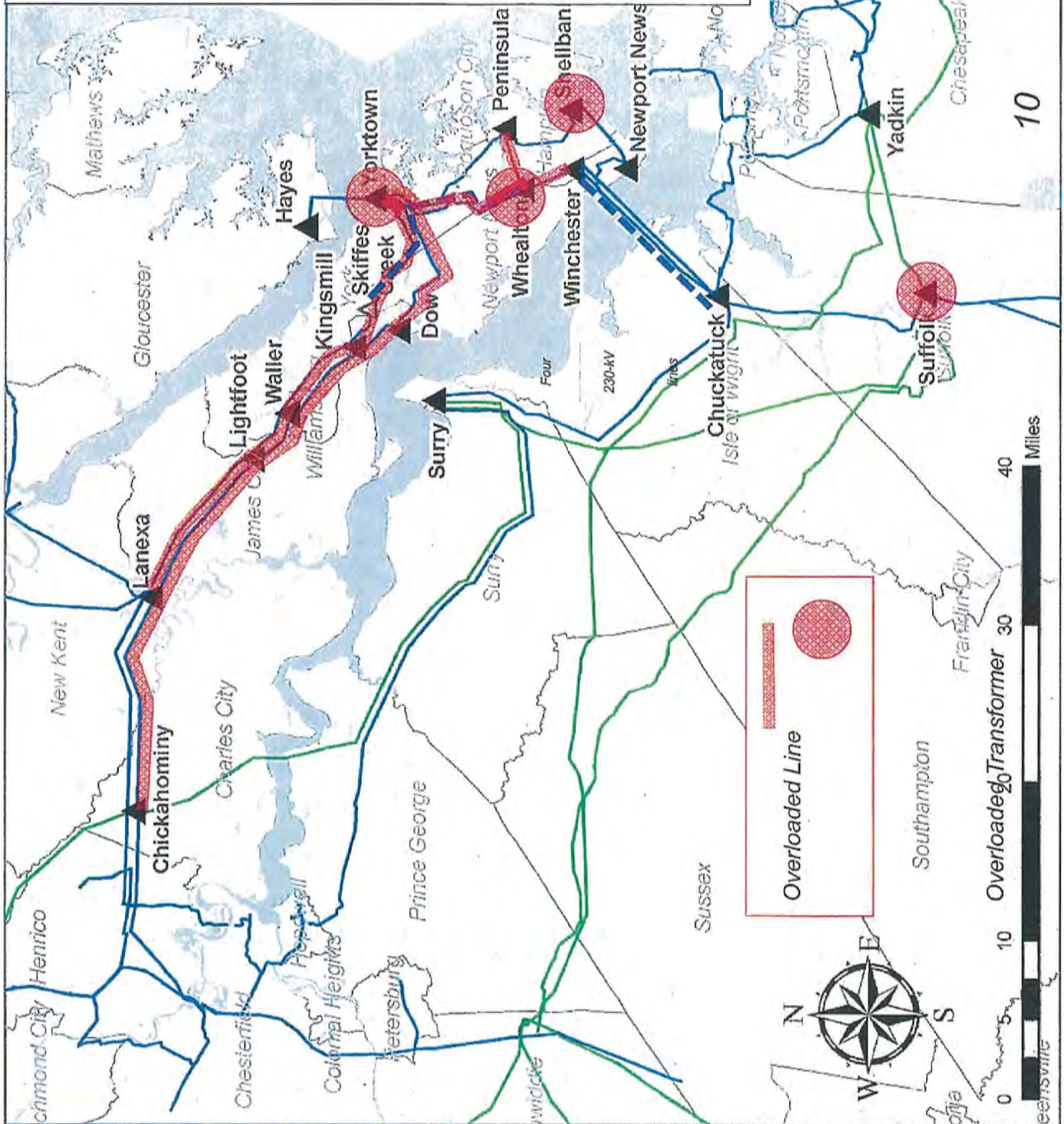




#214 and #263

Violations:

- Line #2113 (Lanexa-Waller)
- Line #2102 (Chic.- Waller)
- Line #209 (Waller - Yorktown)
- Line #285 (Waller - Yorktown)
- Suffolk 500-230 kV Tx
- Line #199 (Peninsula - Wheelton)
- Wheelton 230-115 kV Tx
- Shellbank 230-115 kV Tx
- Line #234
(Wheelton - Winchester)
- Line #292 (Yorktown - Wheelton)
- Yorktown 230-115 kV Tx



Summary of Transmission Violations¹

Deficiency	Basecase	Alternate A	Alternate B	Alternate C	Alternate Ca	Proposed Project
Line # 2113 (Lanexa-Waller)	Yes	Yes		Yes	Yes	
Line 2102 (Chickahominy - Waller)	Yes			Yes	Yes	
Line #214 (Surry - Winchester)	Yes					
Line #263 (Chuckatuk - Newport News)	Yes					
Line #209 (Waller-Yorktown)	Yes			Yes	Yes	
Line #285 (Waller- Yorktown)	Yes				Yes	
Suffolk 500-230 kV Tx	Yes	Yes	Yes	Yes	Yes	
230 kV UG Line #1 (Surry - Skiffes)		Yes				

1. "Yes" means one or more NERC Reliability Violations in 2015 and/or 2021



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Summary of Transmission Violations¹

Deficiency	Basecase	Alternate A	Alternate B	Alternate C	Alternate Ca	Proposed Project
Line # 34 (Lanexa--Yorktown)	Yes			Yes		
Line # 58 (Lanexa--Yorktown)	Yes			Yes		
Line #209(Skiffes -- Yorktown)		Yes	Yes			
Line #34(Skiffes -- Yorktown)			Yes			
Line #99 (Peninsula -- Whealton)	Yes			Yes	Yes	Yes
Whealton 230-115 kV Tx	Yes	Yes	Yes	Yes	Yes	
Shellbank 230-115 kV Tx	Yes			Yes	Yes	
Line #234 (Whealton --Winchesters)	Yes			Yes	Yes	
Line #261(Newport News -- Shellbank)	Yes					

1. "Yes" means one or more NERC Reliability Violations in 2015 and/or 2021



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Summary of Transmission Violations¹



Deficiency	Basecase	Alternate A	Alternate B	Alternate C	Alternate Ca	Proposed Project
Chickahominy 500-230 kV Tx	Yes					
Lanexa 230-115 kV Tx	Yes			Yes		
Line #292 (Yorktown – Whealton)	Yes			Yes		
Line #289 (Chuckatuk – Suffolk)	Yes					
Line #2076 (Birchwood – Northern Neck)	Yes					
Yorktown 230-115 kV Tx					Yes	
Skiffes Creek 230 kV SVC				Yes		

1. "Yes" means one or more NERC Reliability Violations in 2015 and/or 2021

Basecase: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	1	No CSC	0	39	350	21
2015	2	SU2	0	62	N/A	N/A
2015	5	SU1	1	93	N/A	N/A
2021	8	No CSC	0	55	559	43
2021	9	SU2	0	49	N/A	N/A
2021	12	SU1	0	184	N/A	N/A

Proposed Project: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	3	No CSC	0	0	0	0
2015	4	SU2	0	0	N/A	N/A
2021	10	No CSC	0	0	2	0
2021	11	SU2	0	0	N/A	N/A

Alternative A: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1.1 & Tower Line)	D
2015	6A	No CSC	0	0	9	3
2015	7A	SU1	0	3	N/A	N/A
2021	13A	No CSC	0	9	113	7
2021	14A	SU1	0	1	N/A	N/A

Alternative B: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	6B	No CSC	0	1	4	0
2015	7B	SU1	0	2	N/A	N/A
2021	13B	No CSC	0	1	12	0
2021	14B	SU1	0	0	N/A	N/A

Alternative C: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	6C	No CSC	0	5	122	8
2015	7C	SU1	0	70	N/A	N/A
2021	13C	No CSC	0	12	182	13
2021	14C	SU1	0	39	N/A	N/A

Alternative Ca – Rebuild of Line #214 and #263 (Open L 34 & 58 System Reconfiguration): Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	6Ca	No CSC	0	3	84	8
2015	7Ca	SU1	0	5	N/A	N/A
2021	13Ca	No CSC	0	10	149	13
2021	14Ca	SU1	0	4	N/A	N/A

230 kV Alternative A + Generation: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	17A	No CSC	0	0	0	0
2015	18A	SU1	0	0	N/A	N/A
2021	21A	No CSC	0	0	0	0
2021	22A	SU1	0	0	N/A	N/A

Alternative requires 1,008 MW in 2015 and 1,449 MW (2 units min, 1 unit $\geq$ 87 MW) in 2021



230 kV Alternative B + Generation: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	17B	No CSC	0	0	0	0
2015	18B	SU1	0	0	N/A	N/A
2021	21B	No CSC	0	0	0	0
2021	22B	SU1	0	0	N/A	N/A

Alternative requires 159 MW in 2015 and 551 MW (2 units min, 1 unit $\geq$ 27 MW) in 2021

230 kV Alternative C + Generation: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	17C	No CSC	0	0	0	0
2015	18C	SUI	0	0	N/A	N/A
2021	21C	No CSC	0	0	0	0
2021	22C	SUI	0	0	N/A	N/A

Alternative requires 552 MW (2 units min, 1 unit $\geq$ 56 MW) in 2015
and 505 MW (2 units min, 1 unit $\geq$ 139 MW) in 2021

Stand-Alone Generation Option: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2015	15	No CSC	0	0	0	0
2015	16	SU1	0	0	N/A	N/A
2021	19	No CSC	0	0	0	0
2021	20	SU1	0	0	N/A	N/A

Alternative requires 620 MW (2 units min; lose 1 unit & maintain $\geq$ 295 MW) in 2015 and 620 MW (2 units min; lose 1 unit & maintain $\geq$ 295 MW) in 2021

Proposed Project Without Retirements: Number of Thermal Violations

Study Year	Study #	Critical System Condition	NERC TPL Category Tests			
			A (N-0)	B (N-1)	C (N-1-1 & Tower Line)	D
2021	23	No CSC	0	0	2	11
2021	24	SU2	0	4	N/A	N/A
2021	25	No CSC	0	0	0	0
2021	26	SU2	0	0	N/A	N/A



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CATEGORY B

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:48 < UDF000.0 >
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:44 <BRV003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012 GEN RET
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Subsys.File X:\S2021\drv.sub
Monit.File X:\S2021\vapsys.mon
Contin.File X:\S2021\vapsys.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 94.0 % of nominal rating

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	98.8	71.0	89.0	111.1	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	97.3	69.5	89.0	109.4	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	95.2	71.0	89.0	107.0	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	95.2	71.0	89.0	107.0	620	314396 3NNEWS58 115 314411 3TOAN058 115 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	94.9	71.0	89.0	106.6	371	314214 6CHCKRAHM 230 314390 6LIGH285 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	94.6	71.0	89.0	106.2	614	314391 6LIGH209 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.7	69.5	89.0	105.3	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.7	69.5	89.0	105.3	620	314396 3NNEWS58 115 314411 3TOAN058 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.3	69.5	89.0	104.9	371	314214 6CHCKRAHM 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.0	69.5	89.0	104.5	614	314391 6LIGH209 230 314415 6WALR209 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	91.1	71.0	89.0	102.4	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	LN	243.7	142.7	239.0	102.0	1098	314766 6LOUTSA 230 314777 6S ANNA 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	89.8	71.0	89.0	100.8	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	89.6	69.5	89.0	100.7	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	89.6	71.0	89.0	100.6	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	89.3	71.0	89.0	100.4	813	314538 6SUNRY 230 314540 6POOLSVL 230 1
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	LN	239.1	142.7	239.0	100.0	401	314232 6NO ANNA 230 314766 6LOUTSA 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	88.6	71.0	89.0	99.5	643	314421 6WINCHST 230 314540 6POOLSVL 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	88.5	71.0	89.0	99.4	604	314384 3KINGS M 115 314411 3TOAN058 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	88.2	69.5	89.0	99.1	613	314390 6LIGH285 230 314413 6WALR285 230 1
314387	3LANEXA	115	314377	3DOW 34	115	LN	LN	88.1	71.0	89.0	98.9	515	314296 6PENNTMAN 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	88.1	69.5	89.0	98.9	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.8	69.5	89.0	98.6	813	314538 6SUNRY 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.0	69.5	89.0	97.8	643	314421 6WINCHST 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.0	69.5	89.0	97.7	604	314384 3KINGS M 115 314411 3TOAN058 115 1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314387	31ANEXA	115	314377	3DOW 34	115	LN	LN	86.8	71.0	89.0	97.5	514	314296 6PENNIAN 230 314386 6KINGS M 230 1
304223	3ROCKYMT115T	115	314554	3BTLEBRO	115	LN	LN	91.7	16.0	94.0	97.5	846	314559 3CAROLNA 115 314578 3HORNRTN 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.5	69.5	89.0	97.2	515	314296 6PENNIAN 230 314415 6WALR209 230 1
314072	6PL VIEW	230	314925	8PL VIEW	500	TR	TR	960.7	828.8	993.6	96.7	307	314171 6BRAMBL 230 314933 8BRAMBLETON 500 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.2	69.5	89.0	95.8	514	314296 6PENNIAN 230 314386 6KINGS M 230 1
314387	31ANEXA	115	314377	3DOW 34	115	LN	LN	85.2	71.0	89.0	95.8	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	85.2	57.7	89.0	95.7	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314387	31ANEXA	115	314377	3DOW 34	115	LN	LN	84.8	71.0	89.0	95.3	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314513	3YADKIN	115	314461	3DEEPC46	115	LN	LN	342.1	227.3	360.0	95.0	688	314449 6CHESAPE 230 314514 6YADKIN 230 1
314212	6FRRIVER	230	314222	6HANOVER	230	LN	LN	751.7	547.0	797.0	94.3	285	314138 6MINE RD 230 314197 6LDYSMTL 230 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:47 < UDF000.0 >
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:45 <VOV003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET
Case.File X:\S2015\sum 2015(2013LF)_base_wpre.sav
Subsys.File X:\S2021\drv.sub
Monit.File X:\S2021\vapsys.mon
Contn.File X:\S2021\Vapsys.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VolcRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	**	Base Case **
315008	IPOSSM6A	18.0	345	353	0.9260	0.9362	0.9300	1.0700	0.8894	0.9830	L	61	314011 3BULLRUN 115 314111 3HARISON 115 1
315009	IPOSSM6B	18.0	345	353	0.9260	0.9362	0.9300	1.0700	0.8894	0.9830	L	61	314011 3BULLRUN 115 314111 3HARISON 115 1
314014	3CANNONB	115.0	345	353	0.9038	1.0016	0.9300	1.0700	0.9515	1.0517	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9040	1.0009	0.9300	1.0700	0.9509	1.0510	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MICR197	115.0	345	353	0.9040	1.0005	0.9300	1.0700	0.9505	1.0506	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9039	1.0010	0.9300	1.0700	0.9510	1.0511	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GODW197	115.0	345	353	0.9042	1.0004	0.9300	1.0700	0.9504	1.0504	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9203	1.0009	0.9300	1.0700	0.9509	1.0510	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314148	3MICR197	115.0	345	353	0.9204	1.0010	0.9300	1.0700	0.9510	1.0511	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9205	1.0004	0.9300	1.0700	0.9504	1.0504	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314158	3GODW197	115.0	345	353	1.1069	1.0058	0.9300	1.0700	0.9555	1.0561	HR	96	314025 1 TX503 13.2 314160 1 TX503 13.2 Z1
315001	1OMF A	13.2	345	351	1.0328	0.9770	0.9300	1.0700	0.9281	1.0258	R	175	314067 6OCCOQUIN 230 314068 6OX 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9281	1.0258	R	175	314067 6OCCOQUIN 230 314068 6OX 230 1
314118	3MINNIEV	115.0	345	353	0.9456	0.9969	0.9300	1.0700	0.9470	1.0467	D	179	314068 6OX 230 314167 3OX 115 1
314167	3OX	115.0	345	352	0.9457	1.0044	0.9300	1.0700	0.9542	1.0547	D	179	314068 6OX 230 314167 3OX 115 1
315008	IPOSSM6A	18.0	345	353	0.9222	0.9362	0.9300	1.0700	0.8894	0.9830	L	191	314073 3FOSSUM 115 314074 6FOSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9222	0.9362	0.9300	1.0700	0.8894	0.9830	L	191	314073 3FOSSUM 115 314074 6FOSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9225	0.9362	0.9300	1.0700	0.8894	0.9830	L	204	314074 6FOSSUM 230 315008 1POSSM6A 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9225	0.9362	0.9300	1.0700	0.8894	0.9830	L	205	314074 6FOSSUM 230 315009 1POSSM6B 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9230	0.9362	0.9300	1.0700	0.8894	0.9830	L	206	314074 6FOSSUM 230 315010 1POSSM6S 18.0 1
315009	IPOSSM6B	18.0	345	353	0.9230	0.9362	0.9300	1.0700	0.8894	0.9830	L	206	314074 6FOSSUM 230 315010 1POSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9438	0.9969	0.9300	1.0700	0.9470	1.0467	D	255	314118 3MINNIEV 115 314156 3BRISTER 115 1
314122	3SOMEGO	115.0	345	353	0.9497	1.0014	0.9300	1.0700	0.9514	1.0515	D	259	314122 3SOMEGO 115 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9302	0.9827	0.9300	1.0700	0.9336	1.0318	D	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314123	3WELLGTON	115.0	345	353	0.9285	0.9852	0.9300	1.0700	0.9360	1.0345	LD	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314147	3MICR172	115.0	345	353	0.9300	0.9828	0.9300	1.0700	0.9336	1.0319	D	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:47 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314157	3GDM172	115.0	345	353	0.9295	0.9838	0.9300	1.0700	0.9346	1.0330	LD	260	314123 SWELLGTN 115 314141 3LIBERTY 115 1
314122	3SONGGO	115.0	345	353	0.9503	1.0014	0.9300	1.0700	0.9514	1.0515	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9503	1.0044	0.9300	1.0700	0.9541	1.0546	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314049	3LOM172	115.0	345	353	0.9303	0.9827	0.9300	1.0700	0.9336	1.0318	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9286	0.9852	0.9300	1.0700	0.9360	1.0345	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9286	0.9863	0.9300	1.0700	0.9370	1.0356	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314147	3MCR172	115.0	345	353	0.9302	0.9828	0.9300	1.0700	0.9336	1.0319	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	3GDM172	115.0	345	353	0.9286	0.9838	0.9300	1.0700	0.9346	1.0330	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
315008	1POSSM6A	18.0	345	353	0.9252	0.9362	0.9300	1.0700	0.8894	0.9830	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
315009	1POSSM6B	18.0	345	353	0.9252	0.9362	0.9300	1.0700	0.8894	0.9830	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
314775	3N1 RVER	115.0	345	363	0.9546	1.0131	0.9300	1.0700	0.9624	1.0637	D	275	314135 3CHANCE 115 314775 3N1 RVER 115 1
314151	3SLASTWN	115.0	345	355	0.9530	1.0048	0.9300	1.0700	0.9546	1.0550	D	280	314136 3FREDBRG 115 314151 3SLASTWN 115 1
315008	1POSSM6A	18.0	345	353	0.9217	0.9362	0.9300	1.0700	0.8894	0.9830	L	282	314137 6FREDBRG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9217	0.9362	0.9300	1.0700	0.8894	0.9830	L	282	314137 6FREDBRG 230 314138 6MINE RD 230 1
315008	1POSSM6A	18.0	345	353	0.9195	0.9362	0.9300	1.0700	0.8894	0.9830	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1POSSM6B	18.0	345	353	0.9195	0.9362	0.9300	1.0700	0.8894	0.9830	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MCR197	115.0	345	353	0.9203	1.0005	0.9300	1.0700	0.9505	1.0506	LD	295	314148 3MCR197 115 314155 3CANBR T 115 1
314158	3GDM197	115.0	345	353	0.9205	1.0004	0.9300	1.0700	0.9504	1.0504	LD	295	314148 3MCR197 115 314155 3CANBR T 115 1
314176	6HARMONY	230.0	345	354	1.1307	1.0222	0.9300	1.0700	0.9711	1.0753	HR	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314180	6HAYES	230.0	345	354	0.9506	1.0224	0.9300	1.0700	0.9713	1.0755	D	321	314180 6HAYES 230 314423 6YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1473	1.0195	0.9300	1.0700	0.9685	1.0705	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314526	3HANDSON	115.0	345	360	1.0734	1.0225	0.9300	1.0700	0.9714	1.0738	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0730	1.0245	0.9300	1.0700	0.9743	1.0769	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0808	1.0179	0.9300	1.0700	0.9670	1.0688	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.1043	1.0173	0.9300	1.0700	0.9664	1.0681	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SEABORD	115.0	345	362	1.1157	1.0170	0.9300	1.0700	0.9662	1.0679	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.0735	1.0261	0.9300	1.0700	0.9748	1.0774	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.0735	1.0261	0.9300	1.0700	0.9748	1.0774	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1484	1.0206	0.9300	1.0700	0.9695	1.0716	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAMPT1	13.8	345	360	1.0446	0.9940	0.9300	1.0700	0.9443	1.0437	R	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314328	6PLAZA	230.0	345	357	0.9105	1.0054	0.9300	1.0700	0.9552	1.0557	LD	566	314328 6PLAZA 230 314338 6SOUTWEST 230 1
314396	3NEWS58	115.0	345	356	0.9412	0.9930	0.9300	1.0700	0.9433	1.0426	D	609	314387 3LANEXA 115 314396 3NEWS58 115 1
314411	3TOANO58	115.0	345	356	0.9412	0.9917	0.9300	1.0700	0.9421	1.0412	D	609	314387 3LANEXA 115 314396 3NEWS58 115 1
314411	3TOANO58	115.0	345	356	0.9411	0.9917	0.9300	1.0700	0.9421	1.0412	D	620	314396 3NEWS58 115 314411 3TOANO58 115 1
314524	3FRNKLN	115.0	345	360	1.0762	1.0242	0.9300	1.0700	0.9730	1.0754	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0762	1.0242	0.9300	1.0700	0.9730	1.0754	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0730	1.0234	0.9300	1.0700	0.9723	1.0746	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0730	1.0234	0.9300	1.0700	0.9723	1.0746	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0747	1.0256	0.9300	1.0700	0.9743	1.0769	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0809	1.0241	0.9300	1.0700	0.9729	1.0753	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0753	1.0261	0.9300	1.0700	0.9748	1.0774	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0753	1.0261	0.9300	1.0700	0.9748	1.0774	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	1SHAMPT1	13.8	345	360	1.0440	0.9940	0.9300	1.0700	0.9443	1.0437	R	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRNKLN	115.0	345	360	1.0827	1.0242	0.9300	1.0700	0.9730	1.0754	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314526	3HANDSON	115.0	345	360	1.0720	1.0225	0.9300	1.0700	0.9714	1.0737	H	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314534	3S HAMPT	115.0	345	360	1.0787	1.0245	0.9300	1.0700	0.9733	1.0758	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.0863	1.0234	0.9300	1.0700	0.9723	1.0746	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0810	1.0256	0.9300	1.0700	0.9743	1.0769	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314824	3UNCAMP	115.0	345	360	1.0870	1.0241	0.9300	1.0700	0.9729	1.0753	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI	115.0	345	360	1.0815	1.0261	0.9300	1.0700	0.9748	1.0774	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI	115.0	345	360	1.0815	1.0261	0.9300	1.0700	0.9748	1.0774	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	1SHAMPT	13.8	345	360	1.0503	0.9940	0.9300	1.0700	0.9443	1.0437	R	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0718	1.0256	0.9300	1.0700	0.9743	1.0769	H	801	314534 3S HAMPT 115 314541 3WATKINS 115 1
314826	3WATKI	115.0	345	360	1.0723	1.0261	0.9300	1.0700	0.9748	1.0774	H	801	314534 3S HAMPT 115 314541 3WATKINS 115 1
314827	3WATKI	115.0	345	360	1.0723	1.0261	0.9300	1.0700	0.9748	1.0774	H	801	314534 3S HAMPT 115 314541 3WATKINS 115 1
314516	3BRUNS	115.0	345	358	1.0799	1.0091	0.9300	1.0700	0.9587	1.0596	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314565	3CLBHS71	115.0	345	362	1.1032	1.0016	0.9300	1.0700	0.9516	1.0517	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314675	3BRDNAX	115.0	345	358	1.0693	1.0071	0.9300	1.0700	0.9568	1.0575	R	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314676	3BRUNSWK	115.0	345	358	1.0794	1.0086	0.9300	1.0700	0.9582	1.0591	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314693	3FRMAN D	115.0	345	358	1.0844	1.0043	0.9300	1.0700	0.9540	1.0545	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314704	3LAWRENC	115.0	345	358	1.0848	1.0072	0.9300	1.0700	0.9568	1.0575	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314721	3SO HILL	115.0	345	358	1.0576	1.0055	0.9300	1.0700	0.9552	1.0557	R	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314782	2BRUNSWC	69.0	345	358	1.1019	1.0289	0.9300	1.0700	0.9775	1.0803	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314785	2DANLTWN	69.0	345	358	1.0496	0.9764	0.9300	1.0700	0.9276	1.0253	R	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314786	2GASBURG	69.0	345	358	1.0870	1.0129	0.9300	1.0700	0.9623	1.0635	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314787	2BRUNSW2	69.0	345	358	1.0729	1.0015	0.9300	1.0700	0.9514	1.0516	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314850	3CLBHS	115.0	345	362	1.1038	1.0021	0.9300	1.0700	0.9520	1.0522	HR	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314872	2BRUNSWIC	69.0	345	358	1.0607	0.9884	0.9300	1.0700	0.9390	1.0378	R	855	314562 3CLUBHSE 115 314565 3CLBHS71 115 21
314641	3KITTY H	115.0	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
314650	3KITTY 5	34.5	345	361	1.0720	1.0416	0.9300	1.0700	0.9895	1.0936	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
315146	3KITTYHKA	13.8	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
315147	3KITTYHKB	13.8	345	361	1.0720	1.0417	0.9300	1.0700	0.9896	1.0937	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
B51105	KITT 3M4	1.0	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
B51106	KITT 3M5	1.0	345	361	1.0720	1.0417	0.9300	1.0700	0.9896	1.0937	H	940	314635 3COLNGTTP 115 314641 3KITTY H 115 1
314635	3COLNGTTP	115.0	345	361	1.0719	1.0258	0.9300	1.0700	0.9745	1.0771	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314636	3COLING2	115.0	345	361	1.0720	1.0258	0.9300	1.0700	0.9746	1.0771	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0717	1.0407	0.9300	1.0700	0.9886	1.0927	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314646	3KITTY 4	34.5	345	361	1.0717	1.0407	0.9300	1.0700	0.9886	1.0927	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0726	1.0416	0.9300	1.0700	0.9895	1.0936	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314829	3COLIN	115.0	345	361	1.0720	1.0258	0.9300	1.0700	0.9746	1.0771	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
315146	3KITTYHKA	13.8	345	361	1.0717	1.0407	0.9300	1.0700	0.9886	1.0927	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
315147	3KITTYHKB	13.8	345	361	1.0727	1.0417	0.9300	1.0700	0.9896	1.0937	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
B51105	KITT 3M4	1.0	345	361	1.0717	1.0407	0.9300	1.0700	0.9886	1.0927	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
B51106	KITT 3M5	1.0	345	361	1.0727	1.0417	0.9300	1.0700	0.9896	1.0937	H	941	314635 3COLNGTTP 115 314720 3 52T190 115 1
314348	2GRETN	69.0	345	358	1.0805	1.0169	0.9300	1.0700	0.9661	1.0678	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0803	1.0167	0.9300	1.0700	0.9659	1.0675	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314737	2SW35T57	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0714	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314739	2WT A TP	69.0	345	358	1.0704	1.0204	0.9300	1.0700	0.9693	1.0714	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9661	1.0678	HR	1049	314731 2GRETN 69.0 314733 2GRNA DF 69.0 1
314731	2GRETN	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1049	314731 2GRETN 69.0 314733 2GRNA DF 69.0 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- FRI, FEB 15 2013 12:47 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314732	2GRNA FB	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9659	1.0675	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314763	3KIDDDSTO	115.0	345	363	0.9256	0.9931	0.9300	1.0700	0.9434	1.0428	LD	1062	314744 3BREMO 115 314763 3KIDDDSTO 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 7:59 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 7:55 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.0 % of nominal rating											
**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	243.0	142.7	239.0	101.7	226	LN 255
314377	3DOW 34	115	314387 3LANEXA	115	LN	90.4	71.0	89.0	101.5	405	LN 2102
314377	3DOW 34	115	314387 3LANEXA	115	LN	89.7	71.0	89.0	100.7	237	LN 263
314377	3DOW 34	115	314378 3FTEUS34	115	LN	88.8	69.5	89.0	99.8	405	LN 2102
314377	3DOW 34	115	314387 3LANEXA	115	LN	88.4	71.0	89.0	99.4	188	LN 214
314377	3DOW 34	115	314378 3FTEUS34	115	LN	88.2	69.5	89.0	99.1	237	LN 263
314377	3DOW 34	115	314378 3FTEUS34	115	LN	86.9	69.5	89.0	97.6	188	LN 214
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.7	828.8	993.6	96.7	504	TX-1 8BRAMBL
314377	3DOW 34	115	314387 3LANEXA	115	LN	85.9	71.0	89.0	96.5	183	LN 209
314461	3DEEPC46	115	314513 3YADKIN	115	LN	342.3	227.3	360.0	95.1	235	LN 262
314377	3DOW 34	115	314387 3LANEXA	115	LN	84.4	71.0	89.0	94.9	206	LN 234
314377	3DOW 34	115	314378 3FTEUS34	115	LN	84.3	69.5	89.0	94.7	183	LN 209
314212	6FRIVER	230	314222 6HANOVER	230	LN	751.1	547.0	797.0	94.2	395	LN 2090
314377	3DOW 34	115	314387 3LANEXA	115	LN	83.4	71.0	89.0	93.7	232	LN 261
314559	3CAROLINA	115	314581 3JACKSON	115	LN	110.0	72.1	118.0	93.2	327	LN 2012
314377	3DOW 34	115	314378 3FTEUS34	115	LN	82.9	69.5	89.0	93.1	206	LN 234
314377	3DOW 34	115	314387 3LANEXA	115	LN	82.8	71.0	89.0	93.1	415	LN 2113

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 7:58 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 7:57 <VOV003.0>
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\advp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314641	3KITTY H	115.0	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
314646	1KITTY 4	34.5	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
314650	1KITTY 5	34.5	345	361	1.0711	1.0416	0.9300	1.0700	0.9895	1.0936	H	45	LN 52
315146	1KITVHKA	13.8	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
315147	1KITVHKB	13.8	345	361	1.0720	1.0417	0.9300	1.0700	0.9896	1.0937	H	45	LN 52
BS1105	KITT 3W4	1.0	345	361	1.0711	1.0407	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
BS1106	KITT 3W5	1.0	345	361	1.0720	1.0417	0.9300	1.0700	0.9896	1.0937	H	45	LN 52
314524	3FRNKLN	115.0	345	360	1.0827	1.0242	0.9300	1.0700	0.9730	1.0754	HR	61	LN 68
314526	3HANDSOM	115.0	345	360	1.0721	1.0225	0.9300	1.0700	0.9714	1.0737	H	61	LN 68
314534	3S HAMPT	115.0	345	360	1.0787	1.0245	0.9300	1.0700	0.9733	1.0758	HR	61	LN 68
314539	3UNCAMP	115.0	345	360	1.0863	1.0234	0.9300	1.0700	0.9723	1.0746	HR	61	LN 68
314541	3WATKINS	115.0	345	360	1.0810	1.0256	0.9300	1.0700	0.9743	1.0769	HR	61	LN 68
314824	3UNCAM 1	115.0	345	360	1.0870	1.0241	0.9300	1.0700	0.9729	1.0753	HR	61	LN 68
314826	3WATKI 1	115.0	345	360	1.0815	1.0261	0.9300	1.0700	0.9748	1.0774	HR	61	LN 68
314827	3WATKI 2	115.0	345	360	1.0815	1.0261	0.9300	1.0700	0.9748	1.0774	HR	61	LN 68
315115	1SHAMPTI	13.8	345	360	1.0503	0.9940	0.9300	1.0700	0.9443	1.0437	R	61	LN 68
315008	1POSSM6A	18.0	345	353	0.9266	0.9362	0.9300	1.0700	0.8894	0.9830	L	122	LN 134
315009	1POSSM6B	18.0	345	353	0.9266	0.9362	0.9300	1.0700	0.8894	0.9830	L	122	LN 134
314147	3MICR172	115.0	345	353	0.9227	0.9828	0.9300	1.0700	0.9336	1.0319	LD	152	LN 172
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9661	1.0678	HR	153	LN 173
314731	2GRETN2	69.0	345	358	1.0740	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314732	2GRNA FB	69.0	345	358	1.0740	1.0167	0.9300	1.0700	0.9659	1.0675	HR	153	LN 173
314731	2GRETN2	69.0	345	351	1.0783	1.0195	0.9300	1.0700	0.9685	1.0704	HR	154	LN 174
314878	2JN 178	69.0	345	351	1.0782	1.0195	0.9300	1.0700	0.9685	1.0704	HR	156	LN 178
314879	2JN 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0704	HR	157	LN 179
314880	2JN 180	69.0	345	351	1.0785	1.0195	0.9300	1.0700	0.9685	1.0704	HR	158	LN 180

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UpLimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314122	3SOWEGO	115.0	345	353	0.9426	1.0014	0.9300	1.0700	0.9514	1.0515	D	159	LN 181
314051	31OWA197	115.0	345	353	0.9288	1.0009	0.9300	1.0700	0.9509	1.0510	LD	172	LN 197
314148	3MICR197	115.0	345	353	0.8979	1.0005	0.9300	1.0700	0.9505	1.0506	LD	172	LN 197
314158	3GOW197	115.0	345	353	0.9429	1.0004	0.9300	1.0700	0.9504	1.0504	D	172	LN 197
315008	1POSSM6A	18.0	345	353	0.9299	0.9362	0.9300	1.0700	0.8894	0.9830	L	240	LN 266
315009	1POSSM6B	18.0	345	353	0.9299	0.9362	0.9300	1.0700	0.8894	0.9830	L	240	LN 266
315008	1POSSM6A	18.0	345	353	0.9274	0.9362	0.9300	1.0700	0.8894	0.9830	L	248	LN 275
315009	1POSSM6B	18.0	345	353	0.9274	0.9362	0.9300	1.0700	0.8894	0.9830	L	248	LN 275
314014	3CANNONB	115.0	345	353	0.8825	1.0016	0.9300	1.0700	0.9515	1.0517	LD	326	LN 2011
314051	31OWA197	115.0	345	353	0.8828	1.0009	0.9300	1.0700	0.9510	1.0510	LD	326	LN 2011
314148	3MICR197	115.0	345	353	0.8827	1.0005	0.9300	1.0700	0.9505	1.0506	LD	326	LN 2011
314155	3CANBR T	115.0	345	353	0.8827	1.0010	0.9300	1.0700	0.9510	1.0511	LD	326	LN 2011
314158	3GOW197	115.0	345	353	0.8829	1.0004	0.9300	1.0700	0.9504	1.0504	LD	326	LN 2011
315001	1OMF A	13.8	345	351	1.0327	0.9770	0.9300	1.0700	0.9281	1.0258	R	328	LN 2013
315002	1OMF B	13.8	345	351	1.0327	0.9770	0.9300	1.0700	0.9281	1.0258	R	328	LN 2013
315008	1POSSM6A	18.0	345	353	0.9283	0.9362	0.9300	1.0700	0.8894	0.9830	L	337	LN 2022
315009	1POSSM6B	18.0	345	353	0.9283	0.9362	0.9300	1.0700	0.8894	0.9830	L	337	LN 2022
315008	1POSSM6A	18.0	345	353	0.9296	0.9362	0.9300	1.0700	0.8894	0.9830	L	385	LN 2079
315009	1POSSM6B	18.0	345	353	0.9296	0.9362	0.9300	1.0700	0.8894	0.9830	L	385	LN 2079
315008	1POSSM6A	18.0	345	353	0.9217	0.9362	0.9300	1.0700	0.8894	0.9830	L	395	LN 2090
315009	1POSSM6B	18.0	345	353	0.9217	0.9362	0.9300	1.0700	0.8894	0.9830	L	395	LN 2090
315008	1POSSM6A	18.0	345	353	0.9195	0.9362	0.9300	1.0700	0.8894	0.9830	L	407	LN 2104
315009	1POSSM6B	18.0	345	353	0.9184	0.9362	0.9300	1.0700	0.8894	0.9830	L	407	LN 2104
315008	1POSSM6A	18.0	345	353	0.9287	0.9362	0.9300	1.0700	0.8894	0.9830	L	418	LN 2117
315009	1POSSM6B	18.0	345	353	0.9287	0.9362	0.9300	1.0700	0.8894	0.9830	L	418	LN 2117
314114	3LINNDL	115.0	345	353	0.9337	0.9947	0.9300	1.0700	0.9450	1.0444	D	470	TX-1 60X
314118	3MINNIEV	115.0	345	353	0.9325	0.9969	0.9300	1.0700	0.9470	1.0467	D	470	TX-1 60X
314167	3OX	115.0	345	352	0.9326	1.0044	0.9300	1.0700	0.9542	1.0547	D	470	TX-1 60X
315008	1POSSM6A	18.0	345	353	0.9221	0.9362	0.9300	1.0700	0.8894	0.9830	L	475	TX-1 6POSSUM
315009	1POSSM6B	18.0	345	353	0.9221	0.9362	0.9300	1.0700	0.8894	0.9830	L	475	TX-1 6POSSUM
315008	1POSSM6A	18.0	345	353	0.9285	0.9362	0.9300	1.0700	0.8894	0.9830	L	479	TX-1 6POSSU2
315009	1POSSM6B	18.0	345	353	0.9285	0.9362	0.9300	1.0700	0.8894	0.9830	L	479	TX-1 6POSSU2
315008	1POSSM6A	18.0	345	353	0.9226	0.9362	0.9300	1.0700	0.8894	0.9830	L	481	TX-1 6POSSU4
315009	1POSSM6B	18.0	345	353	0.9226	0.9362	0.9300	1.0700	0.8894	0.9830	L	481	TX-1 6POSSU4
315008	1POSSM6A	18.0	345	353	0.9231	0.9362	0.9300	1.0700	0.8894	0.9830	L	482	TX-1 6POSSU5
315009	1POSSM6B	18.0	345	353	0.9231	0.9362	0.9300	1.0700	0.8894	0.9830	L	482	TX-1 6POSSU5
314122	3SOWEGO	115.0	345	353	0.9432	1.0014	0.9300	1.0700	0.9514	1.0515	D	483	TX-1 6POSSU6
314156	3BRISTER	115.0	345	353	0.9432	1.0044	0.9300	1.0700	0.9541	1.0546	D	483	TX-1 6POSSU6
314049	31OWA172	115.0	345	353	0.8881	0.9827	0.9300	1.0700	0.9336	1.0318	LD	492	TX-1 6BRISTE
314123	3WELIGN	115.0	345	353	0.8863	0.9852	0.9300	1.0700	0.9366	1.0345	LD	492	TX-1 6BRISTE
314141	3LIBERTY	115.0	345	353	0.8863	0.9863	0.9300	1.0700	0.9370	1.0356	LD	495	TX-1 6LIBERT
314147	3MICR172	115.0	345	353	0.8879	0.9828	0.9300	1.0700	0.9336	1.0319	LD	495	TX-1 6LIBERT
314157	3GOW172	115.0	345	353	0.8879	0.9838	0.9300	1.0700	0.9346	1.0330	LD	495	TX-1 6LIBERT
315008	1POSSM6A	18.0	345	353	0.8874	0.9362	0.9300	1.0700	0.8894	0.9830	L	503	TX-1 6NEW R2

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 2015 SUMMER BASE CASE (UTSG15S11) REV. 04/02/2012
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Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315009	1POSSM6B	18.0	345	353	0.9299	0.9362	0.9300	1.0700	0.8894	0.9830	L	503	TX-1 6NEW R2

CATEGORY C

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 12:32 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS1511) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 12:29 <BRY003.0>
 2015 SUMMER BASE CASE (LTS1511) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\dvp.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 100.0 % of nominal rating

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
235496	01NSHEND	138	314809	3N SHEND	115	TR	TR	512.9	90.3	283.0	181.2	7	2017&9020
235513	01STRASB	138	314797	4EDINBRG	138	LN	LN	645.4	49.7	222.0	290.7	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	TR	523.0	24.8	166.8	313.5	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	TR	523.0	24.8	166.8	313.5	7	2017&9020
314796	3EDINBRG	115	314807	3MT JACK	115	LN	LN	574.7	103.2	287.0	200.2	7	2017&9020
314798	3MERCK5	115	314802	3GROTOES	115	LN	LN	513.7	74.7	251.0	204.7	7	2017&9020
314798	3MERCK5	115	314809	3N SHEND	115	LN	LN	469.7	8.0	251.0	186.7	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230	TR	TR	5920.9	88.1	258.5	2290.5	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230	TR	TR	5998.6	89.3	311.8	1923.9	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230	TR	TR	5920.9	88.1	258.5	2290.5	7	2017&9020
314799	3ENDLCAV	115	314807	3MT JACK	115	LN	LN	575.1	117.7	359.0	160.2	7	2017&9020
314799	3ENDLCAV	115	314809	3N SHEND	115	LN	LN	752.6	82.6	251.0	299.9	7	2017&9020
314802	3GROTOES	115	314803	6GROTOES	230	TR	TR	421.0	90.2	287.0	146.7	7	2017&9020
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	136.1	69.5	103.0	132.1	9	214&263
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	137.6	71.0	103.0	133.6	9	214&263
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	122.9	57.7	103.0	119.4	9	214&263
314391	6LIGH209	230	314415	6WALKR209	230	LN	LN	566.7	280.5	541.0	104.8	9	214&263
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	108.4	69.5	103.0	105.2	21	209&285
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	110.0	71.0	103.0	106.8	21	209&285
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	111.0	69.5	103.0	107.8	22	211&858
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	112.6	71.0	103.0	109.3	22	211&858
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	TR	326.8	119.9	287.9	113.5	45	257&2099
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	TR	307.9	112.8	265.2	116.1	45	257&2099

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 12:32 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 12:30 <YOV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum.2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\gvp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	**	Base Case **
314796	3EDINBGR	115.0	345	364	1.6720	1.0223	0.9300	1.0700	0.9712	1.0734	HR	7	2017&9020
314797	4EDINBGR	138.0	345	364	1.5705	0.9992	0.9300	1.0700	0.9492	1.0492	HR	7	2017&9020
314798	3MERCCK5	115.0	345	364	1.4477	0.9977	0.9300	1.0700	0.9478	1.0475	HR	7	2017&9020
314799	3ENDLCV	115.0	345	364	2.1086	0.9990	0.9300	1.0700	0.9491	1.0490	HR	7	2017&9020
314800	6ENDLCV	230.0	345	364	3.4633	1.0374	0.9300	1.0700	0.9855	1.0893	HR	7	2017&9020
314802	3GROTOES	115.0	345	364	1.4459	1.0026	0.9300	1.0700	0.9525	1.0528	HR	7	2017&9020
314803	6GROTOES	230.0	345	364	1.0754	1.0320	0.9300	1.0700	0.9804	1.0836	H	7	2017&9020
314807	3MT JACK	115.0	345	364	1.9419	1.0078	0.9300	1.0700	0.9574	1.0582	HR	7	2017&9020
314809	3N SHEND	115.0	345	364	1.7697	0.9972	0.9300	1.0700	0.9474	1.0471	HR	7	2017&9020
314814	3TIMBERV	115.0	345	364	2.1179	0.9887	0.9300	1.0700	0.9392	1.0381	HR	7	2017&9020
314886	3EDINB 1	115.0	345	364	1.6731	1.0230	0.9300	1.0700	0.9718	1.0741	HR	7	2017&9020
314887	3ENDLC 1	115.0	345	364	2.1100	0.9997	0.9300	1.0700	0.9497	1.0497	HR	7	2017&9020
314889	3MERCCK 1	115.0	345	364	1.4486	0.9983	0.9300	1.0700	0.9484	1.0482	HR	7	2017&9020
315008	1POSSM6A	18.0	345	353	0.9216	0.9362	0.9300	1.0700	0.8894	0.9830	L	7	2017&9020
315009	1POSSM6B	18.0	345	353	0.9216	0.9362	0.9300	1.0700	0.8894	0.9830	L	7	2017&9020
313812	6ROCKLAND	230.0	345	356	0.9322	1.0166	0.9300	1.0700	0.9658	1.0674	D	9	214&263
314180	6HAYES	230.0	345	354	0.9404	1.0224	0.9300	1.0700	0.9713	1.0735	D	9	214&263
314296	6PENNIAN	230.0	345	356	0.9413	1.0136	0.9300	1.0700	0.9629	1.0643	D	9	214&263
314376	6DENBIGH	230.0	345	356	0.9363	1.0158	0.9300	1.0700	0.9650	1.0666	D	9	214&263
314386	6KINGS M	230.0	345	356	0.9404	1.0147	0.9300	1.0700	0.9639	1.0654	D	9	214&263
314390	6LIGH285	230.0	345	356	0.9424	1.0082	0.9300	1.0700	0.9578	1.0586	D	9	214&263
314391	6LIGH209	230.0	345	356	0.9480	1.0112	0.9300	1.0700	0.9606	1.0617	D	9	214&263
314398	6NP NEWS	230.0	345	356	0.9414	1.0188	0.9300	1.0700	0.9678	1.0697	ID	9	214&263
314399	6PENBROK	230.0	345	356	0.9098	1.0157	0.9300	1.0700	0.9649	1.0665	ID	9	214&263
314402	6PENINSL	230.0	345	356	0.9165	1.0139	0.9300	1.0700	0.9632	1.0646	ID	9	214&263

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 12:32 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314407	SHLENNK	230.0	345	356	0.9083	1.0123	0.9300	1.0700	0.9617	1.0629	LD	9	2146263
314409	ETABB	230.0	345	356	0.9232	1.0156	0.9300	1.0700	0.9648	1.0664	LD	9	2146263
314413	EWALR285	230.0	345	356	0.9388	1.0085	0.9300	1.0700	0.9581	1.0589	D	9	2146263
314415	EWALR209	230.0	345	356	0.9435	1.0115	0.9300	1.0700	0.9609	1.0620	D	9	2146263
314416	EWARWICK	230.0	345	356	0.9319	1.0164	0.9300	1.0700	0.9655	1.0672	D	9	2146263
314418	EWHEALTN	230.0	345	356	0.9316	1.0162	0.9300	1.0700	0.9654	1.0671	D	9	2146263
314421	EWINGHST	230.0	345	356	0.9314	1.0160	0.9300	1.0700	0.9652	1.0668	D	9	2146263
314423	GYORKTWN	230.0	345	356	0.9387	1.0208	0.9300	1.0700	0.9698	1.0719	D	9	2146263
314442	GNP NE 1	230.0	345	356	0.9233	1.0208	0.9300	1.0700	0.9698	1.0719	LD	9	2146263
314445	GWHEAL 1	230.0	345	356	0.9335	1.0242	0.9300	1.0700	0.9729	1.0754	D	9	2146263
314450	GYORKT 1	230.0	345	356	0.9417	1.0242	0.9300	1.0700	0.9489	1.0488	R	9	2146263
315064	ICHESTS8	13.8	345	357	1.0519	0.9988	0.9300	1.0700	0.9698	1.0719	D	9	2146263
315092	LYORKTK3	25.0	345	356	0.9387	1.0208	0.9300	1.0700	0.9698	1.0719	D	9	2146263
314331	EPOE	230.0	345	357	1.0705	1.0260	0.9300	1.0700	0.9747	1.0773	H	19	200262003
314497	ESEWLSPT	230.0	345	359	0.9500	1.0063	0.9300	1.0700	0.9560	1.0567	LD	45	25762099
314500	GNAYTS	230.0	345	359	0.8500	1.0063	0.9300	1.0700	0.9560	1.0567	LD	45	25762099
314501	GNAYTS1	230.0	345	359	0.8459	1.0063	0.9300	1.0700	0.9560	1.0566	LD	45	25762099
314505	GNAYVN	230.0	345	359	0.8500	1.0064	0.9300	1.0700	0.9561	1.0567	LD	45	25762099
314510	GNAYVN1	230.0	345	359	0.8497	1.0062	0.9300	1.0700	0.9559	1.0565	LD	45	25762099
315008	IPOSSM6A	18.0	345	353	0.9257	0.9362	0.9300	1.0700	0.8894	0.9830	L	47	200624462051
315009	IPOSSM6B	18.0	345	353	0.9257	0.9362	0.9300	1.0700	0.8894	0.9830	L	47	200624462051
315008	IPOSSM6A	18.0	345	353	0.9225	0.9362	0.9300	1.0700	0.8894	0.9830	L	50	2046220
315009	IPOSSM6B	18.0	345	353	0.9225	0.9362	0.9300	1.0700	0.8894	0.9830	L	50	2046220
315008	IPOSSM6A	18.0	345	353	0.9256	0.9362	0.9300	1.0700	0.8894	0.9830	L	58	23762022
315009	IPOSSM6B	18.0	345	353	0.9256	0.9362	0.9300	1.0700	0.8894	0.9830	L	58	23762022
315001	LOMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9281	1.0258	R	60	24862013
315002	LOMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9281	1.0258	R	60	24862013
315008	IPOSSM6A	18.0	345	353	0.9261	0.9362	0.9300	1.0700	0.8894	0.9830	L	63	2516266
315009	IPOSSM6B	18.0	345	353	0.9261	0.9362	0.9300	1.0700	0.8894	0.9830	L	63	2516266
315008	IPOSSM6A	18.0	345	353	0.9235	0.9362	0.9300	1.0700	0.8894	0.9830	L	72	26662022
315009	IPOSSM6B	18.0	345	353	0.9235	0.9362	0.9300	1.0700	0.8894	0.9830	L	72	26662022
315008	IPOSSM6A	18.0	345	353	0.9219	0.9362	0.9300	1.0700	0.8894	0.9830	L	84	25662090
315009	IPOSSM6B	18.0	345	353	0.9219	0.9362	0.9300	1.0700	0.8894	0.9830	L	84	25662090

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 9:55 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 9:52 <BRV002.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\peninsula_AC.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\peninsula.con
 Exclud.File none

Study transfer not defined

***** Report on violations *****

Branches with MW flow more than 99.0 % of nominal rating

**	From bus	**	**	To bus	**	CKT	ContMW	BaseFlo w	Rating	ContLd%	Ncon	Contingency Description
314174	3HARMONY	115	314191	3WHITE S	115	1	297.8	28.5	169.0	176	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	291.8	28.5	169.0	173	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	266.4	28.5	169.0	158	4150	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	260.5	28.5	169.0	154	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	245.1	28.5	169.0	145	663	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-142.4	-70.5	103.0	138	21853	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	141.0	69.1	103.0	137	21853	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-136.4	-70.5	103.0	133	22595	D:6LIGH285-6WALR2851 +6LIGH209-6WALR2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	135.0	69.1	103.0	131	22595	D:6LIGH285-6WALR2851 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-134.7	-70.5	103.0	131	18010	D:6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	133.2	69.1	103.0	129	18010	D:6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314174	3HARMONY	115	314191	3WHITE S	115	1	215.5	28.5	169.0	128	986	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-130.8	-70.5	103.0	127	21100	D:3LANEXA -3NNNEWS581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-130.7	-70.5	103.0	127	3135	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-130.6	-70.5	103.0	127	21860	D:6LANEXA -6LIGH2091 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-130.4	-70.5	103.0	127	2956	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	129.3	69.1	103.0	126	21100	D:3LANEXA -3NNNEWS581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	129.2	69.1	103.0	126	3135	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	129.1	69.1	103.0	125	21860	D:6LANEXA -6LIGH2091 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	128.9	69.1	103.0	125	2956	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091

115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	D:6DAHLGRB-6ARNOLDS1	664	D:6DAHLGRB-6ARNOLDS1	+6DUNNSVL-6LANEXA	1
115	314387	3LANEXA	115	1	-128.8	-70.5	103.0	125	D:6BENCHRC-6CHCKTUK1	2989	D:6BENCHRC-6CHCKTUK1	+6WINCHST-6POOLSVL1	
115	314387	3LANEXA	115	1	-128.7	-70.5	103.0	125	D:6DENBIGH-6WALR2851	18014	D:6DENBIGH-6WALR2851	+6LIGH209-6WALR2091	
115	314387	3LANEXA	115	1	-128.5	-70.5	103.0	125	D:6BENCHRC-6NP NEWS1	2819	D:6BENCHRC-6NP NEWS1	+6SURREY -6POOLSVL1	
115	314387	3LANEXA	115	1	-128.3	-70.5	103.0	125	D:6BENCHRC-6NP NEWS1	2640	D:6BENCHRC-6NP NEWS1	+6LANEXA -6LIGH2091	
115	314387	3LANEXA	115	1	-128.3	-70.5	103.0	125	D:6LANEXA -6LIGH2091	22029	D:6LANEXA -6LIGH2091	+6SURREY -6POOLSVL1	
115	314381	3GRAFT34	115	1	127.5	55.6	103.0	124	D:6LANEXA -6LIGH2091	21853	D:6LANEXA -6LIGH2091	+6LIGH285-6WALR2851	
115	314387	3LANEXA	115	1	-127.4	-70.5	103.0	124	D:6PENNIMA-6WALR2091	14779	D:6PENNIMA-6WALR2091	+6LIGH285-6WALR2851	
115	314378	3FTEUS34	115	1	127.3	69.1	103.0	124	D:6BENCHRC-6CHCKTUK1	2989	D:6BENCHRC-6CHCKTUK1	+6WINCHST-6POOLSVL1	
115	314378	3FTEUS34	115	1	127.2	69.1	103.0	124	D:6DENBIGH-6WALR2851	18014	D:6DENBIGH-6WALR2851	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	127.0	69.1	103.0	123	D:6BENCHRC-6NP NEWS1	2819	D:6BENCHRC-6NP NEWS1	+6SURREY -6POOLSVL1	
115	314378	3FTEUS34	115	1	126.9	69.1	103.0	123	D:6BENCHRC-6NP NEWS1	2640	D:6BENCHRC-6NP NEWS1	+6LANEXA -6LIGH2091	
115	314378	3FTEUS34	115	1	126.9	69.1	103.0	123	D:6LANEXA -6LIGH2091	22029	D:6LANEXA -6LIGH2091	+6SURREY -6POOLSVL1	
115	314387	3LANEXA	115	1	-126.7	-70.5	103.0	123	D:6LANEXA -6LIGH2091	21883	D:6LANEXA -6LIGH2091	+6WINCHST-6POOLSVL1	
115	314387	3LANEXA	115	1	-126.5	-70.5	103.0	123	D:6BENCHRC-6NP NEWS1	2673	D:6BENCHRC-6NP NEWS1	+6WINCHST-6POOLSVL1	
115	314387	3LANEXA	115	1	-126.4	-70.5	103.0	123	D:6DENBIGH-6YORKTWN1	18273	D:6DENBIGH-6YORKTWN1	+6LANEXA -6LIGH2091	
115	314378	3FTEUS34	115	1	126.0	69.1	103.0	122	D:6PENNIMA-6WALR2091	14779	D:6PENNIMA-6WALR2091	+6LIGH285-6WALR2851	
115	314387	3LANEXA	115	1	-125.7	-70.5	103.0	122	D:6LANEXA -3NNWS581	21104	D:6LANEXA -3NNWS581	+6LIGH209-6WALR2091	
115	314387	3LANEXA	115	1	-125.6	-70.5	103.0	122	D:6PENNIMA-6KINGS M1	14503	D:6PENNIMA-6KINGS M1	+6LIGH285-6WALR2851	
115	314387	3LANEXA	115	1	-125.4	-70.5	103.0	122	D:6LIGH209-6WALR2091	22846	D:6LIGH209-6WALR2091	+3NNWS58-3TOANO581	
115	314387	3LANEXA	115	1	-125.3	-70.5	103.0	122	D:6BENCHRC-6CHCKTUK1	2960	D:6BENCHRC-6CHCKTUK1	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	125.2	69.1	103.0	122	D:6LANEXA -6LIGH2091	21883	D:6LANEXA -6LIGH2091	+6WINCHST-6POOLSVL1	
115	314378	3FTEUS34	115	1	125.1	69.1	103.0	121	D:6BENCHRC-6NP NEWS1	2673	D:6BENCHRC-6NP NEWS1	+6WINCHST-6POOLSVL1	
115	314378	3FTEUS34	115	1	124.9	69.1	103.0	121	D:6DENBIGH-6YORKTWN1	18273	D:6DENBIGH-6YORKTWN1	+6LANEXA -6LIGH2091	
115	314378	3FTEUS34	115	1	124.2	69.1	103.0	121	D:6LANEXA -3NNWS581	21104	D:6LANEXA -3NNWS581	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	124.1	69.1	103.0	121	D:6PENNIMA-6KINGS M1	14503	D:6PENNIMA-6KINGS M1	+6LIGH285-6WALR2851	
115	314378	3FTEUS34	115	1	123.9	69.1	103.0	120	D:6BENCHRC-6CHCKTUK1	2960	D:6BENCHRC-6CHCKTUK1	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	123.9	69.1	103.0	120	D:6LIGH209-6WALR2091	22846	D:6LIGH209-6WALR2091	+3NNWS58-3TOANO581	
115	314387	3LANEXA	115	1	123.5	-70.5	103.0	120	D:6LIGH209-6WALR2091	23015	D:6LIGH209-6WALR2091	+6SURREY -6POOLSVL1	
115	314387	3LANEXA	115	1	-123.3	-70.5	103.0	120	D:6BENCHRC-6NP NEWS1	2644	D:6BENCHRC-6NP NEWS1	+6LIGH209-6WALR2091	
115	314387	3LANEXA	115	1	-123.1	-70.5	103.0	120	D:3KINGS M-3TOANO581	20341	D:3KINGS M-3TOANO581	+6LANEXA -6LIGH2091	
115	314387	3LANEXA	115	1	-122.7	-70.5	103.0	119	D:6KINGS M-6YORKTWN1	20851	D:6KINGS M-6YORKTWN1	+6LIGH285-6WALR2851	
115	314378	3FTEUS34	115	1	122.0	69.1	103.0	118	D:6LIGH209-6WALR2091	23015	D:6LIGH209-6WALR2091	+6SURREY -6POOLSVL1	
115	314387	3LANEXA	115	1	-121.9	-70.5	103.0	118	D:6LIGH209-6WALR2091	22869	D:6LIGH209-6WALR2091	+6WINCHST-6POOLSVL1	
115	314378	3FTEUS34	115	1	121.8	69.1	103.0	118	D:6BENCHRC-6NP NEWS1	2644	D:6BENCHRC-6NP NEWS1	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	121.6	69.1	103.0	118	D:3KINGS M-3TOANO581	20341	D:3KINGS M-3TOANO581	+6LANEXA -6LIGH2091	
115	314381	3GRAFT34	115	1	121.5	55.6	103.0	118	D:6LIGH285-6WALR2851	22595	D:6LIGH285-6WALR2851	+6LIGH209-6WALR2091	
115	314378	3FTEUS34	115	1	121.3	69.1	103.0	118	D:6KINGS M-6YORKTWN1	20851	D:6KINGS M-6YORKTWN1	+6LIGH285-6WALR2851	
115	314378	3FTEUS34	115	1	120.4	69.1	103.0	117	D:6LIGH209-6WALR2091	22869	D:6LIGH209-6WALR2091	+6WINCHST-6POOLSVL1	
115	314387	3LANEXA	115	1	-120.3	-70.5	103.0	117	D:6BENCHRC-6CHCKTUK1	2959	D:6BENCHRC-6CHCKTUK1	+6LIGH285-6WALR2851	
115	314387	3LANEXA	115	1	-120.3	-70.5	103.0	117	D:6DENBIGH-6YORKTWN1	18277	D:6DENBIGH-6YORKTWN1	+6LIGH209-6WALR2091	

314377	3DOW 34	115	314387	3LANEXA	115	1	276.4	28.5	169.0	164	664	D: 6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	119.8	55.6	103.0	116	18010	D: 6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-119.7	-70.5	103.0	116	2987	D: 6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-119.7	-70.5	103.0	116	14761	D: 6PENNIMA-6WALR2091 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-119.0	-70.5	103.0	116	21881	D: 6LANEXA -6LIGH2091 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-119.0	-70.5	103.0	116	21861	D: 6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-119.0	-70.5	103.0	116	21863	D: 6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	118.8	69.1	103.0	115	2959	D: 6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	118.9	69.1	103.0	115	18277	D: 6DENBIGH-6YORKTWN1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.4	-70.5	103.0	115	21103	D: 3LANEXA -3NNNEWS581 +6LIGH285-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.3	-70.5	103.0	115	2643	D: 6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.4	-70.5	103.0	115	24702	D: 6NP NEWS-6PEMBROK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.3	-70.5	103.0	115	25175	D: 6PEMBROK-6SHELBNK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	118.2	69.1	103.0	115	14761	D: 6PENNIMA-6WALR2091 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.2	-70.5	103.0	115	22601	D: 6LIGH285-6WALR2851 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.1	-70.5	103.0	115	2953	D: 6BENCHRC-6CHCKTUK1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	118.2	69.1	103.0	115	2987	D: 6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.1	-70.5	103.0	115	22770	D: 6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-118.0	-70.5	103.0	115	14773	D: 6PENNIMA-6WALR2091 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.9	-70.5	103.0	115	20345	D: 3KINGS M-3TOANO581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.9	-70.5	103.0	114	2966	D: 6BENCHRC-6CHCKTUK1 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.8	-70.5	103.0	114	14485	D: 6PENNIMA-6KINGS M1 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.8	-70.5	103.0	114	2929	D: 6BENCHRC-6CHCKTUK1 +6PENNIMA-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.7	-70.5	103.0	114	14786	D: 6PENNIMA-6WALR2091 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.5	-70.5	103.0	114	21279	D: 3LANEXA -3NNNEWS581 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	117.5	69.1	103.0	114	21861	D: 6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	117.5	69.1	103.0	114	21863	D: 6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	117.6	69.1	103.0	114	21881	D: 6LANEXA -6LIGH2091 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.4	-70.5	103.0	114	2671	D: 6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-117.3	-70.5	103.0	114	24464	D: 3NNNEWS58-3TOANO581 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	117.0	69.1	103.0	114	21103	D: 3LANEXA -3NNNEWS581 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.9	69.1	103.0	114	2643	D: 6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.9	69.1	103.0	114	24702	D: 6NP NEWS-6PEMBROK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.9	69.1	103.0	114	25175	D: 6PEMBROK-6SHELBNK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.7	69.1	103.0	113	22601	D: 6LIGH285-6WALR2851 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.6	69.1	103.0	113	2953	D: 6BENCHRC-6CHCKTUK1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.6	-70.5	103.0	113	22624	D: 6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.6	69.1	103.0	113	22770	D: 6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.5	69.1	103.0	113	14773	D: 6PENNIMA-6WALR2091 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.4	-70.5	103.0	113	2637	D: 6BENCHRC-6NP NEWS1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.4	69.1	103.0	113	2966	D: 6BENCHRC-6CHCKTUK1 +3NNNEWS58-3TOANO581

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D: 6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.4	69.1	103.0	113	14485	D: 6PENNIMA-6KINGS M1 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.4	-70.5	103.0	113	14497	D: 6PENNIMA-6KINGS M1 +3LANEXA -3NNWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.4	69.1	103.0	113	20345	D: 3KINGS M-3TOANO581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.4	-70.5	103.0	113	24556	D: 6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.4	-70.5	103.0	113	25029	D: 6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.3	69.1	103.0	113	2929	D: 6BENCHRC-6CHCKTUK1 +6PENNIMA-6WALR2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.2	69.1	103.0	113	14786	D: 6PENNIMA-6WALR2091 +3NNWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.2	-70.5	103.0	113	14955	D: 6PENNIMA-6WALR2091 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.2	-70.5	103.0	113	2928	D: 6BENCHRC-6CHCKTUK1 +6PENNIMA-6KINGS M1
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.2	-70.5	103.0	113	21133	D: 3LANEXA -3NNWS581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.1	-70.5	103.0	113	2650	D: 6BENCHRC-6NP NEWS1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-116.1	-70.5	103.0	113	14510	D: 6PENNIMA-6KINGS M1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	116.0	69.1	103.0	113	21279	D: 3LANEXA -3NNWS581 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	115.9	69.1	103.0	113	2671	D: 6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	115.9	55.6	103.0	113	21100	D: 3LANEXA -3NNWS581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-115.9	-70.5	103.0	113	24318	D: 3NNWS58-3TOANO581 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	115.8	55.6	103.0	112	3135	D: 6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	115.8	69.1	103.0	112	24464	D: 3NNWS58-3TOANO581 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-115.7	-70.5	103.0	112	2613	D: 6BENCHRC-6NP NEWS1 +6PENNIMA-6WALR2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	115.6	55.6	103.0	112	21860	D: 6LANEXA -6LIGH2091 +3NNWS58-3TOANO581
314378	3FTEUS34	115	314381	3GRAFT34	115	1	115.5	55.6	103.0	112	2956	D: 6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	115.1	69.1	103.0	112	22624	D: 6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-115.0	-70.5	103.0	112	18006	D: 6DENBIGH-6WALR2851 +6KINGS M-6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	115.0	69.1	103.0	112	24556	D: 6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.9	69.1	103.0	112	25029	D: 6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.9	69.1	103.0	112	2637	D: 6BENCHRC-6NP NEWS1 +3LANEXA -3NNWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.9	69.1	103.0	112	14497	D: 6PENNIMA-6KINGS M1 +3LANEXA -3NNWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.7	69.1	103.0	111	2928	D: 6BENCHRC-6CHCKTUK1 +6PENNIMA-6KINGS M1
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.7	-70.5	103.0	111	14679	D: 6PENNIMA-6KINGS M1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.8	69.1	103.0	111	14955	D: 6PENNIMA-6WALR2091 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.6	69.1	103.0	111	2650	D: 6BENCHRC-6NP NEWS1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.6	69.1	103.0	111	14510	D: 6PENNIMA-6KINGS M1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.6	-70.5	103.0	111	14809	D: 6PENNIMA-6WALR2091 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.7	69.1	103.0	111	21133	D: 3LANEXA -3NNWS581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.5	-70.5	103.0	111	2941	D: 6BENCHRC-6CHCKTUK1 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.4	69.1	103.0	111	24318	D: 3NNWS58-3TOANO581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.3	-70.5	103.0	111	22032	D: 6LANEXA -6LIGH2091 +6SURREY -1SURREY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	114.2	69.1	103.0	111	2613	D: 6BENCHRC-6NP NEWS1 +6PENNIMA-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.2	-70.5	103.0	111	22867	D: 6LIGH209-6WALR2091 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-114.1	-70.5	103.0	111	2612	D: 6BENCHRC-6NP NEWS1 +6PENNIMA-6KINGS M1

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.9	-70.5	103.0	111	20845	D:6KINGS M-6YORKTWN1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.9	-70.5	103.0	111	22847	D:6LIGH209-6WALR2091 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.9	-70.5	103.0	111	22849	D:6LIGH209-6WALR2091 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.8	-70.5	103.0	111	22952	D:6BENCHRC-6CHCKTUK1 +6KINGS M-6YORKTWN1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	113.9	55.6	103.0	111	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	113.8	55.6	103.0	110	18014	D:6DENBIGH-6WALR2851 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.7	-70.5	103.0	110	20858	D:6KINGS M-6YORKTWN1 +3NNNEWS58-3TOANOS81
314378	3FTEUS34	115	314381	3GRAFT34	115	1	113.5	55.6	103.0	110	2819	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314174	3HARMONY	115	314191	3WHITE S	115	1	186.3	28.5	169.0	110	4772	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	113.5	69.1	103.0	110	18006	D:6DENBIGH-6WALR2851 +6KINGS M-6YORKTWN1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	113.4	55.6	103.0	110	2640	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	113.4	55.6	103.0	110	22029	D:6LANEXA -6LIGH2091 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	113.3	69.1	103.0	110	14679	D:6PENNIMA-6KINGS M1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.1	-70.5	103.0	110	14533	D:6PENNIMA-6KINGS M1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	113.1	69.1	103.0	110	14809	D:6PENNIMA-6WALR2091 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.1	-70.5	103.0	110	18007	D:6DENBIGH-6WALR2851 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	113.0	69.1	103.0	110	2941	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	-113.0	-70.5	103.0	110	20595	D:3KINGS M-3YNNWS 581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-112.9	-70.5	103.0	110	18020	D:6DENBIGH-6WALR2851 +3NNNEWS58-3TOANOS81
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.8	69.1	103.0	110	22032	D:6LANEXA -6LIGH2091 +6SURREY -1SURREY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-112.7	-70.5	103.0	109	18189	D:6DENBIGH-6WALR2851 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.7	69.1	103.0	109	22867	D:6LIGH209-6WALR2091 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.6	69.1	103.0	109	2612	D:6BENCHRC-6NP NEWS1 +6PENNIMA-6KINGS M1
314377	3DOW 34	115	314387	3LANEXA	115	1	-112.5	-70.5	103.0	109	2625	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
314378	3FTEUS34	115	314381	3GRAFT34	115	1	112.5	55.6	103.0	109	14779	D:6PENNIMA-6WALR2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.5	69.1	103.0	109	20845	D:6KINGS M-6YORKTWN1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-112.4	-70.5	103.0	109	21027	D:6KINGS M-6YORKTWN1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.4	69.1	103.0	109	22847	D:6LIGH209-6WALR2091 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.4	69.1	103.0	109	22849	D:6LIGH209-6WALR2091 +6PEMBROK-6SHELBNK1
314174	3HARMONY	115	314191	3WHITE S	115	1	184.2	28.5	169.0	109	985	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6NORNECK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.3	69.1	103.0	109	2952	D:6BENCHRC-6CHCKTUK1 +6KINGS M-6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	112.2	69.1	103.0	109	20858	D:6KINGS M-6YORKTWN1 +3NNNEWS58-3TOANOS81
314377	3DOW 34	115	314387	3LANEXA	115	1	-111.7	-70.5	103.0	109	2636	D:6BENCHRC-6NP NEWS1 +6KINGS M-6YORKTWN1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	111.8	55.6	103.0	109	21883	D:6LANEXA -6LIGH2091 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	111.6	55.6	103.0	108	2673	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	111.6	69.1	103.0	108	14533	D:6PENNIMA-6KINGS M1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	111.6	69.1	103.0	108	18007	D:6DENBIGH-6WALR2851 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314378	3FTEUS34	115	1	111.5	69.1	103.0	108	20595	D:3KINGS M-3YNNWS 581 +6LANEXA -6LIGH2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	111.4	55.6	103.0	108	18273	D:6DENBIGH-6YORKTWN1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-111.4	-70.5	103.0	108	21134	D:3LANEXA -3NNNEWS581 +3YORKTWN-3YORK PSI

314174 3HARMONY	115 314191 3WHITE S	115 1	276.4	28.5	169.0	164	664	D: 6DAHLGRE-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.4	-70.5	103.0	108	21137	D: 3LANEXA -3NNNEWS581 +6YORKTWN-3YORK PS1
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.4	-70.5	103.0	108	14762	D: 6PENNIMA-6WALR2091 +6DENBIGH-6YORKTWN1
314377 3DOW 34	115 314378 3FTEUS34	115 1	111.4	69.1	103.0	108	18020	D: 6DENBIGH-6WALR2851 +3NNNEWS58-3TOANO581
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.3	-70.5	103.0	108	21852	D: 6LANEXA -6LIGH2091 +3LEBAN58-3YNWS 581
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.2	-70.5	103.0	108	2981	D: 6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.1	-70.5	103.0	108	18043	D: 6DENBIGH-6WALR2851 +6WINCHST-6POOLSVL1
314377 3DOW 34	115 314378 3FTEUS34	115 1	111.2	69.1	103.0	108	18189	D: 6DENBIGH-6WALR2851 +6SURREY -6POOLSVL1
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.1	-70.5	103.0	108	20344	D: 3KINGS M-3TOANO581 +6LIGH285-6WALR2851
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.1	-70.5	103.0	108	24319	D: 3NNNEWS58-3TOANO581 +3YORKTWN-3YORK PS1
314377 3DOW 34	115 314387 3LANEXA	115 1	-111.1	-70.5	103.0	108	24322	D: 3NNNEWS58-3TOANO581 +6YORKTWN-3YORK PS1
314377 3DOW 34	115 314378 3FTEUS34	115 1	111.1	69.1	103.0	108	2625	D: 6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
314377 3DOW 34	115 314378 3FTEUS34	115 1	111.0	69.1	103.0	108	21027	D: 6KINGS M-6YORKTWN1 +6SURREY -6POOLSVL1
314377 3DOW 34	115 314387 3LANEXA	115 1	-110.8	-70.5	103.0	108	2950	D: 6BENCHRC-6CHCKTUK1 +3KINGS M-3TOANO581
314377 3DOW 34	115 314387 3LANEXA	115 1	-110.8	-70.5	103.0	108	20881	D: 6KINGS M-6YORKTWN1 +6WINCHST-6POOLSVL1
313813 3OCRAN	115 314191 3WHITE S	115 1	-289.1	-19.9	269.0	108	4151	D: 6BIRCHWD-6COWORN 1 +6DUNNSVL-6LANEXA 1
314378 3FTEUS34	115 314381 3GRAFT34	115 1	110.7	55.6	103.0	108	21104	D: 3LANEXA -3NNNEWS581 +6LIGH209-6WALR2091
314378 3FTEUS34	115 314381 3GRAFT34	115 1	110.7	55.6	103.0	107	14503	D: 6PENNIMA-6KINGS M1 +6LIGH285-6WALR2851
314378 3FTEUS34	115 314381 3GRAFT34	115 1	110.5	55.6	103.0	107	22846	D: 6LIGH209-6WALR2091 +3NNNEWS58-3TOANO581
314378 3FTEUS34	115 314381 3GRAFT34	115 1	110.4	55.6	103.0	107	2960	D: 6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314377 3DOW 34	115 314387 3LANEXA	115 1	-110.3	-70.5	103.0	107	20520	D: 3KINGS M-3TOANO581 +6SURREY -6POOLSVL1
314377 3DOW 34	115 314378 3FTEUS34	115 1	110.2	69.1	103.0	107	2636	D: 6BENCHRC-6NP NEWS1 +6KINGS M-6YORKTWN1
314377 3DOW 34	115 314387 3LANEXA	115 1	-110.2	-70.5	103.0	107	14770	D: 6PENNIMA-6WALR2091 +3KINGS M-3TOANO581
314377 3DOW 34	115 314387 3LANEXA	115 1	-110.1	-70.5	103.0	107	23018	D: 6LIGH209-6WALR2091 +6SURREY -1SURREY 11
314377 3DOW 34	115 314378 3FTEUS34	115 1	110.0	69.1	103.0	107	21137	D: 3LANEXA -3NNNEWS581 +6YORKTWN-3YORK PS1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.9	69.1	103.0	107	14762	D: 6PENNIMA-6WALR2091 +6DENBIGH-6YORKTWN1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.9	69.1	103.0	107	21134	D: 3LANEXA -3NNNEWS581 +3YORKTWN-3YORK PS1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.9	69.1	103.0	107	21852	D: 6LANEXA -6LIGH2091 +3LEBAN58-3YNWS 581
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.7	69.1	103.0	107	2981	D: 6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.7	69.1	103.0	107	18043	D: 6DENBIGH-6WALR2851 +6WINCHST-6POOLSVL1
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.7	-70.5	103.0	107	21131	D: 3LANEXA -3NNNEWS581 +6WHEALTN-6WINCHST1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.7	69.1	103.0	107	24319	D: 3NNNEWS58-3TOANO581 +3YORKTWN-3YORK PS1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.7	69.1	103.0	107	24322	D: 3NNNEWS58-3TOANO581 +6YORKTWN-3YORK PS1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.6	69.1	103.0	106	20344	D: 3KINGS M-3TOANO581 +6LIGH285-6WALR2851
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.5	-70.5	103.0	106	22602	D: 6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.5	-70.5	103.0	106	14486	D: 6PENNIMA-6KINGS M1 +6DENBIGH-6YORKTWN1
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.5	-70.5	103.0	106	22604	D: 6LIGH285-6WALR2851 +6PEMBROK-6SHELBNK1
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.4	-70.5	103.0	106	24316	D: 3NNNEWS58-3TOANO581 +6WHEALTN-6WINCHST1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.3	69.1	103.0	106	20881	D: 6KINGS M-6YORKTWN1 +6WINCHST-6POOLSVL1
314377 3DOW 34	115 314387 3LANEXA	115 1	-109.4	-70.5	103.0	106	22622	D: 6LIGH285-6WALR2851 +6WHEALTN-6WINCHST1
314377 3DOW 34	115 314378 3FTEUS34	115 1	109.3	69.1	103.0	106	2950	D: 6BENCHRC-6CHCKTUK1 +3KINGS M-3TOANO581

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.1	-70.5	103.0	106	2634	D:6BENCHRC-6NP NEWS1 +3KINGS M-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.9	-70.5	103.0	106	20374	D:3KINGS M-3TOANO581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.9	-70.5	103.0	106	21282	D:3LANEXA -3NNWS581 +6SURY -1SURY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	-108.8	69.1	103.0	106	20520	D:3KINGS M-3TOANO581 +6SURY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.8	-70.5	103.0	106	2665	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.7	69.1	103.0	106	14770	D:6PENNIMA-6WALR2091 +3KINGS M-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.7	-70.5	103.0	106	24467	D:3NNWS58-3TOANO581 +6SURY -1SURY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.6	-70.5	103.0	106	14494	D:6PENNIMA-6KINGS M1 +3KINGS M-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.6	69.1	103.0	106	23018	D:6LIGH209-6WALR2091 +6SURY -1SURY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.5	-70.5	103.0	105	21111	D:3LANEXA -3NNWS581 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.5	-70.5	103.0	105	21113	D:3LANEXA -3NNWS581 +6PEMBROK-6SHELBK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	108.6	55.6	103.0	105	23015	D:6LIGH209-6WALR2091 +6SURY -1SURY 11
313813	3OCAN	115	314191	3WHITE S	115	1	-283.1	-19.9	269.0	105	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	108.3	55.6	103.0	105	2644	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.3	-70.5	103.0	105	24296	D:3NNWS58-3TOANO581 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.2	-70.5	103.0	105	2942	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6YORKTWN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-108.3	-70.5	103.0	105	24298	D:3NNWS58-3TOANO581 +6PEMBROK-6SHELBK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	108.2	55.6	103.0	105	20341	D:3KINGS M-3TOANO581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.2	69.1	103.0	105	21131	D:3LANEXA -3NNWS581 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.0	69.1	103.0	105	14486	D:6PENNIMA-6KINGS M1 +6DENBIGH-6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.1	69.1	103.0	105	22602	D:6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.0	69.1	103.0	105	22604	D:6LIGH285-6WALR2851 +6PEMBROK-6SHELBK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.9	69.1	103.0	105	22622	D:6LIGH285-6WALR2851 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	108.0	69.1	103.0	105	24316	D:3NNWS58-3TOANO581 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.9	-70.5	103.0	105	20599	D:3KINGS M-3YVWS 581 +6LIGH209-6WALR2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	107.8	55.6	103.0	105	20851	D:6KINGS M-6YORKTWN1 +6LIGH285-6WALR2851
314449	6CHESAPK	230	314514	6YADKIN	230	1	-868.9	-539.3	830.0	105	47993	D:6THRS279-6YADKIN 1 +8FENTRES-8YADKIN 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.6	69.1	103.0	105	2634	D:6BENCHRC-6NP NEWS1 +3KINGS M-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.5	69.1	103.0	104	20374	D:3KINGS M-3TOANO581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.5	69.1	103.0	104	21282	D:3LANEXA -3NNWS581 +6SURY -1SURY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.3	69.1	103.0	104	2665	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.3	-70.5	103.0	104	18270	D:6DENBIGH-6YORKTWN1 +3LANEXA -3NNWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.3	-70.5	103.0	104	24554	D:6NP NEWS-6PEMBROK1 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.3	-70.5	103.0	104	25027	D:6PEMBROK-6SHELBK1 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.2	69.1	103.0	104	24467	D:3NNWS58-3TOANO581 +6SURY -1SURY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.2	69.1	103.0	104	14494	D:6PENNIMA-6KINGS M1 +3KINGS M-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.1	-70.5	103.0	104	18283	D:6DENBIGH-6YORKTWN1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.1	69.1	103.0	104	21111	D:3LANEXA -3NNWS581 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	107.1	69.1	103.0	104	21113	D:3LANEXA -3NNWS581 +6PEMBROK-6SHELBK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-107.0	-70.5	103.0	104	14807	D:6PENNIMA-6WALR2091 +6WHEALT-6WINCHST1

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	106.9	55.6	103.0	104	22869	D:6LIGH209-6WALR2091 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	106.8	69.1	103.0	104	2942	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6YORKTWN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.8	-70.5	103.0	104	18452	D:6DENBIGH-6YORKTWN1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	106.8	69.1	103.0	104	24296	D:3NNEWS58-3TOANO581 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	106.8	69.1	103.0	104	24298	D:3NNEWS58-3TOANO581 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.6	-70.5	103.0	104	2976	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.6	-70.5	103.0	104	18269	D:6DENBIGH-6YORKTWN1 +6KINGS M-6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	106.4	69.1	103.0	103	20599	D:3KINGS M-3YNEWS 581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.3	-70.5	103.0	103	2626	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6YORKTWN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.3	-70.5	103.0	103	14787	D:6PENNIMA-6WALR2091 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.2	-70.5	103.0	103	14789	D:6PENNIMA-6WALR2091 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.2	-70.5	103.0	103	20337	D:3KINGS M-3TOANO581 +6KINGS M-6YORKTWN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-106.2	-70.5	103.0	103	22349	D:3LEBAN58-3YNEWS 581 +6LIGH209-6WALR2091
313813	3OCRA	115	314178	3LANCAST	115	1	277.0	7.8	269.0	103	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.9	69.1	103.0	103	18270	D:6DENBIGH-6YORKTWN1 +3LANEXA -3NNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-105.8	-70.5	103.0	103	18004	D:6DENBIGH-6WALR2851 +3KINGS M-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.8	69.1	103.0	103	24554	D:6NP NEWS-6PEMBROK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.8	69.1	103.0	103	25027	D:6PEMBROK-6SHELBNK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.6	69.1	103.0	103	18283	D:6DENBIGH-6YORKTWN1 +3NNEWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-105.4	-70.5	103.0	102	14531	D:6PENNIMA-6KINGS M1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.5	69.1	103.0	102	14807	D:6PENNIMA-6WALR2091 +6WHEALTN-6WINCHST1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	105.4	55.6	103.0	102	18277	D:6DENBIGH-6YORKTWN1 +6LIGH209-6WALR2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	105.4	55.6	103.0	102	2959	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314391	6LIGH209	230	314415	6WALR209	230	1	553.3	280.9	541.0	102	2959	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.3	69.1	103.0	102	18452	D:6DENBIGH-6YORKTWN1 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	552.7	280.9	541.0	102	3135	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-105.3	-70.5	103.0	102	18306	D:6DENBIGH-6YORKTWN1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.1	69.1	103.0	102	2976	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	105.2	69.1	103.0	102	18269	D:6DENBIGH-6YORKTWN1 +6KINGS M-6YORKTWN1
314449	6CHESAPK	230	314514	6YADKIN	230	1	-847.2	-539.3	830.0	102	39014	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514	6YADKIN	230	1	-847.2	-539.3	830.0	102	39180	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.8	69.1	103.0	102	2626	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6YORKTWN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.9	69.1	103.0	102	14787	D:6PENNIMA-6WALR2091 +6NP NEWS-6PEMBROK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	104.9	69.1	103.0	102	14789	D:6PENNIMA-6WALR2091 +6PEMBROK-6SHELBNK1
314174	3HARMONY	115	314191	3WHITE S	115	1	171.7	28.5	169.0	102	2987	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.8	-70.5	103.0	102	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.8	-70.5	103.0	102	14511	D:6PENNIMA-6KINGS M1 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.8	-70.5	103.0	102	14513	D:6PENNIMA-6KINGS M1 +6PEMBROK-6SHELBNK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	104.8	55.6	103.0	102	14761	D:6PENNIMA-6WALR2091 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.7	69.1	103.0	102	20337	D:3KINGS M-3TOANO581 +6KINGS M-6YORKTWN1

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.7	69.1	103.0	102	22349	D:3LEBAN58-3YNWS 581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.3	-70.5	103.0	101	22090	D:6LANEXA -6LIGH2091 +8SEPTA -8YADKIN 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.3	69.1	103.0	101	18004	D:6DENBIGH-6WALR2851 +3KINGS M-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.2	-70.5	103.0	101	22058	D:6LANEXA -6LIGH2091 +8CHCKAHM-8SURY 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.2	-70.5	103.0	101	22773	D:6LIGH285-6WALR2851 +6SURY -ISURY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-104.2	-70.5	103.0	101	2660	D:6BENCHRC-6NP NEWS1 +6PENINSI-6PABB 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	104.1	55.6	103.0	101	21861	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	104.1	55.6	103.0	101	21881	D:6LANEXA -6LIGH2091 +6WHEALTN-6WINCHST1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	104.1	55.6	103.0	101	21863	D:6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	104.0	69.1	103.0	101	14531	D:6PENNIMA-6KINGS M1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.9	-70.5	103.0	101	18041	D:6DENBIGH-6WALR2851 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.9	-70.5	103.0	101	21877	D:6LANEXA -6LIGH2091 +3WARWICK-3WHEALTN1
313813	3OCAN	115	314178	3LANCAST	115	1	271.1	7.8	269.0	101	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.8	-70.5	103.0	101	14958	D:6PENNIMA-6WALR2091 +6SURY -ISURY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	103.8	69.1	103.0	101	18306	D:6DENBIGH-6YORKTWN1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	11398	D:3WEST PT-3LANEXA 1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	18021	D:6DENBIGH-6WALR2851 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	18023	D:6DENBIGH-6WALR2851 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	19315	D:3FTEUS58-3GRAFT581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	19573	D:3FTEUS58-3LEBAN581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.7	-70.5	103.0	101	20086	D:3GRAFT58-3YORKTWN1 +6LANEXA -6LIGH2091
314391	6LIGH209	230	314415	6WALR209	230	1	544.0	280.9	541.0	101	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	543.7	280.9	541.0	101	2643	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.5	55.6	103.0	100	21103	D:3LANEXA -3NNNEWS581 +6LIGH285-6WALR2851
314391	6LIGH209	230	314415	6WALR209	230	1	543.8	280.9	541.0	101	22770	D:6LIGH285-6WALR2851 +6SURY -6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.4	55.6	103.0	100	2643	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.4	55.6	103.0	100	24702	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.4	55.6	103.0	100	25175	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	542.6	280.9	541.0	100	2819	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	103.3	69.1	103.0	100	14511	D:6PENNIMA-6KINGS M1 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	103.3	69.1	103.0	100	14513	D:6PENNIMA-6KINGS M1 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.3	-70.5	103.0	100	22056	D:6LANEXA -6LIGH2091 +8CARSON -8SULFOLK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.3	55.6	103.0	100	22601	D:6LIGH285-6WALR2851 +3NNNEWS58-3TOANO581
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.2	55.6	103.0	100	2953	D:6BENCHRC-6CHCKTUK1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.2	-70.5	103.0	100	20879	D:6KINGS M-6YORKTWN1 +6WHEALTN-6WINCHST1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.2	55.6	103.0	100	22770	D:6LIGH285-6WALR2851 +6SURY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-103.1	-70.5	103.0	100	21127	D:3LANEXA -3NNNEWS581 +3WARWICK-3WHEALTN1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.0	55.6	103.0	100	14773	D:6PENNIMA-6WALR2091 +3LANEXA -3NNNEWS581
314378	3FTEUS34	115	314381	3GRAFT34	115	1	103.0	55.6	103.0	100	20345	D:3KINGS M-3TOANO581 +6LIGH209-6WALR2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.9	55.6	103.0	100	2966	D:6BENCHRC-6CHCKTUK1 +3NNNEWS58-3TOANO581

314174	3HARMONY	115	314191	3WHITE S	115	1	276.4	28.5	169.0	164	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.9	55.6	103.0	100	14485	D:6PENNIMA-6KINGS M1 +6DENBIGH-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.9	69.1	103.0	100	22090	D:6LANEXA -6LIGH2091 +8SEPTA -8YADKIN 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.8	55.6	103.0	100	2929	D:6BENCHRC-6CHCKTUK1 +6PENNIMA-6WALR2091
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.8	55.6	103.0	100	14786	D:6PENNIMA-6WALR2091 +3NNNEWS58-3TOANO581
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.8	69.1	103.0	100	22058	D:6LANEXA -6LIGH2091 +8CHCKAHM-8SURREY 1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.8	-70.5	103.0	100	24312	D:3NNNEWS58-3TOANO581 +3WARWICK-3WHEELTN1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.7	69.1	103.0	100	2660	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.7	69.1	103.0	100	22773	D:6LIGH285-6WALR2851 +6SURREY -1SURREY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.5	-70.5	103.0	100	1865	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.5	-70.5	103.0	100	20375	D:3KINGS M-3TOANO581 +3YORKTWN-3YORK PSI
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.5	-70.5	103.0	100	20378	D:3KINGS M-3TOANO581 +6YORKTWN-3YORK PSI
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.6	55.6	103.0	100	21279	D:6LANEXA -3NNNEWS581 +6SURREY -6POOLSVL1
313813	3OCAN	115	314191	3WHITE S	115	1	-267.7	-19.9	269.0	100	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.5	55.6	103.0	100	2671	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.5	-70.5	103.0	100	14682	D:6PENNIMA-6KINGS M1 +6SURREY -1SURREY 11
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.5	69.1	103.0	100	18041	D:6DENBIGH-6WALR2851 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.5	-70.5	103.0	100	20372	D:3KINGS M-3TOANO581 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.3	-70.5	103.0	99	3271	D:3WHITEMA-3HARMONY1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.3	-70.5	103.0	99	3585	D:3WHITEMA-3HAYES891 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.3	69.1	103.0	99	14958	D:6PENNIMA-6WALR2091 +6SURREY -1SURREY 11
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.4	-70.5	103.0	99	20859	D:6KINGS M-6YORKTWN1 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.4	-70.5	103.0	99	20861	D:6KINGS M-6YORKTWN1 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.4	69.1	103.0	99	21877	D:6LANEXA -6LIGH2091 +3WARWICK-3WHEALTN1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.4	-70.5	103.0	99	22091	D:6LANEXA -6LIGH2091 +8SURREY -8SULFOLK1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	102.4	55.6	103.0	99	24464	D:3NNNEWS58-3TOANO581 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.2	69.1	103.0	99	11398	D:3WEST PT-3LANEXA 1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.2	-70.5	103.0	99	16680	D:3COLONY -3WARWICK1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.3	69.1	103.0	99	18021	D:6DENBIGH-6WALR2851 +6NP NEWS-6PEMBROK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.2	69.1	103.0	99	18023	D:6DENBIGH-6WALR2851 +6PEMBROK-6SHELBNK1
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.3	69.1	103.0	99	19315	D:3FTEUS58-3GRAFT581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.3	69.1	103.0	99	19573	D:3FTEUS58-3LEBAN581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	102.3	69.1	103.0	99	20086	D:3GRAFT58-3YORKTWN1 +6LANEXA -6LIGH2091
314461	3DEPC46	115	314513	3YADKIN	115	1	-410.7	-227.5	414.0	99	36155	D:6CHESAPK-6YADKIN 1 +6DOZIER -6ELIZ R 1
314461	3DEPC46	115	314513	3YADKIN	115	1	-410.7	-227.5	414.0	99	36156	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCH1
314391	6LIGH209	230	314415	6WALR209	230	1	536.3	280.9	541.0	99	22624	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.0	-70.5	103.0	99	11395	D:3WEST PT-3LANEXA 1 +3LANEXA -3NNNEWS581
314377	3DOW 34	115	314387	3LANEXA	115	1	-102.0	-70.5	103.0	99	22092	D:6LANEXA -6LIGH2091 +8SURREY -1SURREY 21

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 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:40 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN
 Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum_2015(2013LF)_base_wpre_1345865open.sav
 Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
 Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
 Contin.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314391	6LIGH209	230	314415	6WALR209	230	1	LN	1026.5	313.6	541.0	189.7	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	1011.8	313.6	541.0	187.0	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	917.3	313.6	541.0	169.6	2478 D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314415	6WALR209	230	1	LN	916.9	244.1	541.0	169.5	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314415	6WALR209	230	1	LN	903.2	244.1	541.0	166.9	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNINAN	230	314386	6KINGS M	230	1	LN	898.5	228.1	541.0	166.1	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314386	6KINGS M	230	1	LN	884.7	228.1	541.0	163.5	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	868.6	204.3	541.0	160.5	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	854.8	204.3	541.0	158.0	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	829.4	313.6	541.0	153.3	2332 D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENNINAN	230	314415	6WALR209	230	1	LN	815.0	244.1	541.0	150.6	2478 D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314386	6KINGS M	230	1	LN	794.3	228.1	541.0	146.8	2478 D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314214	6CHCKAHH	230	314390	6LIGH285	230	1	LN	1169.4	428.3	830.0	140.9	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	759.5	204.3	541.0	140.4	2478 D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314214	6CHCKAHH	230	314390	6LIGH285	230	1	LN	1154.0	428.3	830.0	139.0	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNINAN	230	314415	6WALR209	230	1	LN	734.3	244.1	541.0	133.7	2332 D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	1090.0	361.2	812.0	134.2	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314386	6KINGS M	230	1	LN	716.3	228.1	541.0	132.4	2332 D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	1074.9	361.2	812.0	132.4	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	706.4	313.6	541.0	130.6	2616 D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314214	6CHCKAHH	230	314390	6LIGH285	230	1	LN	1065.9	428.3	830.0	128.4	2478 D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314390	6LIGH285	230	314413	6WALR285	230	1	LN	1058.9	344.7	830.0	127.6	2792 D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	688.4	313.6	541.0	127.3	2302 D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	687.8	204.3	541.0	127.1	2332 D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230	314413	6WALR285	230	1	LN	1044.2	344.7	830.0	125.8	2646 D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314391	6LIGH209	230	314415 6WALR209	230 1	LN	671.2	313.6	541.0	124.1	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	671.5	313.6	541.0	124.1	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	661.9	313.6	541.0	122.4	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	661.6	313.6	541.0	122.3	23584	D:6NP NEWS-6PMBROK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	660.9	313.6	541.0	122.2	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314417	3WHEALTN	115	314418 6WHEALTN	230 2	TR	350.7	104.4	289.0	121.3	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314388	6LANEXA	230	314391 6LIGH209	230 1	LN	984.4	361.2	812.0	121.2	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	654.0	313.6	541.0	120.9	21798	D:6LIGH285-6WALR2851 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	649.1	313.6	541.0	120.0	2600	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6WALR2851
314188	3WEST PT	115	314387 3LANEXA	115 1	LN	329.6	56.5	275.0	119.9	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	647.3	313.6	541.0	119.7	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230	314425 3YORK FS	115 1	TR	338.7	115.3	284.4	119.1	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314188	3WEST PT	115	314387 3LANEXA	115 1	LN	327.3	56.5	275.0	119.0	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	639.3	313.6	541.0	118.2	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314422	3YORKTWN	115	314425 3YORK FS	115 1	TR	335.8	114.6	284.4	118.1	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314401	3PENINSL	115	314412 3U CARBD	115 1	LN	160.1	25.5	136.0	117.7	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314412	3U CARBD	115	314417 3WHEALTN	115 1	LN	160.1	25.7	136.0	117.7	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	632.9	313.6	541.0	117.0	2286	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
314417	3WHEALTN	115	314418 6WHEALTN	230 2	TR	337.9	104.4	289.0	116.9	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314214	6CHCKAHM	230	314390 6LIGH285	230 1	LN	969.1	428.3	830.0	116.8	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
313812	6ROCKLANDING	230	314423 6YORKTWN	230 1	LN	631.4	68.9	541.0	116.7	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	754.9	372.5	650.0	116.1	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314391	6LIGH209	230	314415 6WALR209	230 1	LN	625.4	313.6	541.0	115.6	21630	D:6LIGH285-6WALR2851 +6NP NEWS-6PMBROK1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	625.6	313.6	541.0	115.6	21632	D:6LIGH285-6WALR2851 +6PMBROK-6SHELBNK1
314296	6PENNNIN	230	314415 6WALR209	230 1	LN	624.8	244.1	541.0	115.5	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314423	6YORKTWN	230	314425 3YORK FS	115 1	TR	325.7	115.3	284.4	114.5	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314390	6LIGH285	230	314413 6WALR285	230 1	LN	950.2	344.7	830.0	114.5	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314422	3YORKTWN	115	314425 3YORK FS	115 1	TR	325.1	114.6	284.4	114.3	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314376	6DENBIGH	230	314540 6POOLSVL	230 1	LN	741.9	372.5	650.0	114.1	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
313812	6ROCKLANDING	230	314423 6YORKTWN	230 1	LN	611.0	278.3	830.0	113.2	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	610.5	68.9	541.0	112.9	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314415 6WALR209	230 1	LN	733.5	313.6	541.0	112.9	17742	D:6DENBIGH-6WALR2851 +6SURY -6POOLSVL1
314296	6PENNNIN	230	314386 6KINGS M	230 1	LN	608.1	228.1	541.0	112.8	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314296	6PENNNIN	230	314415 6WALR209	230 1	LN	607.8	244.1	541.0	112.3	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314391	6LIGH209	230	314415 6WALR209	230 1	LN	603.5	313.6	541.0	111.6	17596	D:6DENBIGH-6WALR2851 +6WINCHST-6POOLSVL1
313818	6BENCHRC	230	314522 6CHCKTUK	230 1	LN	749.8	359.5	672.0	111.6	21057	D:6LANEXA -6LIGH2091 +6SURY -6POOLSVL1
314376	6DENBIGH	230	314413 6WALR285	230 1	LN	925.9	278.3	830.0	111.5	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	721.4	372.5	650.0	111.0	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	720.1	372.5	650.0	110.8	2302	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314401	3PENINSL	115	314412 3U CARBD	115 1	LN	150.7	25.5	136.0	110.8	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314412	3U CARBD	115	314417 3WHEALTN	115 1	LN	150.7	25.7	136.0	110.8	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	605.8	225.5	549.0	110.4	21057	D:6LANEXA -6LIGH2091 +6SURREY -6POOLSVL1
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	605.9	225.7	549.0	110.4	21057	D:6LANEXA -6LIGH2091 +6SURREY -6POOLSVL1
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	741.3	359.5	672.0	110.3	20911	D:6LANEXA -6LIGH2091 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	596.2	313.6	541.0	110.2	21650	D:6LIGH285-6WALR2851 +6WHEALTIN-6WINCHST1
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	740.8	359.5	672.0	110.2	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	593.4	313.6	541.0	109.7	2601	D:6BENCHRCH-6CHCKTUK1 +6DENBIGH-6YORKTWN1
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	888.2	361.2	812.0	109.4	2332	D:6BENCHRCH-6NP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314386	6KINGS M	230	1	LN	591.1	228.1	541.0	109.3	2302	D:6BENCHRCH-6NP NEWS1 +6LIGH285-6WALR2851
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	598.2	225.7	549.0	109.0	20911	D:6LANEXA -6LIGH2091 +6WINCHST-6POOLSVL1
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	732.3	359.5	672.0	109.0	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	598.1	225.5	549.0	108.9	20911	D:6LANEXA -6LIGH2091 +6WINCHST-6POOLSVL1
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	595.1	225.5	549.0	108.4	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	595.2	225.7	549.0	108.4	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	585.3	244.1	541.0	108.2	23730	D:6NP NEWS-6PEMBROK1 +6SURREY -6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	585.6	244.1	541.0	108.2	24203	D:6PEMBROK-6SHELBK1 +6SURREY -6POOLSVL1
314417	3WHEALTIN	115	314418	6WHEALTIN	230	2	TR	312.2	104.4	289.0	108.0	2633	D:6BENCHRCH-6CHCKTUK1 +6PENINSI-6TABB 1
313818	6BENCHRCH	230	314398	6NP NEWS	230	1	LN	724.3	334.9	672.0	107.8	21057	D:6LANEXA -6LIGH2091 +6SURREY -6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	699.3	372.5	650.0	107.6	2303	D:6BENCHRCH-6NP NEWS1 +6LIGH209-6WALR2091
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	582.1	204.3	541.0	107.6	2616	D:6BENCHRCH-6CHCKTUK1 +6LIGH285-6WALR2851
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	721.2	359.5	672.0	107.3	20881	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	720.4	359.5	672.0	107.2	22043	D:6LIGH209-6WALR2091 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	579.1	313.6	541.0	107.0	2287	D:6BENCHRCH-6NP NEWS1 +6DENBIGH-6YORKTWN1
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	587.4	225.5	549.0	107.0	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	587.4	225.7	549.0	107.0	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	578.4	244.1	541.0	106.9	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	577.8	244.1	541.0	106.8	2644	D:6BENCHRCH-6CHCKTUK1 +6WHEALTIN-6WINCHST1
313818	6BENCHRCH	230	314398	6NP NEWS	230	1	LN	715.9	334.9	672.0	106.5	20911	D:6LANEXA -6LIGH2091 +6WINCHST-6POOLSVL1
313818	6BENCHRCH	230	314398	6NP NEWS	230	1	LN	715.4	334.9	672.0	106.5	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	576.1	244.1	541.0	106.5	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	575.8	244.1	541.0	106.4	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	690.4	372.5	650.0	106.2	2600	D:6BENCHRCH-6CHCKTUK1 +6DENBIGH-6WALR2851
314391	6LIGH209	230	314415	6WALR209	230	1	LN	573.3	313.6	541.0	106.0	17574	D:6DENBIGH-6WALR2851 +6NP NEWS-6PEMBROK1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	573.5	313.6	541.0	106.0	17576	D:6DENBIGH-6WALR2851 +6PEMBROK-6SHELBK1
313818	6BENCHRCH	230	314522	6CHCKTUK	230	1	LN	712.0	359.5	672.0	106.0	21897	D:6LIGH209-6WALR2091 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	571.4	244.1	541.0	105.6	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314415	6WALR209	230	1	LN	570.0	244.1	541.0	105.4	2600	D:6BENCHRCH-6CHCKTUK1 +6DENBIGH-6WALR2851
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	577.5	225.5	549.0	105.2	20881	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	577.6	225.7	549.0	105.2	20881	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
313818	6BENCHRCH	230	314398	6NP NEWS	230	1	LN	706.9	334.9	672.0	105.2	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314296	6PENNNINAN	230	314386	6KINGS M	230	1	LN	568.4	228.1	541.0	105.1	23730	D:6NP NEWS-6PEMBROK1 +6SURREY -6POOLSVL1
314296	6PENNNINAN	230	314386	6KINGS M	230	1	LN	568.7	228.1	541.0	105.1	24203	D:6PEMBROK-6SHELBK1 +6SURREY -6POOLSVL1
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	575.8	225.5	549.0	104.9	22043	D:6LIGH209-6WALR2091 +6SURREY -6POOLSVL1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	575.9	225.7	549.0	104.9	22043	D:6LIGH209-6WALR2091 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	566.3	313.6	541.0	104.7	18003	D:6DENBIGH-6YORKTWN1 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	566.5	313.6	541.0	104.7	23582	D:6NP NEWS-6PEMBROK1 +6WHEALTN-6WINCHST1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	566.6	313.6	541.0	104.7	24055	D:6PEMBROK-6SHELBK1 +6WHEALTN-6WINCHST1
314386	6KINGS M	230	314423	6YORKTWN	230	1	LN	565.3	204.3	541.0	104.5	2302	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314390	6LIGH285	230	314413	6WALR285	230	1	LN	867.7	344.7	830.0	104.5	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	865.9	533.0	830.0	104.3	47021	D:6THRS279-6YADKIN 1 +6FENTRES-8YADKIN 1
314422	3YORKTWN	115	314425	3YORK PS	115	1	TR	295.6	114.6	284.4	104.0	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314423	6YORKTWN	230	314425	3YORK PS	115	1	TR	295.5	115.3	284.4	103.9	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	562.0	228.1	541.0	103.9	21798	D:6LIGH285-6WALR2851 +6SURREY -6POOLSVL1
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	560.9	228.1	541.0	103.7	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313812	6ROCKLANDING	230	314423	6YORKTWN	230	1	LN	560.4	68.9	541.0	103.6	2478	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
313818	6BENCHRC	230	314522	6CHCKTUK	230	1	LN	696.4	359.5	672.0	103.6	17742	D:6DENBIGH-6WALR2851 +6SURREY -6POOLSVL1
314339	6SPRUNCE	230	315083	1SPRUNCA	13.8	1	TR	69.9	58.2	67.5	103.5	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314339	6SPRUNCE	230	315083	1SPRUNCA	13.8	1	TR	69.9	58.2	67.5	103.5	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
313818	6BENCHRC	230	314398	6NP NEWS	230	1	LN	695.8	334.9	672.0	103.5	20881	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314398	6NP NEWS	230	314399	6PEMBROK	230	1	LN	568.3	225.5	549.0	103.5	21897	D:6LIGH209-6WALR2091 +6WINCHST-6POOLSVL1
314399	6PEMBROK	230	314407	6SHELBK	230	1	LN	568.3	225.7	549.0	103.5	21897	D:6LIGH209-6WALR2091 +6WINCHST-6POOLSVL1
314339	6SPRUNCE	230	315083	1SPRUNCA	13.8	1	TR	69.8	58.2	67.5	103.4	2478	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	672.4	372.5	650.0	103.4	2588	D:6BENCHRC-6CHCKTUK1 +6PENNNIMA-6WALR2091
314391	6LIGH209	230	314415	6WALR209	230	1	LN	559.3	313.6	541.0	103.4	17857	D:6DENBIGH-6YORKTWN1 +6WINCHST-6POOLSVL1
313818	6BENCHRC	230	314398	6NP NEWS	230	1	LN	695.1	334.9	672.0	103.4	22043	D:6LIGH209-6WALR2091 +6SURREY -6POOLSVL1
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	559.3	228.1	541.0	103.4	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	559.0	228.1	541.0	103.3	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	670.9	372.5	650.0	103.2	2286	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
314296	6PENNNAN	230	314415	6WALR209	230	1	LN	557.5	244.1	541.0	103.1	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	557.6	313.6	541.0	103.1	17594	D:6DENBIGH-6WALR2851 +6WHEALTN-6WINCHST1
314406	3SHELBK	115	314407	6SHELBK	230	1	TR	276.8	118.3	268.6	103.0	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314296	6PENNNAN	230	314415	6WALR209	230	1	LN	554.8	244.1	541.0	102.6	2286	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
313818	6BENCHRC	230	314522	6CHCKTUK	230	1	LN	689.7	359.5	672.0	102.6	21623	D:6LIGH285-6WALR2851 +6LIGH209-6WALR2091
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	555.0	228.1	541.0	102.6	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	665.0	372.5	650.0	102.3	2587	D:6BENCHRC-6CHCKTUK1 +6PENNNIMA-6KINGS M1
314296	6PENNNAN	230	314386	6KINGS M	230	1	LN	553.4	228.1	541.0	102.3	2600	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6WALR2851
313818	6BENCHRC	230	314522	6CHCKTUK	230	1	LN	687.6	359.5	672.0	102.3	17596	D:6DENBIGH-6WALR2851 +6WINCHST-6POOLSVL1
313818	6BENCHRC	230	314398	6NP NEWS	230	1	LN	686.6	334.9	672.0	102.2	21897	D:6LIGH209-6WALR2091 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115	314418	6WHEALTN	230	2	TR	295.3	104.4	289.0	102.2	24049	D:6PEMBROK-6SHELBK1 +6TABB -6YORKTWN1
314417	3WHEALTN	115	314418	6WHEALTN	230	2	TR	295.2	104.4	289.0	102.1	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314214	6CHCKAHM	230	314390	6LIGH285	230	1	LN	845.6	428.3	830.0	101.9	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314417	3WHEALTN	115	314418	6WHEALTN	230	2	TR	293.8	104.4	289.0	101.7	2319	D:6BENCHRC-6NP NEWS1 +6PENINSL-6TABB 1
314409	6TABB	230	314423	6YORKTWN	230	1	LN	842.1	187.8	830.0	101.5	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	658.9	372.5	650.0	101.4	20889	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314421	6WINCHST	230	314540	6POOLSVL	230	1	LN	659.1	372.5	650.0	101.4	20891	D:6LANEXA -6LIGH2091 +6PEMBROK-6SHELBK1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
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**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314376	6DENBIGH	230	314413 6WALR285	230 1	LN	838.8	278.3	830.0	101.1	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314449	6CHESAPK	230	314514 6YADKIN	230 1	LN	838.5	533.0	830.0	101.0	38042	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514 6YADKIN	230 1	LN	838.5	533.0	830.0	101.0	38208	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314537	6SUFOLK	230	314928 8SULFOLK	500 2	TR	1014.8	386.2	1004.3	101.0	52079	D:6SEPTA -8YADKIN 1 +8YADKIN -8SULFOLK1
314406	6SHELBNK	115	314407 6SHELBNK	230 1	TR	271.0	118.3	268.6	100.9	17071	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230 1	LN	546.1	313.6	541.0	100.9	21801	D:6LIGH285-6WALR2851 +6SURY -1SURY 11
314409	6TABB	230	314423 6YORKTWN	230 1	LN	836.9	187.8	830.0	100.8	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313818	6BENCHRCH	230	314522 6CHCKTUK	230 1	LN	677.3	359.5	672.0	100.8	14532	D:6PENNIMA-6WALR2091 +6SURY -6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	655.5	372.5	650.0	100.8	20881	D:6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314296	6PENNINAN	230	314415 6WALR209	230 1	LN	545.4	244.1	541.0	100.8	21630	D:6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314296	6PENNINAN	230	314415 6WALR209	230 1	LN	545.4	244.1	541.0	100.8	21632	D:6LIGH285-6WALR2851 +6PEMBROK-6SHELBNK1
314422	6YORKTWN	115	314425 6YORKTWN	115 1	TR	296.1	114.6	284.4	100.6	2319	D:6BENCHRC-6NP NEWS1 +6PENNINSL-6TABB 1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	653.9	372.5	650.0	100.6	2609	D:6BENCHRC-6CHCKTUK1 +6KINGS M-6YORKTWN1
314423	6YORKTWN	230	314425 6YORKTWN	115 1	TR	285.9	115.3	284.4	100.5	2319	D:6BENCHRC-6NP NEWS1 +6PENNINSL-6TABB 1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	652.9	372.5	650.0	100.4	2274	D:6BENCHRC-6NP NEWS1 +6PENNIMA-6WALR2091
314386	6KINGS M	230	314423 6YORKTWN	230 1	LN	542.4	204.3	541.0	100.3	24203	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314386	6KINGS M	230	314423 6YORKTWN	230 1	LN	542.1	204.3	541.0	100.2	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314296	6PENNINAN	230	314386 6KINGS M	230 1	LN	540.8	228.1	541.0	100.0	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
313818	6BENCHRCH	230	314522 6CHCKTUK	230 1	LN	672.0	359.5	672.0	100.0	17563	D:6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314398	6NP NEWS	230	314399 6PEMBROK	230 1	LN	549.2	225.5	549.0	100.0	17742	D:6DENBIGH-6WALR2851 +6SURY -6POOLSVL1
314399	6PEMBROK	230	314407 6SHELBNK	230 1	LN	549.2	225.7	549.0	100.0	17742	D:6DENBIGH-6WALR2851 +6SURY -6POOLSVL1
313818	6BENCHRCH	230	314398 6NP NEWS	230 1	LN	671.2	334.9	672.0	99.9	17742	D:6DENBIGH-6WALR2851 +6SURY -6POOLSVL1
314682	3BUGGS I	115	315151 1BUGGS 2	13.8 1	TR	69.9	69.9	70.0	99.8	**	Base Case **
313818	6BENCHRCH	230	314522 6CHCKTUK	230 1	LN	670.0	359.5	672.0	99.7	14258	D:6PENNIMA-6KINGS M1 +6SURY -6POOLSVL1
314214	6CHCKAHM	230	314390 6LIGH285	230 1	LN	826.8	428.3	830.0	99.6	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314296	6PENNINAN	230	314386 6KINGS M	230 1	LN	538.3	228.1	541.0	99.5	2286	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
313818	6BENCHRCH	230	314522 6CHCKTUK	230 1	LN	668.7	359.5	672.0	99.5	14386	D:6PENNIMA-6WALR2091 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	646.9	372.5	650.0	99.5	21630	D:6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	647.0	372.5	650.0	99.5	21632	D:6LIGH285-6WALR2851 +6PEMBROK-6SHELBNK1
314296	6PENNINAN	230	314415 6WALR209	230 1	LN	537.7	244.1	541.0	99.4	17742	D:6DENBIGH-6WALR2851 +6SURY -6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	645.4	372.5	650.0	99.3	2273	D:6BENCHRC-6NP NEWS1 +6PENNIMA-6KINGS M1
313812	6ROCKLANDING	230	314416 6WARWICK	230 1	LN	537.0	15.3	541.0	99.3	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314398	6NP NEWS	230	314399 6PEMBROK	230 1	LN	545.1	225.5	549.0	99.3	21623	D:6LIGH285-6WALR2851 +6LIGH209-6WALR2091
314399	6PEMBROK	230	314407 6SHELBNK	230 1	LN	545.1	225.7	549.0	99.3	21623	D:6LIGH285-6WALR2851 +6LIGH209-6WALR2091
314386	6KINGS M	230	314423 6YORKTWN	230 1	LN	537.0	204.3	541.0	99.3	21798	D:6LIGH285-6WALR2851 +6SURY -6POOLSVL1
314461	3DEPEC46	115	314513 3YADKIN	115 1	LN	411.1	227.4	414.0	99.3	35183	D:6CHESAPK-6YADKIN 1 +6DOZIER -6ELIZ R 1
314461	3DEPEC46	115	314513 3YADKIN	115 1	LN	411.1	227.4	414.0	99.3	35184	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCH1
314339	6SPRUNCE	230	315083 1SPRUNCA	13.8 1	TR	67.0	58.2	67.5	99.2	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230	314540 6POOLSVL	230 1	LN	644.6	372.5	650.0	99.2	2601	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6YORKTWN1

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AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 <VOV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN
Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\sum 2015(2013LF) base_wpre_1345865open.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\vapsys.mon
Contin.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\peninsula.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8997	1.0207	0.9300	1.0700	0.9696	1.0717	LD	1306	D:6ROCKLAN-6WARWICK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8905	1.0207	0.9300	1.0700	0.9696	1.0717	LD	1623	D:6ROCKLAN-6YORKTWN1 +6HAYES -6YORKTWN1
313812	6ROCKLAND	230.0	345	356	0.8842	1.0151	0.9300	1.0700	0.9643	1.0658	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314416	6WARWICK	230.0	345	356	0.8845	1.0149	0.9300	1.0700	0.9641	1.0656	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314418	6WHEALTIN	230.0	345	356	0.8859	1.0149	0.9300	1.0700	0.9641	1.0656	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8867	1.0146	0.9300	1.0700	0.9639	1.0653	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8887	1.0169	0.9300	1.0700	0.9661	1.0678	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.8884	1.0151	0.9300	1.0700	0.9643	1.0658	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.8883	1.0149	0.9300	1.0700	0.9641	1.0656	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314418	6WHEALTIN	230.0	345	356	0.8911	1.0149	0.9300	1.0700	0.9641	1.0656	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8909	1.0146	0.9300	1.0700	0.9639	1.0653	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8929	1.0169	0.9300	1.0700	0.9661	1.0678	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.8937	1.0078	0.9300	1.0700	0.9574	1.0582	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8905	1.0207	0.9300	1.0700	0.9696	1.0717	LD	1939	D:6ROCKLAN-6YORKTWN1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2254	D:6BENCHRC-6NP NEWS1 +6HAYES -6YORKTWN1
313812	6ROCKLAND	230.0	345	356	0.9070	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314296	6PENNINGAN	230.0	345	356	0.9035	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314386	6KINGS M	230.0	345	356	0.9049	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314391	6LIGH209	230.0	345	356	0.9000	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314398	6NP NEWS	230.0	345	356	0.8936	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314399	6PENBROK	230.0	345	356	0.8921	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314402	6PENINSL	230.0	345	356	0.8937	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314407	6SHELBK	230.0	345	356	0.8907	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314409	6TABB	230.0	345	356	0.8903	1.0103	0.9300	1.0700	0.9633	1.0608	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314415	6WALR209	230.0	345	356	0.9008	1.0103	0.9300	1.0700	0.9598	1.0608	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314416	6WARWICK	230.0	345	356	0.9067	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314418	6WHEALTIN	230.0	345	356	0.9064	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314421	6WINCHST	230.0	345	356	0.9065	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314442	6NP NE 1	230.0	345	356	0.8955	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314445	6WHEAL 1	230.0	345	356	0.9082	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314399	6PEMBROK	230.0	345	356	0.9089	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2302	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314407	6SHELBNK	230.0	345	356	0.9074	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2302	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314399	6PEMBROK	230.0	345	356	0.9087	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2303	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314407	6SHELBNK	230.0	345	356	0.9072	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2303	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314398	6NP NEWS	230.0	345	356	0.9950	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2318	D:6BENCHRC-6NP NEWS1 +6PENINS1-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8934	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2318	D:6BENCHRC-6NP NEWS1 +6PENINS1-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8920	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2318	D:6BENCHRC-6NP NEWS1 +6PENINS1-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8968	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2318	D:6BENCHRC-6NP NEWS1 +6PENINS1-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8785	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2319	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314399	6PEMBROK	230.0	345	356	0.8771	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2319	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314402	6PENINS1	230.0	345	356	0.8753	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2319	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8758	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2319	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8803	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2319	D:6BENCHRC-6NP NEWS1 +6PENINS1-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8413	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314399	6PEMBROK	230.0	345	356	0.8401	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314402	6PENINS1	230.0	345	356	0.8376	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8390	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8361	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8430	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
313812	6ROCKLAND	230.0	345	356	0.9098	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314398	6NP NEWS	230.0	345	356	0.8975	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314399	6PEMBROK	230.0	345	356	0.8960	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314402	6PENINS1	230.0	345	356	0.8979	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314407	6SHELBNK	230.0	345	356	0.8946	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314409	6TABB	230.0	345	356	0.9041	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314416	6WALRICK	230.0	345	356	0.9091	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314418	6WHEALTN	230.0	345	356	0.9079	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314442	6NP NE 1	230.0	345	356	0.8994	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314445	6WHEAL 1	230.0	345	356	0.9094	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.7385	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
313828	3WHITENAR	115.0	345	354	0.8671	0.9988	0.9300	1.0700	0.9489	1.0488	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8827	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314177	3HAYES89	115.0	345	354	0.8484	0.9985	0.9300	1.0700	0.9486	1.0485	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314180	6HAYES	230.0	345	354	0.7633	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314189	6FAPERILL	230.0	345	354	0.8930	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENNINAN	230.0	345	356	0.8017	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.7644	0.9972	0.9300	1.0700	0.9473	1.0470	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314372	3BLOXOMC	115.0	345	356	0.7728	0.9971	0.9300	1.0700	0.9472	1.0469	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.7704	0.9945	0.9300	1.0700	0.9448	1.0442	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314374	3COPELND	115.0	345	356	0.7891	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314375	6CORCTN	230.0	345	354	0.8974	1.0142	0.9300	1.0700	0.9635	1.0649	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.7696	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.7542	0.9896	0.9300	1.0700	0.9401	1.0391	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314379	3FTEUS58	115.0	345	356	0.7542	0.9896	0.9300	1.0700	0.9401	1.0391	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.7586	0.9929	0.9300	1.0700	0.9433	1.0426	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.7570	0.9918	0.9300	1.0700	0.9422	1.0414	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314366	6KINGS M	230.0	345	356	0.7941	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314368	6LANXA	230.0	345	356	0.8032	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.7491	0.9858	0.9300	1.0700	0.9365	1.0351	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.8174	1.0068	0.9300	1.0700	0.9564	1.0571	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230.0	345	356	0.8366	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314392	3WAGRUDR	115.0	345	356	0.7849	1.0044	0.9300	1.0700	0.9542	1.0546	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314393	3MERCURY	115.0	345	356	0.7800	1.0026	0.9300	1.0700	0.9525	1.0527	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314394	3ANASA	115.0	345	356	0.7863	1.0037	0.9300	1.0700	0.9536	1.0539	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314397	3NNERS75	115.0	345	356	0.7891	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314398	6NP NEWS	230.0	345	356	0.7235	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314399	6PENBROK	230.0	345	356	0.7230	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314401	3PENINSL	115.0	345	356	0.7862	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.7294	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314403	3SEARD76	115.0	345	356	0.7694	0.9982	0.9300	1.0700	0.9483	1.0481	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314404	3SEARD79	115.0	345	356	0.7688	0.9978	0.9300	1.0700	0.9479	1.0477	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314406	3SHELBNK	115.0	345	356	0.7861	1.0072	0.9300	1.0700	0.9569	1.0576	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314407	6SHELBNK	230.0	345	356	0.7227	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314409	67AB9	230.0	345	356	0.7384	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314412	3U CARBD	115.0	345	356	0.7863	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314413	6WALR285	230.0	345	356	0.8036	1.0070	0.9300	1.0700	0.9566	1.0573	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314414	3WARTICK	115.0	345	356	0.7785	0.9974	0.9300	1.0700	0.9475	1.0473	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.8177	1.0103	0.9300	1.0700	0.9598	1.0608	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314416	6WARTICK	230.0	345	356	0.7366	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115.0	345	356	0.7902	1.0032	0.9300	1.0700	0.9531	1.0534	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.7307	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.7866	1.0042	0.9300	1.0700	0.9540	1.0544	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.7305	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.7645	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.7601	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314424	3YNN5 58	115.0	345	356	0.7487	0.9856	0.9300	1.0700	0.9363	1.0348	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.7639	0.9974	0.9300	1.0700	0.9475	1.0472	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.9050	1.0157	0.9300	1.0700	0.9650	1.0665	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.7249	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.7322	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.7625	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
315091	1YORKT2	18.0	345	356	0.7645	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
315092	1YORKT3	25.0	345	356	0.7601	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.6641	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
313828	3WHITENARS	115.0	345	354	0.7409	0.9988	0.9300	1.0700	0.9489	1.0488	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314172	6DUNNSVL	230.0	345	354	0.9056	1.0017	0.9300	1.0700	0.9516	1.0518	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314174	3HARMONY	115.0	345	354	0.8242	0.9992	0.9300	1.0700	0.9492	1.0491	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8480	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314177	3HAYES69	115.0	345	354	0.7169	0.9985	0.9300	1.0700	0.9486	1.0485	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.6867	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314184	3SHACKLE	115.0	345	354	0.0566	0.9998	0.9300	1.0700	0.9498	1.0497	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314187	3WAN 176	115.0	345	354	0.8080	0.9862	0.9300	1.0700	0.9369	1.0356	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314188	3WEST FT	115.0	345	354	0.9732	0.9995	0.9300	1.0700	0.9495	1.0495	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314169	6PAPERNILL	230.0	345	354	0.9605	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314191	3WHITE S	115.0	345	354	0.9209	0.9665	0.9300	1.0700	0.9466	1.0463	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314296	6PENINMAN	230.0	345	356	0.7405	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.6578	0.9972	0.9300	1.0700	0.9473	1.0470	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314372	3BLOXOM	115.0	345	356	0.6533	0.9971	0.9300	1.0700	0.9472	1.0469	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.6531	0.9945	0.9300	1.0700	0.9448	1.0442	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314374	3COPELND	115.0	345	356	0.6556	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314375	6CORRECTN	230.0	345	354	0.6656	1.0142	0.9300	1.0700	0.9635	1.0649	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.6972	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314377	3DOW 34	115.0	345	356	0.9995	1.0029	0.9300	1.0700	0.9528	1.0531	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.6464	0.9896	0.9300	1.0700	0.9401	1.0391	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314379	3FTEUS58	115.0	345	356	0.6428	0.9874	0.9300	1.0700	0.9381	1.0368	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314381	3GRAPT34	115.0	345	356	0.6513	0.9929	0.9300	1.0700	0.9433	1.0426	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314382	3GRAPT58	115.0	345	356	0.6494	0.9918	0.9300	1.0700	0.9422	1.0414	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314384	3KINGS M	115.0	345	356	0.6792	0.9756	0.9300	1.0700	0.9268	1.0244	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314385	3HARMO 1	115.0	345	354	0.9247	0.9998	0.9300	1.0700	0.9499	1.0498	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.7301	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314387	3LANEXA	115.0	345	356	0.9095	1.0028	0.9300	1.0700	0.9526	1.0529	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314388	6LANEXA	230.0	345	356	0.8722	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.6404	0.9858	0.9300	1.0700	0.9365	1.0351	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314390	6LIGHT285	230.0	345	356	0.7620	1.0068	0.9300	1.0700	0.9564	1.0571	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314391	6LIGHT209	230.0	345	356	0.7868	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314392	3WAGRUDE	115.0	345	356	0.6648	1.0044	0.9300	1.0700	0.9542	1.0546	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314393	3MERCURY	115.0	345	356	0.6616	1.0026	0.9300	1.0700	0.9525	1.0527	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314394	3NASHA	115.0	345	356	0.6643	1.0037	0.9300	1.0700	0.9536	1.0539	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314395	3HARMO 2	115.0	345	354	0.9246	0.9997	0.9300	1.0700	0.9497	1.0496	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314396	3NEWS58	115.0	345	356	0.9977	0.9923	0.9300	1.0700	0.9426	1.0419	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314397	3NEWS75	115.0	345	356	0.6655	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314398	6NP NEWS	230.0	345	356	0.6362	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314399	6PENBROK	230.0	345	356	0.6363	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314401	3PENINSL	115.0	345	356	0.6643	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314402	6PENINSL	230.0	345	356	0.6484	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314403	3SEATED76	115.0	345	356	0.6587	0.9982	0.9300	1.0700	0.9483	1.0481	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314404	3SEATED79	115.0	345	356	0.6581	0.9978	0.9300	1.0700	0.9479	1.0477	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314406	3SHELBNK	115.0	345	356	0.6686	1.0072	0.9300	1.0700	0.9569	1.0576	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314407	6SHELBNK	230.0	345	356	0.6365	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314409	6TABB	230.0	345	356	0.6585	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314411	3TOANOS8	115.0	345	356	0.9961	0.9908	0.9300	1.0700	0.9413	1.0404	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314412	3U CARBD	115.0	345	356	0.6644	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314413	6WAL285	230.0	345	356	0.7440	1.0070	0.9300	1.0700	0.9566	1.0573	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314414	3WARWICK	115.0	345	356	0.6578	0.9974	0.9300	1.0700	0.9475	1.0473	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314415	6WAL209	230.0	345	356	0.7621	1.0103	0.9300	1.0700	0.9598	1.0608	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.6627	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314417	3WHEALTIN	115.0	345	356	0.6667	1.0032	0.9300	1.0700	0.9531	1.0534	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314418	6WHEALTIN	230.0	345	356	0.6588	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.6647	1.0042	0.9300	1.0700	0.9540	1.0544	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.6586	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURRY -6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314422	3YORTWN	115.0	345	356	0.6580	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314423	6YORTWN	230.0	345	356	0.6831	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314424	3YNWS 58	115.0	345	356	0.6400	0.9856	0.9300	1.0700	0.9363	1.0348	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314425	3YORK PS	115.0	345	356	0.6582	0.9974	0.9300	1.0700	0.9475	1.0472	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.6739	1.0157	0.9300	1.0700	0.9650	1.0665	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.6375	1.0196	0.9300	1.0700	0.9661	1.0706	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.6603	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314450	6YORTK 1	230.0	345	356	0.6854	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.6610	1.0078	0.9300	1.0700	0.9574	1.0582	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
315091	1YORTK2	18.0	345	356	0.6580	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
315092	1YORTK3	25.0	345	356	0.6831	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8894	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2568	D:6BENCHRC-6CHCKTUK1 +6HAYES -6YORKTWN1
313812	6ROCKLAND	230.0	345	356	0.9977	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
313818	6BENCHRC	230.0	345	360	0.8798	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314180	6HAYES	230.0	345	354	0.9039	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314296	6PENNIBAN	230.0	345	356	0.8936	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314376	6DENIGH	230.0	345	356	0.9038	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314386	6KINGS M	230.0	345	356	0.8950	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314391	6LIGH209	230.0	345	356	0.8900	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314398	6NP NEWS	230.0	345	356	0.8815	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314399	6PENBROK	230.0	345	356	0.8803	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314402	6PENINSL	230.0	345	356	0.8829	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314407	6SHELBK	230.0	345	356	0.8793	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314409	6TABB	230.0	345	356	0.8888	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314416	6WARWICK	230.0	345	356	0.8974	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314418	6WHEALTN	230.0	345	356	0.8973	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314421	6WINCHST	230.0	345	356	0.8973	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314423	6YORTWN	230.0	345	356	0.9028	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314442	6NP NE 1	230.0	345	356	0.8833	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314445	6WHEAL 1	230.0	345	356	0.8991	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314450	6YORTK 1	230.0	345	356	0.9058	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
315092	1YORTK3	25.0	345	356	0.9028	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
313818	6BENCHRC	230.0	345	360	0.9971	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314398	6NP NEWS	230.0	345	356	0.9987	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314399	6PENBROK	230.0	345	356	0.9975	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314402	6PENINSL	230.0	345	356	0.9993	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314407	6SHELBK	230.0	345	356	0.9963	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314409	6TABB	230.0	345	356	0.9057	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314413	6WALR285	230.0	345	356	0.9094	1.0070	0.9300	1.0700	0.9566	1.0573	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314442	6NP NE 1	230.0	345	356	0.9006	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
313818	6BENCHRC	230.0	345	360	0.9995	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314398	6NP NEWS	230.0	345	356	0.9001	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314399	6PENBROK	230.0	345	356	0.9989	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314402	6PENINSL	230.0	345	356	0.9011	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314407	6SHELBK	230.0	345	356	0.9977	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314409	6TABB	230.0	345	356	0.9070	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314442	6NP NE 1	230.0	345	356	0.9020	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2617	D:6BENCHRC-6CHCKTUK1 +6LIGHT09-6WALR2091
313818	6BENCHCH	230.0	345	360	0.9088	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2625	D:6BENCHRC-6CHCKTUK1 +6NP NEWS-6NP NE 11
313818	6BENCHCH	230.0	345	360	0.9875	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8891	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELBNK1
314399	6PENBROK	230.0	345	356	0.8879	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8868	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8909	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELBNK1
313818	6BENCHCH	230.0	345	360	0.8694	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8711	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314399	6PENBROK	230.0	345	356	0.8700	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8688	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8690	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8729	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
313818	6BENCHCH	230.0	345	360	0.8156	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314372	3BLOXOMC	115.0	345	356	0.9071	0.9971	0.9300	1.0700	0.9472	1.0469	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8275	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314399	6PENBROK	230.0	345	356	0.8167	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8163	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8161	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314416	6WHEALTN	230.0	345	356	0.9099	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8291	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
313812	6ROCKLAND	230.0	345	356	0.8939	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313818	6BENCHCH	230.0	345	360	0.9775	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314180	6HAYES	230.0	345	354	0.9048	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314376	6DENDIGH	230.0	345	356	0.9037	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314398	6NP NEWS	230.0	345	356	0.8792	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314399	6PENBROK	230.0	345	356	0.8781	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314402	6PENINSI	230.0	345	356	0.8811	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314407	6SHELBNK	230.0	345	356	0.8771	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314409	6TABB	230.0	345	356	0.8878	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314416	6WARWICK	230.0	345	356	0.8931	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314418	6WHEALTN	230.0	345	356	0.8913	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314423	6YORKTWN	230.0	345	356	0.9035	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314442	6NP NE 1	230.0	345	356	0.8810	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314445	6WHEAL 1	230.0	345	356	0.8931	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314450	6YORKT 1	230.0	345	356	0.9065	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
315092	1YORKTWN3	25.0	345	356	0.9035	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.8482	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313813	3OCRAH	115.0	345	354	0.8765	1.0023	0.9300	1.0700	0.9522	1.0525	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313818	6BENCHCH	230.0	345	360	0.8182	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313828	3WHITENAR	115.0	345	354	0.8221	0.9988	0.9300	1.0700	0.9489	1.0488	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314172	6DUNNSVL	230.0	345	354	0.8760	1.0017	0.9300	1.0700	0.9516	1.0518	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314173	3GARNER	115.0	345	354	0.8798	1.0006	0.9300	1.0700	0.9506	1.0506	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314174	3HARMONY	115.0	345	354	0.8765	0.9992	0.9300	1.0700	0.9492	1.0491	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314176	6HARMONY	230.0	345	354	0.7967	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314177	3HAYES89	115.0	345	354	0.8916	0.9985	0.9300	1.0700	0.9486	1.0485	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314178	31ANCAST	115.0	345	354	0.8772	1.0030	0.9300	1.0700	0.9528	1.0531	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314180	6HAYES	230.0	345	354	0.5792	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314181	31NORNECK	115.0	345	354	0.8950	1.0086	0.9300	1.0700	0.9582	1.0590	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314182	6NORNECK	230.0	345	354	0.8896	0.9984	0.9300	1.0700	0.9485	1.0483	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314183	6SANDERS	230.0	345	354	0.9964	0.9984	0.9300	1.0700	0.9484	1.0482	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314184	35HACKLE	115.0	345	354	0.7643	0.9998	0.9300	1.0700	0.9498	1.0497	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314187	3WAN 176	115.0	345	354	0.7070	0.9962	0.9300	1.0700	0.9369	1.0368	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314188	3WEST PT	115.0	345	354	0.7836	0.9995	0.9300	1.0700	0.9495	1.0495	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314189	6PAPERWILL	230.0	345	354	0.8172	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314190	6WESTMOR	230.0	345	354	0.9080	0.9988	0.9300	1.0700	0.9489	1.0487	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314191	3WHITE S	115.0	345	354	0.7226	0.9965	0.9300	1.0700	0.9466	1.0463	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314214	6CHKAHM	230.0	345	355	0.9045	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314243	3PROV 92	115.0	345	355	0.8635	1.0000	0.9300	1.0700	0.9500	1.0500	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENMINAN	230.0	345	356	0.8590	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.5252	0.9972	0.9300	1.0700	0.9473	1.0470	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314372	3BLOXONC	115.0	345	356	0.4998	0.9971	0.9300	1.0700	0.9472	1.0469	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.5114	0.9945	0.9300	1.0700	0.9448	1.0442	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314374	3COPELND	115.0	345	356	0.5197	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314375	6CORCTN	230.0	345	354	0.8245	1.0142	0.9300	1.0700	0.9635	1.0649	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.5975	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115.0	345	356	0.8256	1.0029	0.9300	1.0700	0.9528	1.0531	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.5125	0.9986	0.9300	1.0700	0.9401	1.0391	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314379	3FTEUS58	115.0	345	356	0.5084	0.9874	0.9300	1.0700	0.9381	1.0368	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314381	3GRATFS4	115.0	345	356	0.5179	0.9929	0.9300	1.0700	0.9433	1.0426	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314382	3GRATFS8	115.0	345	356	0.5156	0.9918	0.9300	1.0700	0.9422	1.0414	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314384	3KINGS M	115.0	345	356	0.7913	0.9756	0.9300	1.0700	0.9268	1.0244	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314385	3HARMO 1	115.0	345	354	0.7269	0.9998	0.9300	1.0700	0.9499	1.0498	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.6442	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314387	3LANEXA	115.0	345	356	0.8259	1.0028	0.9300	1.0700	0.9526	1.0529	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230.0	345	356	0.8337	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.5058	0.9858	0.9300	1.0700	0.9365	1.0351	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.6899	1.0068	0.9300	1.0700	0.9564	1.0571	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230.0	345	356	0.7228	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314392	3MAGRUDR	115.0	345	356	0.5176	1.0044	0.9300	1.0700	0.9542	1.0546	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314393	3MERCURY	115.0	345	356	0.5091	1.0026	0.9300	1.0700	0.9525	1.0527	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314394	3NASA	115.0	345	356	0.5214	1.0037	0.9300	1.0700	0.9536	1.0539	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314395	3HARMO 2	115.0	345	354	0.7269	0.9997	0.9300	1.0700	0.9497	1.0496	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314396	3NNERS58	115.0	345	356	0.8123	0.9923	0.9300	1.0700	0.9426	1.0419	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314397	3NNERS75	115.0	345	356	0.5197	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314398	6NP NEWS	230.0	345	356	0.5210	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314399	6PNBROK	230.0	345	356	0.5221	1.0144	0.9300	1.0700	0.9637	1.0651	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314400	3LANCA 1	115.0	345	354	0.8777	1.0035	0.9300	1.0700	0.9533	1.0536	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314401	3PENINSL	115.0	345	356	0.5214	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.5354	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.5233	0.9982	0.9300	1.0700	0.9483	1.0481	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.5226	0.9978	0.9300	1.0700	0.9479	1.0477	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314406	3SELEBNK	115.0	345	356	0.5171	1.0072	0.9300	1.0700	0.9569	1.0576	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314407	6SHELLENK	230.0	345	356	0.5236	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314408	6CHCKA 1	230.0	345	355	0.9072	1.0179	0.9300	1.0700	0.9670	1.0688	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.5467	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314411	3TOANO58	115.0	345	356	0.8105	0.9908	0.9300	1.0700	0.9413	1.0404	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314412	3U CARBD	115.0	345	356	0.5214	1.0037	0.9300	1.0700	0.9539	1.0539	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314413	6WALR285	230.0	345	356	0.6653	1.0070	0.9300	1.0700	0.9566	1.0573	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314414	3WALR21C	115.0	345	356	0.5137	0.9974	0.9300	1.0700	0.9475	1.0473	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.6894	1.0103	0.9300	1.0700	0.9598	1.0608	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314416	6WALR21C	230.0	345	356	0.5460	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115.0	345	356	0.5211	1.0032	0.9300	1.0700	0.9531	1.0534	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.5393	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.5217	1.0042	0.9300	1.0700	0.9540	1.0544	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.5390	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.5253	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.5752	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314424	3YWS 58	115.0	345	356	0.5054	0.9856	0.9300	1.0700	0.9363	1.0348	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.5260	0.9974	0.9300	1.0700	0.9475	1.0472	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.8354	1.0157	0.9300	1.0700	0.9650	1.0655	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.5220	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.5404	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.5770	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
315091	1YORKT2	18.0	345	356	0.5253	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
315092	1YORKT3	25.0	345	356	0.5752	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.5344	1.0151	0.9300	1.0700	0.9643	1.0658	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
313813	3OCRAAN	115.0	345	354	0.8721	1.0023	0.9300	1.0700	0.9522	1.0525	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
313818	6BENCHRC	230.0	345	360	0.5037	1.0240	0.9300	1.0700	0.9728	1.0732	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
313828	3WHI TENAR	115.0	345	354	0.6105	0.9988	0.9300	1.0700	0.9489	1.0488	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314172	6DUNNSVL	230.0	345	354	0.8718	1.0017	0.9300	1.0700	0.9516	1.0518	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314173	3GARNER	115.0	345	354	0.8756	1.0006	0.9300	1.0700	0.9506	1.0506	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314174	3HARMONY	115.0	345	354	0.7178	0.9992	0.9300	1.0700	0.9492	1.0491	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.7896	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314177	3HAYES9	115.0	345	354	0.5791	0.9985	0.9300	1.0700	0.9486	1.0485	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314178	3LANCAST	115.0	345	354	0.8728	1.0030	0.9300	1.0700	0.9528	1.0531	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.5658	1.0207	0.9300	1.0700	0.9696	1.0717	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314181	3NORNECK	115.0	345	354	0.8910	1.0086	0.9300	1.0700	0.9582	1.0590	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314182	6NORNECK	230.0	345	354	0.8858	0.9984	0.9300	1.0700	0.9485	1.0483	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314183	6SANDERS	230.0	345	354	0.9928	0.9988	0.9300	1.0700	0.9484	1.0492	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314184	3SHACKLE	115.0	345	354	0.7567	0.9998	0.9300	1.0700	0.9498	1.0497	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314187	3WAN 176	115.0	345	354	0.6980	0.9862	0.9300	1.0700	0.9369	1.0356	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314188	3WEST PT	115.0	345	354	0.7767	0.9995	0.9300	1.0700	0.9495	1.0495	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314189	6EAPERMILL	230.0	345	354	0.8109	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314190	6WESTMOR	230.0	345	354	0.9047	0.9988	0.9300	1.0700	0.9489	1.0487	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314191	3WHIPE S	115.0	345	354	0.7139	0.9965	0.9300	1.0700	0.9466	1.0463	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314214	6CHCKARM	230.0	345	355	0.9008	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314243	3PROV 92	115.0	345	355	0.8589	1.0000	0.9300	1.0700	0.9500	1.0500	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314296	6PENINMAN	230.0	345	356	0.6481	1.0123	0.9300	1.0700	0.9616	1.0629	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.5111	0.9972	0.9300	1.0700	0.9473	1.0470	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRaise	Viol	Ncon	Contingency Description
314372	3BLOXMC	115.0	345	356	0.4855	0.9971	0.9300	1.0700	0.9472	1.0469	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.4972	0.9945	0.9300	1.0700	0.9448	1.0442	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314374	3COPELND	115.0	345	356	0.5057	1.0024	0.9300	1.0700	0.9525	1.0525	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314375	6CORRCIN	230.0	345	354	0.9185	1.0142	0.9300	1.0700	0.9635	1.0649	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.5848	1.0141	0.9300	1.0700	0.9634	1.0648	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314377	3DOW 34	115.0	345	356	0.6129	1.0029	0.9300	1.0700	0.9528	1.0531	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.4993	0.9896	0.9300	1.0700	0.9401	1.0391	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314379	3FTEUS58	115.0	345	356	0.4943	0.9874	0.9300	1.0700	0.9381	1.0368	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.5037	0.9929	0.9300	1.0700	0.9433	1.0426	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.5015	0.9918	0.9300	1.0700	0.9422	1.0414	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314384	3KINGS M	115.0	345	356	0.7853	0.9756	0.9300	1.0700	0.9268	1.0244	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314385	3HARMO 1	115.0	345	354	0.7182	0.9998	0.9300	1.0700	0.9499	1.0498	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.6328	1.0133	0.9300	1.0700	0.9626	1.0639	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314387	3LANEXA	115.0	345	356	0.8201	1.0028	0.9300	1.0700	0.9526	1.0529	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314388	6LANEXA	230.0	345	356	0.8280	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.4916	0.9858	0.9300	1.0700	0.9365	1.0351	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314390	6LIGH285	230.0	345	356	0.6802	1.0068	0.9300	1.0700	0.9546	1.0571	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314391	6LIGH209	230.0	345	356	0.7140	1.0103	0.9300	1.0700	0.9597	1.0608	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314392	3MAGRUDR	115.0	345	356	0.5034	1.0044	0.9300	1.0700	0.9542	1.0546	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314393	3MERCURY	115.0	345	356	0.4948	1.0026	0.9300	1.0700	0.9525	1.0527	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314394	3NACA	115.0	345	356	0.5073	1.0037	0.9300	1.0700	0.9536	1.0539	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314395	3HARMO 2	115.0	345	354	0.7181	0.9997	0.9300	1.0700	0.9497	1.0496	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314396	3NEWS58	115.0	345	356	0.8065	0.9923	0.9300	1.0700	0.9426	1.0419	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314397	3NEWS75	115.0	345	356	0.5057	1.0024	0.9300	1.0700	0.9522	1.0525	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314398	6NP NEWS	230.0	345	356	0.5065	1.0175	0.9300	1.0700	0.9667	1.0684	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314399	6PEMBROK	230.0	345	356	0.5077	1.0144	0.9300	1.0700	0.9637	1.0631	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314400	3LANCA 1	115.0	345	354	0.8732	1.0035	0.9300	1.0700	0.9533	1.0536	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314401	3PENINSL	115.0	345	356	0.5072	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314402	6PENINSL	230.0	345	356	0.5212	1.0124	0.9300	1.0700	0.9618	1.0631	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314403	3SEAPD76	115.0	345	356	0.5091	0.9982	0.9300	1.0700	0.9483	1.0481	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314404	3SEAPD79	115.0	345	356	0.5085	0.9978	0.9300	1.0700	0.9479	1.0477	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314406	3SHELENK	115.0	345	356	0.5028	1.0072	0.9300	1.0700	0.9569	1.0576	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314407	6SHELENK	230.0	345	356	0.5092	1.0110	0.9300	1.0700	0.9604	1.0615	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314408	6CHCKA 1	230.0	345	355	0.5035	1.0179	0.9300	1.0700	0.9670	1.0688	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314409	67ABE	230.0	345	356	0.5327	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314411	3TOANOS8	115.0	345	356	0.8047	0.9908	0.9300	1.0700	0.9413	1.0404	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314412	3U CARB	115.0	345	356	0.5072	1.0037	0.9300	1.0700	0.9535	1.0539	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314413	6WALR285	230.0	345	356	0.6549	1.0070	0.9300	1.0700	0.9566	1.0573	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314414	3WARWICK	115.0	345	356	0.4996	0.9974	0.9300	1.0700	0.9475	1.0473	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314415	6WALR209	230.0	345	356	0.6795	1.0103	0.9300	1.0700	0.9598	1.0608	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.5322	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314417	3WHEALTIN	115.0	345	356	0.5072	1.0032	0.9300	1.0700	0.9531	1.0534	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314418	6WHEALTIN	230.0	345	356	0.5258	1.0149	0.9300	1.0700	0.9641	1.0656	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.5075	1.0042	0.9300	1.0700	0.9540	1.0544	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.5255	1.0146	0.9300	1.0700	0.9639	1.0653	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.5112	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.5616	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314424	3YNWS 58	115.0	345	356	0.4912	0.9956	0.9300	1.0700	0.9363	1.0348	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314425	3YORK PS	115.0	345	356	0.5119	0.9974	0.9300	1.0700	0.9475	1.0472	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.8297	1.0157	0.9300	1.0700	0.9650	1.0665	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.5075	1.0196	0.9300	1.0700	0.9686	1.0706	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.5268	1.0169	0.9300	1.0700	0.9661	1.0678	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.5635	1.0225	0.9300	1.0700	0.9713	1.0736	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.5278	1.0078	0.9300	1.0700	0.9574	1.0582	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
315091	1YORKTN2	18.0	345	356	0.5112	0.9973	0.9300	1.0700	0.9474	1.0471	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
315092	1YORKTN3	25.0	345	356	0.5616	1.0191	0.9300	1.0700	0.9682	1.0701	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8650	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2890	D:3WHITEMA-3HARMONY1 +6PAPERMT-6CORRCTN1
314169	6PAPERMT1	230.0	345	354	0.8599	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2890	D:3WHITEMA-3HARMONY1 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8409	1.0219	0.9300	1.0700	0.9708	1.0730	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8346	1.0148	0.9300	1.0700	0.9641	1.0656	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8344	1.0142	0.9300	1.0700	0.9635	1.0649	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.9087	1.0148	0.9300	1.0700	0.9641	1.0656	LD	3202	D:3WHITEMA-3HAYES891 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8454	1.0219	0.9300	1.0700	0.9708	1.0730	LD	3224	D:3WHITEMA-3HAYES891 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8392	1.0148	0.9300	1.0700	0.9641	1.0656	LD	3224	D:3WHITEMA-3HAYES891 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8392	1.0142	0.9300	1.0700	0.9635	1.0649	LD	3224	D:3WHITEMA-3HAYES891 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8917	1.0207	0.9300	1.0700	0.9696	1.0717	LD	3504	D:3GARNOLD-6CONORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8910	1.0207	0.9300	1.0700	0.9696	1.0717	LD	3814	D:6BIRCHWD-6CONORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	4123	D:6BIRCHWD-1BRCHWDAL +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8913	1.0207	0.9300	1.0700	0.9696	1.0717	LD	4431	D:6BARKROV-6WESTMOR1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8925	1.0207	0.9300	1.0700	0.9696	1.0717	LD	4738	D:6DUNNSVL-6NORNECK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8925	1.0207	0.9300	1.0700	0.9696	1.0717	LD	5044	D:6DUNNSVL-6LANEXA 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8902	1.0207	0.9300	1.0700	0.9696	1.0717	LD	5349	D:3GARNER -3LANCAST1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	5653	D:3GARNER -3NORNECK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8912	1.0207	0.9300	1.0700	0.9696	1.0717	LD	5956	D:3HARMONY-3SHACKLE1 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8657	1.0219	0.9300	1.0700	0.9708	1.0730	LD	5965	D:3HARMONY-3SHACKLE1 +6PAPERMT-6CORRCTN1
314189	6PAPERMT1	230.0	345	354	0.8607	1.0219	0.9300	1.0700	0.9641	1.0656	LD	5965	D:3HARMONY-3SHACKLE1 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8473	1.0219	0.9300	1.0700	0.9708	1.0730	LD	5987	D:3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8412	1.0148	0.9300	1.0700	0.9641	1.0656	LD	5987	D:3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8409	1.0142	0.9300	1.0700	0.9635	1.0649	LD	5987	D:3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8910	1.0207	0.9300	1.0700	0.9696	1.0717	LD	6559	D:3HARMONY-3WHITE S1 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8779	1.0219	0.9300	1.0700	0.9708	1.0730	LD	6856	D:3HARMONY-3HARMO 11 +6HARMONY-6PAPERMT1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	6859	D:3HARMONY-3HARMO 11 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8562	1.0219	0.9300	1.0700	0.9708	1.0730	LD	6868	D:3HARMONY-3HARMO 11 +6PAPERMT-6CORRCTN1
314189	6PAPERMT1	230.0	345	354	0.8510	1.0148	0.9300	1.0700	0.9641	1.0656	LD	6868	D:3HARMONY-3HARMO 11 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8456	1.0219	0.9300	1.0700	0.9708	1.0730	LD	6890	D:3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8394	1.0148	0.9300	1.0700	0.9641	1.0656	LD	6890	D:3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8391	1.0142	0.9300	1.0700	0.9635	1.0649	LD	6890	D:3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8894	1.0207	0.9300	1.0700	0.9696	1.0717	LD	7158	D:3HARMONY-3HARMO 21 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8579	1.0148	0.9300	1.0700	0.9641	1.0656	LD	7167	D:3HARMONY-3HARMO 21 +6PAPERMT-6CORRCTN1
314189	6PAPERMT1	230.0	345	354	0.8579	1.0148	0.9300	1.0700	0.9641	1.0656	LD	7167	D:3HARMONY-3HARMO 21 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8556	1.0219	0.9300	1.0700	0.9708	1.0730	LD	7189	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8495	1.0148	0.9300	1.0700	0.9641	1.0656	LD	7189	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8493	1.0142	0.9300	1.0700	0.9635	1.0649	LD	7189	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8623	1.0219	0.9300	1.0700	0.9708	1.0730	LD	7751	D:6HARMONY-6PAPERMT1 +3HAYES89-6HAYES 1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314176	6HARMONY	230.0	345	354	0.8921	1.0219	0.9300	1.0700	0.9708	1.0730	LD	7753	D:6HARMONY-6PAPERMI1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8995	1.0207	0.9300	1.0700	0.9696	1.0717	LD	7753	D:6HARMONY-6PAPERMI1 +6HAYES -6YORKTWN1
313828	3WHITENAR	115.0	345	354	0.9041	0.9998	0.9300	1.0700	0.9499	1.0488	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8707	1.0219	0.9300	1.0700	0.9708	1.0730	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314177	3HAYES89	115.0	345	354	0.8999	0.9985	0.9300	1.0700	0.9486	1.0485	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314187	3WAN 176	115.0	345	354	0.9031	0.9862	0.9300	1.0700	0.9369	1.0356	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI1	230.0	345	354	0.8052	1.0148	0.9300	1.0700	0.9641	1.0656	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
313828	3WHITENAR	115.0	345	354	0.5821	0.9998	0.9300	1.0700	0.9499	1.0488	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.6041	0.9992	0.9300	1.0700	0.9492	1.0491	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.6028	1.0219	0.9300	1.0700	0.9708	1.0730	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314177	3HAYES89	115.0	345	354	0.5748	0.9985	0.9300	1.0700	0.9486	1.0485	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.7048	0.9998	0.9300	1.0700	0.9498	1.0497	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.5843	0.9862	0.9300	1.0700	0.9369	1.0356	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.7720	0.9995	0.9300	1.0700	0.9495	1.0495	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314189	6PAPERMI1	230.0	345	354	0.5940	1.0148	0.9300	1.0700	0.9641	1.0656	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.5998	0.9995	0.9300	1.0700	0.9466	1.0463	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.5936	1.0142	0.9300	1.0700	0.9635	1.0649	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314384	3KINGS M	115.0	345	356	0.8932	0.9756	0.9300	1.0700	0.9268	1.0244	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.6045	0.9998	0.9300	1.0700	0.9499	1.0498	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.6044	0.9997	0.9300	1.0700	0.9497	1.0496	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314411	3TOANO58	115.0	345	356	0.9100	0.9908	0.9300	1.0700	0.9413	1.0404	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8923	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8344	D:3LANCAST-3LANCA 11 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8639	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8640	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8641	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8642	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8923	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8643	D:6HAYES -6YORKTWN1 +6NORNECK-6SANDERS1
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8644	D:6HAYES -6YORKTWN1 +6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8941	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8645	D:6HAYES -6YORKTWN1 +3SHACKLE-3WEST PT1
314180	6HAYES	230.0	345	354	0.8907	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8646	D:6HAYES -6YORKTWN1 +3WEST PT-3LANEXA 1
313828	3WHITENAR	115.0	345	354	0.8968	0.9988	0.9300	1.0700	0.9499	1.0488	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8041	1.0219	0.9300	1.0700	0.9708	1.0730	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314177	3HAYES89	115.0	345	354	0.8925	0.9985	0.9300	1.0700	0.9496	1.0485	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314180	6HAYES	230.0	345	354	0.8141	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314187	3WAN 176	115.0	345	354	0.8958	0.9862	0.9300	1.0700	0.9369	1.0356	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI1	230.0	345	354	0.7985	1.0148	0.9300	1.0700	0.9641	1.0656	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314191	3WHITE S	115.0	345	354	0.9073	0.9995	0.9300	1.0700	0.9466	1.0463	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8648	D:6HAYES -6YORKTWN1 +30AKRIDG-30AKRI 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8649	D:6HAYES -6YORKTWN1 +30AKRIDG-3KINGS F1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8650	D:6HAYES -6YORKTWN1 +30AKRIDG-30AKRI2321
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8651	D:6HAYES -6YORKTWN1 +1GOSPORT-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8652	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8653	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8654	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8655	D:6HAYES -6YORKTWN1 +6BIRNECK-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8656	D:6HAYES -6YORKTWN1 +6BIRNECK-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8657	D:6HAYES -6YORKTWN1 +6PENNIMA-6KINGS MI

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8915	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8658	D: 6HAYES -6YORKTWN1 +6PENNIMA-6WALR2091
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8659	D: 6HAYES -6YORKTWN1 +3527767A-3BURTN671
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8660	D: 6HAYES -6YORKTWN1 +3527767B-3AMPHB671
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8661	D: 6HAYES -6YORKTWN1 +3527767B-3BURTN671
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8662	D: 6HAYES -6YORKTWN1 +3527767B-3OAKWOOD1
314180	6HAYES	230.0	345	354	0.8903	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8663	D: 6HAYES -6YORKTWN1 +3AMOCO Y-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8915	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8664	D: 6HAYES -6YORKTWN1 +3BLOXOM-3MERCURY1
314180	6HAYES	230.0	345	354	0.8932	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8665	D: 6HAYES -6YORKTWN1 +3COLONY -3WARWICK1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8666	D: 6HAYES -6YORKTWN1 +3COLONY -3YORKTWN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8667	D: 6HAYES -6YORKTWN1 +3COPELND-3NEWS751
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8668	D: 6HAYES -6YORKTWN1 +3COPELND-3WHEALTN1
314180	6HAYES	230.0	345	354	0.8907	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
313828	3WHITEMARK	115.0	345	354	0.8657	0.9988	0.9300	1.0700	0.9489	1.0488	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8891	0.9992	0.9300	1.0700	0.9492	1.0491	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8862	1.0219	0.9300	1.0700	0.9708	1.0730	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314177	3HAYES89	115.0	345	354	0.8593	0.9985	0.9300	1.0700	0.9486	1.0485	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8700	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.8697	0.9998	0.9300	1.0700	0.9498	1.0497	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314167	3WAN 176	115.0	345	354	0.8660	0.9862	0.9300	1.0700	0.9369	1.0356	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.7641	0.9995	0.9300	1.0700	0.9495	1.0495	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314189	6PAPERMILL	230.0	345	354	0.5772	1.0148	0.9300	1.0700	0.9641	1.0656	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8847	0.9965	0.9300	1.0700	0.9466	1.0463	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.5768	1.0142	0.9300	1.0700	0.9635	1.0649	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314384	3KINGS M	115.0	345	356	0.8880	0.9756	0.9300	1.0700	0.9268	1.0244	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8895	0.9998	0.9300	1.0700	0.9499	1.0498	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8894	0.9997	0.9300	1.0700	0.9497	1.0496	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314396	3NEWS58	115.0	345	356	0.9055	0.9923	0.9300	1.0700	0.9426	1.0419	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314411	3TOANO58	115.0	345	356	0.9049	0.9908	0.9300	1.0700	0.9413	1.0404	LD	8669	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8914	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8670	D: 6HAYES -6YORKTWN1 +6DENBIGH-6WALR2851
314180	6HAYES	230.0	345	354	0.8929	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8671	D: 6HAYES -6YORKTWN1 +6DENBIGH-6YORKTWN1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8672	D: 6HAYES -6YORKTWN1 +3DOW 34 -3LANEXA 1
314180	6HAYES	230.0	345	354	0.8904	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8673	D: 6HAYES -6YORKTWN1 +3FTEUS34-3GRAFT341
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8674	D: 6HAYES -6YORKTWN1 +3FTEUS58-3GRAFT581
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8675	D: 6HAYES -6YORKTWN1 +3FTEUS58-3LEBAN581
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8676	D: 6HAYES -6YORKTWN1 +3GRAFT34-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8677	D: 6HAYES -6YORKTWN1 +3GRAFT58-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8922	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8678	D: 6HAYES -6YORKTWN1 +3KINGS M-3TOANO581
314180	6HAYES	230.0	345	354	0.8915	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8679	D: 6HAYES -6YORKTWN1 +6KINGS M-6YORKTWN1
314180	6HAYES	230.0	345	354	0.8892	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8680	D: 6HAYES -6YORKTWN1 +3LANEXA -3NEWS581
314180	6HAYES	230.0	345	354	0.8921	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8681	D: 6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8682	D: 6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 2
314180	6HAYES	230.0	345	354	0.8908	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8683	D: 6HAYES -6YORKTWN1 +6LANEXA -6LIGH2091
314180	6HAYES	230.0	345	354	0.8901	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8684	D: 6HAYES -6YORKTWN1 +6LANEXA -6LANEXA 11
314180	6HAYES	230.0	345	354	0.8901	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8685	D: 6HAYES -6YORKTWN1 +3LEBAN58-3YNEWS 581
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8686	D: 6HAYES -6YORKTWN1 +6LIGH285-6WALR2851
314180	6HAYES	230.0	345	354	0.8902	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8687	D: 6HAYES -6YORKTWN1 +6LIGH209-6WALR2091
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8688	D: 6HAYES -6YORKTWN1 +3MAGRUDE-3PENINSLI
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8689	D: 6HAYES -6YORKTWN1 +3MAGRUDE-3SHELBNKI

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8920	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8690	D: 6HAYES -6YORKTWN1 +3MERCURY-3SHELBK1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8691	D: 6HAYES -6YORKTWN1 +3NASA -3PENINS11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8692	D: 6HAYES -6YORKTWN1 +3NASA -3PENINS12
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8693	D: 6HAYES -6YORKTWN1 +3NNWS58-3TOANOS81
314180	6HAYES	230.0	345	354	0.8919	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8694	D: 6HAYES -6YORKTWN1 +6NP NEWS-6PEMEROK1
314180	6HAYES	230.0	345	354	0.8913	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8695	D: 6HAYES -6YORKTWN1 +6NP NEWS-6NP NE 11
314180	6HAYES	230.0	345	354	0.8918	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8696	D: 6HAYES -6YORKTWN1 +6PEMEROK-6SHELBK1
314180	6HAYES	230.0	345	354	0.8917	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8697	D: 6HAYES -6YORKTWN1 +3PENINS1-SHEAFD761
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8698	D: 6HAYES -6YORKTWN1 +3PENINS1-SHEAFD791
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8699	D: 6HAYES -6YORKTWN1 +3PENINS1-3U CARBD1
314180	6HAYES	230.0	345	354	0.8929	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8700	D: 6HAYES -6YORKTWN1 +3PENINS1-6PENIN 11
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8701	D: 6HAYES -6YORKTWN1 +3PENINS1-6PENINSL1
314180	6HAYES	230.0	345	354	0.8894	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8702	D: 6HAYES -6YORKTWN1 +6PENINS1-6SHELBK1
314180	6HAYES	230.0	345	354	0.8912	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8703	D: 6HAYES -6YORKTWN1 +6PENINS1-6TABB 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8704	D: 6HAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8705	D: 6HAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8706	D: 6HAYES -6YORKTWN1 +3SHELBK-3WHEALT1
314180	6HAYES	230.0	345	354	0.8932	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8707	D: 6HAYES -6YORKTWN1 +3SHELBK-6SHELBK1
314180	6HAYES	230.0	345	354	0.8923	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8708	D: 6HAYES -6YORKTWN1 +6TABB -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8928	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8709	D: 6HAYES -6YORKTWN1 +3U CARBD-3WHEALT1
314180	6HAYES	230.0	345	354	0.8927	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8710	D: 6HAYES -6YORKTWN1 +3WARMICK-3WHEALT1
314180	6HAYES	230.0	345	354	0.8927	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8711	D: 6HAYES -6YORKTWN1 +3WARMICK-6WHEALT1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8712	D: 6HAYES -6YORKTWN1 +3WHEALT-6WHEALT1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8713	D: 6HAYES -6YORKTWN1 +3WHEALT-6WHEALT2
314180	6HAYES	230.0	345	354	0.8922	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8714	D: 6HAYES -6YORKTWN1 +6WHEALT-6WHEALT1
314180	6HAYES	230.0	345	354	0.8907	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8715	D: 6HAYES -6YORKTWN1 +6WHEALT-6WHEALT1
314180	6HAYES	230.0	345	354	0.8925	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8716	D: 6HAYES -6YORKTWN1 +6WHEALT-6WHEALT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8717	D: 6HAYES -6YORKTWN1 +3YORKTWN-3YORK PS1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8718	D: 6HAYES -6YORKTWN1 +3YORKTWN-1YORKTWN2
314180	6HAYES	230.0	345	354	0.8910	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8719	D: 6HAYES -6YORKTWN1 +6YORKTWN-6YORKT 11
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8720	D: 6HAYES -6YORKTWN1 +6YORKTWN-3YORK PS1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8721	D: 6HAYES -6YORKTWN1 +3BERKL51-3YORKTWN31
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8722	D: 6HAYES -6YORKTWN1 +3ALEX CR-3BOWERS 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8723	D: 6HAYES -6YORKTWN1 +3STORE -3LONGC271
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8724	D: 6HAYES -6YORKTWN1 +3STORE -3VA ECH 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8725	D: 6HAYES -6YORKTWN1 +3BAYSIDE-3BURTN671
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8726	D: 6HAYES -6YORKTWN1 +3BAYSIDE-3LONGC271
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8727	D: 6HAYES -6YORKTWN1 +3BERKL51-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8728	D: 6HAYES -6YORKTWN1 +3BERKL51-3REEVES 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8729	D: 6HAYES -6YORKTWN1 +3BOWERS -3DEEPC871
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8730	D: 6HAYES -6YORKTWN1 +3BOWERS -3HODGE F1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8731	D: 6HAYES -6YORKTWN1 +6BOWERS -3CHRLND1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8732	D: 6HAYES -6YORKTWN1 +6BOWERS -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8733	D: 6HAYES -6YORKTWN1 +3BURTN67-3DAVIS671
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8734	D: 6HAYES -6YORKTWN1 +3BURTN67-3DAVIS271
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8735	D: 6HAYES -6YORKTWN1 +3CHESAPK-3CMN GAS1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8736	D: 6HAYES -6YORKTWN1 +3CHESAPK-3CRADCK1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8737	D: 6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC461
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8738	D: 6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC871
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8739	D: 6HAYES -6YORKTWN1 +3CHESAPK-3DOZIER 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8740	D: 6HAYES -6YORKTWN1 +3CHESAPK-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8741	D: 6HAYES -6YORKTWN1 +3CHESAPK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8742	D: 6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTX1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8743	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPK31
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8744	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPK41
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8745	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPKA1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8746	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPKB1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8747	D: 6HAYES -6YORKTWN1 +6CHESAPK-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8748	D: 6HAYES -6YORKTWN1 +6CHESAPK-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8749	D: 6HAYES -6YORKTWN1 +6CHESAPK-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8750	D: 6HAYES -6YORKTWN1 +3CHESPTX-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8751	D: 6HAYES -6YORKTWN1 +3CHRHND-3HODGE F1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8752	D: 6HAYES -6YORKTWN1 +3CHRHND-6CHRHND1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8753	D: 6HAYES -6YORKTWN1 +6CHRHND-6HARBORV1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8754	D: 6HAYES -6YORKTWN1 +6CHRHND-6LJ KING1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8755	D: 6HAYES -6YORKTWN1 +6CHRHND-6SEWISPT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8756	D: 6HAYES -6YORKTWN1 +6CHRHND-6SEWISPT2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8757	D: 6HAYES -6YORKTWN1 +6CHRHND-6CHRH1 11
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8758	D: 6HAYES -6YORKTWN1 +3CMN GAS-3GRASFLD1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8759	D: 6HAYES -6YORKTWN1 +3CRADOCK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8760	D: 6HAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8761	D: 6HAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8762	D: 6HAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8763	D: 6HAYES -6YORKTWN1 +3DEEPC46-3YADKIN 1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8764	D: 6HAYES -6YORKTWN1 +3DOZIER -3THOMPSN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8765	D: 6HAYES -6YORKTWN1 +6DOZIER -6ELIZ R 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8766	D: 6HAYES -6YORKTWN1 +6DOZIER -6GRENWCH1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8767	D: 6HAYES -6YORKTWN1 +6ELIZ R -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8768	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8769	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8770	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR31
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8771	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8772	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8773	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8774	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8775	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8776	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8777	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8778	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8779	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8780	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8781	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8782	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8783	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8784	D:6HAYES -6YORKTWN1 +3GRENWCH-3GRENWCH2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8785	D:6HAYES -6YORKTWN1 +6GRENWCH-3GRENWCH2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8786	D:6HAYES -6YORKTWN1 +6GRENWCH-6THALJA 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8787	D:6HAYES -6YORKTWN1 +6GRENWCH-3GRENWCH 11
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8788	D:6HAYES -6YORKTWN1 +6HARBORV-6ADKIN 1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8789	D:6HAYES -6YORKTWN1 +6HARBORV-6SMITFLD1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8790	D:6HAYES -6YORKTWN1 +3HICKORY-6HICKORY1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8791	D:6HAYES -6YORKTWN1 +3IND PRK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8792	D:6HAYES -6YORKTWN1 +3IND PRK-3THOLE S1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8793	D:6HAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8794	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8795	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8796	D:6HAYES -6YORKTWN1 +6HUNTSN-6THRS2791
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8797	D:6HAYES -6YORKTWN1 +6HUNTSN-6SUFPOLK1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8798	D:6HAYES -6YORKTWN1 +6LANDSTN-6LYNHAVN1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8799	D:6HAYES -6YORKTWN1 +6LANDSTN-6STUMPY 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8800	D:6HAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8801	D:6HAYES -6YORKTWN1 +3LONDONB-3PENDLTN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8802	D:6HAYES -6YORKTWN1 +3LONDONB-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8803	D:6HAYES -6YORKTWN1 +6HARBORV-6CRITTDN1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8804	D:6HAYES -6YORKTWN1 +6LK KING-ILKINGAL
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8805	D:6HAYES -6YORKTWN1 +6LK KING-ILKINGB1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8806	D:6HAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8807	D:6HAYES -6YORKTWN1 +6LYNHAVN-6THALJA 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8808	D:6HAYES -6YORKTWN1 +6LYNHAVN-6LYNHA 11
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8809	D:6HAYES -6YORKTWN1 +3MCLAUGH-3REEVES 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8810	D:6HAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8811	D:6HAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8812	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8813	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8814	D:6HAYES -6YORKTWN1 +3PENDLTN-3VA BCH 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8815	D:6HAYES -6YORKTWN1 +3REEVES -3REEVE 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8816	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8817	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8818	D:6HAYES -6YORKTWN1 +3REEVES -6GRITANI1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8819	D:6HAYES -6YORKTWN1 +6REEVES -6REEVE 11
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8820	D:6HAYES -6YORKTWN1 +6GRITAN-6SNORFLK1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8821	D:6HAYES -6YORKTWN1 +3SEWISPT-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8822	D:6HAYES -6YORKTWN1 +3SEWISPT-3THOLE S1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8823	D:6HAYES -6YORKTWN1 +3SEWISPT-6SEWISPT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8824	D:6HAYES -6YORKTWN1 +3SEWISPT-6SEWISPT2
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8825	D:6HAYES -6YORKTWN1 +6SEWISPT-6NAVYS 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8826	D:6HAYES -6YORKTWN1 +6SEWISPT-6NAVYS1 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8827	D:6HAYES -6YORKTWN1 +6SNORFLK-6THRS2791
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8828	D:6HAYES -6YORKTWN1 +6NAVYS -6NAVYN 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8829	D:6HAYES -6YORKTWN1 +6NAVYS1 -6NAVYN1 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8830	D:6HAYES -6YORKTWN1 +6STUMPY -6THRS2791

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8831	D:6HAYES -6YORKTWN1 +3THOLE S-THOLE 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8832	D:6HAYES -6YORKTWN1 +6THRS279-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8833	D:6HAYES -6YORKTWN1 +3VA BCH -3VA BC 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8834	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8835	D:6HAYES -6YORKTWN1 +6YADKIN -6YADK1 11
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8836	D:6HAYES -6YORKTWN1 +6YADKIN -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8837	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 2
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8838	D:6HAYES -6YORKTWN1 +6CHCKTUK-6KINGSFOL
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8839	D:6HAYES -6YORKTWN1 +6CHCKTUK-6SURY 1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8840	D:6HAYES -6YORKTWN1 +6CHCKTUK-6CHCKT 11
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8841	D:6HAYES -6YORKTWN1 +6CRLTUDN-6SURY 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8842	D:6HAYES -6YORKTWN1 +3FRNKLN -3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8843	D:6HAYES -6YORKTWN1 +3FRNKLN -3WATKINS1
314180	6HAYES	230.0	345	354	0.8894	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8844	D:6HAYES -6YORKTWN1 +6KINGSFO-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8845	D:6HAYES -6YORKTWN1 +3HANDSOM-3S HAMPT1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8846	D:6HAYES -6YORKTWN1 +3HOLLAND-3SUFFOLK1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8847	D:6HAYES -6YORKTWN1 +3HOLLAND-3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8848	D:6HAYES -6YORKTWN1 +3IVOR106-3OAKRI231
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8849	D:6HAYES -6YORKTWN1 +3MYRTLE -3WINDSOR1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8850	D:6HAYES -6YORKTWN1 +3OAKRI23-3SUFFCAP1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8851	D:6HAYES -6YORKTWN1 +6SMITFLD-6SURY 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8852	D:6HAYES -6YORKTWN1 +3S HAMPT-3WATKINS1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8853	D:6HAYES -6YORKTWN1 +3S HAMPT-1SHAMPT11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8854	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFOLK21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8855	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFC 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8856	D:6HAYES -6YORKTWN1 +3SUFFOLK-3SUFFC 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8857	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8858	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK2
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8859	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK3
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8860	D:6HAYES -6YORKTWN1 +6SUFFOLK-8SULFOLK1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8861	D:6HAYES -6YORKTWN1 +6SUFFOLK-8SULFOLK2
314180	6HAYES	230.0	345	354	0.8929	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8862	D:6HAYES -6YORKTWN1 +6SURY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8894	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8863	D:6HAYES -6YORKTWN1 +6SURY -6GRAVELA1
314180	6HAYES	230.0	345	354	0.8910	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8864	D:6HAYES -6YORKTWN1 +6SURY -6GRAVELB1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8865	D:6HAYES -6YORKTWN1 +6SURY -1SURY 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8866	D:6HAYES -6YORKTWN1 +6SURY -1GRAVELC1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8867	D:6HAYES -6YORKTWN1 +3UNCAMP -3UNCAMP 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8868	D:6HAYES -6YORKTWN1 +3WATKINS-3WATKI 11
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8869	D:6HAYES -6YORKTWN1 +3WATKINS-3WATKI 21
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8870	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVEL31
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8871	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVEL41
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8872	D:6HAYES -6YORKTWN1 +6GRAVELB-1GRAVEL51
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8873	D:6HAYES -6YORKTWN1 +6GRAVELB-1GRAVEL61
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8874	D:6HAYES -6YORKTWN1 +8LOUDD -18LOUDDUN1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8875	D:6HAYES -6YORKTWN1 +8MORRS -18MORRSVL1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8876	D:6HAYES -6YORKTWN1 +8MT ST -18MT STM 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8877	D:6HAYES -6YORKTWN1 +8MT ST -28MT STM 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8878	D:6HAYES -6YORKTWN1 +8BRISTE-CHANCE 1
314180	6HAYES	230.0	345	354	0.8896	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8879	D:6HAYES -6YORKTWN1 +8BRISTE-MORRISVLL
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8880	D:6HAYES -6YORKTWN1 +8BRISTE-BOX 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8881	D:6HAYES -6YORKTWN1 +8BATH CO-BLEANGTNI
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8882	D:6HAYES -6YORKTWN1 +8BATH CO-AVALLEY 1
314180	6HAYES	230.0	345	354	0.8901	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8883	D:6HAYES -6YORKTWN1 + B0461 BATH 3W1 1
314180	6HAYES	230.0	345	354	0.8901	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8884	D:6HAYES -6YORKTWN1 + B0462 BATH 3W3 1
314180	6HAYES	230.0	345	354	0.8901	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8885	D:6HAYES -6YORKTWN1 + B0463 BATH 3W5 1
314180	6HAYES	230.0	345	354	0.8931	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8886	D:6HAYES -6YORKTWN1 +8CARSON -8CLOVER 1
314180	6HAYES	230.0	345	354	0.8931	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8887	D:6HAYES -6YORKTWN1 +8CARSON -8MDLTHAN1
314180	6HAYES	230.0	345	354	0.8931	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8888	D:6HAYES -6YORKTWN1 +8CARSON -8FIVEPRK1
314180	6HAYES	230.0	345	354	0.8931	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8889	D:6HAYES -6YORKTWN1 +8CARSON -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8925	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8890	D:6HAYES -6YORKTWN1 +8CHICKAHM-BELMONT 1
314180	6HAYES	230.0	345	354	0.8917	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8891	D:6HAYES -6YORKTWN1 +8CHICKAHM-SURRY 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8892	D:6HAYES -6YORKTWN1 +8CLIFTON-BLOUDOUN1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8893	D:6HAYES -6YORKTWN1 +8CLIFTON-BOX 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8894	D:6HAYES -6YORKTWN1 +8DOOMS -8DYSMTN1
314180	6HAYES	230.0	345	354	0.8909	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8895	D:6HAYES -6YORKTWN1 +8DOOMS -8CUNNING1
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8896	D:6HAYES -6YORKTWN1 +8DOOMS -8LENGTNI
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8897	D:6HAYES -6YORKTWN1 +8DOOMS -8VALLEY 1
314180	6HAYES	230.0	345	354	0.8906	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8898	D:6HAYES -6YORKTWN1 +8ELMONT -8CUNNING1
314180	6HAYES	230.0	345	354	0.8928	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8899	D:6HAYES -6YORKTWN1 +8ELMONT -8DYSMTN1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8900	D:6HAYES -6YORKTWN1 +8FENTRES-3YADKIN 1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8901	D:6HAYES -6YORKTWN1 +8CUNNING-1CUNINGAI
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8902	D:6HAYES -6YORKTWN1 +8CUNNING-1CUNINGBI
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8903	D:6HAYES -6YORKTWN1 +8CUNNING-1CUNINGCI
314180	6HAYES	230.0	345	354	0.8900	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8904	D:6HAYES -6YORKTWN1 +8CUNNING-1CUNINGDI
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8905	D:6HAYES -6YORKTWN1 +8LDYSMTN-BNO ANNAL
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8906	D:6HAYES -6YORKTWN1 +8LDYSMTN-8FOSSUM 1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8907	D:6HAYES -6YORKTWN1 +8LOUDOUN-8MORRISVLL
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8908	D:6HAYES -6YORKTWN1 +8LOUDOUN-8BRABBLE1
314180	6HAYES	230.0	345	354	0.8895	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8909	D:6HAYES -6YORKTWN1 +8MDLTHAN-BNO ANNAL
314180	6HAYES	230.0	345	354	0.8931	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8910	D:6HAYES -6YORKTWN1 +8FIVEPRK-8SEPTA 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8911	D:6HAYES -6YORKTWN1 +8MORRISVLL-BNO ANNAL
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8912	D:6HAYES -6YORKTWN1 +8MORRISVLL-8FRONT R1
314180	6HAYES	230.0	345	354	0.8897	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8913	D:6HAYES -6YORKTWN1 +8MT STM -8VALLEY 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8914	D:6HAYES -6YORKTWN1 +8MT STM -3M STORM1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8915	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM11
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8916	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM21
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8917	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM31
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8918	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNAL1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8919	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNAL21
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8920	D:6HAYES -6YORKTWN1 +8OX -8FOSSUM 1
314180	6HAYES	230.0	345	354	0.8898	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8921	D:6HAYES -6YORKTWN1 +3M STORM-3N BRNCH1
314180	6HAYES	230.0	345	354	0.8899	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8922	D:6HAYES -6YORKTWN1 +8SEPTA -8SURRY 1
314180	6HAYES	230.0	345	354	0.8927	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8923	D:6HAYES -6YORKTWN1 +8YADKIN 1
314180	6HAYES	230.0	345	354	0.8932	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8924	D:6HAYES -6YORKTWN1 +8SURRY -8SULFOLK1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	Voltrise	Viol	Ncon	Contingency Description
314160	6HAYES	230.0	345	354	0.8922	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8925	D:6HAYES -6YORKTWN1 +8SURREY -15SURREY 21
314180	6HAYES	230.0	345	354	0.8998	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8926	D:6HAYES -6YORKTWN1 +8PDL VIEW-6BRAMBLE1
314160	6HAYES	230.0	345	354	0.8997	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8927	D:6HAYES -6YORKTWN1 +8EVLIN -6SULFOLK1
314180	6HAYES	230.0	345	354	0.8998	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8928	D:6HAYES -6YORKTWN1 +8FRONT R-1FRNT RY1
314180	6HAYES	230.0	345	354	0.8997	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8929	D:6HAYES -6YORKTWN1 -8YADKIN -8YADKIN 3
314180	6HAYES	230.0	345	354	0.8998	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8930	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 2
314180	6HAYES	230.0	345	354	0.8998	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8931	D:6HAYES -6YORKTWN1 +3CHESAPEAKE-6CHESAPEK2
314160	6HAYES	230.0	345	354	0.8990	1.0207	0.9300	1.0700	0.9696	1.0717	LD	8932	D:6HAYES -6YORKTWN1 +6YADKIN -6SULFOLK1
314176	6HARMONY	230.0	345	354	0.8944	1.0219	0.9300	1.0700	0.9708	1.0730	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTYN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8483	1.0148	0.9300	1.0700	0.9641	1.1065	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTYN-6LANEXA 1
314375	6CORRECTYN	230.0	345	354	0.8481	1.0142	0.9300	1.0700	0.9635	1.1064	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTYN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8482	1.0219	0.9300	1.0700	0.9708	1.1073	LD	10963	D:3WEST PT-31LANEXA 1 +6PAPERMT-6CORRECTYN
314189	6PAPERMT1	230.0	345	354	0.8429	1.0148	0.9300	1.0700	0.9641	1.1065	LD	10963	D:3WEST PT-31LANEXA 1 +6PAPERMT-6CORRECTYN
314176	6HARMONY	230.0	345	354	0.8424	1.0219	0.9300	1.0700	0.9708	1.1073	LD	10985	D:3WEST PT-31LANEXA 1 +6CORRECTYN-6LANEXA 1
314189	6PAPERMT1	230.0	345	354	0.8178	1.0148	0.9300	1.0700	0.9641	1.1065	LD	10985	D:3WEST PT-31LANEXA 1 +6CORRECTYN-6LANEXA 1
314375	6CORRECTYN	230.0	345	354	0.8175	1.0142	0.9300	1.0700	0.9635	1.1064	LD	10985	D:3WEST PT-31LANEXA 1 +6CORRECTYN-6LANEXA 1
314399	6PEMBROK	230.0	345	356	0.8977	1.0144	0.9300	1.0700	0.9637	1.1065	LD	20889	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314402	6PENINSL	230.0	345	356	0.9029	1.0124	0.9300	1.0700	0.9618	1.1063	LD	20889	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314407	6SHELBNK	230.0	345	356	0.9377	1.0110	0.9300	1.0700	0.9604	1.1061	LD	20889	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314409	6TABB	230.0	345	356	0.9097	1.0140	0.9300	1.0700	0.9633	1.1067	LD	20889	D:6LANEXA -6LIGH2091 +6NP NEWS-6PEMBROK1
314402	6PENINSL	230.0	345	356	0.9026	1.0124	0.9300	1.0700	0.9618	1.1063	LD	20891	D:6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8973	1.0110	0.9300	1.0700	0.9604	1.1061	LD	20891	D:6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314409	6TABB	230.0	345	356	0.9094	1.0140	0.9300	1.0700	0.9633	1.1067	LD	20891	D:6LANEXA -6LIGH2091 +6PEMBROK-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.9082	1.0144	0.9300	1.0700	0.9637	1.1065	LD	21630	D:6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314407	6SHELBNK	230.0	345	356	0.9082	1.0110	0.9300	1.0700	0.9604	1.1061	LD	21630	D:6LIGH285-6WALR2851 +6NP NEWS-6PEMBROK1
314407	6SHELBNK	230.0	345	356	0.9078	1.0110	0.9300	1.0700	0.9604	1.1061	LD	21632	D:6LIGH285-6WALR2851 +6PEMBROK-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.9072	1.0144	0.9300	1.0700	0.9637	1.1065	LD	21875	D:6LIGH209-6WALR2091 +6NP NEWS-6PEMBROK1
314407	6SHELBNK	230.0	345	356	0.9072	1.0110	0.9300	1.0700	0.9604	1.1061	LD	21875	D:6LIGH209-6WALR2091 +6NP NEWS-6PEMBROK1
314407	6SHELBNK	230.0	345	356	0.9068	1.0110	0.9300	1.0700	0.9604	1.1061	LD	21877	D:6LIGH209-6WALR2091 +6PEMBROK-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8724	1.0144	0.9300	1.0700	0.9637	1.1065	LD	23570	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8724	1.0110	0.9300	1.0700	0.9604	1.1061	LD	23570	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8666	1.0144	0.9300	1.0700	0.9637	1.1065	LD	23571	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8666	1.0110	0.9300	1.0700	0.9604	1.1061	LD	23571	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314399	6PEMBROK	230.0	345	356	0.8543	1.0144	0.9300	1.0700	0.9637	1.1065	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8543	1.0124	0.9300	1.0700	0.9618	1.1063	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8543	1.0110	0.9300	1.0700	0.9604	1.1061	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8625	1.0140	0.9300	1.0700	0.9633	1.1067	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314399	6PEMBROK	230.0	345	356	0.9063	1.0144	0.9300	1.0700	0.9637	1.1065	LD	23582	D:6NP NEWS-6PEMBROK1 +6WHEALTIN-6WINCHST1
314407	6SHELBNK	230.0	345	356	0.9063	1.0110	0.9300	1.0700	0.9604	1.1061	LD	23582	D:6NP NEWS-6PEMBROK1 +6WHEALTIN-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.8255	1.0151	0.9300	1.0700	0.9643	1.1065	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314160	6HAYES	230.0	345	354	0.8739	1.0207	0.9300	1.0700	0.9696	1.0717	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314296	6PENINIAN	230.0	345	356	0.8936	1.0123	0.9300	1.0700	0.9616	1.1062	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8881	0.9972	0.9300	1.0700	0.9473	1.1047	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314372	3BLOXOMC	115.0	345	356	0.9057	0.9971	0.9300	1.0700	0.9472	1.1046	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.8993	0.9945	0.9300	1.0700	0.9448	1.1042	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314376	6DENBLIGH	230.0	345	356	0.8754	1.0141	0.9300	1.0700	0.9634	1.1064	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1

PSS(mr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314378	3TEUS34	115.0	345	356	0.8795	0.9896	0.9300	1.0700	0.9401	1.0391	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314379	3TEUS58	115.0	345	356	0.8770	0.9874	0.9300	1.0700	0.9381	1.0368	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314381	3GRAT34	115.0	345	356	0.8832	0.9929	0.9300	1.0700	0.9433	1.0426	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314382	3GRAT58	115.0	345	356	0.8819	0.9918	0.9300	1.0700	0.9422	1.0414	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8896	1.0133	0.9300	1.0700	0.9626	1.0639	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.8751	0.9858	0.9300	1.0700	0.9365	1.0351	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.9000	1.0068	0.9300	1.0700	0.9564	1.0571	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314399	6PEMBROK	230.0	345	356	0.9399	1.0144	0.9300	1.0700	0.9637	1.0651	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.9453	1.0124	0.9300	1.0700	0.9618	1.0631	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.9447	0.9982	0.9300	1.0700	0.9483	1.0481	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.9441	0.9978	0.9300	1.0700	0.9479	1.0477	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314407	6SHELBK	230.0	345	356	0.9388	1.0110	0.9300	1.0700	0.9604	1.0615	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.9535	1.0140	0.9300	1.0700	0.9633	1.0647	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314413	6WAL285	230.0	345	356	0.9922	1.0070	0.9300	1.0700	0.9666	1.0573	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314414	3WAL285	115.0	345	356	0.9086	0.9974	0.9300	1.0700	0.9475	1.0473	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314415	6WAL209	230.0	345	356	0.9020	1.0103	0.9300	1.0700	0.9598	1.0608	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314416	6WAL209	230.0	345	356	0.8496	1.0149	0.9300	1.0700	0.9641	1.0656	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314418	6WAL209	230.0	345	356	0.8496	1.0149	0.9300	1.0700	0.9641	1.0656	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8494	1.0146	0.9300	1.0700	0.9639	1.0653	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.8882	0.9973	0.9300	1.0700	0.9474	1.0471	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8718	1.0191	0.9300	1.0700	0.9682	1.0701	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314424	3YNWS 58	115.0	345	356	0.8749	0.9856	0.9300	1.0700	0.9363	1.0348	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8873	0.9974	0.9300	1.0700	0.9475	1.0472	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8513	1.0169	0.9300	1.0700	0.9611	1.0678	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8745	1.0225	0.9300	1.0700	0.9713	1.0736	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
315091	1YORKT2	18.0	345	356	0.8882	0.9973	0.9300	1.0700	0.9474	1.0471	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
315092	1YORKT3	25.0	345	356	0.8718	1.0191	0.9300	1.0700	0.9682	1.0701	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.8554	1.0151	0.9300	1.0700	0.9643	1.0658	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8729	1.0207	0.9300	1.0700	0.9696	1.0717	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314296	6PENNYMAN	230.0	345	356	0.9922	1.0123	0.9300	1.0700	0.9616	1.0629	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8874	0.9972	0.9300	1.0700	0.9473	1.0470	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314372	3BLOXMC	115.0	345	356	0.9052	0.9971	0.9300	1.0700	0.9472	1.0469	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.8989	0.9945	0.9300	1.0700	0.9448	1.0442	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.8742	1.0141	0.9300	1.0700	0.9634	1.0648	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314379	3TEUS58	115.0	345	356	0.8763	0.9874	0.9300	1.0700	0.9381	1.0368	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314381	3GRAT34	115.0	345	356	0.8826	0.9929	0.9300	1.0700	0.9433	1.0426	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314382	3GRAT58	115.0	345	356	0.8813	0.9918	0.9300	1.0700	0.9422	1.0414	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8882	1.0133	0.9300	1.0700	0.9626	1.0639	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.8745	0.9858	0.9300	1.0700	0.9365	1.0351	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314390	6LIGH285	230.0	345	356	0.9986	1.0068	0.9300	1.0700	0.9564	1.0571	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314399	6PEMBROK	230.0	345	356	0.9380	1.0144	0.9300	1.0700	0.9637	1.0651	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314402	6PENINSL	230.0	345	356	0.9444	1.0124	0.9300	1.0700	0.9618	1.0631	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.9541	0.9982	0.9300	1.0700	0.9483	1.0481	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.9935	0.9978	0.9300	1.0700	0.9479	1.0477	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314407	6SHELBK	230.0	345	356	0.9380	1.0110	0.9300	1.0700	0.9604	1.0615	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1
314409	6TABB	230.0	345	356	0.9526	1.0140	0.9300	1.0700	0.9633	1.0647	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY -6POOLSVL1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314413	6WALR285	230.0	345	356	0.8908	1.0070	0.9300	1.0700	0.9566	1.0573	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314414	3WARWICK	115.0	345	356	0.9083	0.9974	0.9300	1.0700	0.9475	1.0473	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314415	6WALR209	230.0	345	356	0.9007	1.0103	0.9300	1.0700	0.9598	1.0608	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.8540	1.0149	0.9300	1.0700	0.9641	1.0656	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314418	6WHEALYN	230.0	345	356	0.9501	1.0149	0.9300	1.0700	0.9641	1.0656	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.9499	1.0146	0.9300	1.0700	0.9639	1.0653	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.8875	0.9973	0.9300	1.0700	0.9474	1.0471	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8708	1.0191	0.9300	1.0700	0.9682	1.0701	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314424	3YNWS 58	115.0	345	356	0.8742	0.9856	0.9300	1.0700	0.9363	1.0348	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8867	0.9974	0.9300	1.0700	0.9475	1.0472	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314445	6WHEALYN	230.0	345	356	0.8518	1.0169	0.9300	1.0700	0.9661	1.0678	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314450	6YORKTWN	230.0	345	356	0.8737	1.0225	0.9300	1.0700	0.9713	1.0736	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.9526	1.0078	0.9300	1.0700	0.9574	1.0582	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
315091	1YORKTWN2	18.0	345	356	0.8875	0.9973	0.9300	1.0700	0.9474	1.0471	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
315092	1YORKTWN3	25.0	345	356	0.8708	1.0191	0.9300	1.0700	0.9682	1.0701	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314407	6SHELBK	230.0	345	356	0.8734	1.0110	0.9300	1.0700	0.9604	1.0615	LD	24043	D:6PEMBROK-6SHELBK1 +6PENINSL-6SHELBK1
314402	6PENINSL	230.0	345	356	0.8691	1.0124	0.9300	1.0700	0.9618	1.0631	LD	24044	D:6PEMBROK-6SHELBK1 +6PENINSL-6TABB 1
314408	6SHELBK	230.0	345	356	0.8682	1.0110	0.9300	1.0700	0.9604	1.0615	LD	24044	D:6PEMBROK-6SHELBK1 +6PENINSL-6TABB 1
314402	6PENINSL	230.0	345	356	0.8536	1.0124	0.9300	1.0700	0.9618	1.0631	LD	24049	D:6PEMBROK-6SHELBK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8521	1.0140	0.9300	1.0700	0.9633	1.0647	LD	24049	D:6PEMBROK-6SHELBK1 +6TABB -6YORKTWN1
314407	6SHELBK	230.0	345	356	0.8538	1.0110	0.9300	1.0700	0.9604	1.0615	LD	24055	D:6PEMBROK-6SHELBK1 +6WHEALYN-6WINCHST1
313612	6ROCKLAND	230.0	345	356	0.8551	1.0151	0.9300	1.0700	0.9643	1.0658	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314180	6HAYES	230.0	345	354	0.8735	1.0207	0.9300	1.0700	0.9616	1.0717	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314296	6PENINMAN	230.0	345	356	0.8933	1.0123	0.9300	1.0700	0.9616	1.0629	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8876	0.9972	0.9300	1.0700	0.9473	1.0470	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314372	3BLOXOMC	115.0	345	356	0.9051	0.9971	0.9300	1.0700	0.9472	1.0469	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.8908	0.9945	0.9300	1.0700	0.9448	1.0442	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.8750	1.0141	0.9300	1.0700	0.9634	1.0648	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.8790	0.9896	0.9300	1.0700	0.9401	1.0391	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314379	3FTEUS58	115.0	345	356	0.8765	0.9874	0.9300	1.0700	0.9381	1.0368	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.8828	0.9929	0.9300	1.0700	0.9433	1.0426	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.8814	0.9918	0.9300	1.0700	0.9422	1.0414	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8892	1.0133	0.9300	1.0700	0.9626	1.0639	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.8747	0.9858	0.9300	1.0700	0.9365	1.0351	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.8998	1.0068	0.9300	1.0700	0.9564	1.0571	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.8448	1.0124	0.9300	1.0700	0.9618	1.0631	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314403	3SEAD76	115.0	345	356	0.8942	0.9982	0.9300	1.0700	0.9483	1.0481	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314404	3SEAD79	115.0	345	356	0.9037	0.9978	0.9300	1.0700	0.9479	1.0477	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314407	6SHELBK	230.0	345	356	0.8393	1.0110	0.9300	1.0700	0.9604	1.0615	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.8530	1.0140	0.9300	1.0700	0.9633	1.0647	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314413	6WALR285	230.0	345	356	0.8919	1.0070	0.9300	1.0700	0.9566	1.0573	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314414	3WARWICK	115.0	345	356	0.9080	0.9974	0.9300	1.0700	0.9475	1.0473	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.9019	1.0103	0.9300	1.0700	0.9598	1.0608	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314416	6WARWICK	230.0	345	356	0.8536	1.0149	0.9300	1.0700	0.9641	1.0656	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314418	6WHEALYN	230.0	345	356	0.8491	1.0149	0.9300	1.0700	0.9641	1.0656	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8489	1.0146	0.9300	1.0700	0.9639	1.0653	LD	24057	D:6PEMBROK-6SHELBK1 +6WINCHST-6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314422	3YORKTWN	115.0	345	356	0.8877	0.9973	0.9300	1.0700	0.9474	1.0471	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8714	1.0191	0.9300	1.0700	0.9682	1.0701	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
314424	3YNWS 58	115.0	345	356	0.8744	0.9856	0.9300	1.0700	0.9363	1.0348	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8868	0.9974	0.9300	1.0700	0.9475	1.0472	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8509	1.0169	0.9300	1.0700	0.9661	1.0678	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8742	1.0225	0.9300	1.0700	0.9713	1.0736	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
315091	1YORKT2N	18.0	345	356	0.8877	0.9973	0.9300	1.0700	0.9474	1.0471	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
315092	1YORKT3	25.0	345	356	0.8714	1.0191	0.9300	1.0700	0.9682	1.0701	LD	24057	D:6PEMBROK-6SHELEBNK1 +6WINCHST-6POOLSVL1
313012	6ROCKLAND	230.0	345	356	0.8549	1.0151	0.9300	1.0700	0.9643	1.0658	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8724	1.0207	0.9300	1.0700	0.9696	1.0717	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314296	6PENNINGAN	230.0	345	356	0.8919	1.0123	0.9300	1.0700	0.9616	1.0629	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8869	0.9972	0.9300	1.0700	0.9473	1.0470	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314372	3BLOKMC	115.0	345	356	0.9045	0.9971	0.9300	1.0700	0.9472	1.0469	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.8984	0.9945	0.9300	1.0700	0.9448	1.0442	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314376	6DENIGH	230.0	345	356	0.8738	1.0141	0.9300	1.0700	0.9634	1.0648	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314378	3TEUS34	115.0	345	356	0.8784	0.9896	0.9300	1.0700	0.9401	1.0391	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314379	3TEUS58	115.0	345	356	0.8758	0.9874	0.9300	1.0700	0.9381	1.0368	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.8821	0.9929	0.9300	1.0700	0.9433	1.0426	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.8808	0.9918	0.9300	1.0700	0.9422	1.0414	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8879	1.0133	0.9300	1.0700	0.9626	1.0639	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314389	3LEBAN58	115.0	345	356	0.8740	0.9858	0.9300	1.0700	0.9365	1.0351	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314390	6LIGH285	230.0	345	356	0.8983	1.0068	0.9300	1.0700	0.9564	1.0571	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314402	6PENINS	230.0	345	356	0.8439	1.0124	0.9300	1.0700	0.9618	1.0631	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314403	3SEADY76	115.0	345	356	0.8936	0.9982	0.9300	1.0700	0.9483	1.0481	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314404	3SEADY79	115.0	345	356	0.8936	0.9978	0.9300	1.0700	0.9479	1.0477	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314407	6SHELEBNK	230.0	345	356	0.8375	1.0110	0.9300	1.0700	0.9604	1.0615	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314409	6TABB	230.0	345	356	0.8521	1.0140	0.9300	1.0700	0.9633	1.0647	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314413	6WALR285	230.0	345	356	0.8905	1.0070	0.9300	1.0700	0.9566	1.0573	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314414	3WARWICK	115.0	345	356	0.9004	0.9974	0.9300	1.0700	0.9475	1.0473	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314415	6WALR209	230.0	345	356	0.8536	1.0149	0.9300	1.0700	0.9598	1.0608	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.8536	1.0149	0.9300	1.0700	0.9641	1.0656	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.8495	1.0149	0.9300	1.0700	0.9641	1.0656	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8494	1.0146	0.9300	1.0700	0.9639	1.0653	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.8870	0.9973	0.9300	1.0700	0.9474	1.0471	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8704	1.0191	0.9300	1.0700	0.9682	1.0701	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314424	3YNWS 58	115.0	345	356	0.8737	0.9856	0.9300	1.0700	0.9363	1.0348	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8862	0.9974	0.9300	1.0700	0.9475	1.0472	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8513	1.0169	0.9300	1.0700	0.9661	1.0678	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8732	1.0225	0.9300	1.0700	0.9713	1.0736	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.8521	1.0078	0.9300	1.0700	0.9574	1.0582	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
315091	1YORKT2N	18.0	345	356	0.8870	0.9973	0.9300	1.0700	0.9474	1.0471	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
315092	1YORKT3	25.0	345	356	0.8704	1.0191	0.9300	1.0700	0.9682	1.0701	LD	24203	D:6PEMBROK-6SHELEBNK1 +6SURY -6POOLSVL1
314402	6PENINS	230.0	345	356	0.8718	1.0124	0.9300	1.0700	0.9618	1.0631	LD	25444	D:6PENINS-6SHELEBNK1 +6TABB -6YORKTWN1
314497	6TABB	230.0	345	356	0.8703	1.0140	0.9300	1.0700	0.9633	1.0647	LD	25444	D:6PENINS-6SHELEBNK1 +6TABB -6YORKTWN1
314497	6SEWISPT	230.0	345	359	0.8747	1.0063	0.9300	1.0700	0.9560	1.0567	LD	36251	D:6CHRLND-6SEWISPT1 +6CHRLND-6SEWISPT2
314500	6NAVYS	230.0	345	359	0.8747	1.0063	0.9300	1.0700	0.9560	1.0567	LD	36251	D:6CHRLND-6SEWISPT1 +6CHRLND-6SEWISPT2
314501	6NAVYS1	230.0	345	359	0.8747	1.0063	0.9300	1.0700	0.9560	1.0567	LD	36251	D:6CHRLND-6SEWISPT1 +6CHRLND-6SEWISPT2

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314505	6NAVYN	230.0	345	359	0.8748	1.0064	0.9300	1.0700	0.9561	1.0567	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314510	6NAVYNL	230.0	345	359	0.8745	1.0062	0.9300	1.0700	0.9559	1.0565	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314348	2GRETN 1	69.0	345	358	0.8456	1.0169	0.9300	1.0700	0.9661	1.0678	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314354	2ALTVS 1	69.0	345	358	0.8700	1.0327	0.9300	1.0700	0.9811	1.0843	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314515	3ALTVS 1	115.0	345	358	0.8606	1.0005	0.9300	1.0700	0.9505	1.0506	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314666	3ALTVS1A	115.0	345	358	0.8602	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314667	4ALTVS1A	138.0	345	358	0.8486	0.9984	0.9300	1.0700	0.9485	1.0483	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314668	4BANS1R	138.0	345	358	0.9077	0.9947	0.9300	1.0700	0.9449	1.0444	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314670	2ALTVS1A	69.0	345	358	0.8698	1.0324	0.9300	1.0700	0.9808	1.0840	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314671	4BEARSKN	138.0	345	358	0.8892	0.9966	0.9300	1.0700	0.9467	1.0464	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314680	2CHATHAM	69.0	345	358	0.8325	1.0048	0.9300	1.0700	0.9545	1.0550	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314685	2CHTM TP	69.0	345	358	0.8331	1.0053	0.9300	1.0700	0.9551	1.0556	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314689	3DONINIO	115.0	345	358	0.8406	0.9927	0.9300	1.0700	0.9431	1.0424	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314694	3GRIT	115.0	345	358	0.8764	1.0021	0.9300	1.0700	0.9520	1.0522	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314700	3HALL BR	115.0	345	358	0.8622	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314705	3HURT	115.0	345	358	0.8656	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314712	3OTTER R	115.0	345	358	0.8625	0.9999	0.9300	1.0700	0.9499	1.0499	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314727	2CLIX DP	69.0	345	358	0.8297	1.0022	0.9300	1.0700	0.9521	1.0523	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314728	2CLIX TP	69.0	345	358	0.8304	1.0029	0.9300	1.0700	0.9527	1.0530	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314729	2GLADYS	69.0	345	358	0.8458	1.0111	0.9300	1.0700	0.9606	1.0617	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314730	2GLDY TP	69.0	345	358	0.8660	1.0298	0.9300	1.0700	0.9783	1.0812	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314731	2GRETN A	69.0	345	358	0.8454	1.0167	0.9300	1.0700	0.9658	1.0675	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314732	2GRNA FB	69.0	345	358	0.8454	1.0167	0.9300	1.0700	0.9658	1.0675	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314733	2GRNA DP	69.0	345	358	0.8434	1.0149	0.9300	1.0700	0.9642	1.0657	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314734	2KLOP DP	69.0	345	358	0.8609	1.0261	0.9300	1.0700	0.9748	1.0774	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314735	2KLOP TP	69.0	345	358	0.8608	1.0261	0.9300	1.0700	0.9748	1.0774	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314736	2SHKO DP	69.0	345	358	0.8329	1.0052	0.9300	1.0700	0.9549	1.0554	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314737	2SW35T57	69.0	345	358	0.8518	1.0203	0.9300	1.0700	0.9693	1.0714	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314738	2MT AIRY	69.0	345	358	0.8458	1.0148	0.9300	1.0700	0.9641	1.0656	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314739	2MT A TP	69.0	345	358	0.8518	1.0203	0.9300	1.0700	0.9693	1.0714	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314740	2ALTVS35	69.0	345	358	0.8698	1.0324	0.9300	1.0700	0.9808	1.0841	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314789	2BEARSKN	69.0	345	358	0.8891	0.9966	0.9300	1.0700	0.9467	1.0464	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314836	3BALTFLS	115.0	345	365	0.3770	0.9962	0.9300	1.0700	0.9464	1.0460	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314837	3BUENA V	115.0	345	365	0.3759	0.9952	0.9300	1.0700	0.9455	1.0450	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314838	3BUSTLER	115.0	345	365	0.3814	0.9985	0.9300	1.0700	0.9485	1.0484	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314839	3BUSTL T	115.0	345	365	0.3816	0.9986	0.9300	1.0700	0.9487	1.0485	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314840	6CLFTN F	230.0	345	365	0.3603	0.9802	0.9300	1.0700	0.9312	1.0292	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314841	4CLFTN P	138.0	345	365	0.3651	1.0359	0.9300	1.0700	0.9841	1.0877	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314842	4COVNGT2	138.0	345	365	0.3484	1.0255	0.9300	1.0700	0.9742	1.0768	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314843	4COVNGT1	138.0	345	365	0.3459	1.0238	0.9300	1.0700	0.9726	1.0750	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314844	3CRAIGSV	115.0	345	365	0.3762	0.9955	0.9300	1.0700	0.9457	1.0452	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314845	3EFFNGR	115.0	345	365	0.3807	0.9986	0.9300	1.0700	0.9487	1.0486	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314846	3FAIRFLD	115.0	345	365	0.3802	0.9977	0.9300	1.0700	0.9478	1.0476	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314847	4FUDGE H	138.0	345	365	0.3430	1.0217	0.9300	1.0700	0.9706	1.0728	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314848	3GLASGOW	115.0	345	365	0.3785	0.9972	0.9300	1.0700	0.9473	1.0471	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314849	3GOSHEN	115.0	345	365	0.3777	0.9964	0.9300	1.0700	0.9466	1.0463	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1
314851	3JAMES L	115.0	345	365	0.3755	0.9952	0.9300	1.0700	0.9455	1.0450	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LENGTNG1

PSS(mr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 11:41 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET L34 58 & 65 OPEN

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314852	3JMS L T	115.0	345	365	0.3762	0.9956	0.9300	1.0700	0.9459	1.0454	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314853	3LEXNGTN	115.0	345	365	0.3828	0.9993	0.9300	1.0700	0.9494	1.0493	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314854	6LEXNGT1	230.0	345	365	0.3870	0.9921	0.9300	1.0700	0.9425	1.0417	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314855	6LOWMOOR	230.0	345	365	0.3590	0.9798	0.9300	1.0700	0.9308	1.0288	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314856	6LEXNGT2	230.0	345	365	0.3870	0.9921	0.9300	1.0700	0.9425	1.0417	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314857	4LOWMOOR	138.0	345	365	0.3594	1.0334	0.9300	1.0700	0.9817	1.0850	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314858	3ROCKB T	115.0	345	365	0.3773	0.9959	0.9300	1.0700	0.9461	1.0457	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314859	4NSTVACO	138.0	345	365	0.3396	1.0192	0.9300	1.0700	0.9682	1.0701	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314860	4E MILL	138.0	345	365	0.3403	1.0198	0.9300	1.0700	0.9688	1.0708	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314861	3SKIMMER	115.0	345	365	0.7825	0.9747	0.9300	1.0700	0.9260	1.0235	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314894	4LOWMO 1	138.0	345	365	0.3596	1.0339	0.9300	1.0700	0.9822	1.0856	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314901	8BATH CO	500.0	345	366	0.4123	1.0500	0.9300	1.0700	0.9975	1.1025	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314912	8LEXNGTN	500.0	345	366	0.4220	1.0468	0.9300	1.0700	0.9944	1.0991	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315156	1HALIBRI	13.8	345	358	0.8622	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315165	1HURT 1	13.8	345	358	0.8981	0.9934	0.9300	1.0700	0.9437	1.0430	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315166	1HURT 2	13.8	345	358	0.8981	0.9934	0.9300	1.0700	0.9437	1.0430	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315201	1BATH 1A	20.5	345	366	0.4200	1.0283	0.9300	1.0700	0.9769	1.0797	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315202	1BATH 2B	20.5	345	366	0.4272	1.0283	0.9300	1.0700	0.9769	1.0798	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315203	1BATH 3C	20.5	345	366	0.4274	1.0278	0.9300	1.0700	0.9764	1.0792	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315204	1BATH 4D	20.5	345	366	0.4195	1.0279	0.9300	1.0700	0.9765	1.0792	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315205	1BATH 5E	20.5	345	366	0.4198	1.0281	0.9300	1.0700	0.9767	1.0795	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315206	1BATH 6F	20.5	345	366	0.4190	1.0281	0.9300	1.0700	0.9767	1.0795	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
BS0461	BATH 3W1	1.0	345	366	0.4032	1.0249	0.9300	1.0700	0.9737	1.0762	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
BS0462	BATH 3W3	1.0	345	366	0.3995	1.0224	0.9300	1.0700	0.9713	1.0735	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
BS0463	BATH 3W5	1.0	345	366	0.3995	1.0228	0.9300	1.0700	0.9716	1.0739	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
BS1032	HURT 3WD	1.0	345	358	0.8670	0.9995	0.9300	1.0700	0.9495	1.0495	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1

CATEGORY D

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 8:36 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 8:33 <BRV003.0>
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
 Subsys.File X:\S2015\advp.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\2015 Category D.con
 Exclud.File none

***** Report on violations *****

Branches with MVA Flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	140.4	71.0	103.0	136.3	5	ROW 568
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	138.8	69.5	103.0	134.7	5	ROW 568
314399	6PEMBROK	230	314407 6SHELBNK	230	LN	LN	717.8	207.7	549.0	130.8	1	ROW 436
314398	6NP NEWS	230	314399 6PEMBROK	230	LN	LN	717.8	207.4	549.0	130.7	1	ROW 436
313818	6BENCHRCH	230	314522 6CHCKTUK	230	LN	LN	865.6	340.1	672.0	128.8	1	ROW 436
313818	6BENCHRCH	230	314398 6NP NEWS	230	LN	LN	839.8	315.5	672.0	125.0	1	ROW 436
314278	6BERMUDA	230	314286 6CHSTF A	230	LN	LN	660.4	36.2	541.0	122.1	4	ROW 567
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	124.4	57.7	103.0	120.8	5	ROW 568
314278	6BERMUDA	230	314303 6HOPENLL	230	LN	LN	660.5	36.4	549.0	120.3	4	ROW 567
314421	6WINCHST	230	314540 6POOLSVL	230	LN	LN	773.4	357.6	650.0	119.0	1	ROW 436
314398	6NP NEWS	230	314399 6PEMBROK	230	LN	LN	650.7	207.4	549.0	118.5	6	Chickahominy
314399	6PEMBROK	230	314407 6SHELBNK	230	LN	LN	650.8	207.7	549.0	118.5	6	Chickahominy
313818	6BENCHRCH	230	314522 6CHCKTUK	230	LN	LN	795.9	340.1	672.0	118.4	6	Chickahominy
314252	3TURNR92	115	314284 3CHSTFLD	115	LN	LN	292.4	101.4	249.0	117.4	6	Chickahominy
313818	6BENCHRCH	230	314398 6NP NEWS	230	LN	LN	770.4	315.5	672.0	114.6	6	Chickahominy
314421	6WINCHST	230	314540 6POOLSVL	230	LN	LN	716.8	357.6	650.0	110.3	6	Chickahominy
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	113.0	71.0	103.0	109.7	4	ROW 567
314391	6LIGH209	230	314415 6WALR209	230	LN	LN	599.1	280.5	541.0	108.9	5	ROW 568
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	111.8	71.0	103.0	108.5	9	Yorktown
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	111.4	69.5	103.0	108.2	4	ROW 567
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	110.2	69.5	103.0	107.0	9	Yorktown
314243	3PROV 92	115	314252 3TURNR92	115	LN	LN	262.0	75.3	249.0	105.2	6	Chickahominy
314243	3PROV 92	115	314387 3LANEXA	115	LN	LN	253.5	67.4	249.0	101.8	6	Chickahominy

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 8:36 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314287	6CHSTF B	230	314303	6HOPEWLL	230		LN	55.4	22.1	549.0	101.2	4	ROW 567
314682	3BUGGS I	115	315151	1BUGGS 2	13.8		TR	69.9	69.9	70.0	99.8		** Base Case **

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 8:35 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SAT, FEB 16 2013 8:34 <VOV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre.sav
Subsys.File X:\S2015\divp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015 Category D.con
Exclud.File none

***** Report on violations *****

Busess with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	**	Base Case **
313810	6DAHLGREN	230.0	345	354	0.9467	0.9576	0.9300	1.0700	0.9477	1.0475	D	1	ROW 436
313812	6ROCKLAND	230.0	345	356	0.9369	1.0166	0.9300	1.0700	0.9658	1.0674	D	1	ROW 436
313813	3CGRAN	115.0	345	354	0.9032	1.0011	0.9300	1.0700	0.9511	1.0512	LD	1	ROW 436
313828	3WHITEMAR	115.0	345	354	0.9168	1.0017	0.9300	1.0700	0.9517	1.0518	LD	1	ROW 436
314139	6OAKGROV	230.0	345	354	0.9294	0.9991	0.9300	1.0700	0.9492	1.0491	LD	1	ROW 436
314172	6DUNNSVL	230.0	345	354	0.9167	1.0021	0.9300	1.0700	0.9520	1.0522	LD	1	ROW 436
314173	3GARNER	115.0	345	354	0.9076	1.0007	0.9300	1.0700	0.9506	1.0507	LD	1	ROW 436
314174	3HARMONY	115.0	345	354	0.9116	1.0019	0.9300	1.0700	0.9518	1.0520	LD	1	ROW 436
314176	6HARMONY	230.0	345	354	0.9372	1.0222	0.9300	1.0700	0.9711	1.0733	D	1	ROW 436
314177	3HAYES89	115.0	345	354	0.9187	1.0014	0.9300	1.0700	0.9513	1.0515	LD	1	ROW 436
314178	3LANCAST	115.0	345	354	0.9071	1.0023	0.9300	1.0700	0.9522	1.0524	LD	1	ROW 436
314180	6HAYES	230.0	345	354	0.9382	1.0224	0.9300	1.0700	0.9713	1.0735	D	1	ROW 436
314181	3NORNECK	115.0	345	354	0.9215	1.0081	0.9300	1.0700	0.9577	1.0585	LD	1	ROW 436
314182	6NORNECK	230.0	345	354	0.9145	0.9988	0.9300	1.0700	0.9489	1.0487	LD	1	ROW 436
314183	6SANDERS	230.0	345	354	0.9165	0.9987	0.9300	1.0700	0.9488	1.0486	LD	1	ROW 436
314184	3SHACKLE	115.0	345	354	0.9151	1.0016	0.9300	1.0700	0.9516	1.0517	LD	1	ROW 436
314187	3WAN 176	115.0	345	354	0.8971	0.9890	0.9300	1.0700	0.9396	1.0385	LD	1	ROW 436
314188	3WEST PT	115.0	345	354	0.9160	1.0009	0.9300	1.0700	0.9509	1.0509	LD	1	ROW 436
314189	6PAPERMI	230.0	345	354	0.9316	1.0148	0.9300	1.0700	0.9641	1.0656	D	1	ROW 436
314190	6WESTMOR	230.0	345	354	0.9211	0.9992	0.9300	1.0700	0.9492	1.0491	LD	1	ROW 436
314191	3WHITE S	115.0	345	354	0.9073	1.0005	0.9300	1.0700	0.9505	1.0506	LD	1	ROW 436
314296	6PENNIMAN	230.0	345	356	0.9312	1.0136	0.9300	1.0700	0.9629	1.0643	D	1	ROW 436
314371	3AMOCO Y	115.0	345	356	0.9142	0.9967	0.9300	1.0700	0.9469	1.0465	LD	1	ROW 436
314372	3BLOXONC	115.0	345	356	0.9153	0.9975	0.9300	1.0700	0.9476	1.0474	LD	1	ROW 436
314373	3COLONY	115.0	345	356	0.9119	0.9946	0.9300	1.0700	0.9448	1.0443	LD	1	ROW 436

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314374	3COPPLND	115.0	345	356	0.9217	1.0028	0.9300	1.0700	0.9526	1.0529	LD	1	ROW 436
314375	6CORCIN	230.0	345	354	0.9313	1.0141	0.9300	1.0700	0.9634	1.0648	D	1	ROW 436
314376	6DENIGH	230.0	345	356	0.9330	1.0158	0.9300	1.0700	0.9650	1.0666	D	1	ROW 436
314377	3DOW 34	115.0	345	356	0.9127	0.9979	0.9300	1.0700	0.9480	1.0478	LD	1	ROW 436
314378	3FTEUS34	115.0	345	356	0.9111	0.9957	0.9300	1.0700	0.9459	1.0455	LD	1	ROW 436
314379	3FTEUS58	115.0	345	356	0.9008	0.9833	0.9300	1.0700	0.9341	1.0325	LD	1	ROW 436
314381	3GRAFT34	115.0	345	356	0.9123	0.9948	0.9300	1.0700	0.9450	1.0445	LD	1	ROW 436
314382	3GRAFT58	115.0	345	356	0.9067	0.9890	0.9300	1.0700	0.9396	1.0385	LD	1	ROW 436
314384	3KINGS M	115.0	345	356	0.8974	0.9796	0.9300	1.0700	0.9306	1.0286	LD	1	ROW 436
314385	3HARMO 1	115.0	345	354	0.9122	1.0026	0.9300	1.0700	0.9524	1.0527	LD	1	ROW 436
314386	6KINGS M	230.0	345	356	0.9321	1.0147	0.9300	1.0700	0.9639	1.0654	D	1	ROW 436
314387	3LANEXA	115.0	345	356	0.9211	1.0031	0.9300	1.0700	0.9529	1.0533	LD	1	ROW 436
314388	6LANEXA	230.0	345	356	0.9313	1.0136	0.9300	1.0700	0.9629	1.0643	D	1	ROW 436
314389	3LEBAN58	115.0	345	356	0.8986	0.9811	0.9300	1.0700	0.9321	1.0302	LD	1	ROW 436
314391	6LIGH209	230.0	345	356	0.9294	1.0112	0.9300	1.0700	0.9606	1.0617	LD	1	ROW 436
314392	3MAGRUDR	115.0	345	356	0.9233	1.0046	0.9300	1.0700	0.9544	1.0548	LD	1	ROW 436
314393	3MERCURY	115.0	345	356	0.9214	1.0030	0.9300	1.0700	0.9529	1.0532	LD	1	ROW 436
314394	3NASA	115.0	345	356	0.9226	1.0038	0.9300	1.0700	0.9536	1.0540	LD	1	ROW 436
314395	3HARMO 2	115.0	345	354	0.9120	1.0024	0.9300	1.0700	0.9523	1.0525	LD	1	ROW 436
314396	3NEWS58	115.0	345	356	0.9116	0.9930	0.9300	1.0700	0.9433	1.0426	LD	1	ROW 436
314397	3NEWS75	115.0	345	356	0.9217	1.0028	0.9300	1.0700	0.9526	1.0529	LD	1	ROW 436
314398	6NP NEWS	230.0	345	356	0.9457	1.0188	0.9300	1.0700	0.9678	1.0697	D	1	ROW 436
314399	6PEMBROK	230.0	345	356	0.9397	1.0157	0.9300	1.0700	0.9649	1.0665	D	1	ROW 436
314400	3LANCA 1	115.0	345	354	0.9075	1.0028	0.9300	1.0700	0.9527	1.0530	LD	1	ROW 436
314401	3PENINSL	115.0	345	356	0.9226	1.0038	0.9300	1.0700	0.9536	1.0540	LD	1	ROW 436
314402	6PENINSL	230.0	345	356	0.9324	1.0139	0.9300	1.0700	0.9632	1.0646	D	1	ROW 436
314403	3SEAFD76	115.0	345	356	0.9154	0.9980	0.9300	1.0700	0.9481	1.0479	LD	1	ROW 436
314404	3SEAFD79	115.0	345	356	0.9149	0.9976	0.9300	1.0700	0.9477	1.0474	LD	1	ROW 436
314406	3SHELBNK	115.0	345	356	0.9264	1.0077	0.9300	1.0700	0.9573	1.0581	LD	1	ROW 436
314407	6SHELBNK	230.0	345	356	0.9335	1.0123	0.9300	1.0700	0.9617	1.0629	D	1	ROW 436
314409	6TABB	230.0	345	356	0.9331	1.0156	0.9300	1.0700	0.9648	1.0664	D	1	ROW 436
314411	3TOANO58	115.0	345	356	0.9103	0.9917	0.9300	1.0700	0.9421	1.0412	LD	1	ROW 436
314412	3U CARBD	115.0	345	356	0.9226	1.0038	0.9300	1.0700	0.9536	1.0540	LD	1	ROW 436
314413	6WALR285	230.0	345	356	0.9272	1.0085	0.9300	1.0700	0.9581	1.0589	LD	1	ROW 436
314414	3WARWICK	115.0	345	356	0.9154	0.9977	0.9300	1.0700	0.9478	1.0476	LD	1	ROW 436
314415	6WALR209	230.0	345	356	0.9294	1.0115	0.9300	1.0700	0.9609	1.0620	LD	1	ROW 436
314416	6WARWICK	230.0	345	356	0.9331	1.0164	0.9300	1.0700	0.9655	1.0672	D	1	ROW 436
314417	3WHEALTN	115.0	345	356	0.9226	1.0036	0.9300	1.0700	0.9535	1.0538	LD	1	ROW 436
314418	6WHEALTN	230.0	345	356	0.9339	1.0162	0.9300	1.0700	0.9654	1.0671	D	1	ROW 436
314420	3PENIN 1	115.0	345	356	0.9231	1.0043	0.9300	1.0700	0.9541	1.0545	LD	1	ROW 436
314421	6WINCHST	230.0	345	356	0.9338	1.0160	0.9300	1.0700	0.9652	1.0668	D	1	ROW 436
314422	3YORKTWN	115.0	345	356	0.9143	0.9968	0.9300	1.0700	0.9470	1.0466	LD	1	ROW 436
314423	6YORKTWN	230.0	345	356	0.9372	1.0208	0.9300	1.0700	0.9698	1.0719	D	1	ROW 436
314424	3YNWS 58	115.0	345	356	0.8991	0.9806	0.9300	1.0700	0.9316	1.0296	LD	1	ROW 436

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314425	3YORK PS	115.0	345	356	0.9145	0.9970	0.9300	1.0700	0.9471	1.0468	LD	1	ROW 436
314440	6LANEX 1	230.0	345	356	0.9332	1.0156	0.9300	1.0700	0.9648	1.0664	D	1	ROW 436
314442	6NP NE 1	230.0	345	356	0.9476	1.0208	0.9300	1.0700	0.9698	1.0719	D	1	ROW 436
314445	6WHEAL 1	230.0	345	356	0.9358	1.0183	0.9300	1.0700	0.9674	1.0692	D	1	ROW 436
314450	6YORKT 1	230.0	345	356	0.9403	1.0242	0.9300	1.0700	0.9729	1.0754	D	1	ROW 436
315034	1NNECKC1	13.2	345	354	0.9451	1.0340	0.9300	1.0700	0.9823	1.0856	D	1	ROW 436
315035	1NNECKC2	13.2	345	354	0.9451	1.0340	0.9300	1.0700	0.9823	1.0856	D	1	ROW 436
315091	1YORKTN2	18.0	345	356	0.9143	0.9968	0.9300	1.0700	0.9470	1.0466	LD	1	ROW 436
315092	1YORKTN3	25.0	345	356	0.9372	1.0208	0.9300	1.0700	0.9698	1.0719	D	1	ROW 436
315064	1CHESTS8	13.8	345	357	1.0519	0.9988	0.9300	1.0700	0.9489	1.0488	R	4	ROW 567
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	4	ROW 567
313812	6ROCKLAND	230.0	345	356	0.9097	1.0166	0.9300	1.0700	0.9658	1.0674	LD	5	ROW 568
313813	3OCRAN	115.0	345	354	0.9362	1.0011	0.9300	1.0700	0.9511	1.0512	D	5	ROW 568
313828	3WHITENAR	115.0	345	354	0.9095	1.0017	0.9300	1.0700	0.9517	1.0518	LD	5	ROW 568
314173	3GARNER	115.0	345	354	0.9473	1.0007	0.9300	1.0700	0.9506	1.0507	D	5	ROW 568
314174	3HARMONY	115.0	345	354	0.9323	1.0019	0.9300	1.0700	0.9518	1.0520	D	5	ROW 568
314176	3HARMONY	230.0	345	354	0.9601	1.0222	0.9300	1.0700	0.9711	1.0733	D	5	ROW 568
314177	3HAYES89	115.0	345	354	0.9025	1.0014	0.9300	1.0700	0.9513	1.0515	LD	5	ROW 568
314178	3LANCAST	115.0	345	354	0.9384	1.0023	0.9300	1.0700	0.9522	1.0524	D	5	ROW 568
314180	6HAYES	230.0	345	354	0.9179	1.0224	0.9300	1.0700	0.9713	1.0735	LD	5	ROW 568
314184	3SHACKLE	115.0	345	354	0.9344	1.0016	0.9300	1.0700	0.9516	1.0517	D	5	ROW 568
314187	3WAN 176	115.0	345	354	0.9183	0.9890	0.9300	1.0700	0.9396	1.0385	LD	5	ROW 568
314188	3WEST PT	115.0	345	354	0.9350	1.0009	0.9300	1.0700	0.9509	1.0509	D	5	ROW 568
314189	6PAPERMI	230.0	345	354	0.9587	1.0148	0.9300	1.0700	0.9641	1.0656	D	5	ROW 568
314191	3WHITE S	115.0	345	354	0.9347	1.0005	0.9300	1.0700	0.9505	1.0506	D	5	ROW 568
314296	6PENNIMAN	230.0	345	356	0.9246	1.0136	0.9300	1.0700	0.9629	1.0643	LD	5	ROW 568
314371	3AMOCO Y	115.0	345	356	0.8910	0.9967	0.9300	1.0700	0.9469	1.0465	LD	5	ROW 568
314372	3BLOXOMC	115.0	345	356	0.8826	0.9975	0.9300	1.0700	0.9476	1.0474	LD	5	ROW 568
314373	3COLONY	115.0	345	356	0.8851	0.9946	0.9300	1.0700	0.9448	1.0443	LD	5	ROW 568
314374	3COPELAND	115.0	345	356	0.8921	1.0028	0.9300	1.0700	0.9526	1.0529	LD	5	ROW 568
314375	6CORCTN	230.0	345	354	0.9599	1.0141	0.9300	1.0700	0.9634	1.0648	D	5	ROW 568
314376	6DENBIGH	230.0	345	356	0.9155	1.0158	0.9300	1.0700	0.9650	1.0666	LD	5	ROW 568
314377	3DOW 34	115.0	345	356	0.9090	0.9979	0.9300	1.0700	0.9480	1.0478	LD	5	ROW 568
314378	3FTEUS34	115.0	345	356	0.9018	0.9957	0.9300	1.0700	0.9459	1.0455	LD	5	ROW 568
314379	3FTEUS58	115.0	345	356	0.8834	0.9833	0.9300	1.0700	0.9341	1.0325	LD	5	ROW 568
314381	3GRAFT34	115.0	345	356	0.8937	0.9948	0.9300	1.0700	0.9450	1.0445	LD	5	ROW 568
314382	3GRAFT58	115.0	345	356	0.8862	0.9890	0.9300	1.0700	0.9396	1.0385	LD	5	ROW 568
314384	3KINGS M	115.0	345	356	0.8842	0.9796	0.9300	1.0700	0.9306	1.0286	LD	5	ROW 568
314385	3HARMO 1	115.0	345	354	0.9330	1.0026	0.9300	1.0700	0.9524	1.0527	D	5	ROW 568
314386	6KINGS M	230.0	345	356	0.9228	1.0147	0.9300	1.0700	0.9639	1.0654	LD	5	ROW 568
314387	3LANEXA	115.0	345	356	0.9400	1.0031	0.9300	1.0700	0.9529	1.0533	D	5	ROW 568
314388	6LANEXA	230.0	345	356	0.9616	1.0136	0.9300	1.0700	0.9629	1.0643	D	5	ROW 568
314389	3LEBAN58	115.0	345	356	0.8823	0.9811	0.9300	1.0700	0.9321	1.0302	LD	5	ROW 568
314390	6LIGH285	230.0	345	356	0.9278	1.0082	0.9300	1.0700	0.9578	1.0586	LD	5	ROW 568

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314391	6LIGH209	230.0	345	356	0.9352	1.0112	0.9300	1.0700	0.9606	1.0617	D	5	ROW 568
314392	3MAGRUDR	115.0	345	356	0.8921	1.0046	0.9300	1.0700	0.9544	1.0548	LD	5	ROW 568
314393	3MERCURY	115.0	345	356	0.8889	1.0030	0.9300	1.0700	0.9529	1.0532	LD	5	ROW 568
314394	3NARSA	115.0	345	356	0.8925	1.0038	0.9300	1.0700	0.9536	1.0540	LD	5	ROW 568
314395	3HARMO 2	115.0	345	354	0.9328	1.0024	0.9300	1.0700	0.9523	1.0525	D	5	ROW 568
314396	3NEWS58	115.0	345	356	0.9179	0.9930	0.9300	1.0700	0.9433	1.0426	LD	5	ROW 568
314397	3NEWS575	115.0	345	356	0.8921	1.0028	0.9300	1.0700	0.9526	1.0529	LD	5	ROW 568
314398	6NP NEWS	230.0	345	356	0.9001	1.0188	0.9300	1.0700	0.9678	1.0697	LD	5	ROW 568
314399	6PEMBROK	230.0	345	356	0.8985	1.0157	0.9300	1.0700	0.9649	1.0665	LD	5	ROW 568
314400	3LANCA 1	115.0	345	354	0.9389	1.0028	0.9300	1.0700	0.9527	1.0530	D	5	ROW 568
314401	3PENINSL	115.0	345	356	0.8925	1.0038	0.9300	1.0700	0.9536	1.0540	LD	5	ROW 568
314402	6PENINSL	230.0	345	356	0.9016	1.0139	0.9300	1.0700	0.9632	1.0646	LD	5	ROW 568
314403	3SEAFD76	115.0	345	356	0.8909	0.9980	0.9300	1.0700	0.9481	1.0479	LD	5	ROW 568
314404	3SEAFD79	115.0	345	356	0.8904	0.9976	0.9300	1.0700	0.9477	1.0474	LD	5	ROW 568
314406	3SHELBNK	115.0	345	356	0.8942	1.0077	0.9300	1.0700	0.9573	1.0581	LD	5	ROW 568
314407	6SHELBNK	230.0	345	356	0.8971	1.0123	0.9300	1.0700	0.9617	1.0629	LD	5	ROW 568
314409	6TABB	230.0	345	356	0.9054	1.0156	0.9300	1.0700	0.9648	1.0664	LD	5	ROW 568
314411	3TOANO58	115.0	345	356	0.9150	0.9917	0.9300	1.0700	0.9421	1.0412	LD	5	ROW 568
314412	3U CARBD	115.0	345	356	0.8925	1.0038	0.9300	1.0700	0.9536	1.0540	LD	5	ROW 568
314413	6WALR285	230.0	345	356	0.9228	1.0085	0.9300	1.0700	0.9581	1.0589	LD	5	ROW 568
314414	3WARWICK	115.0	345	356	0.8877	0.9977	0.9300	1.0700	0.9478	1.0476	LD	5	ROW 568
314415	6WALR209	230.0	345	356	0.9287	1.0115	0.9300	1.0700	0.9609	1.0620	LD	5	ROW 568
314416	6WARWICK	230.0	345	356	0.9094	1.0164	0.9300	1.0700	0.9655	1.0672	LD	5	ROW 568
314417	3WHEALTN	115.0	345	356	0.8931	1.0036	0.9300	1.0700	0.9535	1.0538	LD	5	ROW 568
314418	6WHEALTN	230.0	345	356	0.9094	1.0162	0.9300	1.0700	0.9654	1.0671	LD	5	ROW 568
314420	3PENIN 1	115.0	345	356	0.8929	1.0043	0.9300	1.0700	0.9541	1.0545	LD	5	ROW 568
314421	6WINCHST	230.0	345	356	0.9092	1.0160	0.9300	1.0700	0.9652	1.0668	LD	5	ROW 568
314422	3YORKTWN	115.0	345	356	0.8911	0.9968	0.9300	1.0700	0.9470	1.0466	LD	5	ROW 568
314423	6YORKTWN	230.0	345	356	0.9159	1.0208	0.9300	1.0700	0.9698	1.0719	LD	5	ROW 568
314424	3YNWS 58	115.0	345	356	0.8825	0.9806	0.9300	1.0700	0.9316	1.0296	LD	5	ROW 568
314425	3YORK PS	115.0	345	356	0.8914	0.9970	0.9300	1.0700	0.9471	1.0468	LD	5	ROW 568
314440	6LANEX 1	230.0	345	356	0.9635	1.0156	0.9300	1.0700	0.9648	1.0664	D	5	ROW 568
314442	6NP NE 1	230.0	345	356	0.9019	1.0208	0.9300	1.0700	0.9698	1.0719	LD	5	ROW 568
314445	6WHEAL 1	230.0	345	356	0.9112	1.0183	0.9300	1.0700	0.9674	1.0692	LD	5	ROW 568
314450	6YORKT 1	230.0	345	356	0.9189	1.0242	0.9300	1.0700	0.9729	1.0754	LD	5	ROW 568
315064	1CHESTS8	13.8	345	357	1.0519	0.9988	0.9300	1.0700	0.9489	1.0488	R	5	ROW 568
315091	1YORKTN2	18.0	345	356	0.8911	0.9968	0.9300	1.0700	0.9470	1.0466	LD	5	ROW 568
315092	1YORKTN3	25.0	345	356	0.9159	1.0208	0.9300	1.0700	0.9698	1.0719	LD	5	ROW 568
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	5	ROW 568
313812	6ROCKLAND	230.0	345	356	0.9468	1.0166	0.9300	1.0700	0.9658	1.0674	D	6	Chickahominy
313813	3OCRAH	115.0	345	354	0.9215	1.0011	0.9300	1.0700	0.9511	1.0512	LD	6	Chickahominy
313828	3WHITEMAR	115.0	345	354	0.9289	1.0017	0.9300	1.0700	0.9517	1.0518	LD	6	Chickahominy
314139	6OAKGROV	230.0	345	354	0.9476	0.9991	0.9300	1.0700	0.9492	1.0491	D	6	Chickahominy
314172	6DUNNSVL	230.0	345	354	0.9342	1.0021	0.9300	1.0700	0.9520	1.0521	D	6	Chickahominy

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	Voltris e	Viol	Ncon	Contingency Description
314173	3GARNER	115.0	345	354	0.9249	1.0007	0.9300	1.0700	0.9506	1.0507	LD	6	Chickahominy
314174	3HARMONY	115.0	345	354	0.9234	1.0019	0.9300	1.0700	0.9518	1.0520	LD	6	Chickahominy
314176	3HARMONY	230.0	345	354	0.9488	1.0222	0.9300	1.0700	0.9711	1.0733	D	6	Chickahominy
314177	3HAYES89	115.0	345	354	0.9305	1.0014	0.9300	1.0700	0.9513	1.0515	D	6	Chickahominy
314178	3LANCAST	115.0	345	354	0.9223	1.0023	0.9300	1.0700	0.9522	1.0524	LD	6	Chickahominy
314180	3HAYES	230.0	345	354	0.9510	1.0224	0.9300	1.0700	0.9713	1.0735	D	6	Chickahominy
314181	3NORNECK	115.0	345	354	0.9397	1.0081	0.9300	1.0700	0.9577	1.0585	D	6	Chickahominy
314182	3NORNECK	230.0	345	354	0.9331	0.9988	0.9300	1.0700	0.9489	1.0487	D	6	Chickahominy
314183	3SANDERS	230.0	345	354	0.9352	0.9987	0.9300	1.0700	0.9488	1.0486	D	6	Chickahominy
314184	3SHACKLE	115.0	345	354	0.9213	1.0016	0.9300	1.0700	0.9516	1.0517	LD	6	Chickahominy
314187	3WAN 176	115.0	345	354	0.9092	0.9890	0.9300	1.0700	0.9396	1.0385	LD	6	Chickahominy
314188	3WEST PT	115.0	345	354	0.9197	1.0009	0.9300	1.0700	0.9509	1.0509	LD	6	Chickahominy
314189	3PAPERMTL	230.0	345	354	0.9428	1.0148	0.9300	1.0700	0.9641	1.0656	D	6	Chickahominy
314190	3WESTMOR	230.0	345	354	0.9399	0.9992	0.9300	1.0700	0.9492	1.0491	D	6	Chickahominy
314191	3WHITE S	115.0	345	354	0.9213	1.0005	0.9300	1.0700	0.9505	1.0506	LD	6	Chickahominy
314243	3PROV 92	115.0	345	355	0.9225	1.0000	0.9300	1.0700	0.9500	1.0500	LD	6	Chickahominy
314296	3PENNIMAN	230.0	345	356	0.9436	1.0136	0.9300	1.0700	0.9629	1.0643	D	6	Chickahominy
314371	3AMOCO Y	115.0	345	356	0.9245	0.9967	0.9300	1.0700	0.9469	1.0465	LD	6	Chickahominy
314372	3BLOXOMC	115.0	345	356	0.9282	0.9975	0.9300	1.0700	0.9476	1.0474	LD	6	Chickahominy
314373	3COLONY	115.0	345	356	0.9237	0.9946	0.9300	1.0700	0.9448	1.0443	LD	6	Chickahominy
314374	3COPELAND	115.0	345	356	0.9344	1.0028	0.9300	1.0700	0.9526	1.0529	D	6	Chickahominy
314375	3CORRTN	230.0	345	354	0.9425	1.0141	0.9300	1.0700	0.9634	1.0648	D	6	Chickahominy
314376	3DENBIGH	230.0	345	356	0.9444	1.0158	0.9300	1.0700	0.9650	1.0666	D	6	Chickahominy
314377	3DOW 34	115.0	345	356	0.9202	0.9979	0.9300	1.0700	0.9480	1.0478	LD	6	Chickahominy
314378	3FTEUS34	115.0	345	356	0.9192	0.9957	0.9300	1.0700	0.9459	1.0455	LD	6	Chickahominy
314379	3FTEUS58	115.0	345	356	0.9079	0.9833	0.9300	1.0700	0.9341	1.0325	LD	6	Chickahominy
314381	3GRAFT34	115.0	345	356	0.9209	0.9948	0.9300	1.0700	0.9450	1.0445	LD	6	Chickahominy
314382	3GRAFT58	115.0	345	356	0.9151	0.9890	0.9300	1.0700	0.9396	1.0385	LD	6	Chickahominy
314384	3KINGS M	115.0	345	356	0.9026	0.9796	0.9300	1.0700	0.9306	1.0286	LD	6	Chickahominy
314385	3HARMO 1	115.0	345	354	0.9241	1.0026	0.9300	1.0700	0.9524	1.0527	LD	6	Chickahominy
314386	3KINGS M	230.0	345	356	0.9446	1.0147	0.9300	1.0700	0.9639	1.0654	D	6	Chickahominy
314387	3LANEXA	115.0	345	356	0.9209	1.0031	0.9300	1.0700	0.9529	1.0533	LD	6	Chickahominy
314388	3LANEXA	230.0	345	356	0.9424	1.0136	0.9300	1.0700	0.9629	1.0643	D	6	Chickahominy
314389	3LEBAN58	115.0	345	356	0.9052	0.9811	0.9300	1.0700	0.9321	1.0302	LD	6	Chickahominy
314390	3LIGH285	230.0	345	356	0.9412	1.0112	0.9300	1.0700	0.9578	1.0586	D	6	Chickahominy
314391	3LIGH209	230.0	345	356	0.9412	1.0112	0.9300	1.0700	0.9606	1.0617	D	6	Chickahominy
314392	3MAGRUDR	115.0	345	356	0.9356	1.0046	0.9300	1.0700	0.9544	1.0548	D	6	Chickahominy
314393	3MERCURY	115.0	345	356	0.9341	1.0030	0.9300	1.0700	0.9529	1.0532	D	6	Chickahominy
314394	3NASA	115.0	345	356	0.9346	1.0038	0.9300	1.0700	0.9536	1.0540	D	6	Chickahominy
314395	3HARMO 2	115.0	345	354	0.9126	1.0024	0.9300	1.0700	0.9523	1.0525	LD	6	Chickahominy
314396	3NEWS58	115.0	345	356	0.9126	0.9930	0.9300	1.0700	0.9433	1.0426	LD	6	Chickahominy
314397	3NEWS75	115.0	345	356	0.9344	1.0028	0.9300	1.0700	0.9526	1.0529	D	6	Chickahominy
314398	6NP NEWS	230.0	345	356	0.9586	1.0188	0.9300	1.0700	0.9678	1.0697	D	6	Chickahominy
314399	6PEMBROK	230.0	345	356	0.9528	1.0157	0.9300	1.0700	0.9649	1.0665	D	6	Chickahominy

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltrRis e	Viol	Ncon	Contingency Description
314400	3LANCA 1	115.0	345	354	0.9228	1.0028	0.9300	1.0700	0.9527	1.0530	LD	6	Chickahominy
314401	3PENINSL	115.0	345	356	0.9346	1.0038	0.9300	1.0700	0.9536	1.0540	D	6	Chickahominy
314402	6PENINSL	230.0	345	356	0.9456	1.0139	0.9300	1.0700	0.9632	1.0646	D	6	Chickahominy
314403	3SEAFD76	115.0	345	356	0.9263	0.9980	0.9300	1.0700	0.9481	1.0479	LD	6	Chickahominy
314404	3SEAFD79	115.0	345	356	0.9258	0.9976	0.9300	1.0700	0.9477	1.0474	LD	6	Chickahominy
314406	3SHELBNK	115.0	345	356	0.9391	1.0077	0.9300	1.0700	0.9573	1.0581	D	6	Chickahominy
314407	6SHELBNK	230.0	345	356	0.9468	1.0123	0.9300	1.0700	0.9617	1.0629	D	6	Chickahominy
314409	6TABB	230.0	345	356	0.9462	1.0156	0.9300	1.0700	0.9648	1.0664	D	6	Chickahominy
314411	3TOANO58	115.0	345	356	0.9145	0.9917	0.9300	1.0700	0.9421	1.0412	LD	6	Chickahominy
314412	3U CARBD	115.0	345	356	0.9346	1.0038	0.9300	1.0700	0.9536	1.0540	D	6	Chickahominy
314413	6WALR285	230.0	345	356	0.9363	1.0085	0.9300	1.0700	0.9581	1.0589	D	6	Chickahominy
314414	3WARWICK	115.0	345	356	0.9278	0.9977	0.9300	1.0700	0.9478	1.0476	LD	6	Chickahominy
314415	6WALR209	230.0	345	356	0.9415	1.0115	0.9300	1.0700	0.9609	1.0620	D	6	Chickahominy
314416	6WARWICK	230.0	345	356	0.9468	1.0164	0.9300	1.0700	0.9655	1.0672	D	6	Chickahominy
314417	3WHEALTIN	115.0	345	356	0.9353	1.0036	0.9300	1.0700	0.9535	1.0538	D	6	Chickahominy
314418	6WHEALTIN	230.0	345	356	0.9479	1.0162	0.9300	1.0700	0.9654	1.0671	D	6	Chickahominy
314420	3PENIN 1	115.0	345	356	0.9350	1.0043	0.9300	1.0700	0.9541	1.0545	D	6	Chickahominy
314421	6WINCHST	230.0	345	356	0.9478	1.0160	0.9300	1.0700	0.9652	1.0668	D	6	Chickahominy
314422	3YORKTWN	115.0	345	356	0.9246	0.9968	0.9300	1.0700	0.9470	1.0466	LD	6	Chickahominy
314423	6YORKTWN	230.0	345	356	0.9499	1.0208	0.9300	1.0700	0.9698	1.0719	D	6	Chickahominy
314424	3YNNWS 58	115.0	345	356	0.9044	0.9806	0.9300	1.0700	0.9316	1.0296	LD	6	Chickahominy
314425	3YORK PS	115.0	345	356	0.9248	0.9970	0.9300	1.0700	0.9471	1.0468	LD	6	Chickahominy
314440	6LANEX 1	230.0	345	356	0.9443	1.0156	0.9300	1.0700	0.9648	1.0664	D	6	Chickahominy
314442	6NP NE 1	230.0	345	356	0.9605	1.0208	0.9300	1.0700	0.9698	1.0719	D	6	Chickahominy
314445	6WHEAL 1	230.0	345	356	0.9499	1.0183	0.9300	1.0700	0.9674	1.0692	D	6	Chickahominy
314450	6YORKT 1	230.0	345	356	0.9530	1.0242	0.9300	1.0700	0.9729	1.0754	D	6	Chickahominy
315034	1NNECKC1	13.2	345	354	0.9638	1.0340	0.9300	1.0700	0.9823	1.0856	D	6	Chickahominy
315035	1NNECKC2	13.2	345	354	0.9638	1.0340	0.9300	1.0700	0.9823	1.0856	D	6	Chickahominy
315091	1YORKT2	18.0	345	356	0.9246	0.9968	0.9300	1.0700	0.9470	1.0466	LD	6	Chickahominy
315092	1YORKT3	25.0	345	356	0.9499	1.0208	0.9300	1.0700	0.9698	1.0719	D	6	Chickahominy
313813	3OCGRAN	115.0	345	354	0.9328	1.0011	0.9300	1.0700	0.9511	1.0512	D	7	Lanexa
314172	6DUNNSVL	230.0	345	354	0.9519	1.0021	0.9300	1.0700	0.9520	1.0522	D	7	Lanexa
314173	3GARNER	115.0	345	354	0.9390	1.0007	0.9300	1.0700	0.9506	1.0507	D	7	Lanexa
314174	3HARMONY	115.0	345	354	0.9341	1.0019	0.9300	1.0700	0.9518	1.0520	D	7	Lanexa
314176	6HARMONY	230.0	345	354	0.9694	1.0222	0.9300	1.0700	0.9711	1.0733	D	7	Lanexa
314178	3LANCAST	115.0	345	354	0.9336	1.0023	0.9300	1.0700	0.9522	1.0524	D	7	Lanexa
314184	3SHACKLE	115.0	345	354	0.9279	1.0016	0.9300	1.0700	0.9516	1.0517	LD	7	Lanexa
314187	3WAN 176	115.0	345	354	0.9201	0.9890	0.9300	1.0700	0.9396	1.0385	LD	7	Lanexa
314188	3WEST PT	115.0	345	354	0.9248	1.0009	0.9300	1.0700	0.9509	1.0509	LD	7	Lanexa
314191	3WHITE S	115.0	345	354	0.9326	1.0005	0.9300	1.0700	0.9505	1.0506	D	7	Lanexa
314243	3PROV 92	115.0	345	355	0.9351	1.0000	0.9300	1.0700	0.9500	1.0500	D	7	Lanexa
314377	3DOW 34	115.0	345	356	0.9392	0.9979	0.9300	1.0700	0.9480	1.0478	D	7	Lanexa
314378	3FTEUS34	115.0	345	356	0.9416	0.9957	0.9300	1.0700	0.9459	1.0455	D	7	Lanexa
314379	3FTEUS58	115.0	345	356	0.9331	0.9833	0.9300	1.0700	0.9341	1.0325	D	7	Lanexa

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314384	3KINGS M	115.0	345	356	0.9237	0.9796	0.9300	1.0700	0.9306	1.0286	LD	7	Lanexa
314385	3HARMO 1	115.0	345	354	0.9347	1.0026	0.9300	1.0700	0.9524	1.0527	D	7	Lanexa
314387	3LANEXA	115.0	345	356	0.9243	1.0031	0.9300	1.0700	0.9529	1.0533	LD	7	Lanexa
314389	3LEBAN58	115.0	345	356	0.9293	0.9811	0.9300	1.0700	0.9321	1.0302	LD	7	Lanexa
314395	3HARMO 2	115.0	345	354	0.9346	1.0024	0.9300	1.0700	0.9523	1.0525	D	7	Lanexa
314396	3NNEWS58	115.0	345	356	0.9216	0.9930	0.9300	1.0700	0.9433	1.0426	LD	7	Lanexa
314400	3LANCA 1	115.0	345	354	0.9341	1.0028	0.9300	1.0700	0.9527	1.0530	D	7	Lanexa
314411	3TOANO58	115.0	345	356	0.9212	0.9917	0.9300	1.0700	0.9421	1.0412	LD	7	Lanexa
314424	3YNWS 58	115.0	345	356	0.9278	0.9806	0.9300	1.0700	0.9316	1.0296	LD	7	Lanexa
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	7	Lanexa
314396	3NNEWS58	115.0	345	356	0.9374	0.9930	0.9300	1.0700	0.9433	1.0426	D	8	Lanexa115
314411	3TOANO58	115.0	345	356	0.9374	0.9917	0.9300	1.0700	0.9421	1.0412	D	8	Lanexa115
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	8	Lanexa115
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	9	Yorktown
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	10	Yorktown115
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	11	Chuckatuk

CATEGORY B

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 10:13 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV
 Case File C:\Documents and Settings\peter09\My Documents\rebuttal 2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY500.sav
 Subsys. File X:\S2015\drv.sub
 Monit. File X:\S2015\vapsys.mon
 Contin. File X:\S2015\vapsys.con
 Exclud. File none

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 10:10 <BRV003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

Case File C:\Documents and Settings\peter09\My Documents\rebuttal 2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY500.sav

Subsys. File X:\S2015\drv.sub

Monit. File X:\S2015\vapsys.mon

Contin. File X:\S2015\vapsys.con

Exclud. File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314377	3DOW 34	115	314367 3LANEXA	115	LN	LN	103.8	74.7	89.0	116.7	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	102.3	73.1	89.0	115.0	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	99.6	74.7	89.0	111.9	614	314391 6LIGH209 230 314415 6WALR209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	99.5	74.7	89.0	111.8	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	99.5	74.7	89.0	111.8	620	314396 3NNEWS58 115 314411 3TOANO58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	99.2	74.7	89.0	111.5	371	314214 6CHCKAHM 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	98.0	73.1	89.0	110.2	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	98.0	73.1	89.0	110.2	614	314391 6LIGH209 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	97.7	73.1	89.0	109.7	620	314396 3NNEWS58 115 314411 3TOANO58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	94.1	74.7	89.0	105.8	371	314214 6CHCKAHM 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	93.2	74.7	89.0	104.7	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	93.1	74.7	89.0	104.6	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	92.8	74.7	89.0	104.3	515	314296 6PENNMIMAN 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	92.6	73.1	89.0	104.0	604	314384 3KINGS M 115 314411 3TOANO58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	92.5	74.7	89.0	103.9	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	91.8	74.7	89.0	103.1	813	314538 6SUNRY 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	91.7	74.7	89.0	103.0	514	314296 6PENNMIMAN 230 314386 6KINGS M 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	91.7	74.7	89.0	103.0	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	91.7	73.1	89.0	103.0	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	91.6	73.1	89.0	102.9	643	314421 6WINCHST 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	91.3	73.1	89.0	102.6	515	314296 6PENNMIMAN 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	90.9	73.1	89.0	102.1	604	314384 3KINGS M 115 314411 3TOANO58 115 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	90.2	73.1	89.0	101.4	813	314538 6SUNRY 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	90.2	73.1	89.0	101.4	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	90.2	73.1	89.0	101.4	514	314296 6PENNMIMAN 230 314386 6KINGS M 230 1
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	90.2	61.3	89.0	101.4	610	314388 6LANEXA 230 314391 6LIGH209 230 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 10:13 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading\$	Noon	Contingency Description
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	90.2	73.1	89.0	104.3	643	314421 6WLNCHST 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	89.8	74.7	89.0	100.9	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	89.6	74.7	89.0	100.7	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	LN	239.0	139.6	239.0	100.0	1098	314766 6LOUTSA 230 314777 6S ANNA 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	88.2	73.1	89.0	99.1	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	88.0	73.1	89.0	98.9	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	LN	234.4	139.6	239.0	98.1	401	314232 6NO ANNA 230 314766 6LOUTSA 230 1
314212	6FRRIVER	230	314222 6HAMOVER	230	LN	LN	781.0	603.5	797.0	98.0	285	314138 6MINE RD 230 314197 6LDYSMT1 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	LN	115.3	74.9	118.0	97.7	411	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
304223	3ROCKYMT115T	115	314554 3BTLEBRO	115	LN	LN	91.8	17.9	94.0	97.6	846	314559 3CAROLINA 115 314578 3HORNRTN 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	86.4	74.7	89.0	97.1	816	314538 6CURRY 230 315116 1SURRY 1 22.0 1
314391	6LIGH209	230	314415 6WALR209	230	LN	LN	455.8	297.0	470.0	97.0	371	314214 6CHCKAHM 230 314390 6LIGH285 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	LN	114.2	74.9	118.0	96.8	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	86.1	61.3	89.0	96.8	614	314391 6LIGH209 230 314415 6WALR209 230 1
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	85.9	61.3	89.0	96.5	609	314387 3LANEXA 115 314396 3NNWS58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	85.9	74.7	89.0	96.5	620	314396 3NNWS58 115 314411 3TOANO58 115 1
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	85.8	61.3	89.0	96.4	611	314418 6WHEALTIN 230 314421 6WINCHST 230 1
314581	3JACKSON	115	314626 3WOODLND	115	LN	LN	112.7	72.4	118.0	95.5	411	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	84.9	74.7	89.0	95.4	621	314398 6NP NEWS 230 314399 6PEMBROK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	84.9	74.7	89.0	95.4	623	314399 6PEMBROK 230 314407 6SHELEBK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	84.9	74.7	89.0	95.3	596	314376 6DENBIGH 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	84.8	73.1	89.0	95.3	816	314538 6SURRY 230 315116 1SURRY 1 22.0 1
314461	3DEEPC46	115	314513 3YADKIN	115	LN	LN	341.0	226.5	360.0	94.7	641	314418 6WHEALTIN 230 314421 6WINCHST 230 1
314581	3JACKSON	115	314626 3WOODLND	115	LN	LN	111.6	72.4	118.0	94.6	688	314449 6CHESAPK 230 314514 6YADKIN 230 1
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	TR	938.7	810.4	993.6	94.5	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	83.5	74.7	89.0	93.8	307	314171 6BRAMBL 230 314933 8BRAMBLETON 500 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	83.5	73.1	89.0	93.8	605	314384 3KINGS M 115 314424 3YNEWS 58 315 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	83.5	73.1	89.0	93.8	621	314398 6NP NEWS 230 314399 6PEMBROK 230 1
314212	6FRRIVER	230	314222 6HAMOVER	230	LN	LN	747.0	603.5	797.0	93.7	282	314137 6FREDBERG 230 314138 6MINE RD 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	83.3	73.1	89.0	93.6	596	314376 6DENBIGH 230 314423 6YORKTWN 230 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 10:12 <VOV0003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV
Case File C:\Documents and Settings\peter09\My Documents\rebuttal 2015\sum_2015(2013LF)_base_wpre_cscnosurry500.sav
Subsys File X:\S2015\vdvp.sub
Monit File X:\S2015\vapsys.mon
Contn File X:\S2015\vapsys.con
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314014	3CANNONB	115.0	345	353	0.9074	1.0038	0.9300	1.0700	0.9536	1.0540	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9077	1.0031	0.9300	1.0700	0.9529	1.0533	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MTCR197	115.0	345	353	0.9076	1.0027	0.9300	1.0700	0.9526	1.0529	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9076	1.0032	0.9300	1.0700	0.9531	1.0534	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314156	3GODW197	115.0	345	353	0.9078	1.0026	0.9300	1.0700	0.9525	1.0527	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9225	1.0031	0.9300	1.0700	0.9529	1.0533	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314148	3MTCR197	115.0	345	353	0.9224	1.0027	0.9300	1.0700	0.9526	1.0529	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9224	1.0032	0.9300	1.0700	0.9531	1.0534	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314156	3GODW197	115.0	345	353	0.9225	1.0026	0.9300	1.0700	0.9525	1.0527	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314160	1 TX503	13.2	345	353	1.1080	1.0007	0.9300	1.0700	0.9507	1.0508	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0228	0.9778	0.9300	1.0700	0.9289	1.0267	R	175	314067 60COCOUN 230 314068 60X 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	175	314067 60COCOUN 230 314068 60X 230 1
314118	3MINNIEV	115.0	345	353	0.9477	0.9968	0.9300	1.0700	0.9488	1.0487	D	179	314068 60X 230 314167 30X 115 1
314167	30X	115.0	345	352	0.9478	1.0063	0.9300	1.0700	0.9560	1.0566	D	179	314068 60X 230 314167 30X 115 1
315008	1POSSM6A	18.0	345	353	0.9280	0.9389	0.9300	1.0700	0.8920	0.9859	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9280	0.9389	0.9300	1.0700	0.8920	0.9859	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9267	0.9389	0.9300	1.0700	0.8920	0.9859	L	204	314074 6POSSUM 230 315008 1POSSM6A 18.0 1
315008	1POSSM6A	18.0	345	353	0.9267	0.9389	0.9300	1.0700	0.8920	0.9859	L	205	314074 6POSSUM 230 315009 1POSSM6B 18.0 1
315008	1POSSM6A	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315009	1POSSM6B	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9461	0.9968	0.9300	1.0700	0.9488	1.0487	D	255	314118 3MINNIEV 115 314167 30X 115 1
314122	3SOWEGO	115.0	345	353	0.9509	1.0033	0.9300	1.0700	0.9531	1.0535	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9299	0.9847	0.9300	1.0700	0.9355	1.0340	LD	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314123	3WELLGTON	115.0	345	353	0.9282	0.9873	0.9300	1.0700	0.9379	1.0366	LD	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9297	0.9848	0.9300	1.0700	0.9356	1.0341	LD	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314157	3GODW172	115.0	345	353	0.9297	0.9848	0.9300	1.0700	0.9356	1.0341	LD	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314122	3SOWEGO	115.0	345	353	0.9515	1.0033	0.9300	1.0700	0.9531	1.0535	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9559	1.0565	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9301	0.9847	0.9300	1.0700	0.9355	1.0340	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGTON	115.0	345	353	0.9283	0.9873	0.9300	1.0700	0.9379	1.0366	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 10:12 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	OppLimit	VoltDrop	Voltrise	Viol	Ncon	Contingency Description
314141	3LIBERTY	115.0	345	353	0.9283	0.9883	0.9300	1.0700	0.9369	1.0378	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314147	3MTCR197	115.0	345	353	0.9289	0.9848	0.9300	1.0700	0.9356	1.0341	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	3GODW172	115.0	345	353	0.9293	0.9858	0.9300	1.0700	0.9365	1.0351	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314175	3N1 RVER	115.0	345	363	0.9551	1.0143	0.9300	1.0700	0.9636	1.0650	D	275	314135 3CARNCE 115 314175 3N1 RVER 115 1
314151	3SLABTWN	115.0	345	355	0.9530	1.0058	0.9300	1.0700	0.9556	1.0561	D	260	314136 3FREDRGG 115 314151 3SLABTWN 115 1
315008	1POSSW6A	18.0	345	353	0.9262	0.9389	0.9300	1.0700	0.8920	0.9859	L	282	314137 6FREDRGG 230 314138 6MINE RD 230 1
315009	1POSSW6B	18.0	345	353	0.9262	0.9389	0.9300	1.0700	0.8920	0.9859	L	282	314137 6FREDRGG 230 314138 6MINE RD 230 1
315008	1POSSW6A	18.0	345	353	0.9244	0.9389	0.9300	1.0700	0.8920	0.9859	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1POSSW6B	18.0	345	353	0.9244	0.9389	0.9300	1.0700	0.8920	0.9859	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MTCR197	115.0	345	353	0.9289	1.0027	0.9300	1.0700	0.9526	1.0529	LD	295	314148 3MTCR197 115 314155 3CARNR T 115 1
314158	3GODW197	115.0	345	353	0.9289	1.0026	0.9300	1.0700	0.9525	1.0527	LD	295	314148 3MTCR197 115 314155 3CARNR T 115 1
314176	6HARMONY	230.0	345	354	0.9282	1.0209	0.9300	1.0700	0.9698	1.0719	HR	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314180	6HAYES	230.0	345	354	0.9462	1.0212	0.9300	1.0700	0.9701	1.0722	D	321	314180 6HAYES 230 314423 6YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1462	1.0187	0.9300	1.0700	0.9677	1.0696	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314526	3HANDSOM	115.0	345	360	1.1474	1.0249	0.9300	1.0700	0.9702	1.0723	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.1472	1.0243	0.9300	1.0700	0.9721	1.0744	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.1472	1.0243	0.9300	1.0700	0.9731	1.0756	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.1478	1.0167	0.9300	1.0700	0.9659	1.0675	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MARGTGV	115.0	345	362	1.1472	1.0160	0.9300	1.0700	0.9652	1.0668	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SEABORD	115.0	345	362	1.1472	1.0159	0.9300	1.0700	0.9651	1.0667	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.1472	1.0249	0.9300	1.0700	0.9736	1.0761	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.1472	1.0249	0.9300	1.0700	0.9736	1.0761	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1474	1.0197	0.9300	1.0700	0.9687	1.0707	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAMPT1	13.8	345	360	1.1437	0.9927	0.9300	1.0700	0.9431	1.0424	R	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	1SPRUNCA	13.8	345	357	1.1455	0.9664	0.9300	1.0700	0.9181	1.0147	R	464	314275 6BELMEAD 230 314276 6BRASIN 230 1
315085	1SPRUNCC	13.8	345	357	1.1455	0.9682	0.9300	1.0700	0.9198	1.0166	R	464	314275 6BELMEAD 230 314276 6BRASIN 230 1
314328	6PLAZA	230.0	345	357	0.9165	1.0051	0.9300	1.0700	0.9549	1.0554	LD	566	314328 6PLAZA 230 314338 6SOMWEST 230 1
314396	3NNWS58	115.0	345	356	0.9399	0.9905	0.9300	1.0700	0.9423	1.0414	D	609	314387 3LANEXA 115 314396 3NNWS58 115 1
314411	3TOANO58	115.0	345	356	0.9398	0.9905	0.9300	1.0700	0.9410	1.0400	D	620	314396 3NNWS58 115 314411 3TOANO58 115 1
314524	3FRANKLN	115.0	345	360	1.1475	1.0230	0.9300	1.0700	0.9718	1.0741	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.1475	1.0230	0.9300	1.0700	0.9604	1.0615	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.1474	1.0233	0.9300	1.0700	0.9721	1.0744	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.1475	1.0223	0.9300	1.0700	0.9711	1.0734	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.1475	1.0229	0.9300	1.0700	0.9731	1.0756	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.1478	1.0229	0.9300	1.0700	0.9718	1.0741	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.1474	1.0249	0.9300	1.0700	0.9736	1.0761	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.1474	1.0249	0.9300	1.0700	0.9736	1.0761	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	1SHAMPT1	13.8	345	360	1.1475	0.9927	0.9300	1.0700	0.9431	1.0424	R	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314524	3FRANKLN	115.0	345	360	1.1475	1.0230	0.9300	1.0700	0.9718	1.0741	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314526	3HANDSOM	115.0	345	360	1.1475	1.0213	0.9300	1.0700	0.9702	1.0723	H	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314534	3S HAMPT	115.0	345	360	1.1475	1.0233	0.9300	1.0700	0.9721	1.0744	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.1475	1.0229	0.9300	1.0700	0.9711	1.0734	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.1478	1.0243	0.9300	1.0700	0.9731	1.0756	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314824	3UNCAMP 1	115.0	345	360	1.1478	1.0229	0.9300	1.0700	0.9718	1.0741	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.1478	1.0249	0.9300	1.0700	0.9736	1.0761	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI 2	115.0	345	360	1.1478	1.0249	0.9300	1.0700	0.9736	1.0761	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	1SHAMPT1	13.8	345	360	1.1491	0.9927	0.9300	1.0700	0.9431	1.0424	R	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1

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 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	OppLimit	VoltDrop	Voltrise	Viol	Ncon	Contingency Description
314541	3WATKINS	115.0	345	360	1.0712	1.0243	0.9300	1.0700	0.9731	1.0756	H	801	314534 3S HANPT 115 314541 3WATKINS 115 1
314826	3WATK1 1	115.0	345	360	1.0718	1.0249	0.9300	1.0700	0.9736	1.0761	H	801	314534 3S HANPT 115 314541 3WATKINS 115 1
314827	3WATK1 2	115.0	345	360	1.0718	1.0249	0.9300	1.0700	0.9736	1.0761	H	801	314534 3S HANPT 115 314541 3WATKINS 115 1
314516	3BRUNS 1	115.0	345	358	1.0795	1.0016	0.9300	1.0700	0.9581	1.0590	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314565	3CLUBH71	115.0	345	362	1.1029	1.0010	0.9300	1.0700	0.9509	1.0510	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314675	3BRCUNAK	115.0	345	358	1.0690	1.0066	0.9300	1.0700	0.9563	1.0569	R	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314676	3BRUNSWK	115.0	345	358	1.0791	1.0061	0.9300	1.0700	0.9535	1.0538	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314693	3FRMAN D	115.0	345	358	1.0941	1.0036	0.9300	1.0700	0.9535	1.0538	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314704	3LAWEENC	115.0	345	358	1.0845	1.0066	0.9300	1.0700	0.9562	1.0569	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314721	3SO HILL	115.0	345	358	1.0573	1.0050	0.9300	1.0700	0.9547	1.0552	R	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314782	2BRUNSWC	69.0	345	358	1.1036	1.0283	0.9300	1.0700	0.9769	1.0797	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314785	2DANLWTN	69.0	345	358	1.0493	1.0759	0.9300	1.0700	0.9271	1.0246	R	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314786	2GASBURG	69.0	345	358	1.0667	1.0123	0.9300	1.0700	0.9617	1.0629	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314787	2BRUNSW2	69.0	345	358	1.0726	1.0009	0.9300	1.0700	0.9509	1.0510	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314850	3CLUBH5	115.0	345	362	1.1035	1.0015	0.9300	1.0700	0.9514	1.0516	HR	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314872	2BRUNSWIC	69.0	345	358	1.0604	0.9878	0.9300	1.0700	0.9384	1.0372	R	855	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314641	3KITTY H	115.0	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
314646	1KITTY 4	34.5	345	361	1.0728	1.0413	0.9300	1.0700	0.9892	1.0934	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
314650	1KITTY 5	34.5	345	361	1.0728	1.0404	0.9300	1.0700	0.9892	1.0934	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
315146	1KITTYHKA	13.8	345	361	1.0719	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
315147	1KITTYHKB	13.8	345	361	1.0729	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
BS1105	KITT 3W4	1.0	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
BS1106	KITT 3W5	1.0	345	361	1.0729	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTP 115 314641 3KITTY H 115 1
314635	3COLNGTP	115.0	345	361	1.0728	1.0256	0.9300	1.0700	0.9743	1.0768	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314636	3COLNG2	115.0	345	361	1.0728	1.0256	0.9300	1.0700	0.9743	1.0769	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0726	1.0404	0.9300	1.0700	0.9884	1.0924	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314646	1KITTY 4	34.5	345	361	1.0726	1.0404	0.9300	1.0700	0.9884	1.0924	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314650	1KITTY 5	34.5	345	361	1.0725	1.0413	0.9300	1.0700	0.9892	1.0934	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0728	1.0256	0.9300	1.0700	0.9743	1.0769	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
315146	1KITTYHKA	13.8	345	361	1.0726	1.0404	0.9300	1.0700	0.9884	1.0924	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
315147	1KITTYHKB	13.8	345	361	1.0735	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
BS1105	KITT 3W4	1.0	345	361	1.0726	1.0404	0.9300	1.0700	0.9884	1.0924	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
BS1106	KITT 3W5	1.0	345	361	1.0735	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTP 115 314720 3 52T190 115 1
314348	2GRETN 1	69.0	345	358	1.0803	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0802	1.0164	0.9300	1.0700	0.9656	1.0673	HR	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0702	1.0201	0.9300	1.0700	0.9691	1.0711	H	1048	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN 1	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1049	314731 2GRETN 69.0 314733 2GRNA DP 69.0 1
314731	2GRETN 1	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0673	HR	1049	314731 2GRETN 69.0 314733 2GRNA DP 69.0 1
314732	2GRNA FB	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0673	HR	1049	314731 2GRETN 69.0 314733 2GRNA DP 69.0 1
314763	3KIDUSTO	115.0	345	363	0.9255	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1062	314744 3BRENO 115 314763 3KIDUSTO 115 1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
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AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 11:24 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV
 Case.File C:\Documents and Settings\peter09\My Documents\rebuttal 2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY500.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314289	6DARBYTN	230	315067	1DARBY 1	13.8	TR	TR	86.3	86.3	90.0	95.9	**	Base Case **
314289	6DARBYTN	230	315068	1DARBY 2	13.8	TR	TR	86.3	86.3	90.0	95.9	**	Base Case **
314289	6DARBYTN	230	315069	1DARBY 3	13.8	TR	TR	86.3	86.3	90.0	95.9	**	Base Case **
314289	6DARBYTN	230	315070	1DARBY 4	13.8	TR	TR	86.3	86.3	90.0	95.9	**	Base Case **
314465	6ELIZ R	230	315110	1ELIZAR3	13.8	TR	TR	123.0	123.0	130.0	94.6	**	Base Case **
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.5	85.5	90.0	95.0	**	Base Case **
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.5	85.5	90.0	95.0	**	Base Case **
314682	3BUGGS I	115	315150	1BUGGS 1	13.8	TR	TR	70.0	70.0	74.6	93.9	**	Base Case **
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	TR	69.9	69.9	70.0	99.8	**	Base Case **
314901	8BATH CO	500	BS0461	BATH 3W1	1.00	TR	TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0462	BATH 3W3	1.00	TR	TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0463	BATH 3W5	1.00	TR	TR	1009.9	1009.9	1080.0	93.5	**	Base Case **
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00	TR	TR	506.8	506.8	540.0	93.9	**	Base Case **
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	73.1	89.0	95.3	51 LN 58	
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	74.7	89.0	97.1	51 LN 58	
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	44.5	32.7	45.0	98.9	152 LN 172	
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	89.3	73.1	89.0	100.3	183 LN 209	
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	90.9	74.7	89.0	102.1	183 LN 209	
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	73.1	89.0	101.2	188 LN 214	

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
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**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.6	74.7	89.0	102.9	188	LN 214
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.9	73.1	89.0	96.5	206	LN 234
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.4	74.7	89.0	98.2	206	LN 234
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	LN	238.3	139.6	239.0	99.7	226	LN 255
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	83.5	73.1	89.0	93.8	232	LN 261
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	85.0	74.7	89.0	95.5	232	LN 261
314461	3DEEPC46	115	314513	3YADKIN	115	LN	LN	341.0	226.5	360.0	94.7	235	LN 262
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	73.1	89.0	101.2	237	LN 263
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.5	74.7	89.0	102.9	237	LN 263
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	83.9	73.1	89.0	94.3	258	LN 285
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	85.5	74.7	89.0	96.0	258	LN 285
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00	TR	TR	511.6	506.8	540.0	94.7	284	LN 547
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00	TR	TR	514.6	506.8	540.0	95.3	285	LN 548
314559	3CAROLNA	115	314581	3JACKSON	115	LN	LN	114.6	74.9	118.0	97.1	327	LN 2012
314581	3JACKSON	115	314626	3WOODLND	115	LN	LN	112.0	72.4	118.0	95.0	327	LN 2012
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.9	175.8	190.0	95.2	395	LN 2090
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.9	175.8	190.0	95.2	395	LN 2090
314212	6FRIVER	230	314222	6HANOVER	230	LN	LN	780.5	603.5	797.0	97.9	395	LN 2090
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.2	73.1	89.0	104.8	405	LN 2102
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	94.8	74.7	89.0	106.5	405	LN 2102
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	181.7	175.8	190.0	95.6	407	LN 2104
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	181.7	175.8	190.0	95.6	407	LN 2104
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.9	73.1	89.0	96.6	415	LN 2113
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.5	74.7	89.0	98.3	415	LN 2113
314387	3LANEXA	115	314388	6LANEXA	230	TR	TR	182.2	87.2	191.7	95.1	415	LN 2113
314147	3MICR172	115	314160	1 TX503	13.2	TR	TR	50.8	33.1	45.0	112.8	455	TX-1 3MICR19
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.2	175.8	190.0	94.8	475	TX-1 6POSSUM
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.2	175.8	190.0	94.8	475	TX-1 6POSSUM
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	179.2	175.8	190.0	94.3	479	TX-1 6POSSU2
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	179.2	175.8	190.0	94.3	479	TX-1 6POSSU2
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.7	175.8	190.0	95.1	481	TX-1 6POSSU4
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.7	175.8	190.0	95.1	482	TX-1 6POSSU5

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 11:25 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	181.1	175.8	190.0	95.3	483	TX-1 6POSSU6
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	181.1	175.8	190.0	95.3	483	TX-1 6POSSU6
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	48.6	32.7	45.0	107.9	495	TX-1 6LIBERT
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	53.7	32.7	45.0	119.4	499	TX-1 3MICR17
314072	6PL VIEW	230	314925	8PL VIEW	500	TR	TR	938.7	810.4	993.6	94.5	504	TX-1 8BRAMEL
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	73.1	89.0	95.3	608	TX-1 6SURRY
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	74.7	89.0	97.1	608	TX-1 6SURRY

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 11:25 <VOW003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV
 Case.File C:\Documents and Settings\peter09\My Documents\rebuttal 2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY500.sav
 Subsys.File X:\S2015\vdvp.sub
 Monit.File X:\S2015\vpasys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314641	KITTY H	115.0	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	45	LN 52
314646	KITTY 4	34.5	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	45	LN 52
314650	KITTY 5	34.5	345	361	1.0728	1.0413	0.9300	1.0700	0.9892	1.0934	H	45	LN 52
314646	KITTYHKA	13.8	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	45	LN 52
315147	KITTYHKB	13.8	345	361	1.0729	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
B51105	KITT 3W4	1.0	345	361	1.0719	1.0404	0.9300	1.0700	0.9884	1.0924	H	45	LN 52
B51106	KITT 3W5	1.0	345	361	1.0729	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
314524	FRANKIN	115.0	345	360	1.0816	1.0230	0.9300	1.0700	0.9718	1.0741	HR	61	LN 68
314526	SHANDSON	115.0	345	360	1.0709	1.0213	0.9300	1.0700	0.9702	1.0723	H	61	LN 68
314534	SS HAMPT	115.0	345	360	1.0776	1.0233	0.9300	1.0700	0.9721	1.0744	HR	61	LN 68
314539	BUNCAMP	115.0	345	360	1.0851	1.0223	0.9300	1.0700	0.9711	1.0734	HR	61	LN 68
314541	SWATKINS	115.0	345	360	1.0799	1.0243	0.9300	1.0700	0.9731	1.0756	HR	61	LN 68
314824	BUNCAM 1	115.0	345	360	1.0859	1.0229	0.9300	1.0700	0.9718	1.0741	HR	61	LN 68
314826	SWATKI 1	115.0	345	360	1.0804	1.0249	0.9300	1.0700	0.9736	1.0761	HR	61	LN 68
314827	SWATKI 2	115.0	345	360	1.0804	1.0249	0.9300	1.0700	0.9736	1.0761	HR	61	LN 68
315115	ISHAMPT1	13.8	345	360	1.0492	0.9927	0.9300	1.0700	0.9431	1.0424	R	61	LN 68
314348	ZCRETN 1	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314731	ZCRETNA	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0673	HR	153	LN 173
314732	ZCRNA FB	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0673	HR	153	LN 173
314874	21N 174	69.0	345	351	1.0796	1.0206	0.9300	1.0700	0.9696	1.0716	HR	154	LN 174
314878	21N 178	69.0	345	351	1.0795	1.0206	0.9300	1.0700	0.9696	1.0716	HR	156	LN 178
314879	21N 179	69.0	345	351	1.0796	1.0206	0.9300	1.0700	0.9696	1.0716	HR	157	LN 179
314880	21N 180	69.0	345	351	1.0798	1.0206	0.9300	1.0700	0.9696	1.0716	HR	158	LN 180
314122	35OWEGO	115.0	345	353	1.0909	1.0033	0.9300	1.0700	0.9531	1.0535	D	159	LN 181
314051	310WA197	115.0	345	353	0.9363	1.0031	0.9300	1.0700	0.9529	1.0533	D	172	LN 197
314148	3MICR197	115.0	345	353	0.9119	1.0027	0.9300	1.0700	0.9526	1.0529	LD	172	LN 197

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 11:25 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314158	3GOW197	115.0	345	353	0.9483	1.0026	0.9300	1.0700	0.9525	1.0527	D	172 LN 197	
314014	3CANNONB	115.0	345	353	0.9032	1.0038	0.9300	1.0700	0.9536	1.0540	LD	326 LN 2011	
314051	3LOWA197	115.0	345	353	0.9034	1.0031	0.9300	1.0700	0.9529	1.0533	LD	326 LN 2011	
314148	3MICR197	115.0	345	353	0.9034	1.0027	0.9300	1.0700	0.9526	1.0529	LD	326 LN 2011	
314155	3CANNB T	115.0	345	353	0.9033	1.0032	0.9300	1.0700	0.9531	1.0534	LD	326 LN 2011	
314158	3GOW197	115.0	345	353	0.9036	1.0026	0.9300	1.0700	0.9525	1.0527	LD	326 LN 2011	
315001	1OMF A	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	328 LN 2013	
315002	1OMF B	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	328 LN 2013	
315083	1SPRUNCA	13.8	345	357	1.0155	0.9664	0.9300	1.0700	0.9181	1.0147	R	367 LN 2055	
315085	1SPRUNCC	13.8	345	357	1.0169	0.9682	0.9300	1.0700	0.9198	1.0166	R	367 LN 2055	
315009	1POSSM6B	18.0	345	353	0.9263	0.9389	0.9300	1.0700	0.8920	0.9859	L	395 LN 2090	
315008	1POSSM6A	18.0	345	353	0.9246	0.9389	0.9300	1.0700	0.8920	0.9859	L	407 LN 2104	
315009	1POSSM6B	18.0	345	353	0.9246	0.9389	0.9300	1.0700	0.8920	0.9859	L	407 LN 2104	
314180	6HAYES	230.0	345	354	0.9462	1.0212	0.9300	1.0700	0.9701	1.0722	D	423 LN 2122	
314118	3MINNIEV	115.0	345	353	0.9477	0.9988	0.9300	1.0700	0.9488	1.0487	D	470 TX-1 60X	
314167	3OX	115.0	345	352	0.9478	1.0063	0.9300	1.0700	0.9560	1.0566	D	470 TX-1 60X	
315008	1POSSM6A	18.0	345	353	0.9280	0.9389	0.9300	1.0700	0.8920	0.9859	L	475 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9280	0.9389	0.9300	1.0700	0.8920	0.9859	L	475 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9267	0.9389	0.9300	1.0700	0.8920	0.9859	L	481 TX-1 6POSSU4	
315008	1POSSM6A	18.0	345	353	0.9267	0.9389	0.9300	1.0700	0.8920	0.9859	L	482 TX-1 6POSSU5	
315008	1POSSM6A	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	483 TX-1 6POSSU6	
315009	1POSSM6B	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	483 TX-1 6POSSU6	
314122	3SOWEGO	115.0	345	353	0.9515	1.0033	0.9300	1.0700	0.9531	1.0535	D	492 TX-1 6BRISTE	
314156	3ERISTER	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9559	1.0565	D	492 TX-1 6BRISTE	
314049	3LOWA172	115.0	345	353	0.9301	0.9847	0.9300	1.0700	0.9355	1.0340	D	495 TX-1 6LIBERT	
314123	3WELLGTON	115.0	345	353	0.9283	0.9873	0.9300	1.0700	0.9379	1.0366	LD	495 TX-1 6LIBERT	
314141	3LIBERTY	115.0	345	353	0.9283	0.9883	0.9300	1.0700	0.9389	1.0378	LD	495 TX-1 6LIBERT	
314147	3MICR172	115.0	345	353	0.9299	0.9848	0.9300	1.0700	0.9356	1.0341	LD	495 TX-1 6LIBERT	
314157	3GOW172	115.0	345	353	0.9293	0.9858	0.9300	1.0700	0.9365	1.0351	LD	495 TX-1 6LIBERT	

CATEGORY B

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:39 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:36 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File X:\S2015\sum.2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File X:\S2015\drv.sub
Monit.File X:\S2015\wapsys.mon
Contin.File X:\S2015\Vapsys.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	243.5	142.6	239.0	101.9	1101	314766 6LOUISA 230 314777 6S ANNA 230 1
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	238.9	142.6	239.0	100.0	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
304223	3ROCKYMT115T	115	314554	3BTLEBRO	115	LN	91.7	15.9	94.0	97.5	849	314559 3CAROLINA 115 314578 3HORNRTN 115 1
314174	3HARMONY	115	314176	6HARMONY	230	TR	186.3	82.4	191.8	97.1	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314072	6PL VIEW	230	314925	8PL VIEW	500	TR	960.0	828.2	993.6	95.6	307	314171 6BRAMBEL 230 314933 8BRAMBLETON 500 1
314461	3DEEPC46	115	314513	3YADKIN	115	LN	340.3	225.8	360.0	94.5	691	314449 6CHESAPK 230 314514 6YADKIN 230 1
314559	3CAROLNA	115	314561	3JACKSON	115	LN	111.1	72.3	118.0	94.2	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:38 <VOW003.0>
2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case File X:\S2015\sum 2015(2013LF)_base_wpre_wskiffes.sav
Subsys File X:\S2015\drv.sub
Monit File X:\S2015\vpapsys.mon
Contn File X:\S2015\vpapsys.con
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0717	1.0717	0.9300	1.0700	1.0177	1.1248	H	61	Base Case
315008	1POSSM6A	18.0	345	353	0.9255	0.9356	0.9300	1.0700	0.8887	0.9822	L	61	314011 3BULLRN 115 314111 3HARISON 115 1
315009	1POSSM6B	18.0	345	353	0.9255	0.9356	0.9300	1.0700	0.8887	0.9822	L	61	314011 3BULLRN 115 314111 3HARISON 115 1
314014	3CANNONB	115.0	345	353	0.9039	0.9017	0.9300	1.0700	0.9516	1.0518	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314031	3LOMA197	115.0	345	353	0.9042	1.0010	0.9300	1.0700	0.9510	1.0511	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MICR197	115.0	345	353	0.9042	1.0007	0.9300	1.0700	0.9506	1.0507	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANNB T	115.0	345	353	0.9041	1.0012	0.9300	1.0700	0.9511	1.0512	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GODW197	115.0	345	353	0.9043	1.0005	0.9300	1.0700	0.9505	1.0506	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314031	3LOMA197	115.0	345	353	0.9206	1.0010	0.9300	1.0700	0.9510	1.0511	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314148	3MICR197	115.0	345	353	0.9205	1.0007	0.9300	1.0700	0.9506	1.0507	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314155	3CANNB T	115.0	345	353	0.9205	1.0012	0.9300	1.0700	0.9511	1.0512	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314158	3GODW197	115.0	345	353	0.9206	1.0005	0.9300	1.0700	0.9505	1.0506	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314160	1 TX503	13.2	345	353	1.1071	1.0059	0.9300	1.0700	0.9556	1.0562	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOQUN 230 314068 6OX 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOQUN 230 314068 6OX 230 1
314118	3MINNIEV	115.0	345	353	0.9455	0.9570	0.9300	1.0700	0.9471	1.0468	D	179	314068 6OX 230 314167 3OX 115 1
314167	3OX	115.0	345	352	0.9456	1.0045	0.9300	1.0700	0.9543	1.0548	D	179	314068 6OX 230 314167 3OX 115 1
315008	1POSSM6A	18.0	345	353	0.9216	0.9356	0.9300	1.0700	0.8887	0.9822	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9216	0.9356	0.9300	1.0700	0.8887	0.9822	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9219	0.9356	0.9300	1.0700	0.8887	0.9822	L	204	314074 6POSSUM 230 315008 1POSSM6A 18.0 1
315008	1POSSM6A	18.0	345	353	0.9219	0.9356	0.9300	1.0700	0.8887	0.9822	L	205	314074 6POSSUM 230 315009 1POSSM6B 18.0 1
315008	1POSSM6A	18.0	345	353	0.9224	0.9356	0.9300	1.0700	0.8887	0.9822	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315009	1POSSM6B	18.0	345	353	0.9224	0.9356	0.9300	1.0700	0.8887	0.9822	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9439	0.9970	0.9300	1.0700	0.9471	1.0468	D	255	314118 3MINNIEV 115 314167 3OX 115 1
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9515	1.0516	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9304	0.9828	0.9300	1.0700	0.9337	1.0320	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9286	0.9834	0.9300	1.0700	0.9361	1.0346	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314147	3MICR172	115.0	345	353	0.9302	0.9829	0.9300	1.0700	0.9337	1.0320	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314157	360DW172	115.0	345	353	0.9597	0.9839	0.9300	1.0700	0.9347	1.0331	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314122	350W5GO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9515	1.0516	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9504	1.0045	0.9300	1.0700	0.9543	1.0547	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314049	310W172	115.0	345	353	0.9305	0.9828	0.9300	1.0700	0.9337	1.0320	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9297	0.9854	0.9300	1.0700	0.9361	1.0346	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9297	0.9864	0.9300	1.0700	0.9371	1.0358	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314147	3WIC172	115.0	345	353	0.9303	0.9829	0.9300	1.0700	0.9337	1.0320	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	360DW172	115.0	345	353	0.9298	0.9839	0.9300	1.0700	0.9347	1.0331	LD	263	314130 6BRISTER 230 314142 6STAFORD 230 1
315008	1FOSM6GA	18.0	345	353	0.9250	0.9356	0.9300	1.0700	0.8887	0.9822	L	273	314134 6CPANES 230 314142 6STAFORD 230 1
315009	1FOSM6GB	18.0	345	353	0.9250	0.9356	0.9300	1.0700	0.8887	0.9822	L	273	314134 6CPANES 230 314142 6STAFORD 230 1
314775	3NI RVER	115.0	345	363	0.9546	1.0132	0.9300	1.0700	0.9626	1.0639	D	275	314135 3CHANCE 115 314775 3NI RVER 115 1
314151	3SLABTN	115.0	345	355	0.9550	1.0053	0.9300	1.0700	0.9551	1.0557	D	280	314136 3FREDERG 115 314151 3SLABTN 115 1
315008	1FOSM6GA	18.0	345	353	0.9202	0.9356	0.9300	1.0700	0.8887	0.9822	L	282	314137 6FREDERG 230 314138 6MINE RD 230 1
315009	1FOSM6GB	18.0	345	353	0.9202	0.9356	0.9300	1.0700	0.8887	0.9822	L	282	314137 6FREDERG 230 314138 6MINE RD 230 1
315008	1FOSM6GA	18.0	345	353	0.9195	0.9356	0.9300	1.0700	0.8887	0.9822	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1FOSM6GB	18.0	345	353	0.9195	0.9356	0.9300	1.0700	0.8887	0.9822	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MTC197	115.0	345	353	0.9184	1.0077	0.9300	1.0700	0.9506	1.0507	LD	295	314148 3MTC197 115 314155 3CANBR T 115 1
314534	3S HAMPT	115.0	345	360	1.0762	1.0230	0.9300	1.0700	0.9721	1.0744	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0729	1.0261	0.9300	1.0700	0.9751	1.0771	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0817	1.0183	0.9300	1.0700	0.9676	1.0695	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3GRADSTV	115.0	345	362	1.1091	1.0175	0.9300	1.0700	0.9668	1.0686	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATK1 1	115.0	345	362	1.1466	1.0172	0.9300	1.0700	0.9665	1.0682	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATK1 2	115.0	345	360	1.0745	1.0266	0.9300	1.0700	0.9756	1.0783	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1494	1.0206	0.9300	1.0700	0.9697	1.0717	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAWPT1	13.8	345	360	1.0455	0.9945	0.9300	1.0700	0.9451	1.0446	R	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	1SPRUNCA	13.8	345	357	1.0101	0.9622	0.9300	1.0700	0.9138	1.0100	R	464	314275 6BELMEAD 230 314276 6BASTIN 230 1
314328	6PLAZA	230.0	345	357	0.9103	1.0055	0.9300	1.0700	0.9553	1.0558	LD	566	314328 6PLAZA 230 314338 6SOUTWEST 230 1
314524	3FRNKIN	115.0	345	360	1.0762	1.0247	0.9300	1.0700	0.9738	1.0763	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0782	1.0126	0.9300	1.0700	0.9623	1.0636	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0726	1.0250	0.9300	1.0700	0.9740	1.0766	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0794	1.0240	0.9300	1.0700	0.9731	1.0753	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0748	1.0261	0.9300	1.0700	0.9751	1.0777	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0801	1.0247	0.9300	1.0700	0.9738	1.0763	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATK1 1	115.0	345	360	1.0753	1.0266	0.9300	1.0700	0.9756	1.0783	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATK1 2	115.0	345	360	1.0753	1.0266	0.9300	1.0700	0.9756	1.0783	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRNKIN	115.0	345	360	1.0828	1.0247	0.9300	1.0700	0.9738	1.0763	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314526	3UNCAMP	115.0	345	360	1.0721	1.0230	0.9300	1.0700	0.9721	1.0744	H	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314534	3S HAMPT	115.0	345	360	1.0787	1.0250	0.9300	1.0700	0.9740	1.0766	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.0863	1.0240	0.9300	1.0700	0.9731	1.0755	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0810	1.0261	0.9300	1.0700	0.9751	1.0777	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1

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 2015 SUMMER BASE CASE (LTSIG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upllimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314824	3UNCAM 1	115.0	345	360	1.0870	1.0247	0.9300	1.0700	0.9738	1.0763	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0916	1.0266	0.9300	1.0700	0.9756	1.0783	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI 2	115.0	345	360	1.0816	1.0266	0.9300	1.0700	0.9756	1.0783	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	15SHAMPTI	13.8	345	360	1.0504	0.9945	0.9300	1.0700	0.9451	1.0446	R	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314565	3CLUBS 1	115.0	345	358	1.0732	1.0092	0.9300	1.0700	0.9587	1.0596	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314565	3CLUBS71	115.0	345	362	1.0732	1.0016	0.9300	1.0700	0.9516	1.0571	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314675	3BROONAX	115.0	345	358	1.0693	1.0071	0.9300	1.0700	0.9568	1.0575	R	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314676	3BROONSK	115.0	345	358	1.0732	1.0087	0.9300	1.0700	0.9582	1.0591	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314693	3FPMAN D	115.0	345	358	1.0944	1.0042	0.9300	1.0700	0.9541	1.0545	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314704	3LAURENC	115.0	345	358	1.0848	1.0072	0.9300	1.0700	0.9541	1.0545	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314721	3SO HILL	115.0	345	358	1.0576	1.0055	0.9300	1.0700	0.9552	1.0558	R	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314782	2BRUNSWC	69.0	345	358	1.0429	0.9289	0.9300	1.0700	0.9775	1.0804	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314785	2DANITWN	69.0	345	358	1.0426	0.9765	0.9300	1.0700	0.9277	1.0253	R	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314786	2GASBURG	69.0	345	358	1.0870	1.0129	0.9300	1.0700	0.9623	1.0636	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314787	2BRUNSW2	69.0	345	358	1.0729	1.0015	0.9300	1.0700	0.9515	1.0516	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314850	3CLBS 1	115.0	345	362	1.1038	1.0021	0.9300	1.0700	0.9520	1.0522	HR	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314872	2BRUNSWIC	69.0	345	358	1.0607	0.9884	0.9300	1.0700	0.9390	1.0378	R	858	314562 3CLUBSE 115 314565 3CLUBS71 115 21
314641	3KITTY H	115.0	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314650	3KITTY 5	34.5	345	361	1.0726	1.0420	0.9300	1.0700	0.9900	1.0942	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
315146	3KITTHKA	13.8	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
315147	3KITTHRB	13.8	345	361	1.0727	1.0421	0.9300	1.0700	0.9901	1.0943	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
BS1105	KITT 3W4	1.0	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
BS1106	KITT 3W5	1.0	345	361	1.0727	1.0421	0.9300	1.0700	0.9901	1.0943	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314635	3COLNGTP	115.0	345	361	1.0726	1.0262	0.9300	1.0700	0.9751	1.0777	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314636	3COLNG2	115.0	345	361	1.0726	1.0263	0.9300	1.0700	0.9751	1.0778	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0724	1.0411	0.9300	1.0700	0.9892	1.0933	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314646	3KITTY 4	34.5	345	361	1.0724	1.0411	0.9300	1.0700	0.9892	1.0933	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0722	1.0420	0.9300	1.0700	0.9900	1.0942	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0726	1.0263	0.9300	1.0700	0.9751	1.0778	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
315146	3KITTHKA	13.8	345	361	1.0724	1.0411	0.9300	1.0700	0.9892	1.0933	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
315147	3KITTHRB	13.8	345	361	1.0723	1.0421	0.9300	1.0700	0.9901	1.0943	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
BS1105	KITT 3W4	1.0	345	361	1.0724	1.0411	0.9300	1.0700	0.9892	1.0933	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
BS1106	KITT 3W5	1.0	345	361	1.0723	1.0421	0.9300	1.0700	0.9901	1.0943	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314348	2GRETNA 1	69.0	345	358	1.0805	1.0169	0.9300	1.0700	0.9660	1.0677	HR	1051	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314732	2GRETNA FB	69.0	345	358	1.0802	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1051	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314737	2SM3T57	69.0	345	358	1.0703	1.0203	0.9300	1.0700	0.9693	1.0713	H	1051	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0713	H	1051	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314348	2GRETNA 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9658	1.0675	HR	1052	314731 2GRETNA 69.0 314733 2GRETNA DP 69.0 1
314731	2GRETNA	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1052	314731 2GRETNA 69.0 314733 2GRETNA DP 69.0 1
314732	2GRETNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1052	314731 2GRETNA 69.0 314733 2GRETNA DP 69.0 1
314763	3KIDOSTO	115.0	345	363	0.9255	0.9931	0.9300	1.0700	0.9434	1.0428	LD	1065	314744 3BREMO 115 314763 3KIDOSTO 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:31 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:29 <BRV003.0>
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
 Subsys.File X:\S2015\advp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single_ALT.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	56.3	32.5	45.0	125.1	508	TX-1 3MICR17
314147	3MICR172	115	314160 1 TX503	13.2	TR	51.6	33.3	45.0	114.6	464	TX-1 3MICR19
314025	1 TX500	13.2	314148 3MICR197	115	TR	50.1	32.5	45.0	111.2	504	TX-1 6LIBERT
314025	1 TX500	13.2	314148 3MICR197	115	TR	46.0	32.5	45.0	102.1	155	LN 172
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	242.8	142.6	239.0	101.6	231	LN 255
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.0	828.2	993.6	96.6	513	TX-1 8BRAMB
314461	3DEEPC46	115	314513 3YADKIN	115	LN	340.3	225.8	360.0	94.5	240	LN 262
314559	3CAROLNA	115	314581 3JACKSON	115	LN	110.5	72.3	118.0	93.6	336	LN 2012

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 13:31 <V0V003.0>

2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File X:\S2015\advp.sub
Monit.File X:\S2015\advpsys.mon
Contn.File X:\S2015\sum2015_single_ALT.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	Voltris e	Viol	Ncon	Contingency Description
315218	LCUNINGC	18.0	345	366	1.0717	1.0717	0.9300	1.0700	1.0177	1.1248	H	**	Base Case **
314641	3KITTY H	115.0	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	46 LN 52	
314646	1KITTY 4	34.5	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	46 LN 52	
314650	1KITTY 5	34.5	345	361	1.0726	1.0420	0.9300	1.0700	0.9900	1.0942	H	46 LN 52	
315146	1KITTYHKA	13.8	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	46 LN 52	
315147	1KITTYHKB	13.8	345	361	1.0727	1.0421	0.9300	1.0700	0.9901	1.0943	H	46 LN 52	
B\$1105	KITT 3W4	1.0	345	361	1.0717	1.0411	0.9300	1.0700	0.9892	1.0933	H	46 LN 52	
B\$1106	KITT 3W5	1.0	345	361	1.0727	1.0421	0.9300	1.0700	0.9901	1.0943	H	46 LN 52	
314524	3FRNKLN	115.0	345	360	1.0799	1.0247	0.9300	1.0700	0.9738	1.0763	HR	64 LN 68	
314534	3S HAMPT	115.0	345	360	1.0759	1.0250	0.9300	1.0700	0.9740	1.0766	H	64 LN 68	
314539	3UNCAMP	115.0	345	360	1.0834	1.0240	0.9300	1.0700	0.9731	1.0755	HR	64 LN 68	
314541	3WATKINS	115.0	345	360	1.0782	1.0261	0.9300	1.0700	0.9751	1.0777	HR	64 LN 68	
314824	3UNCAM 1	115.0	345	360	1.0841	1.0247	0.9300	1.0700	0.9738	1.0763	HR	64 LN 68	
314826	3WATKI 1	115.0	345	360	1.0787	1.0266	0.9300	1.0700	0.9756	1.0783	HR	64 LN 68	
314827	3WATKI 2	115.0	345	360	1.0787	1.0266	0.9300	1.0700	0.9756	1.0783	HR	64 LN 68	
315115	1SHAMPT1	13.8	345	360	1.0474	0.9945	0.9300	1.0700	0.9451	1.0446	R	64 LN 68	
315008	1POSSM6A	18.0	345	353	0.9255	0.9356	0.9300	1.0700	0.8887	0.9822	L	125 LN 134	
315009	1POSSM6B	18.0	345	353	0.9255	0.9356	0.9300	1.0700	0.8887	0.9822	L	125 LN 134	
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9660	1.0677	HR	156 LN 173	
314731	2GRETN A	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	156 LN 173	
314732	2GRNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	156 LN 173	
314874	21LN 174	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9686	1.0705	HR	157 LN 174	
314878	21LN 178	69.0	345	351	1.0783	1.0195	0.9300	1.0700	0.9686	1.0705	HR	159 LN 178	
314879	21LN 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9686	1.0705	HR	160 LN 179	
314880	21LN 180	69.0	345	351	1.0786	1.0195	0.9300	1.0700	0.9686	1.0705	HR	161 LN 180	
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9515	1.0516	D	162 LN 181	

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 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314051	310NA197	115.0	345	353	0.9344	1.0010	0.9300	1.0700	0.9510	1.0511	D	175	LN 197
314148	31MCR197	115.0	345	353	0.9094	1.0007	0.9300	1.0700	0.9506	1.0507	LD	175	LN 197
314158	31GOW197	115.0	345	353	0.9461	1.0005	0.9300	1.0700	0.9505	1.0506	D	175	LN 197
314014	31CANNONB	115.0	345	353	0.9403	1.0017	0.9300	1.0700	0.9516	1.0518	LD	335	LN 2011
314051	310NA197	115.0	345	353	0.9406	1.0010	0.9300	1.0700	0.9510	1.0511	LD	335	LN 2011
314148	31MCR197	115.0	345	353	0.9406	1.0007	0.9300	1.0700	0.9506	1.0507	LD	335	LN 2011
314158	31CANNONB	115.0	345	353	0.9405	1.0012	0.9300	1.0700	0.9511	1.0512	LD	335	LN 2011
314158	31GOW197	115.0	345	353	0.9407	1.0005	0.9300	1.0700	0.9505	1.0506	LD	335	LN 2011
315001	10ME A	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	337	LN 2013
315002	10ME B	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	337	LN 2013
315083	10SPRUNCA	13.8	345	357	1.0101	0.9622	0.9300	1.0700	0.9138	1.0100	R	376	LN 2055
315008	10POSSM6A	18.0	345	353	0.9201	0.9356	0.9300	1.0700	0.8887	0.9822	L	404	LN 2090
315009	10POSSM6B	18.0	345	353	0.9201	0.9356	0.9300	1.0700	0.8887	0.9822	L	404	LN 2090
315008	10POSSM6A	18.0	345	353	0.9195	0.9356	0.9300	1.0700	0.8887	0.9822	L	416	LN 2104
315009	10POSSM6B	18.0	345	353	0.9184	0.9356	0.9300	1.0700	0.8887	0.9822	L	416	LN 2104
314180	6HAYES	230.0	345	354	0.9571	1.0329	0.9300	1.0700	0.9876	1.0916	D	432	LN 2122
314118	31MINNTEV	115.0	345	353	0.9457	0.9970	0.9300	1.0700	0.9471	1.0468	D	479	TX-1 60X
314167	30X	115.0	345	352	0.9458	1.0045	0.9300	1.0700	0.9543	1.0548	D	479	TX-1 60X
315008	10POSSM6A	18.0	345	353	0.9216	0.9356	0.9300	1.0700	0.8887	0.9822	L	484	TX-1 6POSSUM
315009	10POSSM6B	18.0	345	353	0.9216	0.9356	0.9300	1.0700	0.8887	0.9822	L	484	TX-1 6POSSUM
315008	10POSSM6A	18.0	345	353	0.9218	0.9356	0.9300	1.0700	0.8887	0.9822	L	490	TX-1 6POSSU4
315009	10POSSM6B	18.0	345	353	0.9218	0.9356	0.9300	1.0700	0.8887	0.9822	L	491	TX-1 6POSSU5
315008	10POSSM6A	18.0	345	353	0.9223	0.9356	0.9300	1.0700	0.8887	0.9822	L	492	TX-1 6POSSU6
315009	10POSSM6B	18.0	345	353	0.9223	0.9356	0.9300	1.0700	0.8887	0.9822	L	492	TX-1 6POSSU6
314122	31OWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9515	1.0516	D	501	TX-1 6BRISTE
314156	31BRISTE	115.0	345	353	0.9504	1.0045	0.9300	1.0700	0.9543	1.0547	D	501	TX-1 6BRISTE
314049	31LOWA172	115.0	345	353	0.9305	0.9828	0.9300	1.0700	0.9337	1.0320	D	504	TX-1 6LIBERT
314123	31WELLGN	115.0	345	353	0.9287	0.9854	0.9300	1.0700	0.9361	1.0346	LD	504	TX-1 6LIBERT
314141	31LIBERTY	115.0	345	353	0.9287	0.9864	0.9300	1.0700	0.9371	1.0358	LD	504	TX-1 6LIBERT
314147	31MCR172	115.0	345	353	0.9303	0.9829	0.9300	1.0700	0.9337	1.0320	D	504	TX-1 6LIBERT
314157	31GOW172	115.0	345	353	0.9298	0.9839	0.9300	1.0700	0.9347	1.0331	LD	504	TX-1 6LIBERT

CATEGORY C

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 13:04 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 13:04 <BRV003.0>
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
 Subsys.File X:\S2015\advp.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8		TR	69.9	69.9	70.0	99.8	**	Base Case **
235496	01NSHEND	138	314809	3N SHEND	115		TR	513.5	90.2	283.0	181.4	7	2017#9020
235513	01STRASB	138	314797	4EDINBRG	138		LN	645.5	49.6	222.0	290.8	7	2017#9020
314796	3EDINBRG	115	314797	4EDINBRG	138		TR	521.3	24.8	166.8	312.5	7	2017#9020
314796	3EDINBRG	115	314797	4EDINBRG	138		TR	521.3	24.8	166.8	312.5	7	2017#9020
314796	3EDINBRG	115	314807	3MT JACK	115		LN	575.0	103.1	287.0	200.4	7	2017#9020
314798	3MERCK5	115	314802	3GROTOES	115		LN	509.6	74.6	251.0	203.0	7	2017#9020
314798	3MERCK5	115	314809	3N SHEND	115		LN	464.4	7.9	251.0	185.0	7	2017#9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5890.9	88.1	258.5	2278.9	7	2017#9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5968.2	89.2	311.8	1914.1	7	2017#9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5890.9	88.1	258.5	2278.9	7	2017#9020
314799	3ENDLCAV	115	314807	3MT JACK	115		LN	575.4	117.6	359.0	160.3	7	2017#9020
314799	3ENDLCAV	115	314809	3N SHEND	115		LN	748.9	82.6	251.0	298.4	7	2017#9020
314802	3GROTOES	115	314803	6GROTOES	230		TR	427.8	90.2	287.0	149.0	7	2017#9020
314496	3SEWLSPT	115	314497	6SEWLSPT	230		TR	326.8	123.6	287.9	113.5	45	257#2099
314496	3SEWLSPT	115	314497	6SEWLSPT	230		TR	307.9	116.3	265.2	116.1	45	257#2099

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 13:04 <VOW003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File X:\S2015\gvp.sub
Monit.File X:\S2015\vpapsys.mon
Contn.File X:\S2015\2015_rtep_tower_contingency_DVP.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	Voltdro p	Voltris e	Viol	Ncon	Contingency Description ** Base Case
315218	LCUNINGC	18.0	345	366	1.0713	1.0713	0.9300	1.0700	1.0177	1.1248	H		
314796	JEDINBERG	115.0	345	364	1.5663	1.0223	0.9300	1.0700	0.9712	1.0734	HR	7	201769020
314797	4EDINBERG	138.0	345	364	1.5649	0.9992	0.9300	1.0700	0.9493	1.0492	HR	7	201769020
314798	3MERCK5	115.0	345	364	1.4477	0.9976	0.9300	1.0700	0.9477	1.0475	HR	7	201769020
314799	3ENDLCAR	115.0	345	364	2.1032	0.9990	0.9300	1.0700	0.9490	1.0489	HR	7	201769020
314800	6ENDLCAR	230.0	345	364	1.5553	1.0373	0.9300	1.0700	0.9655	1.0892	HR	7	201769020
314802	3GROTOES	115.0	345	364	1.4495	1.0026	0.9300	1.0700	0.9525	1.0527	HR	7	201769020
314803	6GROTOES	230.0	345	364	1.0750	1.0319	0.9300	1.0700	0.9603	1.0835	H	7	201769020
314807	3MT JACK	115.0	345	364	1.9064	1.0078	0.9300	1.0700	0.9574	1.0582	HR	7	201769020
314809	3N SHEND	115.0	345	364	1.7661	0.9972	0.9300	1.0700	0.9474	1.0471	HR	7	201769020
314814	3TIMBERV	115.0	345	364	2.1114	0.9886	0.9300	1.0700	0.9392	1.0380	HR	7	201769020
314886	JEDINB 1	115.0	345	364	1.5674	1.0230	0.9300	1.0700	0.9718	1.0741	HR	7	201769020
314887	3ENDLC 1	115.0	345	364	2.1047	0.9997	0.9300	1.0700	0.9497	1.0496	HR	7	201769020
314889	3MERCK 1	115.0	345	364	1.4487	0.9983	0.9300	1.0700	0.9484	1.0482	HR	7	201769020
315008	1POSSM6A	18.0	345	353	0.9206	0.9354	0.9300	1.0700	0.8887	0.9822	L	7	201769020
315009	1POSSM6B	18.0	345	353	0.9206	0.9354	0.9300	1.0700	0.8887	0.9822	L	7	201769020
314331	6POE	230.0	345	357	1.0702	1.0258	0.9300	1.0700	0.9745	1.0771	H	19	200262003
314497	6SEWLSFT	230.0	345	359	0.8500	1.0063	0.9300	1.0700	0.9560	1.0566	LD	45	25762099
314500	6NAVYS	230.0	345	359	0.8500	1.0063	0.9300	1.0700	0.9559	1.0566	LD	45	25762099
314501	6NAVYS1	230.0	345	359	0.8500	1.0062	0.9300	1.0700	0.9559	1.0565	LD	45	25762099
314505	6NAVYN	230.0	345	359	0.8500	1.0063	0.9300	1.0700	0.9560	1.0566	LD	45	25762099
314510	6NAVYN1	230.0	345	359	0.8498	1.0061	0.9300	1.0700	0.9558	1.0564	LD	45	25762099
315008	1POSSM6A	18.0	345	353	0.9250	0.9354	0.9300	1.0700	0.8887	0.9822	L	47	20062442051
315009	1POSSM6B	18.0	345	353	0.9250	0.9354	0.9300	1.0700	0.8887	0.9822	L	47	20062442051
315008	1POSSM6A	18.0	345	353	0.9218	0.9354	0.9300	1.0700	0.8887	0.9822	L	50	2046220
315009	1POSSM6B	18.0	345	353	0.9218	0.9354	0.9300	1.0700	0.8887	0.9822	L	50	2046220

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315008	IPSSM6A	18.0	345	353	0.9250	0.9354	0.9300	1.0700	0.8887	0.9822	L	58	23742022
315009	IPSSM6B	18.0	345	353	0.9250	0.9354	0.9300	1.0700	0.8887	0.9822	L	58	23742022
315001	IOMF A	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	60	24842013
315002	IOMF B	13.8	345	351	1.0328	0.9771	0.9300	1.0700	0.9282	1.0259	R	60	24842013
315008	IPSSM6A	18.0	345	353	0.9254	0.9354	0.9300	1.0700	0.8887	0.9822	L	63	2514266
315009	IPSSM6B	18.0	345	353	0.9254	0.9354	0.9300	1.0700	0.8887	0.9822	L	63	2514266
315008	IPSSM6A	18.0	345	353	0.9229	0.9354	0.9300	1.0700	0.8887	0.9822	L	72	26642022
315009	IPSSM6B	18.0	345	353	0.9229	0.9354	0.9300	1.0700	0.8887	0.9822	L	72	26642022
315008	IPSSM6A	18.0	345	353	0.9197	0.9354	0.9300	1.0700	0.8887	0.9822	L	84	25642090
315009	IPSSM6B	18.0	345	353	0.9197	0.9354	0.9300	1.0700	0.8887	0.9822	L	84	25642090

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:17 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:14 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 100.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	83.7	223.2	104.7	26 D:30AKRI44-3MYRTLE 1 +6HARMONY-6PAPERMIL
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	83.7	223.2	104.7	358 D:30AKRI44-3SUFFOLK 1 +6HARMONY-6PAPERMIL
313813	3OCRAAN	115	314178	3LANCAST	115	1	LN	311.7	21.8	269.0	115.9	679 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
313813	3OCRAAN	115	314191	3WHITE S	115	1	LN	327.7	30.5	269.0	121.8	679 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	275.2	23.6	249.0	110.5	679 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	339.9	37.5	169.0	201.2	679 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
313813	3OCRAAN	115	314178	3LANCAST	115	1	LN	324.8	21.8	269.0	120.7	680 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
313813	3OCRAAN	115	314191	3WHITE S	115	1	LN	341.6	30.5	269.0	127.0	680 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	289.4	23.6	249.0	116.2	680 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	256.8	43.6	249.0	103.1	680 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	355.9	37.5	169.0	210.6	680 D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	187.7	37.5	169.0	111.1	1009 D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115	314182	6NORNECK	230	2	TR	226.8	45.7	206.6	109.8	1009 D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6NORNECK1
313813	3OCRAAN	115	314191	3WHITE S	115	1	LN	274.2	30.5	269.0	101.9	1010 D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	285.3	37.5	169.0	168.8	1010 D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	83.7	223.2	104.7	1019 D:6DAHLGRE-6OAKGROV1 +6HARMONY-6PAPERMIL
313813	3OCRAAN	115	314178	3LANCAST	115	1	LN	317.1	21.8	269.0	117.9	3934 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAAN	115	314191	3WHITE S	115	1	LN	333.6	30.5	269.0	124.0	3934 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	281.0	23.6	249.0	112.9	3934 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	347.8	37.5	169.0	205.8	3934 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAAN	115	314178	3LANCAST	115	1	LN	324.6	21.8	269.0	120.7	3935 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAAN	115	314191	3WHITE S	115	1	LN	341.5	30.5	269.0	126.9	3935 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	289.0	23.6	249.0	116.1	3935 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	255.8	43.6	249.0	102.7	3935 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	355.8	37.5	169.0	210.5	3935 D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
313813	3OCRA	115	314178	3LANCAST	115	1	LN	318.0	21.8	269.0	118.2	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	334.4	30.5	269.0	124.3	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	282.1	23.6	249.0	113.3	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	348.0	37.5	169.0	205.9	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314178	3LANCAST	115	1	LN	325.4	21.8	269.0	121.0	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	342.2	30.5	269.0	127.2	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	290.1	23.6	249.0	116.5	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	256.7	43.6	249.0	103.1	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	356.8	37.5	169.0	211.1	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	211.7	37.5	169.0	125.3	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	192.1	37.5	169.0	113.7	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	838.0	531.4	830.0	101.0	40800	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	838.0	531.4	830.0	101.0	40971	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	856.2	531.4	830.0	103.2	50117	D:6THRS279-6YADKIN 1 +8FENTRES-8YADKIN 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:14 <VOV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum 2015(2013LF)_base_wskiffes.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
313810	6DAHLGREN	230.0	345	354	0.3456	1.0021	0.9300	1.0700	0.9520	1.0522	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
313813	30CRAN	115.0	345	354	0.7150	1.0055	0.9300	1.0700	0.9552	1.0558	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3532	1.0050	0.9300	1.0700	0.9547	1.0552	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.5196	1.0066	0.9300	1.0700	0.9563	1.0569	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8647	1.0049	0.9300	1.0700	0.9546	1.0551	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314178	3LANCAST	115.0	345	354	0.6570	1.0071	0.9300	1.0700	0.9568	1.0575	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3986	1.0147	0.9300	1.0700	0.9640	1.0564	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3642	1.0061	0.9300	1.0700	0.9558	1.0564	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3613	1.0058	0.9300	1.0700	0.9555	1.0560	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9138	1.0048	0.9300	1.0700	0.9546	1.0550	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314187	3WAN 176	115.0	345	354	0.8486	0.9920	0.9300	1.0700	0.9424	1.0416	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3561	1.0058	0.9300	1.0700	0.9555	1.0561	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7451	1.0045	0.9300	1.0700	0.9543	1.0548	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8647	1.0055	0.9300	1.0700	0.9553	1.0558	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8645	1.0053	0.9300	1.0700	0.9551	1.0556	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6973	1.0076	0.9300	1.0700	0.9572	1.0580	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
315034	1NNECK1	13.2	345	354	0.4088	1.0407	0.9300	1.0700	0.9887	1.0928	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
315035	1NNECK2	13.2	345	354	0.4088	1.0407	0.9300	1.0700	0.9887	1.0928	LD	679	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2344	1.0021	0.9300	1.0700	0.9520	1.0522	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
313813	30CRAN	115.0	345	354	0.6473	1.0055	0.9300	1.0700	0.9552	1.0558	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMAR	115.0	345	354	0.9164	1.0057	0.9300	1.0700	0.9554	1.0560	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2412	1.0050	0.9300	1.0700	0.9547	1.0552	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2501	1.0102	0.9300	1.0700	0.9597	1.0607	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4222	1.0066	0.9300	1.0700	0.9563	1.0569	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8158	1.0049	0.9300	1.0700	0.9546	1.0551	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6146	1.0071	0.9300	1.0700	0.9568	1.0575	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2754	1.0147	0.9300	1.0700	0.9640	1.0654	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2515	1.0061	0.9300	1.0700	0.9558	1.0564	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2467	1.0058	0.9300	1.0700	0.9555	1.0560	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314184	3SHACKLE	115.0	345	354	0.8765	1.0048	0.9300	1.0700	0.9546	1.0550	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7991	0.9920	0.9300	1.0700	0.9424	1.0416	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9071	1.0043	0.9300	1.0700	0.9541	1.0545	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.2457	1.0058	0.9300	1.0700	0.9555	1.0561	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6921	1.0045	0.9300	1.0700	0.9543	1.0548	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8163	1.0055	0.9300	1.0700	0.9553	1.0558	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8162	1.0053	0.9300	1.0700	0.9551	1.0556	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6149	1.0076	0.9300	1.0700	0.9572	1.0580	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2825	1.0407	0.9300	1.0700	0.9887	1.0928	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.2825	1.0407	0.9300	1.0700	0.9887	1.0928	LD	680	D:6DAHLGRE-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.8816	1.0050	0.9300	1.0700	0.9547	1.0552	LD	1009	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6GRONECK1
314182	6GRONECK	230.0	345	354	0.8803	1.0061	0.9300	1.0700	0.9558	1.0564	LD	1009	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6GRONECK1
314183	6SANDERS	230.0	345	354	0.8803	1.0058	0.9300	1.0700	0.9555	1.0560	LD	1009	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6GRONECK1
314190	6WESTHOR	230.0	345	354	0.8812	1.0058	0.9300	1.0700	0.9555	1.0561	LD	1009	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6GRONECK1
313813	3OCCAN	115.0	345	354	0.8908	1.0055	0.9300	1.0700	0.9552	1.0558	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.6253	1.0050	0.9300	1.0700	0.9547	1.0552	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.6257	1.0102	0.9300	1.0700	0.9597	1.0607	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.7404	1.0066	0.9300	1.0700	0.9563	1.0569	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.8363	1.0071	0.9300	1.0700	0.9568	1.0575	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314181	3GRONECK	115.0	345	354	0.6804	1.0147	0.9300	1.0700	0.9640	1.0654	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314182	6GRONECK	230.0	345	354	0.6242	1.0061	0.9300	1.0700	0.9558	1.0564	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.6240	1.0058	0.9300	1.0700	0.9555	1.0560	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.6248	1.0058	0.9300	1.0700	0.9555	1.0561	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8671	1.0045	0.9300	1.0700	0.9543	1.0548	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.8368	1.0076	0.9300	1.0700	0.9572	1.0580	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.6979	1.0407	0.9300	1.0700	0.9887	1.0928	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.6979	1.0407	0.9300	1.0700	0.9887	1.0928	LD	1010	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	1351	D:6BENCHRC-6WARMICK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	1679	D:6BENCHRC-6YORKTWN1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2006	D:6BENCHRC-6WARMICK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8915	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2332	D:6BENCHRC-6WARMICK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2657	D:6BENCHRC-6NP NEWS1 +6HAYES -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8934	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314399	6NP NEWS	230.0	345	356	0.8919	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8905	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8952	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8912	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314399	6NP NEWS	230.0	345	356	0.8912	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8885	1.0329	0.9300	1.0700	0.9812	1.0845	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8882	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8930	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8743	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8729	1.0324	0.9300	1.0700	0.9807	1.0840	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8705	1.0304	0.9300	1.0700	0.9812	1.0845	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8716	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8690	1.0339	0.9300	1.0700	0.9822	1.0856	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8761	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:17 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	JD	2981	D:6BENCHRC-6CHCKTUK1 +6HAYES -6YORKTWN1
313818	6BENCHRC	230.0	345	360	0.8858	1.0317	0.9300	1.0700	0.9801	1.0833	JD	3046	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8975	1.0342	0.9300	1.0700	0.9825	1.0860	JD	3046	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6SHELBNK1
314399	6PMBROK	230.0	345	356	0.8963	1.0324	0.9300	1.0700	0.9807	1.0840	JD	3046	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8953	1.0304	0.9300	1.0700	0.9788	1.0819	JD	3046	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8993	1.0363	0.9300	1.0700	0.9845	1.0882	JD	3046	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6SHELBNK1
313818	6BENCHRC	230.0	345	360	0.8916	1.0317	0.9300	1.0700	0.9801	1.0833	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8933	1.0342	0.9300	1.0700	0.9825	1.0860	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
314399	6PMBROK	230.0	345	356	0.8921	1.0324	0.9300	1.0700	0.9807	1.0840	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
314402	6PENTINSI	230.0	345	356	0.8912	1.0329	0.9300	1.0700	0.9812	1.0845	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8911	1.0304	0.9300	1.0700	0.9788	1.0819	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8951	1.0363	0.9300	1.0700	0.9845	1.0882	JD	3047	D:6BENCHRC-6CHCKTUK1 +6PENTINSI-6TABB 1
313818	6BENCHRC	230.0	345	360	0.8913	1.0317	0.9300	1.0700	0.9801	1.0833	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8739	1.0342	0.9300	1.0700	0.9825	1.0860	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314399	6PMBROK	230.0	345	356	0.8719	1.0324	0.9300	1.0700	0.9807	1.0840	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314402	6PENTINSI	230.0	345	356	0.8700	1.0329	0.9300	1.0700	0.9812	1.0845	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8709	1.0304	0.9300	1.0700	0.9788	1.0819	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8686	1.0339	0.9300	1.0700	0.9822	1.0856	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8748	1.0363	0.9300	1.0700	0.9845	1.0882	JD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
313818	6DAHLGREN	230.0	345	354	0.3135	1.0021	0.9300	1.0700	0.9520	1.0522	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
313813	3OCAN	115.0	345	354	0.7015	1.0055	0.9300	1.0700	0.9520	1.0558	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314131	6GARNOLDS	230.0	345	354	0.3132	1.0029	0.9300	1.0700	0.9528	1.0531	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314139	6GAKGROV	230.0	345	354	0.3215	1.0050	0.9300	1.0700	0.9547	1.0552	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314173	3GARNER	115.0	345	354	0.4967	1.0066	0.9300	1.0700	0.9563	1.0569	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314174	3HARMONY	115.0	345	354	0.8570	1.0049	0.9300	1.0700	0.9546	1.0551	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314178	3LANCAST	115.0	345	354	0.6721	1.0071	0.9300	1.0700	0.9568	1.0575	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314191	3GNORNECK	115.0	345	354	0.3683	1.0147	0.9300	1.0700	0.9640	1.0654	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314182	6GNORNECK	230.0	345	354	0.3336	1.0061	0.9300	1.0700	0.9558	1.0564	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314183	6SANDERS	230.0	345	354	0.3304	1.0058	0.9300	1.0700	0.9555	1.0560	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314184	3SHACKLE	115.0	345	354	0.9090	1.0048	0.9300	1.0700	0.9546	1.0550	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314187	3WAN 176	115.0	345	354	0.8415	0.9920	0.9300	1.0700	0.9424	1.0416	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314190	6WESTWOR	230.0	345	354	0.3268	1.0058	0.9300	1.0700	0.9555	1.0561	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314191	3WHITE S	115.0	345	354	0.7331	1.0045	0.9300	1.0700	0.9543	1.0548	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314395	3HARMO 1	115.0	345	354	0.8576	1.0055	0.9300	1.0700	0.9553	1.0558	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314395	3HARMO 2	115.0	345	354	0.8575	1.0053	0.9300	1.0700	0.9551	1.0556	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
314400	3LANCA 1	115.0	345	354	0.6724	1.0076	0.9300	1.0700	0.9572	1.0580	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
315034	1INNECK1	13.2	345	354	0.3778	1.0407	0.9300	1.0700	0.9887	1.0928	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
315035	1INNECK2	13.2	345	354	0.3778	1.0407	0.9300	1.0700	0.9887	1.0928	JD	3934	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6GNORNECK1
313810	6DAHLGREN	230.0	345	354	0.2394	1.0021	0.9300	1.0700	0.9520	1.0522	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCAN	115.0	345	354	0.6466	1.0055	0.9300	1.0700	0.9552	1.0558	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMAR	115.0	345	354	0.9166	1.0057	0.9300	1.0700	0.9554	1.0560	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314131	6GARNOLDS	230.0	345	354	0.2394	1.0029	0.9300	1.0700	0.9528	1.0531	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314139	6GAKGROV	230.0	345	354	0.2462	1.0050	0.9300	1.0700	0.9547	1.0552	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2549	1.0102	0.9300	1.0700	0.9597	1.0607	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4248	1.0066	0.9300	1.0700	0.9563	1.0569	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8163	1.0049	0.9300	1.0700	0.9546	1.0551	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6161	1.0071	0.9300	1.0700	0.9568	1.0575	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314181	3NORNECK	115.0	345	354	0.2798	1.0147	0.9300	1.0700	0.9640	1.0654	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2563	1.0061	0.9300	1.0700	0.9558	1.0564	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2536	1.0058	0.9300	1.0700	0.9555	1.0560	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.0768	1.0048	0.9300	1.0700	0.9546	1.0550	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7997	0.9920	0.9300	1.0700	0.9424	1.0416	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9073	1.0043	0.9300	1.0700	0.9541	1.0545	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.2506	1.0058	0.9300	1.0700	0.9555	1.0561	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6831	1.0045	0.9300	1.0700	0.9543	1.0548	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8169	1.0055	0.9300	1.0700	0.9553	1.0558	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8167	1.0053	0.9300	1.0700	0.9551	1.0556	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6164	1.0076	0.9300	1.0700	0.9572	1.0580	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2869	1.0407	0.9300	1.0700	0.9887	1.0928	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.2869	1.0407	0.9300	1.0700	0.9887	1.0928	JD	3935	D:GARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8907	1.0396	0.9300	1.0700	0.9876	1.0916	JD	3947	D:GARNOLDS-6COMORN 1 +6HAYES -6YORKTWN1
313810	6DAHLGREN	230.0	345	354	0.3031	1.0021	0.9300	1.0700	0.9520	1.0522	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAH	115.0	345	354	0.6598	1.0055	0.9300	1.0700	0.9552	1.0558	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314131	6GARNOLDS	230.0	345	354	0.3024	1.0029	0.9300	1.0700	0.9528	1.0531	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3117	1.0050	0.9300	1.0700	0.9547	1.0552	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.4923	1.0066	0.9300	1.0700	0.9563	1.0569	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8565	1.0049	0.9300	1.0700	0.9546	1.0551	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314175	6COMORN	230.0	345	354	0.3023	1.0031	0.9300	1.0700	0.9529	1.0533	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314178	3LANCAST	115.0	345	354	0.6700	1.0071	0.9300	1.0700	0.9568	1.0575	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3606	1.0147	0.9300	1.0700	0.9640	1.0654	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3247	1.0061	0.9300	1.0700	0.9558	1.0564	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3213	1.0058	0.9300	1.0700	0.9555	1.0560	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314187	3WAN 176	115.0	345	354	0.8408	1.0048	0.9300	1.0700	0.9546	1.0550	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3174	1.0058	0.9300	1.0700	0.9555	1.0561	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7317	1.0045	0.9300	1.0700	0.9543	1.0548	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8571	1.0055	0.9300	1.0700	0.9553	1.0558	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8569	1.0053	0.9300	1.0700	0.9551	1.0556	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6703	1.0076	0.9300	1.0700	0.9572	1.0580	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
315034	1NNECKC1	13.2	345	354	0.3698	1.0407	0.9300	1.0700	0.9887	1.0928	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
315035	1NNECKC2	13.2	345	354	0.3698	1.0407	0.9300	1.0700	0.9887	1.0928	JD	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2286	1.0021	0.9300	1.0700	0.9520	1.0522	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAH	115.0	345	354	0.6461	1.0055	0.9300	1.0700	0.9552	1.0558	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMARE	115.0	345	354	0.9161	1.0057	0.9300	1.0700	0.9554	1.0560	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314131	6GARNOLDS	230.0	345	354	0.2282	1.0029	0.9300	1.0700	0.9528	1.0531	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2359	1.0050	0.9300	1.0700	0.9547	1.0552	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2455	1.0102	0.9300	1.0700	0.9597	1.0607	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4197	1.0066	0.9300	1.0700	0.9563	1.0569	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8152	1.0049	0.9300	1.0700	0.9546	1.0551	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314175	6COMORN	230.0	345	354	0.2455	1.0031	0.9300	1.0700	0.9529	1.0533	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6133	1.0071	0.9300	1.0700	0.9568	1.0575	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2716	1.0147	0.9300	1.0700	0.9640	1.0654	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2468	1.0061	0.9300	1.0700	0.9558	1.0564	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2439	1.0058	0.9300	1.0700	0.9555	1.0560	JD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314184	3SHACKLE	115.0	345	354	0.8761	1.0048	0.9300	1.0700	0.9546	1.0550	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7985	0.9920	0.9300	1.0700	0.9424	1.0416	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9068	1.0043	0.9300	1.0700	0.9541	1.0545	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.2407	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6910	1.0045	0.9300	1.0700	0.9543	1.0548	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8157	1.0055	0.9300	1.0700	0.9553	1.0556	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8156	1.0053	0.9300	1.0700	0.9551	1.0554	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6136	1.0076	0.9300	1.0700	0.9572	1.0580	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2785	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.2785	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4255	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8910	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.9008	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8152	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314183	6SANDERS	230.0	345	354	0.8149	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314190	6WESTMOR	230.0	345	354	0.8154	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314172	6DUNNSVL	230.0	345	354	0.7451	1.0102	0.9300	1.0700	0.9597	1.0607	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314173	3GARNER	115.0	345	354	0.8677	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.8264	1.0147	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.7464	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314183	6SANDERS	230.0	345	354	0.7461	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314190	6WESTMOR	230.0	345	354	0.7466	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315034	1NNECKC1	13.2	345	354	0.8476	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315035	1NNECKC2	13.2	345	354	0.8476	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8432	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314183	6SANDERS	230.0	345	354	0.8085	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8079	1.0058	0.9300	1.0700	0.9555	1.0560	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315034	1NNECKC1	13.2	345	354	0.9194	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315035	1NNECKC2	13.2	345	354	0.9194	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314172	6DUNNSVL	230.0	345	354	0.8043	1.0102	0.9300	1.0700	0.9597	1.0607	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314173	3GARNER	115.0	345	354	0.9190	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.8915	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8055	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315034	1NNECKC1	13.2	345	354	0.9144	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315035	1NNECKC2	13.2	345	354	0.9144	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314172	6DUNNSVL	230.0	345	354	0.7551	1.0102	0.9300	1.0700	0.9597	1.0607	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314173	3GARNER	115.0	345	354	0.8817	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.8403	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.7563	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314183	6SANDERS	230.0	345	354	0.7557	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315034	1NNECKC1	13.2	345	354	0.8619	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
315035	1NNECKC2	13.2	345	354	0.8619	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8916	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BTRCHWD-6COMORN 1 +6HAYES -6YORKTWN1

PSS(m)MUST 10.2 – Managing and Utilizing System Transmission – SUN, MAR 10 2013 22:17 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8933	1.0396	0.9300	1.0700	0.9876	1.0916	LD	6166	D: 3GARNER -3NORNECK1 +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8644	1.0352	0.9300	1.0700	0.9835	1.0870	LD	6197	D: 3GARNER -3NORNECK1 +6CORRCTN-6LANEXA 1
314189	GPAPERMI	230.0	345	354	0.8546	1.0266	0.9300	1.0700	0.9753	1.0779	LD	6197	D: 3GARNER -3NORNECK1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8583	1.0255	0.9300	1.0700	0.9742	1.0768	LD	6197	D: 3GARNER -3NORNECK1 +6CORRCTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8915	1.0396	0.9300	1.0700	0.9876	1.0916	LD	6479	D: 3HARMONY-3SHACKLE1 +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8851	1.0352	0.9300	1.0700	0.9835	1.0870	LD	6510	D: 3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314189	GPAPERMI	230.0	345	354	0.8794	1.0266	0.9300	1.0700	0.9753	1.0779	LD	6510	D: 3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8792	1.0255	0.9300	1.0700	0.9742	1.0768	LD	6510	D: 3HARMONY-3SHACKLE1 +6CORRCTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	7102	D: 3HARMONY-3WHITE SI +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	7412	D: 3HARMONY-3HARMO 11 +6HAYES -6YORKTWN1
314375	6CORRCTN	230.0	345	354	0.8873	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7421	D: 3HARMONY-3HARMO 11 +6PAPERMI-6CORRCTN1
314180	GHAYES	230.0	345	354	0.8825	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7421	D: 3HARMONY-3HARMO 11 +6PAPERMI-6CORRCTN1
314176	GHARMONY	230.0	345	354	0.8612	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7443	D: 3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314189	GPAPERMI	230.0	345	354	0.8552	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7443	D: 3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8549	1.0255	0.9300	1.0700	0.9742	1.0768	LD	7443	D: 3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	7721	D: 3HARMONY-3HARMO 21 +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8871	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7752	D: 3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8814	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7752	D: 3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8845	1.0396	0.9300	1.0700	0.9876	1.0916	LD	8336	D: 6HARMONY-6PAPERMI11 +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8578	1.0352	0.9300	1.0700	0.9835	1.0870	LD	8651	D: 3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314189	GPAPERMI	230.0	345	354	0.8526	1.0266	0.9300	1.0700	0.9753	1.0779	LD	8651	D: 3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314176	GHARMONY	230.0	345	354	0.8422	1.0352	0.9300	1.0700	0.9835	1.0870	LD	8673	D: 3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314189	GPAPERMI	230.0	345	354	0.8360	1.0266	0.9300	1.0700	0.9753	1.0779	LD	8673	D: 3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8357	1.0255	0.9300	1.0700	0.9742	1.0768	LD	8673	D: 3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8893	1.0396	0.9300	1.0700	0.9876	1.0916	LD	8947	D: 3LANCAST-3LANCA 11 +6HAYES -6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9252	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314189	GPAPERMI	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9253	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9254	D: 6HAYES -6YORKTWN1 +3NORNECK-1NNECKC11
314176	GHARMONY	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9255	D: 6HAYES -6YORKTWN1 +3NORNECK-1NNECKC21
314189	GPAPERMI	230.0	345	354	0.8902	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9256	D: 6HAYES -6YORKTWN1 +6NORNECK-6SANDERS1
314375	6CORRCTN	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9257	D: 6HAYES -6YORKTWN1 +6SANDERS-6WESTMOR1
314180	GHAYES	230.0	345	354	0.8936	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9258	D: 6HAYES -6YORKTWN1 +3SHACKLE-3WEST PT1
314176	GHARMONY	230.0	345	354	0.8906	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9259	D: 6HAYES -6YORKTWN1 +3WEST PT-3LANEXA 1
314189	GPAPERMI	230.0	345	354	0.8563	1.0352	0.9300	1.0700	0.9835	1.0870	LD	9260	D: 6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314375	6CORRCTN	230.0	345	354	0.8641	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9260	D: 6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314180	GHAYES	230.0	345	354	0.8512	1.0266	0.9300	1.0700	0.9753	1.0779	LD	9260	D: 6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314176	GHARMONY	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9261	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR1 11
314189	GPAPERMI	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9262	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR1 11
314375	6CORRCTN	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9263	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9264	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314176	GHARMONY	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9265	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314189	GPAPERMI	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9266	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314375	6CORRCTN	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9267	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9268	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314176	GHARMONY	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9269	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321
314189	GPAPERMI	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9270	D: 6HAYES -6YORKTWN1 +30AKRIDG-30AKR12321

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9271	D: 6HAYES -6YORKTWN1 +6PENNING-6WALR2091
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9272	D: 6HAYES -6YORKTWN1 +3527767A-3BURTN671
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9273	D: 6HAYES -6YORKTWN1 +3527767B-3AMPHB671
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9274	D: 6HAYES -6YORKTWN1 +3527767B-3BURTN671
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9275	D: 6HAYES -6YORKTWN1 +3527767B-3OKAWOOD1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9276	D: 6HAYES -6YORKTWN1 +3AMOCO-Y-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8901	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9277	D: 6HAYES -6YORKTWN1 +3BLOXOMC-3MERCURY1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9278	D: 6HAYES -6YORKTWN1 +3COLONY -3WABWICK1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9279	D: 6HAYES -6YORKTWN1 +3COLONY -3YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9280	D: 6HAYES -6YORKTWN1 +3COPELAND-3NNENW51
314180	6HAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9281	D: 6HAYES -6YORKTWN1 +3COPELAND-3WHEALTN1
314176	6HARMONY	230.0	345	354	0.8406	1.0352	0.9300	1.0700	0.9835	1.0870	LD	9282	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8497	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9282	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314189	6PAPERMILL	230.0	345	354	0.8444	1.0266	0.9300	1.0700	0.9753	1.0779	LD	9282	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8441	1.0255	0.9300	1.0700	0.9742	1.0768	LD	9282	D: 6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9283	D: 6HAYES -6YORKTWN1 +6DENBIGH-6SKIFPCRE1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9284	D: 6HAYES -6YORKTWN1 +6DENBIGH-6YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9285	D: 6HAYES -6YORKTWN1 +3DOW 34 -3SKIFPCRE1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9286	D: 6HAYES -6YORKTWN1 +3FTEUS34-3GRAFT341
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9287	D: 6HAYES -6YORKTWN1 +3FTEUS34-3SKIFPCRE1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9288	D: 6HAYES -6YORKTWN1 +3FTEUS58-3GRAFT581
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9289	D: 6HAYES -6YORKTWN1 +3FTEUS58-3LEBAN581
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9290	D: 6HAYES -6YORKTWN1 +3GRAFT34-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9291	D: 6HAYES -6YORKTWN1 +3GRAFT34-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8900	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9292	D: 6HAYES -6YORKTWN1 +3KINGS M-3SKIFPCRE1
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9293	D: 6HAYES -6YORKTWN1 +6KINGS M-6SKIFPCRE1
314180	6HAYES	230.0	345	354	0.8904	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9294	D: 6HAYES -6YORKTWN1 +3LANEXA -3NNENW581
314180	6HAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9295	D: 6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 1
314180	6HAYES	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9296	D: 6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 2
314180	6HAYES	230.0	345	354	0.8905	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9297	D: 6HAYES -6YORKTWN1 +6LANEXA -6LIGH2091
314180	6HAYES	230.0	345	354	0.8911	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9298	D: 6HAYES -6YORKTWN1 +6LANEXA -6LANEXA 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9299	D: 6HAYES -6YORKTWN1 +3LEBAN58-3YNNW 581
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9300	D: 6HAYES -6YORKTWN1 +6LIGH209-6WALR2851
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9301	D: 6HAYES -6YORKTWN1 +6LIGH209-6WALR2091
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9302	D: 6HAYES -6YORKTWN1 +3MAGRUDR-3PENINS11
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9303	D: 6HAYES -6YORKTWN1 +3MAGRUDR-3SHELBK1
314180	6HAYES	230.0	345	354	0.8903	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9304	D: 6HAYES -6YORKTWN1 +3MERCURY-3SHELBK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9305	D: 6HAYES -6YORKTWN1 +3NASHA -3PENINS11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9306	D: 6HAYES -6YORKTWN1 +3NASHA -3PENINS12
314180	6HAYES	230.0	345	354	0.8905	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9307	D: 6HAYES -6YORKTWN1 +3NNENW58-3TOAR0581
314180	6HAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9308	D: 6HAYES -6YORKTWN1 +6NP NEWS-6PENBROK1
314180	6HAYES	230.0	345	354	0.8918	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9309	D: 6HAYES -6YORKTWN1 +6NP NEWS-6NP NE 11
314180	6HAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9310	D: 6HAYES -6YORKTWN1 +6PENBROK-6SHELBK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9311	D: 6HAYES -6YORKTWN1 +3PENINS11-3SEAF0761
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9312	D: 6HAYES -6YORKTWN1 +3PENINS11-3SEAF0791
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9313	D: 6HAYES -6YORKTWN1 +3PENINS11-3U CARB01
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9314	D: 6HAYES -6YORKTWN1 +3PENINS11-3PENIN 11

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9315	D: 6HAYES -6YORKTWN1 +3PENINSL-6PENINS1
314180	6HAYES	230.0	345	354	0.8900	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9316	D: 6HAYES -6YORKTWN1 +6PENINSL-6SHELBNK1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9317	D: 6HAYES -6YORKTWN1 +6PENINSL-6TABB 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9318	D: 6HAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9319	D: 6HAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9320	D: 6HAYES -6YORKTWN1 +3SHELBNK-3JHEALTN1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9321	D: 6HAYES -6YORKTWN1 +3SHELBNK-6SHELBNK1
314180	6HAYES	230.0	345	354	0.8900	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9322	D: 6HAYES -6YORKTWN1 +6TABB -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9323	D: 6HAYES -6YORKTWN1 +3U CARBD-3JHEALTN1
314180	6HAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9324	D: 6HAYES -6YORKTWN1 +6WALR285-6SKI FCRE1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9325	D: 6HAYES -6YORKTWN1 +3HARWICK-3JHEALTN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9326	D: 6HAYES -6YORKTWN1 +6HARWICK-6JHEALTN1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9327	D: 6HAYES -6YORKTWN1 +3JHEALTN-6JHEALTN1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9328	D: 6HAYES -6YORKTWN1 +3JHEALTN-6JHEALTN2
314180	6HAYES	230.0	345	354	0.8908	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9329	D: 6HAYES -6YORKTWN1 +6JHEALTN-6WLNCHST1
314180	6HAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9330	D: 6HAYES -6YORKTWN1 +6JHEALTN-6WLNCHST 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9331	D: 6HAYES -6YORKTWN1 +6WLNCHST-6POOLSVL1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9332	D: 6HAYES -6YORKTWN1 +3YORKTWN-3YORK PS1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9333	D: 6HAYES -6YORKTWN1 +3YORKTWN-6YORKTWN21
314180	6HAYES	230.0	345	354	0.8905	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9334	D: 6HAYES -6YORKTWN1 +6YORKTWN-6YORKT 11
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9335	D: 6HAYES -6YORKTWN1 +6YORKTWN-3YORK PS1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9336	D: 6HAYES -6YORKTWN1 +6YORKTWN-6YORKTWN31
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9337	D: 6HAYES -6YORKTWN1 +6YORKTWN-6SKI FCRE1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9338	D: 6HAYES -6YORKTWN1 +3YWKS 58-3SKI FCRE1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9339	D: 6HAYES -6YORKTWN1 +3ALEX CR-3BOWERS 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9340	D: 6HAYES -6YORKTWN1 +3STORE -3LONGC271
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9341	D: 6HAYES -6YORKTWN1 +3STORE -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9342	D: 6HAYES -6YORKTWN1 +3BAYSIDE-3BURTN671
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9343	D: 6HAYES -6YORKTWN1 +3BAYSIDE-3LONGC271
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9344	D: 6HAYES -6YORKTWN1 +3BERKLS1-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9345	D: 6HAYES -6YORKTWN1 +3BERKLS1-3REEVES 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9346	D: 6HAYES -6YORKTWN1 +3BOWERS -3JEBPCB71
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9347	D: 6HAYES -6YORKTWN1 +3BOWERS -3JHODGE F1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9348	D: 6HAYES -6YORKTWN1 +6BOWERS -6SCHRHLND1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9349	D: 6HAYES -6YORKTWN1 +6BOWERS -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9350	D: 6HAYES -6YORKTWN1 +3BURTN67-3DAVIS671
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9351	D: 6HAYES -6YORKTWN1 +3BURTN67-3DAVIS271
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9352	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3CMN GAS1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9353	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3CRADOCK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9354	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC461
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9355	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9356	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9357	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9358	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9359	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9360	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9361	D: 6HAYES -6YORKTWN1 +3CHESAPEK-3JEBPC871

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:17 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9362	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPKA1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9363	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESPKB1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9364	D: 6HAYES -6YORKTWN1 +3CHESAPK-1CHESAPK2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9365	D: 6HAYES -6YORKTWN1 +6CHESAPK-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9366	D: 6HAYES -6YORKTWN1 +6CHESAPK-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9367	D: 6HAYES -6YORKTWN1 +6CHESAPK-6YALKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9368	D: 6HAYES -6YORKTWN1 +3CHESPTX-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9369	D: 6HAYES -6YORKTWN1 +3CHRHLLND-6HODGE F1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9370	D: 6HAYES -6YORKTWN1 +3CHRHLLND-6CHRHLLND1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9371	D: 6HAYES -6YORKTWN1 +6CHRHLLND-6HARBORV1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9372	D: 6HAYES -6YORKTWN1 +6CHRHLLND-6LX KING1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9373	D: 6HAYES -6YORKTWN1 +6CHRHLLND-6SEMLSPF1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9374	D: 6HAYES -6YORKTWN1 +6CHRHLLND-6SEMLSPF2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9375	D: 6HAYES -6YORKTWN1 +6CHRHLLND-6CHRHLL 11
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9376	D: 6HAYES -6YORKTWN1 +3CMN GAS-3GRASF1D1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9377	D: 6HAYES -6YORKTWN1 +3CRADOCK-3REYES 1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9378	D: 6HAYES -6YORKTWN1 +3CRADOCK-3SHEA 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9379	D: 6HAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9380	D: 6HAYES -6YORKTWN1 +3DAVIS1527-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9381	D: 6HAYES -6YORKTWN1 +3DEEPC46-3YALKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9382	D: 6HAYES -6YORKTWN1 +3DOZIER -3THOMPNS1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9383	D: 6HAYES -6YORKTWN1 +6DOZIER -6ELIZ R 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9384	D: 6HAYES -6YORKTWN1 +6DOZIER -6GRENWCH1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9385	D: 6HAYES -6YORKTWN1 +6ELIZ R -6YALKIN 1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9386	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR11
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9387	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9388	D: 6HAYES -6YORKTWN1 +6ELIZ R -6ELIZAR31
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9389	D: 6HAYES -6YORKTWN1 +6FENTRES-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9390	D: 6HAYES -6YORKTWN1 +6FENTRES-6THRS2791
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9391	D: 6HAYES -6YORKTWN1 +6FENTRES-6HICKORY1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9392	D: 6HAYES -6YORKTWN1 +6FENTRES-6FENTR 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9393	D: 6HAYES -6YORKTWN1 +6FENTRES-6FENTRES1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9394	D: 6HAYES -6YORKTWN1 +6FENTRES-6FENTRES2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9395	D: 6HAYES -6YORKTWN1 +6GREATBR-6HICKORY1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9396	D: 6HAYES -6YORKTWN1 +6GRASF1D-6GREAT B1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9397	D: 6HAYES -6YORKTWN1 +6GRN RUN-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9398	D: 6HAYES -6YORKTWN1 +6GRN RUN-6LYNHAVN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9399	D: 6HAYES -6YORKTWN1 +6GRENWCH-6THOLE S1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9400	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENW 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9401	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9402	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH3
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9403	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH4
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9404	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH5
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9405	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH6
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9406	D: 6HAYES -6YORKTWN1 +6HARBORV-6YALKIN 1
314180	6HAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9407	D: 6HAYES -6YORKTWN1 +6HARBORV-6SMITFLD1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9408	D: 6HAYES -6YORKTWN1 +6HICKORY-6HICKORY1

PSS(m)MUST 10.2 – Managing and Utilizing System Transmission – SUN, MAR 10 2013 22:17 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9409	D:6HAYES -6YORKTWN1 +3IND PRK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9410	D:6HAYES -6YORKTWN1 +3IND PRK-3THOLE S1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9411	D:6HAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9412	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9413	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9414	D:6HAYES -6YORKTWN1 +6HUNTSN-6THRS2791
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9415	D:6HAYES -6YORKTWN1 +6HUNTSN-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9416	D:6HAYES -6YORKTWN1 +6LANDSTN-6STUMPY 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9417	D:6HAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9418	D:6HAYES -6YORKTWN1 +3LONDONB-3PENDLTON1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9419	D:6HAYES -6YORKTWN1 +3LONDONB-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9420	D:6HAYES -6YORKTWN1 +3LONDONB-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9421	D:6HAYES -6YORKTWN1 +6HARBOR-6CRITIDN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9422	D:6HAYES -6YORKTWN1 +6LK KING-6LKRINGAL
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9423	D:6HAYES -6YORKTWN1 +6LK KING-6LKRINGB1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9424	D:6HAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9425	D:6HAYES -6YORKTWN1 +6LYNHAVN-6THALIA 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9426	D:6HAYES -6YORKTWN1 +6LYNHAVN-6LYNHA 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9427	D:6HAYES -6YORKTWN1 +3MLAUGH-3REEVES 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9428	D:6HAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9429	D:6HAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9430	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9431	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9432	D:6HAYES -6YORKTWN1 +3PENDLTON-3VA BCH 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9433	D:6HAYES -6YORKTWN1 +3REEVES -3REEVE 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9434	D:6HAYES -6YORKTWN1 +3REEVES -3REEVES 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9435	D:6HAYES -6YORKTWN1 +3REEVES -3REEVES 2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9436	D:6HAYES -6YORKTWN1 +3REEVES -3GRUITAN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9437	D:6HAYES -6YORKTWN1 +3REEVES -3REEVE 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9438	D:6HAYES -6YORKTWN1 +3SEWILSPT-3SNORFIK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9439	D:6HAYES -6YORKTWN1 +3SEWILSPT-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9440	D:6HAYES -6YORKTWN1 +3SEWILSPT-3THOLE S1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9441	D:6HAYES -6YORKTWN1 +3SEWILSPT-6SEWILSPT1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9442	D:6HAYES -6YORKTWN1 +3SEWILSPT-6SEWILSPT2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9443	D:6HAYES -6YORKTWN1 +6SEWILSPT-6NAVYS 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9444	D:6HAYES -6YORKTWN1 +6SEWILSPT-6NAVYS1 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9445	D:6HAYES -6YORKTWN1 +6SNORFLK-6THRS2791
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9446	D:6HAYES -6YORKTWN1 +6NAVYS -6NAVYN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9447	D:6HAYES -6YORKTWN1 +6NAVYS1 -6NAVYN1 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9448	D:6HAYES -6YORKTWN1 +6STUMPY -6THRS2791
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9449	D:6HAYES -6YORKTWN1 +3THOLE S-3THOLE 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9450	D:6HAYES -6YORKTWN1 +6THRS279-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9451	D:6HAYES -6YORKTWN1 +3VA BCH -3VA BCH 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9452	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9453	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 2
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9454	D:6HAYES -6YORKTWN1 +6YADKIN -6YADKIN 11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9455	D:6HAYES -6YORKTWN1 +6YADKIN -6YADKIN 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9456	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9457	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 3
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9458	D:6HAYES -6YORKTWN1 +6YADKIN -6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9459	D:6HAYES -6YORKTWN1 +6CHCTUR-6KINGSFOL
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9460	D:6HAYES -6YORKTWN1 +6CHCTUR-6SURREY 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9461	D:6HAYES -6YORKTWN1 +6CHCTUR-6CHCT 11
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9462	D:6HAYES -6YORKTWN1 +6CHCTUR-6SURREY 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9463	D:6HAYES -6YORKTWN1 +3FRANKLIN -3JUNCAMP 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9464	D:6HAYES -6YORKTWN1 +3FRANKLIN -3WATKINS1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9465	D:6HAYES -6YORKTWN1 +6KINGSFOL-6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9466	D:6HAYES -6YORKTWN1 +3HANDSON-3S HAMPT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9467	D:6HAYES -6YORKTWN1 +3HOLLAND-3SUFFOLK1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9468	D:6HAYES -6YORKTWN1 +3HOLLAND-3JUNCAMP 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9469	D:6HAYES -6YORKTWN1 +3VOR106-3OAKR1231
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9470	D:6HAYES -6YORKTWN1 +3MYRTLE -3WINDSOR1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9471	D:6HAYES -6YORKTWN1 +3OAKR123-3SUFFCAP1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9472	D:6HAYES -6YORKTWN1 +6SMITFLD-6SURREY 1
314180	GHAYES	230.0	345	354	0.8947	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9473	D:6HAYES -6YORKTWN1 +3S HAMPT-3WATKINS1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9474	D:6HAYES -6YORKTWN1 +3S HAMPT-1SHAMPT11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9475	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFOLK21
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9476	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFEC 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9477	D:6HAYES -6YORKTWN1 +3SUFFOLK-3SUFFEC 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9478	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9479	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9480	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK3
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9481	D:6HAYES -6YORKTWN1 +6SUFFOLK-8SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9482	D:6HAYES -6YORKTWN1 +6SUFFOLK-8SUFFOLK2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9483	D:6HAYES -6YORKTWN1 +6SURREY -6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9484	D:6HAYES -6YORKTWN1 +6SURREY -6GRAVELA1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9485	D:6HAYES -6YORKTWN1 +6SURREY -6GRAVELB1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9486	D:6HAYES -6YORKTWN1 +6SURREY -1SURREY 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9487	D:6HAYES -6YORKTWN1 +6SURREY -1GRAVELA1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9488	D:6HAYES -6YORKTWN1 +3JUNCAMP -3JUNCAM 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9489	D:6HAYES -6YORKTWN1 +3WATKINS-3WATKI 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9490	D:6HAYES -6YORKTWN1 +3WATKINS-3WATKI 21
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9491	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9492	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9493	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9494	D:6HAYES -6YORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9495	D:6HAYES -6YORKTWN1 +8LOUDO 1-8LOUDOUN1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9496	D:6HAYES -6YORKTWN1 +8MORRIS-8MORRISV11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9497	D:6HAYES -6YORKTWN1 +8MT ST 1-8MT STM 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9498	D:6HAYES -6YORKTWN1 +8MT ST 2-8MT STM 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9499	D:6HAYES -6YORKTWN1 +8BRISTER-8CHANCE 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9500	D:6HAYES -6YORKTWN1 +8BRISTER-8MORRISV11
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9501	D:6HAYES -6YORKTWN1 +8BRISTER-8OX 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9502	D:6HAYES -6YORKTWN1 +8BATH CO-8LEXNGTNI

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9503	D: 6HAYES -6YORKTWN1 +8BATH CO-BVALLEY 1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9504	D: 6HAYES -6YORKTWN1 + BS0461 BATH 3W1 1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9505	D: 6HAYES -6YORKTWN1 + BS0462 BATH 3W3 1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9506	D: 6HAYES -6YORKTWN1 + BS0463 BATH 3W5 1
314180	6HAYES	230.0	345	354	0.8892	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9507	D: 6HAYES -6YORKTWN1 +8CARSON -8CLOVER 1
314180	6HAYES	230.0	345	354	0.8920	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9508	D: 6HAYES -6YORKTWN1 +8CARSON -8DELTHAN1
314180	6HAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9509	D: 6HAYES -6YORKTWN1 +8CARSON -8FIVEFRK1
314180	6HAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9510	D: 6HAYES -6YORKTWN1 +8CARSON -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9511	D: 6HAYES -6YORKTWN1 +8CHICKAHW-BELMONT 1
314180	6HAYES	230.0	345	354	0.8908	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9512	D: 6HAYES -6YORKTWN1 +8CHICKAHW-8SURREY 1
314180	6HAYES	230.0	345	354	0.8906	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9513	D: 6HAYES -6YORKTWN1 +8CLIFTON-8LOUDOUN1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9514	D: 6HAYES -6YORKTWN1 +8CLIFTON-8OX 1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9515	D: 6HAYES -6YORKTWN1 +8CHANCE -8LDYSMT1
314180	6HAYES	230.0	345	354	0.8902	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9516	D: 6HAYES -6YORKTWN1 +8DOOMS -8CUNNING1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9517	D: 6HAYES -6YORKTWN1 +8DOOMS -8LEANGTN1
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9518	D: 6HAYES -6YORKTWN1 +8DOOMS -8VALLEY 1
314180	6HAYES	230.0	345	354	0.8901	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9519	D: 6HAYES -6YORKTWN1 +8ELMONT -8CUNNING1
314180	6HAYES	230.0	345	354	0.8892	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9520	D: 6HAYES -6YORKTWN1 +8ELMONT -8LDYSMT1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9521	D: 6HAYES -6YORKTWN1 +8FENTRES-8YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9522	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAI
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9523	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAI
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9524	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAI
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9525	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAI
314180	6HAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9526	D: 6HAYES -6YORKTWN1 +8LDYSMT1-8NO ANNA1
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9527	D: 6HAYES -6YORKTWN1 +8LDYSMT1-8POSSUM 1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9528	D: 6HAYES -6YORKTWN1 +8LOUDOUN-8MORRISV1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9529	D: 6HAYES -6YORKTWN1 +8LOUDOUN-8BRAMBLE1
314180	6HAYES	230.0	345	354	0.8918	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9530	D: 6HAYES -6YORKTWN1 +8MOLTHAN-8NO ANNA1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9531	D: 6HAYES -6YORKTWN1 +8FIVEFRK-8SEPTA 1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9532	D: 6HAYES -6YORKTWN1 +8MORRISV1-8NO ANNA1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9533	D: 6HAYES -6YORKTWN1 +8MORRISV1-8FRONT R1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9534	D: 6HAYES -6YORKTWN1 +8MT STM -8VALLEY 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9535	D: 6HAYES -6YORKTWN1 +8MT STM -3M STORM1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9536	D: 6HAYES -6YORKTWN1 +8MT STM -1MT STM11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9537	D: 6HAYES -6YORKTWN1 +8MT STM -1MT STM21
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9538	D: 6HAYES -6YORKTWN1 +8MT STM -1MT STM31
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9539	D: 6HAYES -6YORKTWN1 +8NO ANNA-1N ANNA11
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9540	D: 6HAYES -6YORKTWN1 +8NO ANNA-1N ANNA21
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9541	D: 6HAYES -6YORKTWN1 +8OX -8POSSUM 1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9542	D: 6HAYES -6YORKTWN1 +3M STORM-3N BRUCH1
314180	6HAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9543	D: 6HAYES -6YORKTWN1 +8SEPTA -8SURREY 1
314180	6HAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9544	D: 6HAYES -6YORKTWN1 +8SEPTA -8YADKIN 1
314180	6HAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9545	D: 6HAYES -6YORKTWN1 +8SURREY -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9546	D: 6HAYES -6YORKTWN1 +8SURREY -1SURREY 21
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9547	D: 6HAYES -6YORKTWN1 +8PL VIEW-8BRAMBLE1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9548	D: 6HAYES -6YORKTWN1 +8YADKIN -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9549	D: 6HAYES -6YORKTWN1 +8FRONT R-1FRONT RY1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9550	D:6HAYES -6YORKTWN1 +3SKIFCRE-6SKIFCRE1
314180	6HAYES	230.0	345	354	0.8893	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9551	D:6HAYES -6YORKTWN1 +8SURY -8SKIFCRE1
314180	6HAYES	230.0	345	354	0.8893	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9552	D:6HAYES -6YORKTWN1 +6SKIFCRE-6SKIFCRE1
314180	6HAYES	230.0	345	354	0.8893	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9553	D:6HAYES -6YORKTWN1 +6SKIFCRE-6SKIFCRE2
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9554	D:6HAYES -6YORKTWN1 +6WHEALTN-6WHEALTN1
314180	6HAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	JD	9555	D:6HAYES -6YORKTWN1 +6SKIFCRE-6WHEALTN1
314176	6HARMONY	230.0	345	354	0.8866	1.0352	0.9300	1.0700	0.9835	1.0870	JD	11656	D:3WEST PT-3LANEXA 1 +6PAPERMI-6CORRECTN1
314189	6PAPERMI	230.0	345	354	0.8818	1.0266	0.9300	1.0700	0.9753	1.0779	JD	11656	D:3WEST PT-3LANEXA 1 +6PAPERMI-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8845	1.0352	0.9300	1.0700	0.9835	1.0870	JD	11678	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.8848	1.0266	0.9300	1.0700	0.9753	1.0779	JD	11678	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8881	1.0255	0.9300	1.0700	0.9742	1.0768	JD	11678	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314399	6PEMBROK	230.0	345	356	0.8705	1.0324	0.9300	1.0700	0.9807	1.0840	JD	24991	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8705	1.0324	0.9300	1.0700	0.9807	1.0840	JD	24991	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8738	1.0324	0.9300	1.0700	0.9807	1.0840	JD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8750	1.0329	0.9300	1.0700	0.9812	1.0845	JD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8738	1.0304	0.9300	1.0700	0.9788	1.0819	JD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314399	6PEMBROK	230.0	345	356	0.8652	1.0324	0.9300	1.0700	0.9807	1.0840	JD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8654	1.0329	0.9300	1.0700	0.9812	1.0845	JD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0304	0.9300	1.0700	0.9788	1.0819	JD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8639	1.0339	0.9300	1.0700	0.9822	1.0856	JD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8700	1.0304	0.9300	1.0700	0.9788	1.0819	JD	25482	D:6PEMBROK-6SHELBNK1 +6PENINSI-6SHELBNK1
314402	6PENINSI	230.0	345	356	0.8748	1.0329	0.9300	1.0700	0.9812	1.0845	JD	25483	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8735	1.0304	0.9300	1.0700	0.9788	1.0819	JD	25483	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8651	1.0329	0.9300	1.0700	0.9812	1.0845	JD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8649	1.0304	0.9300	1.0700	0.9788	1.0819	JD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8636	1.0339	0.9300	1.0700	0.9822	1.0856	JD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9560	1.0566	JD	38959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314500	6NAVYS	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9559	1.0566	JD	38959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314501	6NAVYS1	230.0	345	359	0.8748	1.0062	0.9300	1.0700	0.9559	1.0565	JD	38959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314505	6NAVYN	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9560	1.0566	JD	38959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314510	6NAVYN1	230.0	345	359	0.8746	1.0061	0.9300	1.0700	0.9558	1.0564	JD	38959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314348	2GRETN 1	69.0	345	358	0.8448	1.0169	0.9300	1.0700	0.9660	1.0677	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314354	2ALTVS 1	69.0	345	358	0.8592	1.0326	0.9300	1.0700	0.9810	1.0843	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314515	3ALTVS 1	115.0	345	358	0.8599	1.0005	0.9300	1.0700	0.9505	1.0505	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314666	3ALTVSTA	115.0	345	358	0.8595	1.0000	0.9300	1.0700	0.9500	1.0500	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314667	4ALTVSTA	138.0	345	358	0.8479	0.9984	0.9300	1.0700	0.9484	1.0483	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314668	4BANISTR	138.0	345	358	0.9072	0.9946	0.9300	1.0700	0.9418	1.0443	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314670	2ALTVSTA	69.0	345	358	0.8690	1.0324	0.9300	1.0700	0.9808	1.0840	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314671	4BEARSKN	138.0	345	358	0.8885	0.9965	0.9300	1.0700	0.9467	1.0463	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314680	2CHATHAM	69.0	345	358	0.8817	1.0047	0.9300	1.0700	0.9545	1.0550	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314680	2CHATH TP	69.0	345	358	0.8323	1.0053	0.9300	1.0700	0.9545	1.0556	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314689	3DOMINIO	115.0	345	358	0.8339	0.9927	0.9300	1.0700	0.9431	1.0424	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314694	3GRIT	115.0	345	358	0.8615	1.0021	0.9300	1.0700	0.9520	1.0522	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314700	3HALL BR	115.0	345	358	0.8615	1.0000	0.9300	1.0700	0.9500	1.0500	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314705	3HURT	115.0	345	358	0.8649	1.0000	0.9300	1.0700	0.9500	1.0500	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314712	3OTTER R	115.0	345	358	0.8619	0.9999	0.9300	1.0700	0.9499	1.0499	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI
314727	2CLMX DP	69.0	345	358	0.8289	1.0021	0.9300	1.0700	0.9520	1.0522	JD	54247	D:8BATH CO-RVALLLEY 1 +8DOOMS -8LENGTNI

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314728	2CIMX TP	69.0	345	358	0.8296	1.0028	0.9300	1.0700	0.9527	1.0530	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314729	2GLADYS	69.0	345	358	0.8450	1.0111	0.9300	1.0700	0.9605	1.0616	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314730	2GLDY TP	69.0	345	358	0.8653	1.0297	0.9300	1.0700	0.9782	1.0812	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314731	2GREINA	69.0	345	358	0.8446	1.0166	0.9300	1.0700	0.9658	1.0675	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314732	2GRNA FB	69.0	345	358	0.8446	1.0166	0.9300	1.0700	0.9658	1.0675	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314733	2GRNA DP	69.0	345	358	0.8426	1.0149	0.9300	1.0700	0.9641	1.0656	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314734	2KLOP DP	69.0	345	358	0.8601	1.0261	0.9300	1.0700	0.9748	1.0774	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314735	2KLOP TP	69.0	345	358	0.8601	1.0261	0.9300	1.0700	0.9748	1.0774	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314736	2SHKO DP	69.0	345	358	0.8421	1.0051	0.9300	1.0700	0.9549	1.0554	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314737	2SM35757	69.0	345	358	0.8510	1.0203	0.9300	1.0700	0.9693	1.0713	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314738	2MT AIRY	69.0	345	358	0.8450	1.0148	0.9300	1.0700	0.9641	1.0655	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314739	2MT A TP	69.0	345	358	0.8510	1.0203	0.9300	1.0700	0.9693	1.0713	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314740	2ALTVS35	69.0	345	358	0.8690	1.0324	0.9300	1.0700	0.9808	1.0840	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314789	2BARGNN	69.0	345	358	0.8885	0.9965	0.9300	1.0700	0.9467	1.0463	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314836	3BALCFLS	115.0	345	365	0.3761	0.9961	0.9300	1.0700	0.9463	1.0460	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314837	3BUENA V	115.0	345	365	0.3749	0.9952	0.9300	1.0700	0.9455	1.0450	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314838	3BUSTLEB	115.0	345	365	0.3804	0.9984	0.9300	1.0700	0.9485	1.0484	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314839	3BUSTLT T	115.0	345	365	0.3806	0.9986	0.9300	1.0700	0.9487	1.0485	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314840	4CLFTN F	230.0	345	365	0.3594	0.9802	0.9300	1.0700	0.9312	1.0292	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314841	4CLFTN F	138.0	345	365	0.3641	1.0359	0.9300	1.0700	0.9841	1.0877	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314842	4COVNGT2	138.0	345	365	0.3474	1.0258	0.9300	1.0700	0.9742	1.0768	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314843	4COVNGT1	138.0	345	365	0.3449	1.0238	0.9300	1.0700	0.9726	1.0750	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314844	3CRAIGSV	115.0	345	365	0.3752	0.9955	0.9300	1.0700	0.9457	1.0452	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314845	3EFFNGR	115.0	345	365	0.3797	0.9986	0.9300	1.0700	0.9487	1.0485	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314846	3FAIRFLD	115.0	345	365	0.3792	0.9977	0.9300	1.0700	0.9478	1.0476	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314847	4FUDGE H	138.0	345	365	0.3420	1.0217	0.9300	1.0700	0.9706	1.0728	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314848	3GLASGOW	115.0	345	365	0.3777	0.9972	0.9300	1.0700	0.9473	1.0471	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314849	3GOSHEN	115.0	345	365	0.3767	0.9964	0.9300	1.0700	0.9466	1.0462	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314851	3JAMES L	115.0	345	365	0.3747	0.9952	0.9300	1.0700	0.9455	1.0450	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314852	3JMS L T	115.0	345	365	0.3753	0.9956	0.9300	1.0700	0.9458	1.0454	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314853	3LEXNGTN	115.0	345	365	0.3818	0.9993	0.9300	1.0700	0.9494	1.0493	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314854	6LEXNGT1	230.0	345	365	0.3860	0.9921	0.9300	1.0700	0.9425	1.0417	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314855	6LOWMOOR	230.0	345	365	0.3580	0.9798	0.9300	1.0700	0.9308	1.0288	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314856	6LEXNGT2	230.0	345	365	0.3860	0.9921	0.9300	1.0700	0.9425	1.0417	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314857	4LOWMOOR	138.0	345	365	0.3584	1.0334	0.9300	1.0700	0.9817	1.0850	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314858	3ROCKB T	115.0	345	365	0.3763	0.9959	0.9300	1.0700	0.9461	1.0457	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314859	4WSTVACO	138.0	345	365	0.3286	1.0192	0.9300	1.0700	0.9682	1.0701	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314860	4E MILL	138.0	345	365	0.3993	1.0198	0.9300	1.0700	0.9688	1.0708	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314861	3SKIMMER	115.0	345	365	0.7818	0.9748	0.9300	1.0700	0.9260	1.0235	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314863	4LOWMO 1	138.0	345	365	0.3586	1.0339	0.9300	1.0700	0.9822	1.0856	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314901	8BATH CO	500.0	345	366	0.4113	1.0500	0.9300	1.0700	0.9975	1.1025	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314912	6LEXNGTN	500.0	345	366	0.4210	1.0468	0.9300	1.0700	0.9944	1.0991	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315156	11ALLBRI	13.8	345	358	0.8615	1.0000	0.9300	1.0700	0.9500	1.0500	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315165	11HURT 1	13.8	345	358	0.8975	0.9935	0.9300	1.0700	0.9438	1.0431	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315166	11HURT 2	13.8	345	358	0.8975	0.9935	0.9300	1.0700	0.9438	1.0431	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315201	11BATH 1A	20.5	345	366	0.4190	1.0283	0.9300	1.0700	0.9769	1.0797	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315202	11BATH 2B	20.5	345	366	0.4262	1.0284	0.9300	1.0700	0.9770	1.0798	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
315203	LBATH 3C	20.5	345	366	0.4264	1.0278	0.9300	1.0700	0.9764	1.0792	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315204	LBATH 4D	20.5	345	366	0.4186	1.0279	0.9300	1.0700	0.9765	1.0793	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315205	LBATH 5E	20.5	345	366	0.4188	1.0282	0.9300	1.0700	0.9768	1.0796	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315206	LBATH 6F	20.5	345	366	0.4180	1.0281	0.9300	1.0700	0.9767	1.0795	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0461	BATH 3W1	1.0	345	366	0.4022	1.0249	0.9300	1.0700	0.9737	1.0762	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0462	BATH 3W3	1.0	345	366	0.3985	1.0224	0.9300	1.0700	0.9713	1.0735	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0463	BATH 3W5	1.0	345	366	0.3985	1.0228	0.9300	1.0700	0.9716	1.0739	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS1032	HURT 3WD	1.0	345	358	0.8663	0.9995	0.9300	1.0700	0.9495	1.0495	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:17 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:14 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\Wapsys.mon
ContIn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 100.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	223.2	104.7	26	D:30AKRI44-3MYRTLE 1 + 6HARMONY-6PAPERMIL
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	223.2	104.7	358	D:30AKRI44-3SUFFOLK 1 + 6HARMONY-6PAPERMIL
313813	3OCRAN	115	314178	3LANCAST	115	1	LN	311.7	269.0	115.9	679	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6NORNECK 1
313813	3OCRAN	115	314191	3WHITE S	115	1	LN	327.7	269.0	121.8	679	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6NORNECK 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	275.2	249.0	110.5	679	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6NORNECK 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	339.9	169.0	201.2	679	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6NORNECK 1
313813	3OCRAN	115	314178	3LANCAST	115	1	LN	324.8	269.0	120.7	680	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6LANEXA 1
313813	3OCRAN	115	314191	3WHITE S	115	1	LN	341.6	269.0	127.0	680	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	289.4	249.0	116.2	680	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	256.8	249.0	103.1	680	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	355.9	169.0	210.6	680	D:6DAHLGRE-6ARNOLDS 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	187.7	169.0	111.1	1009	D:6DAHLGRE-6OAKGROV 1 + 6DUNNSVL-6NORNECK 1
314181	3NORNECK	115	314182	6NORNECK	230	2	TR	226.8	206.6	109.8	1009	D:6DAHLGRE-6OAKGROV 1 + 6DUNNSVL-6NORNECK 1
313813	3OCRAN	115	314191	3WHITE S	115	1	LN	274.2	269.0	101.9	1010	D:6DAHLGRE-6OAKGROV 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	285.3	169.0	168.8	1010	D:6DAHLGRE-6OAKGROV 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314176	6HARMONY	230	1	TR	233.7	223.2	104.7	1019	D:6DAHLGRE-6OAKGROV 1 + 6HARMONY-6PAPERMIL
313813	3OCRAN	115	314178	3LANCAST	115	1	LN	317.1	269.0	117.9	3934	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6NORNECK 1
313813	3OCRAN	115	314191	3WHITE S	115	1	LN	333.6	269.0	124.0	3934	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6NORNECK 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	281.0	249.0	112.9	3934	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6NORNECK 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	347.8	169.0	205.8	3934	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6NORNECK 1
313813	3OCRAN	115	314178	3LANCAST	115	1	LN	324.6	269.0	120.7	3935	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
313813	3OCRAN	115	314191	3WHITE S	115	1	LN	341.5	269.0	126.9	3935	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	289.0	249.0	116.1	3935	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	255.8	249.0	102.7	3935	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	355.8	169.0	210.5	3935	D:6ARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
313813	3OCRA	115	314178	3LANCAST	115	1	LN	318.0	21.8	269.0	118.2	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	334.4	30.5	269.0	124.3	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	282.1	23.6	249.0	113.3	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	348.0	37.5	169.0	205.9	4254	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314178	3LANCAST	115	1	LN	325.4	21.8	269.0	121.0	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	342.2	30.5	269.0	127.2	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	290.1	23.6	249.0	116.5	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	256.7	43.6	249.0	103.1	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	356.8	37.5	169.0	211.1	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	211.7	37.5	169.0	125.3	4892	D:6CANGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	192.1	37.5	169.0	113.7	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	838.0	531.4	830.0	101.0	40800	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	838.0	531.4	830.0	101.0	40971	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	856.2	531.4	830.0	103.2	50117	D:6THRS279-6YADKIN 1 +8FENTRES-8YADKIN 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:14 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.AC.sub
Monit File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
313810	6DAHLGREN	230.0	345	354	0.3456	1.0021	0.9300	1.0700	0.9520	1.0522	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
313813	3OCGRAN	115.0	345	354	0.7150	1.0055	0.9300	1.0700	0.9552	1.0558	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314139	6OAGROV	230.0	345	354	0.3532	1.0050	0.9300	1.0700	0.9547	1.0552	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314173	3GARNER	115.0	345	354	0.5196	1.0066	0.9300	1.0700	0.9563	1.0569	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8641	1.0049	0.9300	1.0700	0.9546	1.0551	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314178	3BLANCAST	115.0	345	354	0.6870	1.0071	0.9300	1.0700	0.9566	1.0575	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3986	1.0147	0.9300	1.0700	0.9640	1.0654	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3642	1.0061	0.9300	1.0700	0.9558	1.0564	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3613	1.0058	0.9300	1.0700	0.9555	1.0560	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9138	1.0048	0.9300	1.0700	0.9546	1.0550	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314187	3WAN 176	115.0	345	354	0.8486	0.9920	0.9300	1.0700	0.9424	1.0416	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3581	1.0058	0.9300	1.0700	0.9555	1.0561	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7451	1.0045	0.9300	1.0700	0.9543	1.0548	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8647	1.0055	0.9300	1.0700	0.9553	1.0558	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8645	1.0053	0.9300	1.0700	0.9551	1.0556	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6873	1.0076	0.9300	1.0700	0.9572	1.0580	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
315034	3NNECK1	13.2	345	354	0.4088	1.0407	0.9300	1.0700	0.9887	1.0928	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
315035	3NNECK2	13.2	345	354	0.4088	1.0407	0.9300	1.0700	0.9887	1.0928	LD	679	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2344	1.0021	0.9300	1.0700	0.9520	1.0522	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
313813	3OCGRAN	115.0	345	354	0.6473	1.0055	0.9300	1.0700	0.9552	1.0558	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
313828	3WHITEMAR	115.0	345	354	0.9164	1.0057	0.9300	1.0700	0.9554	1.0560	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314139	6OAGROV	230.0	345	354	0.2412	1.0050	0.9300	1.0700	0.9547	1.0552	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314172	6DUNNSVI	230.0	345	354	0.2501	1.0102	0.9300	1.0700	0.9597	1.0607	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4222	1.0066	0.9300	1.0700	0.9563	1.0569	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8158	1.0049	0.9300	1.0700	0.9546	1.0551	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314178	3BLANCAST	115.0	345	354	0.6146	1.0071	0.9300	1.0700	0.9568	1.0575	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2754	1.0147	0.9300	1.0700	0.9640	1.0654	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2515	1.0061	0.9300	1.0700	0.9558	1.0564	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2487	1.0058	0.9300	1.0700	0.9555	1.0560	LD	680	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVI-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UpplLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314184	3SHACKLE	115.0	345	354	0.8765	1.0048	0.9300	1.0700	0.9546	1.0550	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314187	3MAN 176	115.0	345	354	0.7991	0.9920	0.9300	1.0700	0.9424	1.0416	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9071	1.0043	0.9300	1.0700	0.9541	1.0545	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.2457	1.0038	0.9300	1.0700	0.9555	1.0561	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6821	1.0045	0.9300	1.0700	0.9543	1.0548	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345	354	0.8163	1.0055	0.9300	1.0700	0.9553	1.0558	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8162	1.0053	0.9300	1.0700	0.9551	1.0556	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6142	1.0076	0.9300	1.0700	0.9572	1.0572	LD	1009	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6MORNECK1
315034	1NNECK1	13.2	345	354	0.2825	1.0407	0.9300	1.0700	0.9887	1.0928	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
315035	1NNECK2	13.2	345	354	0.2825	1.0407	0.9300	1.0700	0.9887	1.0928	LD	680	D:6DAHLGRE-6ARNOLD31 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.8816	1.0050	0.9300	1.0700	0.9547	1.0552	LD	1009	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6MORNECK1
314182	6MORNECK	230.0	345	354	0.8803	1.0061	0.9300	1.0700	0.9558	1.0564	LD	1009	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6MORNECK1
314193	6SANDERS	230.0	345	354	0.8803	1.0058	0.9300	1.0700	0.9555	1.0560	LD	1009	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6MORNECK1
314190	6WESTHOR	230.0	345	354	0.8812	1.0058	0.9300	1.0700	0.9555	1.0561	LD	1009	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6MORNECK1
313813	3OCRAV	115.0	345	354	0.8508	1.0055	0.9300	1.0700	0.9552	1.0558	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.6253	1.0050	0.9300	1.0700	0.9547	1.0552	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.6227	1.0102	0.9300	1.0700	0.9597	1.0607	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.7404	1.0066	0.9300	1.0700	0.9563	1.0569	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314181	3MORNECK	115.0	345	354	0.6804	1.0147	0.9300	1.0700	0.9640	1.0654	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314182	6MORNECK	230.0	345	354	0.6242	1.0061	0.9300	1.0700	0.9558	1.0564	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314193	6SANDERS	230.0	345	354	0.6240	1.0058	0.9300	1.0700	0.9555	1.0560	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.6248	1.0058	0.9300	1.0700	0.9555	1.0561	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8671	1.0045	0.9300	1.0700	0.9543	1.0548	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.8668	1.0076	0.9300	1.0700	0.9587	1.0590	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
315034	1NNECK1	13.2	345	354	0.6979	1.0407	0.9300	1.0700	0.9887	1.0928	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
315035	1NNECK2	13.2	345	354	0.6979	1.0407	0.9300	1.0700	0.9887	1.0928	LD	1010	D:6DAHLGRE-6OAKGROVI +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	1351	D:6ROCKLAN-6MARTICK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	1679	D:6ROCKLAN-6YORKTWN1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8915	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2006	D:6OCRAV -3LANCAST1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8915	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2332	D:6OCRAV -3WHITE S1 +6HAYES -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2657	D:6BENCHRC-6NP NEWS1 +6HAYES -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8934	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314399	6PMBROK	230.0	345	356	0.8919	1.0324	0.9300	1.0700	0.9807	1.0840	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8905	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8952	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2722	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8912	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314399	6PMBROK	230.0	345	356	0.8997	1.0324	0.9300	1.0700	0.9807	1.0840	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8885	1.0329	0.9300	1.0700	0.9812	1.0845	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8882	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8830	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2723	D:6BENCHRC-6NP NEWS1 +6PENINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8743	1.0342	0.9300	1.0700	0.9825	1.0860	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314399	6PMBROK	230.0	345	356	0.8729	1.0324	0.9300	1.0700	0.9807	1.0840	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8705	1.0329	0.9300	1.0700	0.9812	1.0845	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8716	1.0304	0.9300	1.0700	0.9788	1.0819	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8690	1.0339	0.9300	1.0700	0.9822	1.0856	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8761	1.0363	0.9300	1.0700	0.9845	1.0882	LD	2728	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	2981	D:6BENCHRC-6CHCKTUK1 +6HAYES -6YORKTWN1
313818	6BENCHRC	230.0	345	360	0.8858	1.0317	0.9300	1.0700	0.9801	1.0833	LD	3046	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELENK1
314398	6NP NEWS	230.0	345	356	0.8875	1.0342	0.9300	1.0700	0.9825	1.0860	LD	3046	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELENK1
314399	6PEMAROK	230.0	345	356	0.8863	1.0324	0.9300	1.0700	0.9807	1.0840	LD	3046	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELENK1
314407	6SHELENK	230.0	345	356	0.8893	1.0304	0.9300	1.0700	0.9788	1.0819	LD	3046	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELENK1
314442	6NP NE 1	230.0	345	356	0.8893	1.0363	0.9300	1.0700	0.9845	1.0882	LD	3046	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6SHELENK1
313818	6BENCHRC	230.0	345	360	0.8916	1.0317	0.9300	1.0700	0.9801	1.0833	LD	3047	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314398	6NP NEWS	230.0	345	356	0.8833	1.0342	0.9300	1.0700	0.9825	1.0860	LD	3047	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314399	6PEMAROK	230.0	345	356	0.8821	1.0324	0.9300	1.0700	0.9807	1.0840	LD	3047	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8813	1.0329	0.9300	1.0700	0.9812	1.0845	LD	3047	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8851	1.0363	0.9300	1.0700	0.9845	1.0882	LD	3047	D:6BENCHRC-6CHCKTUK1 +6PENINSI-6TABB 1
313818	6BENCHRC	230.0	345	360	0.8713	1.0317	0.9300	1.0700	0.9801	1.0833	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8730	1.0342	0.9300	1.0700	0.9825	1.0860	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314399	6PEMAROK	230.0	345	356	0.8719	1.0324	0.9300	1.0700	0.9807	1.0840	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8709	1.0329	0.9300	1.0700	0.9812	1.0845	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314407	6SHELENK	230.0	345	356	0.8749	1.0304	0.9300	1.0700	0.9788	1.0819	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8646	1.0339	0.9300	1.0700	0.9822	1.0856	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
313810	6DAHLGRN	230.0	345	354	0.8748	1.0363	0.9300	1.0700	0.9845	1.0882	LD	3052	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314173	3GARNER	115.0	345	354	0.8570	1.0049	0.9300	1.0700	0.9546	1.0551	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314174	3HARMONY	115.0	345	354	0.8570	1.0049	0.9300	1.0700	0.9546	1.0551	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314178	3LANCAST	115.0	345	354	0.8721	1.0071	0.9300	1.0700	0.9568	1.0575	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314181	3GRONECK	115.0	345	354	0.8683	1.0147	0.9300	1.0700	0.9640	1.0654	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314182	6GRONECK	230.0	345	354	0.8336	1.0061	0.9300	1.0700	0.9558	1.0560	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314183	6SANDERS	230.0	345	354	0.8304	1.0058	0.9300	1.0700	0.9555	1.0560	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314184	3SHACKLE	115.0	345	354	0.9090	1.0048	0.9300	1.0700	0.9546	1.0550	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314187	3WAN 176	115.0	345	354	0.8415	0.9920	0.9300	1.0700	0.9424	1.0416	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314190	6WESTHOR	230.0	345	354	0.8268	1.0058	0.9300	1.0700	0.9555	1.0561	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314191	3WHITE S	115.0	345	354	0.7231	1.0045	0.9300	1.0700	0.9543	1.0548	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314385	3HARMO 1	115.0	345	354	0.8576	1.0055	0.9300	1.0700	0.9553	1.0558	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314395	3HARMO 2	115.0	345	354	0.8575	1.0053	0.9300	1.0700	0.9551	1.0556	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
314400	3LANCA 1	115.0	345	354	0.8724	1.0076	0.9300	1.0700	0.9572	1.0580	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
315034	1INNECK1	13.2	345	354	0.3778	1.0407	0.9300	1.0700	0.9887	1.0928	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
315035	1INNECK2	13.2	345	354	0.3778	1.0407	0.9300	1.0700	0.9887	1.0928	LD	3934	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6GRONECK1
313810	6DAHLGRN	230.0	345	354	0.2594	1.0021	0.9300	1.0700	0.9520	1.0522	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCARN	115.0	345	354	0.6486	1.0055	0.9300	1.0700	0.9552	1.0558	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMARS	115.0	345	354	0.9166	1.0057	0.9300	1.0700	0.9554	1.0560	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314131	3ARNOLDS	230.0	345	354	0.2394	1.0029	0.9300	1.0700	0.9528	1.0531	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314139	6DAKGROV	230.0	345	354	0.2462	1.0050	0.9300	1.0700	0.9547	1.0552	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2549	1.0102	0.9300	1.0700	0.9597	1.0607	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4248	1.0066	0.9300	1.0700	0.9563	1.0569	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8163	1.0049	0.9300	1.0700	0.9546	1.0551	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6161	1.0071	0.9300	1.0700	0.9568	1.0575	LD	3935	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	UpplLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314181	3NORNECK	115.0	345	354	0.2798	1.0147	0.9300	1.0700	0.9640	1.0654	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2563	1.0061	0.9300	1.0700	0.9558	1.0564	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2536	1.0058	0.9300	1.0700	0.9555	1.0560	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.8768	1.0048	0.9300	1.0700	0.9546	1.0550	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314187	3WAM 176	115.0	345	354	0.7997	0.9920	0.9300	1.0700	0.9424	1.0416	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9073	1.0043	0.9300	1.0700	0.9541	1.0545	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314190	3WESTHOR	230.0	345	354	0.2506	1.0058	0.9300	1.0700	0.9555	1.0561	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6541	1.0045	0.9300	1.0700	0.9543	1.0548	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8169	1.0055	0.9300	1.0700	0.9553	1.0558	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314385	3HARMO 2	115.0	345	354	0.8167	1.0053	0.9300	1.0700	0.9551	1.0556	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6164	1.0076	0.9300	1.0700	0.9572	1.0580	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
315034	1NNECK1	13.2	345	354	0.2869	1.0407	0.9300	1.0700	0.9887	1.0928	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
315035	1NNECK2	13.2	345	354	0.2869	1.0407	0.9300	1.0700	0.9887	1.0928	LD	3935	D: GARNOLDS-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8907	1.0396	0.9300	1.0700	0.9876	1.0916	LD	3947	D: GARNOLDS-6COMORN 1 + 6HAYES -6YORKTWN1
313810	6DAHLGREN	230.0	345	354	0.3031	1.0021	0.9300	1.0700	0.9520	1.0522	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
313813	3OCRAH	115.0	345	354	0.6298	1.0055	0.9300	1.0700	0.9552	1.0558	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314131	6ARNOLDS	230.0	345	354	0.3024	1.0029	0.9300	1.0700	0.9528	1.0531	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3117	1.0050	0.9300	1.0700	0.9547	1.0552	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.4923	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8565	1.0049	0.9300	1.0700	0.9546	1.0551	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314175	6COMORN	230.0	345	354	0.3023	1.0031	0.9300	1.0700	0.9529	1.0533	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314176	3LANCAST	115.0	345	354	0.6700	1.0071	0.9300	1.0700	0.9568	1.0575	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3666	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3247	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3213	1.0058	0.9300	1.0700	0.9555	1.0560	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9088	1.0048	0.9300	1.0700	0.9546	1.0550	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314187	3WAM 176	115.0	345	354	0.8408	0.9920	0.9300	1.0700	0.9424	1.0416	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314190	3WESTHOR	230.0	345	354	0.3174	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7217	1.0045	0.9300	1.0700	0.9543	1.0548	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8571	1.0055	0.9300	1.0700	0.9553	1.0558	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314385	3HARMO 2	115.0	345	354	0.8569	1.0053	0.9300	1.0700	0.9551	1.0556	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6703	1.0076	0.9300	1.0700	0.9572	1.0580	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
315034	1NNECK1	13.2	345	354	0.3698	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
315035	1NNECK2	13.2	345	354	0.3698	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4254	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2286	1.0021	0.9300	1.0700	0.9520	1.0522	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
313813	3OCRAH	115.0	345	354	0.6461	1.0055	0.9300	1.0700	0.9552	1.0558	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
313828	3WHITEHART	115.0	345	354	0.9161	1.0057	0.9300	1.0700	0.9554	1.0560	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314131	6ARNOLDS	230.0	345	354	0.2282	1.0029	0.9300	1.0700	0.9528	1.0531	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2359	1.0050	0.9300	1.0700	0.9547	1.0552	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2455	1.0102	0.9300	1.0700	0.9597	1.0607	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4197	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8152	1.0049	0.9300	1.0700	0.9546	1.0551	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314175	6COMORN	230.0	345	354	0.2281	1.0031	0.9300	1.0700	0.9529	1.0533	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314176	3LANCAST	115.0	345	354	0.6133	1.0071	0.9300	1.0700	0.9568	1.0575	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2716	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2468	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2439	1.0058	0.9300	1.0700	0.9555	1.0560	LD	4255	D: 6BIRCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDropt	VoltRise	Viol	Ncon	Contingency Description
314184	3SRACKLE	115.0	345	354	0.8761	1.0048	0.9300	1.0700	0.9546	1.0550	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314187	3MAN 176	115.0	345	354	0.7985	0.9920	0.9300	1.0700	0.9424	1.0416	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314188	3WEST FT	115.0	345	354	0.9068	1.0043	0.9300	1.0700	0.9541	1.0541	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314190	6WESTW2R	230.0	345	354	0.9407	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.6810	1.0045	0.9300	1.0700	0.9543	1.0548	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345	354	0.8157	1.0055	0.9300	1.0700	0.9553	1.0558	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6136	1.0076	0.9300	1.0700	0.9572	1.0556	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2785	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.2785	1.0407	0.9300	1.0700	0.9887	1.0928	LD	4255	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8910	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4267	D:6BIRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4586	D:6BIRCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.9608	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4891	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.8152	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4891	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.8149	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4891	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6NORNECK1
314190	6WESTW2R	230.0	345	354	0.8154	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4891	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6NORNECK1
314172	6DUNNSVL	230.0	345	354	0.7451	1.0102	0.9300	1.0700	0.9597	1.0607	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.8677	1.0066	0.9300	1.0700	0.9563	1.0563	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.8264	1.0147	0.9300	1.0700	0.9640	1.0654	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.7464	1.0061	0.9300	1.0700	0.9558	1.0564	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.7461	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314190	6WESTW2R	230.0	345	354	0.7466	1.0058	0.9300	1.0700	0.9555	1.0561	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.8476	1.0407	0.9300	1.0700	0.9876	1.0928	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.8476	1.0407	0.9300	1.0700	0.9876	1.0928	LD	4892	D:6OAKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	4904	D:6OAKGROV-6WESTMOR1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	5221	D:6DUNNSVL-6NORNECK1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8432	1.0061	0.9300	1.0700	0.9558	1.0564	LD	5226	D:6DUNNSVL-6NORNECK1 +6NORNECK-6SANDERS1
314183	6SANDERS	230.0	345	354	0.8964	1.0147	0.9300	1.0700	0.9640	1.0654	LD	5227	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314182	6NORNECK	230.0	345	354	0.8085	1.0061	0.9300	1.0700	0.9558	1.0564	LD	5227	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314183	6SANDERS	230.0	345	354	0.8079	1.0058	0.9300	1.0700	0.9555	1.0560	LD	5227	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
315034	1NNECKC1	13.2	345	354	0.9194	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5227	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
315035	1NNECKC2	13.2	345	354	0.9194	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5227	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	5537	D:6DUNNSVL-6LANEXA 1 +6HAYES -6YORKTWN1
314172	6DUNNSVL	230.0	345	354	0.8043	1.0102	0.9300	1.0700	0.9597	1.0607	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314173	3GARNER	115.0	345	354	0.9190	1.0066	0.9300	1.0700	0.9563	1.0569	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314181	3NORNECK	115.0	345	354	0.8915	1.0147	0.9300	1.0700	0.9640	1.0654	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314182	6NORNECK	230.0	345	354	0.8055	1.0061	0.9300	1.0700	0.9558	1.0564	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
315034	1NNECKC1	13.2	345	354	0.9144	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
315035	1NNECKC2	13.2	345	354	0.9144	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5542	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314172	6DUNNSVL	230.0	345	354	0.7551	1.0102	0.9300	1.0700	0.9597	1.0607	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314173	3GARNER	115.0	345	354	0.8811	1.0066	0.9300	1.0700	0.9563	1.0569	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314181	3NORNECK	115.0	345	354	0.8403	1.0147	0.9300	1.0700	0.9640	1.0654	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314182	6NORNECK	230.0	345	354	0.7563	1.0061	0.9300	1.0700	0.9558	1.0564	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314183	6SANDERS	230.0	345	354	0.7557	1.0058	0.9300	1.0700	0.9555	1.0560	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
315034	1NNECKC1	13.2	345	354	0.8619	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
315035	1NNECKC2	13.2	345	354	0.8619	1.0407	0.9300	1.0700	0.9887	1.0928	LD	5543	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8916	1.0396	0.9300	1.0700	0.9876	1.0916	LD	5852	D:6GARNER -3LANCASTI +6HAYES -6YORKTWN1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8933	1.0396	0.9300	1.0700	0.9876	1.0916	LD	6166	D: 3GARNER - 3NORNECK1 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8644	1.0352	0.9300	1.0700	0.9835	1.0870	LD	6197	D: 3GARNER - 3NORNECK1 + 6CORRECTN-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8686	1.0266	0.9300	1.0700	0.9753	1.0779	LD	6197	D: 3GARNER - 3NORNECK1 + 6CORRECTN-GLANEXA 1
314375	6CORRECTN	230.0	345	354	0.8563	1.0255	0.9300	1.0700	0.9742	1.0768	LD	6197	D: 3GARNER - 3NORNECK1 + 6CORRECTN-GLANEXA 1
314180	GHAYES	230.0	345	354	0.8915	1.0396	0.9300	1.0700	0.9876	1.0916	LD	6479	D: 3HARMONY-3SHACKLE1 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8951	1.0352	0.9300	1.0700	0.9835	1.0870	LD	6510	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8794	1.0266	0.9300	1.0700	0.9753	1.0779	LD	6510	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-GLANEXA 1
314375	6CORRECTN	230.0	345	354	0.8792	1.0255	0.9300	1.0700	0.9742	1.0768	LD	6510	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-GLANEXA 1
314180	GHAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	7102	D: 3HARMONY-3WHITE 51 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8973	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7412	D: 3HARMONY-3HARMO 11 + 6HAYES - 6YORKTWN1
314189	GPAPERMI	230.0	345	354	0.8973	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7421	D: 3HARMONY-3HARMO 11 + 6HAYES - 6YORKTWN1
314375	6CORRECTN	230.0	345	354	0.8925	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7421	D: 3HARMONY-3HARMO 11 + 6HAYES - 6YORKTWN1
314180	GHAYES	230.0	345	354	0.8612	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7443	D: 3HARMONY-3HARMO 11 + 6CORRECTN-GLANEXA 1
314176	GHARMONY	230.0	345	354	0.8552	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7443	D: 3HARMONY-3HARMO 11 + 6CORRECTN-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8549	1.0255	0.9300	1.0700	0.9742	1.0768	LD	7443	D: 3HARMONY-3HARMO 11 + 6CORRECTN-GLANEXA 1
314375	6CORRECTN	230.0	345	354	0.8549	1.0255	0.9300	1.0700	0.9742	1.0768	LD	7443	D: 3HARMONY-3HARMO 11 + 6CORRECTN-GLANEXA 1
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	7721	D: 3HARMONY-3HARMO 21 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8871	1.0352	0.9300	1.0700	0.9835	1.0870	LD	7752	D: 3HARMONY-3HARMO 21 + 6CORRECTN-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8814	1.0266	0.9300	1.0700	0.9753	1.0779	LD	7752	D: 3HARMONY-3HARMO 21 + 6CORRECTN-GLANEXA 1
314375	6CORRECTN	230.0	345	354	0.8811	1.0255	0.9300	1.0700	0.9742	1.0768	LD	7752	D: 3HARMONY-3HARMO 21 + 6CORRECTN-GLANEXA 1
314180	GHAYES	230.0	345	354	0.8945	1.0396	0.9300	1.0700	0.9876	1.0916	LD	8336	D: 3HARMONY-6PAPERMI1 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8978	1.0352	0.9300	1.0700	0.9835	1.0870	LD	8651	D: 3HAYES89-6HAYES 1 + 6PAPERMI-6CORRECTN1
314189	GPAPERMI	230.0	345	354	0.8526	1.0266	0.9300	1.0700	0.9753	1.0779	LD	8651	D: 3HAYES89-6HAYES 1 + 6PAPERMI-6CORRECTN1
314375	6CORRECTN	230.0	345	354	0.8526	1.0266	0.9300	1.0700	0.9753	1.0779	LD	8651	D: 3HAYES89-6HAYES 1 + 6PAPERMI-6CORRECTN1
314180	GHAYES	230.0	345	354	0.8422	1.0352	0.9300	1.0700	0.9835	1.0870	LD	8673	D: 3HAYES89-6HAYES 1 + 6CORRECTN-GLANEXA 1
314176	GHARMONY	230.0	345	354	0.8360	1.0266	0.9300	1.0700	0.9742	1.0768	LD	8673	D: 3HAYES89-6HAYES 1 + 6CORRECTN-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8357	1.0255	0.9300	1.0700	0.9742	1.0768	LD	8673	D: 3HAYES89-6HAYES 1 + 6CORRECTN-GLANEXA 1
314375	6CORRECTN	230.0	345	354	0.8357	1.0255	0.9300	1.0700	0.9742	1.0768	LD	8673	D: 3HAYES89-6HAYES 1 + 6CORRECTN-GLANEXA 1
314180	GHAYES	230.0	345	354	0.8993	1.0396	0.9300	1.0700	0.9876	1.0916	LD	8947	D: 3LANCAST-3LANCA 11 + 6HAYES - 6YORKTWN1
314176	GHARMONY	230.0	345	354	0.8917	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9252	D: 6HAYES - 6YORKTWN1 + 3NORNECK-6NORNECK1
314189	GPAPERMI	230.0	345	354	0.8913	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9252	D: 6HAYES - 6YORKTWN1 + 3NORNECK-6NORNECK1
314375	6CORRECTN	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9254	D: 6HAYES - 6YORKTWN1 + 3NORNECK-6NORNECK1
314180	GHAYES	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9255	D: 6HAYES - 6YORKTWN1 + 3NORNECK-6NORNECK1
314176	GHARMONY	230.0	345	354	0.8902	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9256	D: 6HAYES - 6YORKTWN1 + 6NORNECK-6NORNECK1
314189	GPAPERMI	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9257	D: 6HAYES - 6YORKTWN1 + 6NORNECK-6NORNECK1
314375	6CORRECTN	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9257	D: 6HAYES - 6YORKTWN1 + 6NORNECK-6NORNECK1
314180	GHAYES	230.0	345	354	0.8936	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9258	D: 6HAYES - 6YORKTWN1 + 3SHACKLE-WEST PT1
314176	GHARMONY	230.0	345	354	0.8906	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9259	D: 6HAYES - 6YORKTWN1 + 3WEST PT-GLANEXA 1
314189	GPAPERMI	230.0	345	354	0.8563	1.0266	0.9300	1.0700	0.9835	1.0870	LD	9260	D: 6HAYES - 6YORKTWN1 + 6PAPERMI-6CORRECTN1
314375	6CORRECTN	230.0	345	354	0.8641	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9260	D: 6HAYES - 6YORKTWN1 + 6PAPERMI-6CORRECTN1
314180	GHAYES	230.0	345	354	0.8512	1.0266	0.9300	1.0700	0.9753	1.0779	LD	9260	D: 6HAYES - 6YORKTWN1 + 6PAPERMI-6CORRECTN1
314176	GHARMONY	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9261	D: 6HAYES - 6YORKTWN1 + 30AKRIDG-30AKRI 11
314189	GPAPERMI	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9262	D: 6HAYES - 6YORKTWN1 + 30AKRIDG-30AKRI 11
314375	6CORRECTN	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9263	D: 6HAYES - 6YORKTWN1 + 30AKRIDG-30AKRI 11
314180	GHAYES	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9264	D: 6HAYES - 6YORKTWN1 + 1GOSPORT-1GOSPORT1
314176	GHARMONY	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9265	D: 6HAYES - 6YORKTWN1 + 1GOSPORT-1GOSPORT1
314189	GPAPERMI	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9266	D: 6HAYES - 6YORKTWN1 + 1GOSPORT-1GOSPORT1
314375	6CORRECTN	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9267	D: 6HAYES - 6YORKTWN1 + 1GOSPORT-1GOSPORT1
314180	GHAYES	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9268	D: 6HAYES - 6YORKTWN1 + 6BIRNSEC-6LANDSTN1
314176	GHARMONY	230.0	345	354	0.8997	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9269	D: 6HAYES - 6YORKTWN1 + 6BIRNSEC-6VA BCH 1
314189	GPAPERMI	230.0	345	354	0.8996	1.0352	0.9300	1.0700	0.9876	1.0916	LD	9270	D: 6HAYES - 6YORKTWN1 + 6PENNINA-6KINGS ML

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UpplLimit	Voltdrop	Voltrise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9271	D:GHAYES -6YORKTWN1 +6PENNIMA-6WALR2091
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9272	D:GHAYES -6YORKTWN1 +3S27T67B-3BURTN671
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9273	D:GHAYES -6YORKTWN1 +3S27T67B-3MPRB671
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9274	D:GHAYES -6YORKTWN1 +3S27T67B-3BURTN671
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9275	D:GHAYES -6YORKTWN1 +3S27T67B-3OAKWOOD1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9276	D:GHAYES -6YORKTWN1 +3AMOCO Y-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8891	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9277	D:GHAYES -6YORKTWN1 +3BLOKMC-3MERCURY1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9278	D:GHAYES -6YORKTWN1 +3COLONY -3WARKICK1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9279	D:GHAYES -6YORKTWN1 +3COLONY -3YORKTWN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9280	D:GHAYES -6YORKTWN1 +3COPELAND-3NEWS751
314180	GHAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9281	D:GHAYES -6YORKTWN1 +3COPELAND-3WHEELTWN1
314176	GHARMONY	230.0	345	354	0.8406	1.0352	0.9300	1.0700	0.9835	1.0870	LD	9282	D:GHAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8497	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9283	D:GHAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8344	1.0266	0.9300	1.0700	0.9753	1.0779	LD	9284	D:GHAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8344	1.0255	0.9300	1.0700	0.9742	1.0768	LD	9285	D:GHAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9286	D:GHAYES -6YORKTWN1 +6DENBIGH-6SKIFCRL
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9287	D:GHAYES -6YORKTWN1 +6DENBIGH-6YORKTWN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9288	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9289	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9290	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9291	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9292	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9293	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9294	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9295	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9296	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9297	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9298	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8921	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9299	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9300	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9301	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9302	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9303	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9304	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9305	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9306	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9307	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9308	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9309	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9310	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9311	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9312	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9313	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9314	D:GHAYES -6YORKTWN1 +3DOW 34 -3SKIFCRL

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	Voltdrop	Voltrise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9315	D:GHAYES -6YORKTWN1 +3PENINSI-6PENINSI
314180	GHAYES	230.0	345	354	0.8900	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9316	D:GHAYES -6YORKTWN1 +6PENINSI-6SHELEWK1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9317	D:GHAYES -6YORKTWN1 +6PENINSI-6TABB 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9318	D:GHAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9319	D:GHAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9320	D:GHAYES -6YORKTWN1 +3SHELEWK-3WHEALT1
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9321	D:GHAYES -6YORKTWN1 +3SHELEWK-6SHELEWK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9322	D:GHAYES -6YORKTWN1 +6TABB -6YORKTWN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9323	D:GHAYES -6YORKTWN1 +3U CARBD-3WHEALT1
314180	GHAYES	230.0	345	354	0.8919	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9324	D:GHAYES -6YORKTWN1 +6WALR285-6SKTFCR1
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9325	D:GHAYES -6YORKTWN1 +3WALRICK-3WHEALT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9326	D:GHAYES -6YORKTWN1 +6WALRICK-6WHEALT1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9327	D:GHAYES -6YORKTWN1 +3WHEALT1-6WHEALT1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9328	D:GHAYES -6YORKTWN1 +3WHEALT1-6WHEALT2
314180	GHAYES	230.0	345	354	0.8908	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9329	D:GHAYES -6YORKTWN1 +6WHEALT1-6WHEALT3
314180	GHAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9330	D:GHAYES -6YORKTWN1 +6WHEALT1-6WHEALT 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9331	D:GHAYES -6YORKTWN1 +6WINGHST-6POOLSVL1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9332	D:GHAYES -6YORKTWN1 +3YORKTWN-3YORK PS1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9333	D:GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN2
314180	GHAYES	230.0	345	354	0.8905	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9334	D:GHAYES -6YORKTWN1 +6YORKTWN-6YORKT 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9335	D:GHAYES -6YORKTWN1 +6YORKTWN-3YORK PS1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9336	D:GHAYES -6YORKTWN1 +6YORKTWN-1YORKTWN3
314180	GHAYES	230.0	345	354	0.8895	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9337	D:GHAYES -6YORKTWN1 +6YORKTWN-6SKTFCR1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9338	D:GHAYES -6YORKTWN1 +3YANKS 58-3SKTFCR1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9339	D:GHAYES -6YORKTWN1 +3ALEX CR-3BOWERS 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9340	D:GHAYES -6YORKTWN1 +3STORE -3LONGC271
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9341	D:GHAYES -6YORKTWN1 +3STORE -3VA BCH 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9342	D:GHAYES -6YORKTWN1 +3BAYSIDE-3BURTN671
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9343	D:GHAYES -6YORKTWN1 +3BAYSIDE-3LONGC271
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9344	D:GHAYES -6YORKTWN1 +3BERKLS1-3GOSPORT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9345	D:GHAYES -6YORKTWN1 +3BERKLS1-3REEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9346	D:GHAYES -6YORKTWN1 +3BOWERS -3DEEPCR71
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9347	D:GHAYES -6YORKTWN1 +3BOWERS -3HODGE F1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9348	D:GHAYES -6YORKTWN1 +6BOWERS -6CHRLAND1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9349	D:GHAYES -6YORKTWN1 +6BOWERS -6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9350	D:GHAYES -6YORKTWN1 +3BURTN67-3DAVIS671
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9351	D:GHAYES -6YORKTWN1 +3BURTN67-3DAVIS271
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9352	D:GHAYES -6YORKTWN1 +3CHESAPR-3CMN GAS1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9353	D:GHAYES -6YORKTWN1 +3CHESAPR-3GRADOCK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9354	D:GHAYES -6YORKTWN1 +3CHESAPR-3DEEPC461
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9355	D:GHAYES -6YORKTWN1 +3CHESAPR-3DEEPC871
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9356	D:GHAYES -6YORKTWN1 +3CHESAPR-3DQZIER 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9357	D:GHAYES -6YORKTWN1 +3CHESAPR-3GOSPORT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9358	D:GHAYES -6YORKTWN1 +3CHESAPR-3KEEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9359	D:GHAYES -6YORKTWN1 +3CHESAPR-3CHESPTX1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9360	D:GHAYES -6YORKTWN1 +3CHESAPR-1CHESPK31
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9361	D:GHAYES -6YORKTWN1 +3CHESAPR-1CHESPK41

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	Voltdrop	Voltrise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9362	D:GHAYES -6YORKTWN1 +3CHESAPK-1CHESPKAL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9363	D:GHAYES -6YORKTWN1 +3CHESAPK-1CHESPKB1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9364	D:GHAYES -6YORKTWN1 +3CHESAPK-6CHESAPK2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9365	D:GHAYES -6YORKTWN1 +3CHESAPK-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9366	D:GHAYES -6YORKTWN1 +6CHESAPK-6GRENWCH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9367	D:GHAYES -6YORKTWN1 +6CHESAPK-6VADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9368	D:GHAYES -6YORKTWN1 +3CHESPTX-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9369	D:GHAYES -6YORKTWN1 +3CHESPTX-3HODGE F1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9370	D:GHAYES -6YORKTWN1 +3CHESPTX-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9371	D:GHAYES -6YORKTWN1 +6CHESPTX-6HARBORV1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9372	D:GHAYES -6YORKTWN1 +6CHESPTX-6K KING1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9373	D:GHAYES -6YORKTWN1 +6CHESPTX-6SEWISPT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9374	D:GHAYES -6YORKTWN1 +6CHESPTX-6SEWISPT2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9375	D:GHAYES -6YORKTWN1 +6CHESPTX-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9376	D:GHAYES -6YORKTWN1 +3CANN GAS-3GRASFLD1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9377	D:GHAYES -6YORKTWN1 +3CRADOCK-3REEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9378	D:GHAYES -6YORKTWN1 +3CRADOCK-3SHEA 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9379	D:GHAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9380	D:GHAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9381	D:GHAYES -6YORKTWN1 +3DEEPC46-3YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9382	D:GHAYES -6YORKTWN1 +3DOZIER -3THOMPSON1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9383	D:GHAYES -6YORKTWN1 +6DOZIER -6BELLIZ R 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9384	D:GHAYES -6YORKTWN1 +6DOZIER -6GRENWCH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9385	D:GHAYES -6YORKTWN1 +6BELLIZ R -6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9386	D:GHAYES -6YORKTWN1 +6BELLIZ R -6BELLIZAR1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9387	D:GHAYES -6YORKTWN1 +6BELLIZ R -6BELLIZAR2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9388	D:GHAYES -6YORKTWN1 +6BELLIZ R -6BELLIZAR3
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9389	D:GHAYES -6YORKTWN1 +6FENTRES-6LANDSTN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9390	D:GHAYES -6YORKTWN1 +6FENTRES-6THAS2791
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9391	D:GHAYES -6YORKTWN1 +6FENTRES-6HICKORY1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9392	D:GHAYES -6YORKTWN1 +6FENTRES-6FENTR 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9393	D:GHAYES -6YORKTWN1 +6FENTRES-6FENTRES1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9394	D:GHAYES -6YORKTWN1 +6FENTRES-6FENTRES2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9395	D:GHAYES -6YORKTWN1 +6GREATB-6HICKORY1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9396	D:GHAYES -6YORKTWN1 +3GRASFLD-3GREAT B1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9397	D:GHAYES -6YORKTWN1 +6GRN RUN-6GRENWCH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9398	D:GHAYES -6YORKTWN1 +6GRN RUN-6LYNHAVN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9399	D:GHAYES -6YORKTWN1 +3GRENWCH-3THOLE S1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9400	D:GHAYES -6YORKTWN1 +3GRENWCH-3GRENW 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9401	D:GHAYES -6YORKTWN1 +3GRENWCH-3GRENWCH2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9402	D:GHAYES -6YORKTWN1 +3GRENWCH-6GRENWCH2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9403	D:GHAYES -6YORKTWN1 +6GRENWCH-6REEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9404	D:GHAYES -6YORKTWN1 +6GRENWCH-6ITALIA 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9405	D:GHAYES -6YORKTWN1 +6GRENWCH-6GRENW 11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9406	D:GHAYES -6YORKTWN1 +6HARBORV-6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9407	D:GHAYES -6YORKTWN1 +6HARBORV-6SMITFLD1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9408	D:GHAYES -6YORKTWN1 +3HICKORY-6HICKORY1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9409	D:GHAYES -6YORKTWN1 +3IND PR-3REEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9410	D:GHAYES -6YORKTWN1 +3IND PR-3THOLE S1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9411	D:GHAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9412	D:GHAYES -6YORKTWN1 +3LANDSTN-6LANDSTN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9413	D:GHAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9414	D:GHAYES -6YORKTWN1 +6HUNTSN-6THRS2791
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9415	D:GHAYES -6YORKTWN1 +6HUNTSN-6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9416	D:GHAYES -6YORKTWN1 +6LYNHAVN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9417	D:GHAYES -6YORKTWN1 +6LANDSTN-6TUMPY 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9418	D:GHAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9419	D:GHAYES -6YORKTWN1 +3LONDONE-3PENULIN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9420	D:GHAYES -6YORKTWN1 +3LONDONE-3P ANNE 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9421	D:GHAYES -6YORKTWN1 +6HARBORV-6CRITTON1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9422	D:GHAYES -6YORKTWN1 +6LK KING-1LKRTINGAI
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9423	D:GHAYES -6YORKTWN1 +6LK KING-1LKRTINGAI
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9424	D:GHAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9425	D:GHAYES -6YORKTWN1 +6LYNHAVN-6THALIA 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9426	D:GHAYES -6YORKTWN1 +6LYNHAVN-6LYNHIA 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9427	D:GHAYES -6YORKTWN1 +3MCCLAUGH-3REEVES 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9428	D:GHAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9429	D:GHAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9430	D:GHAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9431	D:GHAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9432	D:GHAYES -6YORKTWN1 +3PENDLTH-3VA BCH 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9433	D:GHAYES -6YORKTWN1 +3REEVES -3REEVE 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9434	D:GHAYES -6YORKTWN1 +3REEVES -3REEVES 2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9435	D:GHAYES -6YORKTWN1 +3REEVES -3REEVES 2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9436	D:GHAYES -6YORKTWN1 +6RURITAN-6SNORFLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9437	D:GHAYES -6YORKTWN1 +6RURITAN-6SNORFLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9438	D:GHAYES -6YORKTWN1 +3SEWLSPT-3TAUSSIG1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9439	D:GHAYES -6YORKTWN1 +3SEWLSPT-3THOLE S1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9440	D:GHAYES -6YORKTWN1 +3SEWLSPT-3THOLE S1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9441	D:GHAYES -6YORKTWN1 +3SEWLSPT-6SEWLSPT1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9442	D:GHAYES -6YORKTWN1 +3SEWLSPT-6SEWLSPT2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9443	D:GHAYES -6YORKTWN1 +6SEWLSPT-6NAVYS 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9444	D:GHAYES -6YORKTWN1 +6SEWLSPT-6NAVYS 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9445	D:GHAYES -6YORKTWN1 +6SNORFLK-6THRS2791
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9446	D:GHAYES -6YORKTWN1 +6NAVYS -6NAVYN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9447	D:GHAYES -6YORKTWN1 +6NAVYS1 -6NAVYN1 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9448	D:GHAYES -6YORKTWN1 +6STUMBY -6THRS2791
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9449	D:GHAYES -6YORKTWN1 +3THOLE S-3THOLE 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9450	D:GHAYES -6YORKTWN1 +6THRS279-6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9451	D:GHAYES -6YORKTWN1 +3VA BCH -3VA BCH 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9452	D:GHAYES -6YORKTWN1 +3YADKIN -6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9453	D:GHAYES -6YORKTWN1 +3YADKIN -6YADKIN 2
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9454	D:GHAYES -6YORKTWN1 +6YADKIN -6YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9455	D:GHAYES -6YORKTWN1 +6YADKIN -6YADKIN 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 22:17 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9503	D:6HAYES -6YORKTWN1 +8BATH CO-BVALLEY 1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9504	D:6HAYES -6YORKTWN1 + 8S0461 BATH 3W1 1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9505	D:6HAYES -6YORKTWN1 + 8S0462 BATH 3W3 1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9506	D:6HAYES -6YORKTWN1 + 8S0463 BATH 3W5 1
314180	GHAYES	230.0	345	354	0.8892	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9507	D:6HAYES -6YORKTWN1 +8CARSON -8CLOVER 1
314180	GHAYES	230.0	345	354	0.8920	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9508	D:6HAYES -6YORKTWN1 +8CARSON -8MDJTHAN1
314180	GHAYES	230.0	345	354	0.8917	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9509	D:6HAYES -6YORKTWN1 +8CARSON -8FTVEPRK1
314180	GHAYES	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9511	D:6HAYES -6YORKTWN1 +8CHICAHM-BELMONT 1
314180	GHAYES	230.0	345	354	0.8908	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9512	D:6HAYES -6YORKTWN1 +8CHICAHM-SURRY 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9513	D:6HAYES -6YORKTWN1 +8CLIFTON-8LOUDOUN1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9514	D:6HAYES -6YORKTWN1 +8CLIFTON-BOX 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9515	D:6HAYES -6YORKTWN1 +8CHANCE -8LDYSMTH1
314180	GHAYES	230.0	345	354	0.8902	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9516	D:6HAYES -6YORKTWN1 +8DOOMS -8CUNNING1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9517	D:6HAYES -6YORKTWN1 +8DOOMS -8LENGTNI
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9518	D:6HAYES -6YORKTWN1 +8BELMONT -8CUNNING1
314180	GHAYES	230.0	345	354	0.8901	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9519	D:6HAYES -6YORKTWN1 +8BELMONT -8CUNNING1
314180	GHAYES	230.0	345	354	0.8892	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9520	D:6HAYES -6YORKTWN1 +8ELMONT -8LDYSMTH1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9521	D:6HAYES -6YORKTWN1 +8FENTRES-8YADKIN 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9522	D:6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9523	D:6HAYES -6YORKTWN1 +8CUNNING-8CUNINGBL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9524	D:6HAYES -6YORKTWN1 +8CUNNING-8CUNINGCL
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9525	D:6HAYES -6YORKTWN1 +8CUNNING-8CUNINGDL
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9526	D:6HAYES -6YORKTWN1 +8LDYSMTH-8NO ANNAL
314180	GHAYES	230.0	345	354	0.8894	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9527	D:6HAYES -6YORKTWN1 +8LDYSMTH-8POSSUM 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9528	D:6HAYES -6YORKTWN1 +8LOUDOUN-8MORRISVL
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9529	D:6HAYES -6YORKTWN1 +8LOUDOUN-8BRAMBLE1
314180	GHAYES	230.0	345	354	0.8893	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9530	D:6HAYES -6YORKTWN1 +8MDLTHAN-8NO ANNAL
314180	GHAYES	230.0	345	354	0.8918	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9531	D:6HAYES -6YORKTWN1 +8FTVEPRK-8SEPTA 1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9532	D:6HAYES -6YORKTWN1 +8MORRISVL-8NO ANNAL
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9533	D:6HAYES -6YORKTWN1 +8MORRISVL-8FRONT R1
314180	GHAYES	230.0	345	354	0.8896	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9534	D:6HAYES -6YORKTWN1 +8MT STM -8VALLEY 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9535	D:6HAYES -6YORKTWN1 +8MT STM -3M STORM1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9536	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9537	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM21
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9538	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM31
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9539	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNA11
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9540	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNA21
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9541	D:6HAYES -6YORKTWN1 +8OX -8POSSUM 1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9542	D:6HAYES -6YORKTWN1 +3M STORM-3M BRNCH1
314180	GHAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9543	D:6HAYES -6YORKTWN1 +8SEPTA -8SURRY 1
314180	GHAYES	230.0	345	354	0.8898	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9544	D:6HAYES -6YORKTWN1 +8SEPTA -8YADKIN 1
314180	GHAYES	230.0	345	354	0.8899	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9545	D:6HAYES -6YORKTWN1 +8SURRY -8SULFOLK1
314180	GHAYES	230.0	345	354	0.8914	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9546	D:6HAYES -6YORKTWN1 +8SURRY -1SURRY 21
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9547	D:6HAYES -6YORKTWN1 +8PL VIEW-8BRAMBLE1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9548	D:6HAYES -6YORKTWN1 +8YADKIN -8SULFOLK1
314180	GHAYES	230.0	345	354	0.8897	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9549	D:6HAYES -6YORKTWN1 +8FRONT R-1FRONT RY1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	Voltdrop	Voltrise	Viol	Ncon	Contingency Description
314160	GHAYES	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9550	D:GHAYES -6YORKTWN1 +3SKI PCRE-6SKI PCRE1
314160	GHAYES	230.0	345	354	0.8913	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9551	D:GHAYES -6YORKTWN1 +8SURY -8SKI PCRE1
314160	GHAYES	230.0	345	354	0.8993	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9552	D:GHAYES -6YORKTWN1 +6SKI PCRE-8SKI PCRE1
314160	GHAYES	230.0	345	354	0.8993	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9553	D:GHAYES -6YORKTWN1 +6SKI PCRE-8SKI PCRE2
314160	GHAYES	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9554	D:GHAYES -6YORKTWN1 +6WHEALTH-6WATICK1
314160	GHAYES	230.0	345	354	0.8996	1.0396	0.9300	1.0700	0.9876	1.0916	LD	9555	D:GHAYES -6YORKTWN1 +6SKI PCRE-6WATICK1
314176	GHARMONY	230.0	345	354	0.8866	1.0266	0.9300	1.0700	0.9835	1.0870	LD	11656	D:WHEAT PT-3LANEXA 1 +6PAPERMI-6CORRECTN1
314176	GHARMONY	230.0	345	354	0.8866	1.0266	0.9300	1.0700	0.9835	1.0870	LD	11656	D:WHEAT PT-3LANEXA 1 +6PAPERMI-6CORRECTN1
314176	GHARMONY	230.0	345	354	0.8845	1.0324	0.9300	1.0700	0.9835	1.0870	LD	11678	D:WHEAT PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8484	1.0266	0.9300	1.0700	0.9742	1.0768	LD	11678	D:WHEAT PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314399	6PEMBROK	230.0	345	356	0.8705	1.0324	0.9300	1.0700	0.9807	1.0840	LD	24991	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8705	1.0324	0.9300	1.0700	0.9807	1.0840	LD	24991	D:6NP NEWS-6PEMBROK1 +6PENINSI-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8738	1.0324	0.9300	1.0700	0.9807	1.0840	LD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8750	1.0324	0.9300	1.0700	0.9812	1.0845	LD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8738	1.0324	0.9300	1.0700	0.9788	1.0819	LD	24992	D:6NP NEWS-6PEMBROK1 +6PENINSI-6TABB 1
314399	6PEMBROK	230.0	345	356	0.8652	1.0324	0.9300	1.0700	0.9807	1.0840	LD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8654	1.0324	0.9300	1.0700	0.9812	1.0845	LD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0324	0.9300	1.0700	0.9788	1.0819	LD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8639	1.0339	0.9300	1.0700	0.9822	1.0856	LD	24997	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8748	1.0324	0.9300	1.0700	0.9788	1.0819	LD	25482	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8748	1.0324	0.9300	1.0700	0.9812	1.0845	LD	25483	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8735	1.0304	0.9300	1.0700	0.9788	1.0819	LD	25483	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8651	1.0329	0.9300	1.0700	0.9812	1.0845	LD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8649	1.0304	0.9300	1.0700	0.9788	1.0819	LD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8636	1.0339	0.9300	1.0700	0.9822	1.0856	LD	25488	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314497	6SEWLSPT	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9560	1.0566	LD	36959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314500	6NAVYS	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9559	1.0566	LD	36959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314501	6NAVYS1	230.0	345	359	0.8748	1.0062	0.9300	1.0700	0.9559	1.0565	LD	36959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314505	6NAVYN	230.0	345	359	0.8748	1.0063	0.9300	1.0700	0.9560	1.0566	LD	36959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314510	6NAVYN1	230.0	345	359	0.8746	1.0061	0.9300	1.0700	0.9558	1.0564	LD	36959	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314348	2GRETN 1	69.0	345	358	0.8448	1.0169	0.9300	1.0700	0.9660	1.0677	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314354	2ALTVS 1	69.0	345	358	0.8692	1.0326	0.9300	1.0700	0.9810	1.0843	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314515	3ALTVS 1	115.0	345	358	0.8599	1.0005	0.9300	1.0700	0.9505	1.0505	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314666	3ALTVSTA	115.0	345	358	0.8595	1.0000	0.9300	1.0700	0.9500	1.0500	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314667	4ALTVSTA	138.0	345	358	0.8479	0.9984	0.9300	1.0700	0.9484	1.0483	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314668	4BANISTR	138.0	345	358	0.9072	0.9946	0.9300	1.0700	0.9448	1.0443	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314670	2ALTVSTA	69.0	345	358	0.8690	1.0324	0.9300	1.0700	0.9808	1.0840	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314671	4BEARSKN	138.0	345	358	0.8885	0.9965	0.9300	1.0700	0.9467	1.0463	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314680	2CHATHAM	69.0	345	358	0.8317	1.0047	0.9300	1.0700	0.9545	1.0550	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314685	2CHTM TP	69.0	345	358	0.8323	1.0053	0.9300	1.0700	0.9550	1.0556	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314689	3DONINIO	115.0	345	358	0.8399	0.9927	0.9300	1.0700	0.9431	1.0424	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314694	3GRIT	115.0	345	358	0.8757	1.0021	0.9300	1.0700	0.9520	1.0522	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314700	3HALL BR	115.0	345	358	0.8619	1.0000	0.9300	1.0700	0.9500	1.0500	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314705	3HURT	115.0	345	358	0.8649	1.0000	0.9300	1.0700	0.9500	1.0500	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314712	3OTYER R	115.0	345	358	0.8619	0.9999	0.9300	1.0700	0.9499	1.0499	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314721	2CLMX DP	69.0	345	358	0.8289	1.0021	0.9300	1.0700	0.9520	1.0522	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	Voltdrop	Voltrise	Viol	Ncon	Contingency Description
314726	2CJFX TP	69.0	345	358	0.8296	1.0028	0.9300	1.0700	0.9527	1.0530	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314729	2GLADYS	69.0	345	358	0.8450	1.0111	0.9300	1.0700	0.9605	1.0616	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314730	2GLDY TP	69.0	345	358	0.8653	1.0297	0.9300	1.0700	0.9782	1.0812	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314731	2GRETNA	69.0	345	358	0.8446	1.0166	0.9300	1.0700	0.9658	1.0675	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314732	2GRNA FB	69.0	345	358	0.8446	1.0166	0.9300	1.0700	0.9658	1.0675	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314733	2GRNA DP	69.0	345	358	0.8426	1.0149	0.9300	1.0700	0.9641	1.0656	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314734	2KLOP DP	69.0	345	358	0.8601	1.0261	0.9300	1.0700	0.9748	1.0774	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314735	2KLOP TP	69.0	345	358	0.8601	1.0261	0.9300	1.0700	0.9748	1.0774	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314736	2SHNO DP	69.0	345	358	0.8321	1.0051	0.9300	1.0700	0.9549	1.0554	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314737	2SW35757	69.0	345	358	0.8310	1.0203	0.9300	1.0700	0.9693	1.0713	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314738	2MT AIRY	69.0	345	358	0.8450	1.0148	0.9300	1.0700	0.9641	1.0655	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314739	2MT A TP	69.0	345	358	0.8510	1.0203	0.9300	1.0700	0.9693	1.0713	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314740	2ALTV335	69.0	345	358	0.8690	1.0324	0.9300	1.0700	0.9808	1.0840	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314789	2BEARSKN	69.0	345	358	0.8888	1.0565	0.9300	1.0700	0.9467	1.0463	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314836	3BALCTIS	115.0	345	365	0.3761	0.9961	0.9300	1.0700	0.9463	1.0460	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314837	3BUENA V	115.0	345	365	0.3749	0.9952	0.9300	1.0700	0.9455	1.0450	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314838	3BUSTLEB	115.0	345	365	0.3804	0.9984	0.9300	1.0700	0.9485	1.0484	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314839	3BUSTLE T	115.0	345	365	0.3806	0.9986	0.9300	1.0700	0.9487	1.0485	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314840	6CLFTN F	230.0	345	365	0.3594	0.9802	0.9300	1.0700	0.9312	1.0292	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314841	4CLFTN P	138.0	345	365	0.3641	1.0359	0.9300	1.0700	0.9841	1.0877	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314842	4COVINGT2	138.0	345	365	0.3474	1.0255	0.9300	1.0700	0.9746	1.0768	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314843	4COVINGT1	138.0	345	365	0.3449	1.0238	0.9300	1.0700	0.9736	1.0750	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314844	3CRAIGSV	115.0	345	365	0.3752	0.9955	0.9300	1.0700	0.9457	1.0452	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314845	3EFLINGER	115.0	345	365	0.3797	0.9986	0.9300	1.0700	0.9487	1.0485	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314846	3FAIRFIELD	115.0	345	365	0.3792	0.9977	0.9300	1.0700	0.9478	1.0476	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314847	4FUDGE H	138.0	345	365	0.3420	1.0217	0.9300	1.0700	0.9706	1.0728	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314848	3GLASGOW	115.0	345	365	0.3777	0.9972	0.9300	1.0700	0.9473	1.0471	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314849	3GOSHEN	115.0	345	365	0.3767	0.9964	0.9300	1.0700	0.9466	1.0462	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314851	3JAMES L	115.0	345	365	0.3747	0.9952	0.9300	1.0700	0.9455	1.0450	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314852	3JMS L T	115.0	345	365	0.3753	0.9956	0.9300	1.0700	0.9458	1.0454	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314853	3LEXNGTN	115.0	345	365	0.3818	0.9993	0.9300	1.0700	0.9494	1.0493	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314854	6LEXNGT1	230.0	345	365	0.3860	0.9921	0.9300	1.0700	0.9425	1.0417	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314855	6LOWMOOR	230.0	345	365	0.3580	0.9798	0.9300	1.0700	0.9308	1.0288	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314856	6LEXNGT2	230.0	345	365	0.3860	0.9921	0.9300	1.0700	0.9425	1.0417	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314857	4LOWMOOR	138.0	345	365	0.3584	1.0334	0.9300	1.0700	0.9817	1.0850	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314858	3ROCKB T	115.0	345	365	0.3763	0.9959	0.9300	1.0700	0.9461	1.0457	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314859	4WSIVACO	138.0	345	365	0.3386	1.0192	0.9300	1.0700	0.9682	1.0701	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314860	4E MILL	138.0	345	365	0.3393	1.0198	0.9300	1.0700	0.9688	1.0708	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314861	3SKIMMER	115.0	345	365	0.7818	0.9748	0.9300	1.0700	0.9260	1.0235	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314864	4LOWMO	138.0	345	365	0.3866	1.0339	0.9300	1.0700	0.9822	1.0856	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314901	8BATH CO	500.0	345	366	0.4123	1.0500	0.9300	1.0700	0.9975	1.1025	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
314912	8LEXNGTN	500.0	345	366	0.4210	1.0466	0.9300	1.0700	0.9944	1.0991	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315163	1HALLERI	13.8	345	358	0.8615	1.0000	0.9300	1.0700	0.9500	1.0500	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315165	1HURT 1	13.8	345	358	0.8975	0.9935	0.9300	1.0700	0.9438	1.0431	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315166	1HURT 2	13.8	345	358	0.8975	0.9935	0.9300	1.0700	0.9438	1.0431	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315201	1BATH 1A	20.5	345	366	0.4190	1.0283	0.9300	1.0700	0.9769	1.0797	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
315202	1BATH 2B	20.5	345	366	0.4262	1.0284	0.9300	1.0700	0.9770	1.0798	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
315203	LBATH 3C	20.5	345	366	0.4264	1.0278	0.9300	1.0700	0.9764	1.0792	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315204	LBATH 4D	20.5	345	366	0.4186	1.0279	0.9300	1.0700	0.9765	1.0793	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315205	LBATH 5E	20.5	345	366	0.4188	1.0282	0.9300	1.0700	0.9768	1.0796	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315206	LBATH 6F	20.5	345	366	0.4180	1.0281	0.9300	1.0700	0.9767	1.0795	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0461	BATH 3W1	1.0	345	366	0.4022	1.0249	0.9300	1.0700	0.9737	1.0762	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0462	BATH 3W3	1.0	345	366	0.3985	1.0224	0.9300	1.0700	0.9713	1.0735	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0463	BATH 3W5	1.0	345	366	0.3985	1.0228	0.9300	1.0700	0.9716	1.0739	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS1032	HURT 3WD	1.0	345	358	0.8663	0.9995	0.9300	1.0700	0.9495	1.0495	LD	54247	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

CATEGORY D

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 14:08 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 14:08 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File X:\S2015\advp.sub
Monit.File X:\S2015\vapsys.mon
Contin.File X:\S2015\2015 Category D Alts.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Noon	Contingency Description
314682	3BUGGS I	115	315151 1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **
314278	6BERMUDA	230	314286 6CHSTF A	230	LN	609.7	9.2	541.0	112.7	4	ROM 567
314278	6BERMUDA	230	314303 6HOPEWLL	230	LN	609.8	9.5	549.0	111.1	4	ROM 567
314287	6CHSTF B	230	314303 6HOPEWLL	230	LN	595.0	16.0	549.0	108.4	4	ROM 567

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 14:08 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 14:08 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT WSKIFFES GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes.sav
Subsys.File X:\S2015\divp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015 Category D Alts.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	1CUNINGC	18.0	345	366	1.0713	1.0713	0.9300	1.0700	1.0177	1.1248H			** Base Case **
314176	6HARMONY	230.0	345	354	0.9383	1.0352	0.9300	1.0700	0.9835	1.0870D		7	Lanexa
314189	6PAPERMIT	230.0	345	354	0.9329	1.0266	0.9300	1.0700	0.9753	1.0779D		7	Lanexa
314375	6CORRECTN	230.0	345	354	0.9327	1.0255	0.9300	1.0700	0.9742	1.0768D		7	Lanexa
314387	3LANEXA	115.0	345	356	0.9515	1.0071	0.9300	1.0700	0.9568	1.0575D		7	Lanexa
314396	3NNWES58	115.0	345	356	0.9480	1.0039	0.9300	1.0700	0.9537	1.0540D		7	Lanexa
314411	3TOANOS8	115.0	345	356	0.9475	1.0034	0.9300	1.0700	0.9532	1.0536D		7	Lanexa
314180	6HAYES	230.0	345	354	0.9626	1.0396	0.9300	1.0700	0.9876	1.0916D		9	Yorktown

CATEGORY B

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 16:12 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 16:12 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_ws_kiffes_CSCNOSURRY500.sav
 Subsys.File X:\S2015\divp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\vapsys.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115 315151	1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **
314559	3CAROLNA	115 314581	3JACKSON	115	LN	115.8	75.2	118.0	98.1	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
304223	3ROCKYMT115T	115 314554	3BTLEBRO	115	LN	91.8	17.8	94.0	97.6	849	314559 3CAROLNA 115 314578 3HORNKTN 115 1
314559	3CAROLNA	115 314581	3JACKSON	115	LN	114.6	75.2	118.0	97.1	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314212	6FRIVER	230 314222	6HANOVER	230	LN	772.3	598.0	797.0	96.9	285	314138 6MINE RD 230 314197 6LDYSMT1 230 1
314581	3JACKSON	115 314626	3WOODLAND	115	LN	113.2	72.6	118.0	95.9	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314581	3JACKSON	115 314626	3WOODLAND	115	LN	112.0	72.6	118.0	95.0	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314072	6PL VIEW	230 314925	8PL VIEW	500	TR	938.1	809.9	993.6	94.4	307	314171 6BRAMBL 230 314933 8BRAMBLETON 500 1
314461	3DEEPC46	115 314513	3YADKIN	115	LN	339.6	225.3	360.0	94.3	691	314449 6CHESAPX 230 314514 6YADKIN 230 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 23:37 <VOW003.0>
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 Case File H:\Trans Customer Planning\Peter Nedwick\Year2011\SKiffesCreek Application\Rebuttal Study\S2015\sum 2015(2013LF)_base_wpre_wskiffes_CSCNOSURRY500.sav
 Subsys File H:\Trans Customer Planning\Peter Nedwick\Year2011\SKiffesCreek Application\Rebuttal Study\S2015\drv.sub
 Monit File H:\Trans Customer Planning\Peter Nedwick\Year2011\SKiffesCreek Application\Rebuttal Study\S2015\wapsys.mon
 Contin File H:\Trans Customer Planning\Peter Nedwick\Year2011\SKiffesCreek Application\Rebuttal Study\S2015\wapsys.con
 Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	**	Base Case	Contingency Description
315218	LCUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H				
314014	3CANNONB	115.0	345	353	0.9075	1.0038	0.9300	1.0700	0.9537	1.0540	LD	69	314014	3CANNONB	115 314016 6CANNONB 230 1
314051	3LONA197	115.0	345	353	0.9077	1.0032	0.9300	1.0700	0.9530	1.0533	LD	69	314014	3CANNONB	115 314016 6CANNONB 230 1
314146	3MTCR197	115.0	345	353	0.9077	1.0028	0.9300	1.0700	0.9527	1.0529	LD	69	314014	3CANNONB	115 314016 6CANNONB 230 1
314155	3CANNB T	115.0	345	353	0.9076	1.0033	0.9300	1.0700	0.9531	1.0535	LD	69	314014	3CANNONB	115 314016 6CANNONB 230 1
314158	3GOWM197	115.0	345	353	0.9079	1.0027	0.9300	1.0700	0.9525	1.0528	LD	69	314014	3CANNONB	115 314016 6CANNONB 230 1
314051	3LONA197	115.0	345	353	0.9225	1.0032	0.9300	1.0700	0.9530	1.0530	LD	70	314014	3CANNONB	115 314155 3CANNB T 115 1
314146	3MTCR197	115.0	345	353	0.9225	1.0028	0.9300	1.0700	0.9527	1.0529	LD	70	314014	3CANNONB	115 314155 3CANNB T 115 1
314155	3CANNB T	115.0	345	353	0.9225	1.0033	0.9300	1.0700	0.9531	1.0535	LD	70	314014	3CANNONB	115 314155 3CANNB T 115 1
314158	3GOWM197	115.0	345	353	0.9226	1.0027	0.9300	1.0700	0.9525	1.0528	LD	70	314014	3CANNONB	115 314155 3CANNB T 115 1
314160	1 TX503	13.2	345	353	1.1151	1.0008	0.9300	1.0700	0.9289	1.0508	HR	96	314025	1 TX500	13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9776	0.9300	1.0700	0.9289	1.0267	R	175	314067	60COCOQUN	230 314068 60X 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	175	314067	60COCOQUN	230 314068 60X 230 1
314118	3MTRNIEV	115.0	345	353	0.9478	0.9988	0.9300	1.0700	0.9489	1.0488	D	179	314068	60X	230 314167 30X 115 1
314167	30X	115.0	345	352	0.9479	1.0064	0.9300	1.0700	0.9560	1.0567	D	179	314068	60X	230 314167 30X 115 1
315008	1POSSM6A	18.0	345	353	0.9273	0.9385	0.9300	1.0700	0.8916	0.9854	L	191	314073	3POSSUM	115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9273	0.9385	0.9300	1.0700	0.8916	0.9854	L	191	314073	3POSSUM	115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9262	0.9385	0.9300	1.0700	0.8916	0.9854	L	204	314074	6POSSUM	230 315008 1POSSM6A 18.0 1
315008	1POSSM6A	18.0	345	353	0.9262	0.9385	0.9300	1.0700	0.8916	0.9854	L	205	314074	6POSSUM	230 315009 1POSSM6B 18.0 1
315008	1POSSM6A	18.0	345	353	0.9253	0.9385	0.9300	1.0700	0.8916	0.9854	L	206	314074	6POSSUM	230 315010 1POSSM6B 18.0 1
315009	1POSSM6B	18.0	345	353	0.9253	0.9385	0.9300	1.0700	0.8916	0.9854	L	206	314074	6POSSUM	230 315010 1POSSM6B 18.0 1
314118	3MTRNIEV	115.0	345	353	0.9462	0.9988	0.9300	1.0700	0.9489	1.0488	D	255	314118	3MTRNIEV	115 314167 30X 115 1
314122	3SOWEGO	115.0	345	353	0.9509	1.0034	0.9300	1.0700	0.9532	1.0535	D	259	314122	3SOWEGO	115 314156 3BRISTER 115 1
314049	3LONA172	115.0	345	353	0.9300	0.9846	0.9300	1.0700	0.9356	1.0341	D	260	314123	3WELLGTH	115 314141 3LIBERTY 115 1
314123	3WELLGTH	115.0	345	353	0.9288	0.9873	0.9300	1.0700	0.9356	1.0367	LD	260	314123	3WELLGTH	115 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9288	0.9849	0.9300	1.0700	0.9356	1.0341	LD	260	314123	3WELLGTH	115 314141 3LIBERTY 115 1
314157	3GOWM172	115.0	345	353	0.9283	0.9859	0.9300	1.0700	0.9366	1.0352	LD	260	314123	3WELLGTH	115 314141 3LIBERTY 115 1
314122	3SOWEGO	115.0	345	353	0.9515	1.0034	0.9300	1.0700	0.9532	1.0535	D	263	314130	6BRISTER	230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9559	1.0565	D	263	314130	6BRISTER	230 314156 3BRISTER 115 1
314049	3LONA172	115.0	345	353	0.9301	0.9846	0.9300	1.0700	0.9356	1.0341	D	269	314133	6LIBERTY	230 314141 3LIBERTY 115 1
314123	3WELLGTH	115.0	345	353	0.9284	0.9873	0.9300	1.0700	0.9380	1.0367	LD	269	314133	6LIBERTY	230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9284	0.9884	0.9300	1.0700	0.9390	1.0378	LD	269	314133	6LIBERTY	230 314141 3LIBERTY 115 1

PSS(nr)MUST 10.2 - Managing and Utilizing System Transmission -- SUN, MAR 10 2013 23:39 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
31417	3MCR172	115.0	345	353	0.9300	0.9849	0.9300	1.0700	0.9356	1.0341 LD		269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
31417	360DM172	115.0	345	353	0.9294	0.9859	0.9300	1.0700	0.9366	1.0352 LD		269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314775	3MT RVER	115.0	345	363	0.9550	1.0144	0.9300	1.0700	0.9636	1.0651 D		275	314135 3CHANCE 115 314775 3MT RVER 115 1
314151	3SLABTWN	115.0	345	355	0.9550	1.0064	0.9300	1.0700	0.9561	1.0567 D		280	314136 3FREDBRG 115 314151 3SLABTWN 115 1
315008	1POSSMGA	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854 L		282	314137 6FREDBRG 230 314138 6MLNE RD 230 1
315009	1POSSMGA	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854 L		282	314137 6FREDBRG 230 314138 6MLNE RD 230 1
315008	1POSSMGA	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854 L		289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1POSSMGA	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854 L		289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MCR197	115.0	345	353	0.9228	1.0028	0.9300	1.0700	0.9527	1.0529 LD		295	314148 3MCR197 115 314155 3CANBR T 115 1
314158	6HARMONY	230.0	345	354	1.1551	1.0297	0.9300	1.0700	0.9782	1.0812 HR		318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314180	6HAYES	230.0	345	354	0.9574	1.0314	0.9300	1.0700	0.9798	1.0830 D		321	314180 6HAYES 230 314423 6YORKTWN 230 1
314256	3HANDSON	115.0	345	360	1.0750	1.0216	0.9300	1.0700	0.9678	1.0726 HR		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0728	1.0236	0.9300	1.0700	0.9724	1.0748 H		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0727	1.0247	0.9300	1.0700	0.9734	1.0759 H		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0803	1.0169	0.9300	1.0700	0.9661	1.0678 HR		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MORTSV	115.0	345	362	1.0837	1.0162	0.9300	1.0700	0.9654	1.0670 HR		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SEABORD	115.0	345	362	1.1152	1.0160	0.9300	1.0700	0.9652	1.0668 HR		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.0732	1.0252	0.9300	1.0700	0.9739	1.0765 H		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.0732	1.0252	0.9300	1.0700	0.9739	1.0765 H		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1479	1.0197	0.9300	1.0700	0.9687	1.0707 HR		431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAMPTI	13.8	345	360	1.0442	0.9931	0.9300	1.0700	0.9434	1.0427 R		464	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	1SPRUNCA	13.8	345	357	1.0155	0.9667	0.9300	1.0700	0.9183	1.0150 R		464	314275 6BELMEAD 230 314276 6BRASN 230 1
314328	6PLAZA	230.0	345	357	0.9164	1.0032	0.9300	1.0700	0.9549	1.0555 LD		566	314328 6PLAZA 230 314338 6SOUTEST 230 1
314524	3FRNKLN	115.0	345	360	1.0750	1.0233	0.9300	1.0700	0.9722	1.0745 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0769	1.0114	0.9300	1.0700	0.9608	1.0620 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0714	1.0236	0.9300	1.0700	0.9724	1.0746 H		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0781	1.0226	0.9300	1.0700	0.9715	1.0738 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314541	3WATKINS	115.0	345	360	1.0735	1.0247	0.9300	1.0700	0.9734	1.0759 H		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0786	1.0233	0.9300	1.0700	0.9722	1.0745 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0741	1.0252	0.9300	1.0700	0.9739	1.0765 H		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0741	1.0252	0.9300	1.0700	0.9739	1.0765 H		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
315115	1SHAMPTI	13.8	345	360	1.0428	0.9931	0.9300	1.0700	0.9434	1.0427 R		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314524	3FRNKLN	115.0	345	360	1.0815	1.0233	0.9300	1.0700	0.9722	1.0745 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314526	3HANDSON	115.0	345	360	1.0709	1.0216	0.9300	1.0700	0.9705	1.0726 H		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0779	1.0236	0.9300	1.0700	0.9724	1.0748 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0821	1.0226	0.9300	1.0700	0.9715	1.0738 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314541	3WATKINS	115.0	345	360	1.0798	1.0247	0.9300	1.0700	0.9734	1.0759 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0858	1.0233	0.9300	1.0700	0.9722	1.0745 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0803	1.0252	0.9300	1.0700	0.9739	1.0765 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0803	1.0252	0.9300	1.0700	0.9739	1.0765 HR		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
315115	1SHAMPTI	13.8	345	360	1.0491	0.9931	0.9300	1.0700	0.9434	1.0427 R		798	314527 3HOLLAND 115 314536 3SUFTOLK 115 1
314541	3WATKINS	115.0	345	360	1.0719	1.0236	0.9300	1.0700	0.9734	1.0759 H		804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314826	3WATKI 1	115.0	345	360	1.0725	1.0252	0.9300	1.0700	0.9739	1.0765 H		804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314827	3WATKI 2	115.0	345	360	1.0725	1.0252	0.9300	1.0700	0.9739	1.0765 H		804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314516	3BRUNS 1	115.0	345	358	1.0796	1.0086	0.9300	1.0700	0.9581	1.0590 HR		858	314562 3CLUBHSE 115 314565 3CLUBS71 115 21
314565	3CLUBS71	115.0	345	362	1.0829	1.0009	0.9300	1.0700	0.9509	1.0510 HR		858	314562 3CLUBHSE 115 314565 3CLUBS71 115 21
314675	3BRODNAX	115.0	345	358	1.0690	1.0066	0.9300	1.0700	0.9562	1.0569 R		858	314562 3CLUBHSE 115 314565 3CLUBS71 115 21

PSS(nrm)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, MAR 10 2013 23:39 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UpplLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314676	3BRUNSWK	115.0	345	358	1.0792	1.0081	0.9300	1.0700	0.9577	1.0585	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314693	3PRMAN D	115.0	345	358	1.0941	1.0036	0.9300	1.0700	0.9534	1.0538	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314704	3LAWRENC	115.0	345	358	1.0845	1.0065	0.9300	1.0700	0.9562	1.0569	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314721	3GO HILL	115.0	345	358	1.0573	1.0050	0.9300	1.0700	0.9547	1.0552	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314782	2BRUNSWC	69.0	345	358	1.0216	1.0283	0.9300	1.0700	0.9769	1.0797	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314785	2DANITWN	69.0	345	358	1.0493	0.9758	0.9300	1.0700	0.9270	1.0246	R	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314786	2GASBURG	69.0	345	358	1.0667	1.0123	0.9300	1.0700	0.9617	1.0629	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314787	2BRUNSW2	69.0	345	358	1.0726	1.0009	0.9300	1.0700	0.9509	1.0510	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314850	3CLUBS 1	115.0	345	362	1.1035	1.0014	0.9300	1.0700	0.9514	1.0515	HR	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314872	2BRUNSWICR	69.0	345	358	1.0604	0.9878	0.9300	1.0700	0.9384	1.0372	R	858	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314641	3KITTY H	115.0	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314646	1KITTY 4	34.5	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314650	1KITTY 5	34.5	345	361	1.0728	1.0415	0.9300	1.0700	0.9895	1.0936	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
315146	1KITTHKA	13.8	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
315147	1KITTHRB	13.8	345	361	1.0729	1.0416	0.9300	1.0700	0.9895	1.0937	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
B61105	KITT 3M4	1.0	345	361	1.0729	1.0416	0.9300	1.0700	0.9886	1.0927	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
B61106	KITT 3M5	1.0	345	361	1.0729	1.0416	0.9300	1.0700	0.9895	1.0937	H	943	314635 3COLNGTP 115 314641 3KITTY H 115 1
314635	3COLNGTP	115.0	345	361	1.0729	1.0258	0.9300	1.0700	0.9745	1.0771	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314636	3COLNG2	115.0	345	361	1.0729	1.0258	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0726	1.0406	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314646	1KITTY 4	34.5	345	361	1.0726	1.0406	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314650	1KITTY 5	34.5	345	361	1.0735	1.0415	0.9300	1.0700	0.9895	1.0936	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0729	1.0258	0.9300	1.0700	0.9745	1.0771	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
315147	1KITTHKA	13.8	345	361	1.0726	1.0406	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
315147	1KITTHRB	13.8	345	361	1.0736	1.0416	0.9300	1.0700	0.9895	1.0937	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
B61105	KITT 3M4	1.0	345	361	1.0726	1.0406	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
B61106	KITT 3M5	1.0	345	361	1.0736	1.0416	0.9300	1.0700	0.9895	1.0937	H	944	314635 3COLNGTP 115 314720 3 52T190 115 1
314348	2GRETN 1	69.0	345	358	1.0802	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1051	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0800	1.0164	0.9300	1.0700	0.9656	1.0672	HR	1051	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314737	2SW3T57	69.0	345	358	1.0701	1.0201	0.9300	1.0700	0.9691	1.0711	H	1051	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314739	2MT A 7P	69.0	345	358	1.0701	1.0201	0.9300	1.0700	0.9691	1.0711	H	1051	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN 1	69.0	345	358	1.0741	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1052	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314731	2GRETN	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0672	HR	1052	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314732	2GRNA FB	69.0	345	358	1.0738	1.0164	0.9300	1.0700	0.9656	1.0672	HR	1052	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314763	3KIDOSTO	115.0	345	363	0.9256	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1065	314744 3BRENO 115 314763 3KIDOSTO 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 15:06 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 15:04 <BRV003.0>
 2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_wskiffes_CSCNOSURRY500.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single_ALT.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	238.1	239.0	99.6	231	LN 255
314559	3CAROLNA	115	314581	3JACKSON	115	LN	115.1	118.0	97.5	336	LN 2012
314212	6FRRIVER	230	314222	6HANOVER	230	LN	771.9	797.0	96.9	404	LN 2090
314581	3JACKSON	115	314626	3WOODLND	115	LN	112.5	118.0	95.3	336	LN 2012
314072	6PL VIEW	230	314925	8PL VIEW	500	TR	938.1	993.6	94.4	513	TX-1 8BRMBL
314461	3DEEFC46	115	314513	3YADKIN	115	LN	339.6	360.0	94.3	240	LN 262

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 15:06 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 15:05 <V0V003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_ws_kiffes_CSCNOSURRY500.sav
Subsys.File X:\S2015\vdvp.sub
Monit.File X:\S2015\vdvp.sys.mon
Contn.File X:\S2015\sum2015_single_ALT.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description ** Base Case **
315218	LCUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	46 LN 52	
314641	3KITTY H	115.0	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
314646	1KITTY 4	34.5	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
314650	1KITTY 5	34.5	345	361	1.0720	1.0415	0.9300	1.0700	0.9895	1.0936	H	46 LN 52	
315146	1KITTYKA	13.8	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
315147	1KITTYHKB	13.8	345	361	1.0720	1.0416	0.9300	1.0700	0.9895	1.0937	H	46 LN 52	
B\$1105	KITT 3W4	1.0	345	361	1.0720	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
B\$1106	KITT 3W5	1.0	345	361	1.0720	1.0416	0.9300	1.0700	0.9895	1.0937	H	46 LN 52	
314524	3FRNKLN	115.0	345	360	1.0816	1.0233	0.9300	1.0700	0.9722	1.0745	HR	64 LN 68	
314526	3HANDSCM	115.0	345	360	1.0709	1.0216	0.9300	1.0700	0.9705	1.0726	H	64 LN 68	
314534	3S HAMPT	115.0	345	360	1.0776	1.0236	0.9300	1.0700	0.9724	1.0748	HR	64 LN 68	
314539	3UNCAMP	115.0	345	360	1.0851	1.0226	0.9300	1.0700	0.9715	1.0738	HR	64 LN 68	
314541	3WATKINS	115.0	345	360	1.0799	1.0247	0.9300	1.0700	0.9734	1.0759	HR	64 LN 68	
314824	3UNCAM 1	115.0	345	360	1.0859	1.0233	0.9300	1.0700	0.9722	1.0745	HR	64 LN 68	
314826	3WATKI 1	115.0	345	360	1.0804	1.0252	0.9300	1.0700	0.9739	1.0765	HR	64 LN 68	
314827	3WATKI 2	115.0	345	360	1.0492	0.9931	0.9300	1.0700	0.9434	1.0427	R	64 LN 68	
315115	1SHAMPT1	13.8	345	358	1.0741	1.0166	0.9300	1.0700	0.9658	1.0675	HR	156 LN 173	
314348	2GRETN 1	69.0	345	358	1.0728	1.0164	0.9300	1.0700	0.9656	1.0672	HR	156 LN 173	
314731	2GRETRNA	69.0	345	358	1.0728	1.0164	0.9300	1.0700	0.9656	1.0672	HR	156 LN 173	
314732	2GRNA FB	69.0	345	358	1.0796	1.0206	0.9300	1.0700	0.9686	1.0717	HR	157 LN 174	
314874	2LIN 174	69.0	345	351	1.0795	1.0206	0.9300	1.0700	0.9686	1.0717	HR	159 LN 178	
314878	2LIN 178	69.0	345	351	1.0795	1.0206	0.9300	1.0700	0.9686	1.0717	HR	160 LN 179	
314879	2LIN 179	69.0	345	351	1.0797	1.0206	0.9300	1.0700	0.9686	1.0717	HR	161 LN 180	
314880	2LIN 180	69.0	345	351	1.0798	1.0206	0.9300	1.0700	0.9686	1.0717	HR	162 LN 181	
314122	3SOWEGO	115.0	345	353	0.9509	1.0034	0.9300	1.0700	0.9532	1.0535	D	175 LN 197	
314051	3LOMA197	115.0	345	353	0.9364	1.0032	0.9300	1.0700	0.9530	1.0533	D	175 LN 197	

PSS(mr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 15:06 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET WSKIFFES CSC NO SURRY500KV

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	Voltrise	Viol	Ncon	Contingency Description
314148	3MICKR197	115.0	345	353	0.9120	1.0028	0.9300	1.0700	0.9527	1.0529	LD	175 LN 197	
314158	3GOWH197	115.0	345	353	0.9484	1.0027	0.9300	1.0700	0.9525	1.0528	D	175 LN 197	
314014	3CANNONB	115.0	345	353	0.9033	1.0038	0.9300	1.0700	0.9537	1.0540	LD	335 LN 2011	
314051	3LOMA197	115.0	345	353	0.9035	1.0032	0.9300	1.0700	0.9530	1.0533	LD	335 LN 2011	
314148	3MICKR197	115.0	345	353	0.9035	1.0028	0.9300	1.0700	0.9527	1.0529	LD	335 LN 2011	
314155	3CANBER T	115.0	345	353	0.9034	1.0033	0.9300	1.0700	0.9531	1.0535	LD	335 LN 2011	
314158	3GOWH197	115.0	345	353	0.9037	1.0027	0.9300	1.0700	0.9525	1.0528	LD	335 LN 2011	
315001	LOMF A	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	337 LN 2013	
315002	LOMF B	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	337 LN 2013	
315083	1SPRUNCA	13.8	345	357	1.0155	0.9667	0.9300	1.0700	0.9183	1.0150	R	376 LN 2055	
315085	1SPRUNCC	13.8	345	357	1.0169	0.9684	0.9300	1.0700	0.9200	1.0169	R	376 LN 2055	
315008	1POSSM6A	18.0	345	353	0.9246	0.9385	0.9300	1.0700	0.8916	0.9854	L	404 LN 2090	
315009	1POSSM6B	18.0	345	353	0.9246	0.9385	0.9300	1.0700	0.8916	0.9854	L	404 LN 2090	
315008	1POSSM6A	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854	L	416 LN 2104	
315009	1POSSM6B	18.0	345	353	0.9245	0.9385	0.9300	1.0700	0.8916	0.9854	L	416 LN 2104	
314180	6HAYES	230.0	345	354	0.9574	1.0314	0.9300	1.0700	0.9798	1.0830	D	432 LN 2122	
314118	3MINNIEV	115.0	345	353	0.9478	0.9968	0.9300	1.0700	0.9489	1.0488	D	479 TX-1 60X	
314167	3OX	115.0	345	352	0.9479	1.0064	0.9300	1.0700	0.9567	1.0567	D	479 TX-1 60X	
315008	1POSSM6A	18.0	345	353	0.9273	0.9385	0.9300	1.0700	0.8916	0.9854	L	484 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9273	0.9385	0.9300	1.0700	0.8916	0.9854	L	484 TX-1 6POSSUM	
315008	1POSSM6A	18.0	345	353	0.9262	0.9385	0.9300	1.0700	0.8916	0.9854	L	490 TX-1 6POSSU4	
315009	1POSSM6B	18.0	345	353	0.9262	0.9385	0.9300	1.0700	0.8916	0.9854	L	491 TX-1 6POSSU5	
315008	1POSSM6A	18.0	345	353	0.9253	0.9385	0.9300	1.0700	0.8916	0.9854	L	492 TX-1 6POSSU6	
315009	1POSSM6B	18.0	345	353	0.9253	0.9385	0.9300	1.0700	0.8916	0.9854	L	492 TX-1 6POSSU6	
314122	3SOWEGO	115.0	345	353	0.9515	1.0034	0.9300	1.0700	0.9532	1.0535	D	501 TX-1 6BRISTE	
314156	3BRISTER	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9559	1.0569	D	501 TX-1 6BRISTE	
314049	3LOMA172	115.0	345	353	0.9301	0.9848	0.9300	1.0700	0.9356	1.0341	D	504 TX-1 6LIBERT	
314123	3WELLGTH	115.0	345	353	0.9284	0.9873	0.9300	1.0700	0.9380	1.0367	LD	504 TX-1 6LIBERT	
314143	3LIBERTY	115.0	345	353	0.9284	0.9864	0.9300	1.0700	0.9380	1.0376	LD	504 TX-1 6LIBERT	
314147	3MICKR172	115.0	345	353	0.9300	0.9849	0.9300	1.0700	0.9356	1.0341	LD	504 TX-1 6LIBERT	
314157	3GOWH172	115.0	345	353	0.9294	0.9859	0.9300	1.0700	0.9366	1.0352	LD	504 TX-1 6LIBERT	

CATEGORY B

PSS(r)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 14:45 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV
 Case File X:\S2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY230.sav
 Subsys File X:\S2015\wpsub
 Monit. File X:\S2015\wpsys.mon
 Contin. File X:\S2015\wpsys.con
 Excltd. File none

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 14:43 <BRV003.0>

2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012

2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

Case File X:\S2015\sum_2015(2013LF)_base_wpre_CSCNOSURRY230.sav

Subsys File X:\S2015\wpsub

Monit. File X:\S2015\wpsys.mon

Contin. File X:\S2015\wpsys.con

Excltd. File none

***** Report on violations *****

Branches with MVA Flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	116.0	83.3	89.0	130.3	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	114.5	81.8	89.0	128.6	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	111.8	83.3	89.0	125.6	614	314391 6LIGH209 230 314415 6WALR209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	110.6	83.3	89.0	124.3	371	314214 6CHCKAHM 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	110.2	81.8	89.0	123.9	614	314391 6LIGH209 230 314415 6WALR209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	109.9	83.3	89.0	123.5	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	109.9	83.3	89.0	123.5	620	314396 3NNEWS58 115 314411 3TOAN058 115 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	108.4	81.8	89.0	122.6	371	314214 6CHCKAHM 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	108.4	81.8	89.0	121.8	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	108.4	81.8	89.0	121.8	620	314396 3NNEWS58 115 314411 3TOAN058 115 1
314025	1 TX500	13.2	314148 3MICR197	115	TR	TR	53.7	32.7	45.0	119.4	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
314025	1 TX500	13.2	314148 3MICR197	115	TR	TR	53.8	32.7	45.0	119.4	293	314147 3MICR172 115 314160 1 TX503 13.2 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	105.4	83.3	89.0	118.4	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	105.3	83.3	89.0	118.3	515	314296 6PENNIMAN 230 314415 6WALR209 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	104.0	83.3	89.0	116.8	514	314296 6PENNIMAN 230 314386 6KINGS M 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	103.7	81.8	89.0	116.6	515	314296 6PENNIMAN 230 314415 6WALR209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	103.8	81.8	89.0	116.6	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	103.2	83.3	89.0	115.9	604	314384 3KINGS M 115 314411 3TOAN058 115 1
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	102.5	70.1	89.0	115.2	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	102.4	81.8	89.0	115.1	514	314296 6PENNIMAN 230 314386 6KINGS M 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	101.9	83.3	89.0	114.5	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	101.6	81.8	89.0	114.2	604	314384 3KINGS M 115 314411 3TOAN058 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	101.4	83.3	89.0	113.9	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	100.8	83.3	89.0	113.3	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314147	3MICR172	115	314160 1 TX503	13.2	TR	TR	50.8	33.1	45.0	112.8	95	314025 1 TX500 13.2 314148 3MICR197 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 14:45 < UDF000.0 >

2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012

2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	100.4	81.8	89.0	112.8	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	99.9	83.3	89.0	112.2	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	99.9	81.8	89.0	112.2	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	99.3	81.8	89.0	111.5	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	98.4	81.8	89.0	110.5	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	98.4	70.1	89.0	110.5	614	314391 6LIGH209 230 314415 6WALR209 230 1
314391	6LIGH209	230	314415	6WALR209	230	LN	LN	513.5	339.0	470.0	109.2	371	314214 6CHCKAHH 230 314390 6LIGH285 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	97.1	70.1	89.0	109.1	371	314214 6CHCKAHH 230 314390 6LIGH285 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	96.3	83.3	89.0	108.3	813	314538 6SURRY 230 314540 6POOLSVL 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	96.3	70.1	89.0	108.2	609	314387 3LANEXA 115 314396 3NEWS58 115 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	96.3	70.1	89.0	108.2	620	314396 3NEWS58 115 314411 3TOANO58 115 1
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	48.6	32.7	45.0	107.9	260	314123 3WELLGTH 115 314141 3LIBERTY 115 1
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	48.6	32.7	45.0	107.9	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	96.0	83.3	89.0	107.9	596	314376 6DENBIGH 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	95.6	83.3	89.0	107.4	643	314421 6WINCHST 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	94.8	81.8	89.0	106.5	813	314538 6SURRY 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	94.5	81.8	89.0	106.1	596	314376 6DENBIGH 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	94.0	81.8	89.0	105.7	643	314421 6WINCHST 230 314540 6POOLSVL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	93.8	83.3	89.0	105.4	605	314384 3KINGS M 115 314424 3YNWS 58 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	93.1	83.3	89.0	104.6	621	314398 6NP NEWS 230 314399 6PEMBROK 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	93.1	83.3	89.0	104.5	623	314399 6PEMBROK 230 314407 6SHELBNK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	92.2	81.8	89.0	103.7	605	314384 3KINGS M 115 314424 3YNWS 58 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	92.3	83.3	89.0	103.7	612	314389 3LEBAN58 115 314424 3YNWS 58 115 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	92.2	70.1	89.0	103.6	515	314296 6PENNINGMAN 230 314415 6WALR209 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	92.0	70.1	89.0	103.4	613	314390 6LIGH285 230 314413 6WALR285 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	91.6	81.8	89.0	103.0	623	314399 6PEMBROK 230 314407 6SHELBNK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	91.6	81.8	89.0	102.9	621	314398 6NP NEWS 230 314399 6PEMBROK 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.5	83.3	89.0	102.8	644	314422 3YORKTWN 115 314425 3YORK PS 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.5	83.3	89.0	102.8	646	314423 3YORKTWN 230 314425 3YORK PS 115 1
314391	6LIGH209	230	314415	6WALR209	230	LN	LN	482.0	339.0	470.0	102.6	613	314390 6LIGH285 230 314413 6WALR285 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	90.9	70.1	89.0	102.1	514	314296 6PENNINGMAN 230 314386 6KINGS M 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.7	81.8	89.0	101.9	612	314389 3LEBAN58 115 314424 3YNWS 58 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	81.8	89.0	101.1	644	314422 3YORKTWN 115 314425 3YORK PS 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	81.8	89.0	101.1	646	314423 3YORKTWN 230 314425 3YORK PS 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	89.8	83.3	89.0	100.9	641	314418 6WHEALTHN 230 314421 6WINCHST 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	89.9	70.1	89.0	100.8	604	314384 3KINGS M 115 314411 3TOANO58 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	89.2	83.3	89.0	100.2	637	314414 3WARTICK 115 314417 3WHEALTHN 115 1
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	LN	248.9	139.6	239.0	99.9	1098	314766 6LOUISA 230 314777 6S ANNA 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.9	83.3	89.0	99.9	1224	314903 8CHCKAHH 500 314924 8SURRY 500 1
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	TR	69.9	69.9	70.0	99.8	**	Base Case **
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	88.9	70.1	89.0	99.8	606	314386 6KINGS M 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.6	83.3	89.0	99.5	1256	314923 8SEPTA 500 314927 8YADKIN 500 1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.5	83.3	89.0	99.4	330	314188 3WEST PT 115 314387 3LANEXA 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.4	83.3	89.0	99.4	792	314525 6KINGSFO 230 314537 6SUFFOLK 230 1
314212	6FRRIVER	230	314222	6HANOVER	230	LN	LN	790.7	612.3	797.0	99.2	285	314138 6MINE RD 230 314197 6LDYSGMT1 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	88.2	81.8	89.0	99.1	641	314418 6WHEALTHN 230 314421 6WINCHST 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.8	524	314303 6HOPEWILL 230 314538 6SURREY 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.8	1222	314902 8CARSON 500 314928 8SUFFOLK 500 1
314559	3CAROLINA	115	314581	3JACKSON	115	LN	LN	116.5	75.8	118.0	98.7	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.7	525	314303 6HOPEWILL 230 314538 6SURREY 230 2
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	87.8	70.1	89.0	98.7	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	87.7	70.1	89.0	98.5	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.7	81.8	89.0	98.5	637	314414 3WARWICK 115 314417 3WHEALTHN 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.4	83.3	89.0	98.2	590	314373 3COLONY 115 314414 3WARWICK 115 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.4	81.8	89.0	98.1	1224	314903 8CHCKKAHM 500 314924 8SURREY 500 1
314757	3GORDNVL	115	314776	3SOMERSET	115	LN	LN	234.3	139.6	239.0	98.0	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.1	83.3	89.0	97.9	786	314522 6CHCKTUK 230 314525 6KINGSFO 230 1
314559	3CAROLINA	115	314581	3JACKSON	115	LN	LN	115.3	75.8	118.0	97.8	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.0	81.8	89.0	97.8	1256	314923 8SEPTA 500 314927 8YADKIN 500 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.9	81.8	89.0	97.7	330	314188 3WEST PT 115 314387 3LANEXA 115 1
314377	3DOW 34	115	314378	3LANEXA	115	LN	LN	87.0	83.3	89.0	97.7	624	314401 3PENINSL 115 314402 3PENINSL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.9	81.8	89.0	97.6	792	314525 6KINGSFO 230 314537 6SUFFOLK 230 1
304223	3ROCKYMT115T	115	314554	3BTLEBRO	115	LN	LN	91.8	18.9	94.0	97.6	846	314559 3CAROLINA 115 314578 3HORNNTN 115 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.9	83.3	89.0	97.6	1257	314924 8SURREY 500 314928 8SUFFOLK 500 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	83.3	89.0	97.1	635	314409 6TABE 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	83.3	89.0	97.1	1258	314924 8SURREY 500 315233 1SURREY 2 22.0 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.3	81.8	89.0	97.0	524	314303 6HOPEWILL 230 314538 6SURREY 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.3	81.8	89.0	97.0	525	314303 6HOPEWILL 230 314538 6SURREY 230 2
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.3	83.3	89.0	97.0	623	314406 3SHELEBK 115 314407 6SHELEBK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.4	81.8	89.0	97.0	1222	314902 8CARSON 500 314928 8SUFFOLK 500 1
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	86.1	70.1	89.0	96.8	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314591	6LIGH209	230	314415	6WALR209	230	LN	LN	454.9	339.0	470.0	96.8	595	314376 6DENBIGH 230 314413 6WALR285 230 1
314581	3JACKSON	115	314626	3WOODLAND	115	LN	LN	113.9	73.2	118.0	96.5	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.9	81.8	89.0	96.5	590	314373 3COLONY 115 314414 3WARWICK 115 1
314387	3LANEXA	115	314396	3NNWS58	115	LN	LN	137.8	110.2	143.0	96.4	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.6	81.8	89.0	96.2	786	314522 6CHCKTUK 230 314525 6KINGSFO 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.4	81.8	89.0	96.0	624	314401 3PENINSL 115 314402 3PENINSL 230 1
314461	3DEEPC46	115	314513	3YADKIN	115	LN	LN	345.8	230.9	360.0	96.0	688	314449 6CHESAPK 230 314514 6YADKIN 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.3	81.8	89.0	95.9	1257	314924 8SURREY 500 314928 8SUFFOLK 500 1
314581	3JACKSON	115	314626	3WOODLAND	115	LN	LN	112.8	73.2	118.0	95.6	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	81.8	89.0	95.3	633	314406 3SHELEBK 115 314407 6SHELEBK 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	81.8	89.0	95.3	635	314409 6TABE 230 314423 6YORKTWN 230 1
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	81.8	89.0	95.3	1258	314924 8SURREY 500 315233 1SURREY 2 22.0 1
314212	6FRRIVER	230	314222	6HANOVER	230	LN	LN	756.8	612.3	797.0	94.9	282	314137 6FREDBRG 230 314138 6MINE RD 230 1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314465	6ELIZ R	230	315110	1ELIZAR3	13.8		TR	123.0	123.0	130.0	94.6	**	Base Case **
314072	6PL VIEW	230	314925	8PL VIEW	500		TR	939.0	810.7	993.6	94.5	307	314171 6BRAMB 230 314933 8BRAMBLETON 500 1
314296	6PENNINGAN	230	314415	6WALR209	230		LN	441.7	269.8	470.0	94.0	371	314214 6CHCKRAH 230 314390 6LIGH285 230 1
314682	3BUGGS I	115	315150	1BUGGS 1	13.8		TR	70.0	70.0	74.6	93.9	**	Base Case **
314387	3LANEXA	115	314396	3NNEWS58	115		LN	134.1	110.2	143.0	93.8	614	314391 6LIGH209 230 314415 6WALR209 230 1
314025	1 TX500	13.2	314148	3MICR197	115		TR	42.2	32.7	45.0	93.7	261	314123 3WELLGTN 115 314157 3GODW172 115 1
314218	6ELMONT	230	314222	6HANOVER	230		LN	746.8	568.5	797.0	93.7	285	314138 6MINE RD 230 314197 6LDYSMT1 230 1
314396	3NNEWS58	115	314411	3TORAN058	115		LN	137.8	110.2	147.0	93.7	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314377	3DOW 34	115	314387	3LANEXA	115		LN	83.3	83.3	89.0	93.6	**	Base Case **

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 2015 SUMMER BASE CASE (LTSIG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 14:44 <V0V003.0>

2015 SUMMER BASE CASE (LTSIG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

Case.File X:\S2015\sum 2015(2013LF)_base_wpre_CSCNOGURRY230.sav

Subsys.File X:\S2015\drv.sub

Monit.File X:\S2015\vapsys.mon

Contn.File X:\S2015\vapsys.con

Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
313818	6BENCHRCH	230.0	345	360	0.9722	1.0257	0.9300	1.0700	0.9744	1.0770	D	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314014	3CANNONB	115.0	345	353	0.9074	1.0038	0.9300	1.0700	0.9536	1.0539	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9076	1.0031	0.9300	1.0700	0.9529	1.0532	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MTCR197	115.0	345	353	0.9076	1.0027	0.9300	1.0700	0.9528	1.0528	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9076	1.0032	0.9300	1.0700	0.9530	1.0534	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GODWI197	115.0	345	353	0.9078	1.0026	0.9300	1.0700	0.9525	1.0527	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9225	1.0031	0.9300	1.0700	0.9529	1.0532	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314148	3MTCR197	115.0	345	353	0.9224	1.0027	0.9300	1.0700	0.9526	1.0528	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9224	1.0032	0.9300	1.0700	0.9530	1.0534	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314160	1 TX503	13.2	345	353	0.9225	1.0007	0.9300	1.0700	0.9507	1.0507	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	175	314067 60CCOQUIN 230 314068 60X 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9778	0.9300	1.0700	0.9289	1.0267	R	175	314067 60CCOQUIN 230 314068 60X 230 1
314118	3MINNIEV	115.0	345	353	0.9477	0.9988	0.9300	1.0700	0.9488	1.0487	D	179	314068 60X 230 314167 30X 115 1
314167	30X	115.0	345	352	0.9478	1.0063	0.9300	1.0700	0.9566	1.0566	D	179	314068 60X 230 314167 30X 115 1
315008	1POSSM6A	18.0	345	353	0.9278	0.9389	0.9300	1.0700	0.8920	0.9859	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9278	0.9389	0.9300	1.0700	0.8920	0.9859	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9268	0.9389	0.9300	1.0700	0.8920	0.9859	L	204	314074 6POSSUM 230 315008 1POSSM6A 18.0 1
315008	1POSSM6A	18.0	345	353	0.9268	0.9389	0.9300	1.0700	0.8920	0.9859	L	205	314074 6POSSUM 230 315009 1POSSM6B 18.0 1
315009	1POSSM6A	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315009	1POSSM6B	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9459	0.9988	0.9300	1.0700	0.9488	1.0487	D	255	314118 3MINNIEV 115 314167 30X 115 1
314122	3SOWEGO	115.0	345	353	0.9509	1.0033	0.9300	1.0700	0.9531	1.0534	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9299	0.9847	0.9300	1.0700	0.9355	1.0340	LD	260	314123 3WELLTGN 115 314141 3LIBERTY 115 1
314123	3WELLTGN	115.0	345	353	0.9281	0.9873	0.9300	1.0700	0.9379	1.0366	LD	260	314123 3WELLTGN 115 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9297	0.9848	0.9300	1.0700	0.9356	1.0340	LD	260	314123 3WELLTGN 115 314141 3LIBERTY 115 1
314157	3GODWI172	115.0	345	353	0.9292	0.9858	0.9300	1.0700	0.9365	1.0351	LD	260	314123 3WELLTGN 115 314141 3LIBERTY 115 1
314122	3SOWEGO	115.0	345	353	0.9515	1.0033	0.9300	1.0700	0.9531	1.0534	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1

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 2015 SUMMER BASE CASE (LTSIG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upllimi t	VoltDro p	VoltrIs e	Viol	Ncon	Contingency Description
314156	3BRISTER	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9558	1.0565	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9300	0.9847	0.9300	1.0700	0.9355	1.0366	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELIGHT	115.0	345	353	0.9283	0.9873	0.9300	1.0700	0.9379	1.0366	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9283	0.9883	0.9300	1.0700	0.9389	1.0377	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314147	3MCR172	115.0	345	353	0.9288	0.9848	0.9300	1.0700	0.9356	1.0340	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	3GODW172	115.0	345	353	0.9283	0.9858	0.9300	1.0700	0.9365	1.0351	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314775	3NI RVER	115.0	345	353	0.9551	1.0143	0.9300	1.0700	0.9635	1.0650	D	275	314175 3NI RVER 115 1
314151	3SLABTWN	115.0	345	355	0.9520	1.0057	0.9300	1.0700	0.9554	1.0560	D	280	314136 3FREDBERG 115 314151 3SLABTWN 115 1
315008	1POSSM6A	18.0	345	353	0.9265	0.9389	0.9300	1.0700	0.8920	0.9859	L	282	314137 6FREDBERG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9265	0.9389	0.9300	1.0700	0.8920	0.9859	L	282	314137 6FREDBERG 230 314138 6MINE RD 230 1
315008	1POSSM6A	18.0	345	353	0.9243	0.9389	0.9300	1.0700	0.8920	0.9859	L	289	314142 6STAFORD 230 314145 6AQUI HARD B 230 1
315009	1POSSM6B	18.0	345	353	0.9243	0.9389	0.9300	1.0700	0.8920	0.9859	L	289	314142 6STAFORD 230 314145 6AQUI HARD B 230 1
314148	3MCR197	115.0	345	353	0.9227	1.0027	0.9300	1.0700	0.9526	1.0528	D	295	314148 3MCR197 115 314155 3CANR T 115 1
314156	3GODW197	115.0	345	353	0.9227	1.0026	0.9300	1.0700	0.9525	1.0527	D	295	314148 3MCR197 115 314155 3CANR T 115 1
314176	6HARMONY	230.0	345	354	1.1257	1.0189	0.9300	1.0700	0.9680	1.0699	HR	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314180	6HAYES	230.0	345	354	0.9450	1.0202	0.9300	1.0700	0.9692	1.0712	D	321	314180 6HAYES 230 314423 6YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1461	1.0184	0.9300	1.0700	0.9675	1.0694	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0745	1.0210	0.9300	1.0700	0.9700	1.0721	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0723	1.0231	0.9300	1.0700	0.9719	1.0742	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0797	1.0241	0.9300	1.0700	0.9729	1.0753	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0797	1.0164	0.9300	1.0700	0.9656	1.0673	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MARGT5V	115.0	345	362	1.1032	1.0158	0.9300	1.0700	0.9650	1.0665	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SEABORD	115.0	345	362	1.1446	1.0156	0.9300	1.0700	0.9648	1.0664	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 2	115.0	345	360	1.0727	1.0247	0.9300	1.0700	0.9734	1.0759	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1473	1.0195	0.9300	1.0700	0.9685	1.0704	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAMPT1	13.8	345	360	1.0437	0.9925	0.9300	1.0700	0.9429	1.0421	R	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	1SPRUNCA	13.8	345	357	1.0164	0.9667	0.9300	1.0700	0.9183	1.0150	R	464	314275 6BELMEAD 230 314276 6BASIN 230 1
315085	1SERUNCC	13.8	345	357	1.0178	0.9684	0.9300	1.0700	0.9200	1.0169	R	464	314275 6BELMEAD 230 314276 6BASIN 230 1
314328	6PLAZA	230.0	345	357	0.9549	1.0052	0.9300	1.0700	0.9549	1.0554	D	566	314328 6PLAZA 230 314338 6SOUNEST 230 1
314176	6HARMONY	230.0	345	354	0.9581	1.0189	0.9300	1.0700	0.9680	1.0699	D	594	314375 6CORRCTN 230 314388 6LANEXA 230 1
314189	6PAPERMTL	230.0	345	354	0.9530	1.0118	0.9300	1.0700	0.9612	1.0624	D	594	314375 6CORRCTN 230 314388 6LANEXA 230 1
314375	6CORRCTN	230.0	345	354	0.9527	1.0112	0.9300	1.0700	0.9606	1.0617	D	594	314375 6CORRCTN 230 314388 6LANEXA 230 1
314396	3NEWS58	115.0	345	356	0.9388	0.9900	0.9300	1.0700	0.9405	1.0395	D	609	314387 3LANEXA 115 314396 3NEWS58 115 1
314411	3TOANO58	115.0	345	356	0.9388	0.9887	0.9300	1.0700	0.9392	1.0381	D	609	314387 3LANEXA 115 314396 3NEWS58 115 1
314411	3TOANO58	115.0	345	356	0.9387	0.9887	0.9300	1.0700	0.9392	1.0381	D	620	314396 3NEWS58 115 314411 3TOANO58 115 1
314399	6PEMBROK	230.0	345	356	0.9623	1.0151	0.9300	1.0700	0.9643	1.0658	D	621	314398 6NP NEWS 230 314399 6PEMBROK 230 1
315111	1LAKKINGA	13.8	345	359	0.9933	0.9418	0.9300	1.0700	0.8947	0.9889	R	670	314444 6BOWERS 230 314514 6YADKIN 230 1
315112	1LAKKINGB	13.8	345	359	0.9933	0.9418	0.9300	1.0700	0.8947	0.9889	R	670	314444 6BOWERS 230 314514 6YADKIN 230 1
315111	1LAKKINGA	13.8	345	359	0.9907	0.9418	0.9300	1.0700	0.8947	0.9889	R	696	314453 6CHRLND 230 314653 6CHRL 1 230 1
315112	1LAKKINGB	13.8	345	359	0.9907	0.9418	0.9300	1.0700	0.8947	0.9889	R	696	314453 6CHRLND 230 314653 6CHRL 1 230 1
314524	3FRNKLN	115.0	345	360	1.0747	1.0228	0.9300	1.0700	0.9716	1.0739	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0766	1.0109	0.9300	1.0700	0.9603	1.0614	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0721	1.0231	0.9300	1.0700	0.9719	1.0742	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0778	1.0221	0.9300	1.0700	0.9710	1.0732	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0733	1.0241	0.9300	1.0700	0.9729	1.0753	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 14:45 < UDF000.0 >
 2015 SUMMER BASE CASE (UTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro p	Voltris e	Viol	Noon	Contingency Description
314824	3UNCAM 1	115.0	345	360	1.0795	1.0228	0.9300	1.0700	0.9716	1.0739	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0738	1.0247	0.9300	1.0700	0.9734	1.0759	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0738	1.0247	0.9300	1.0700	0.9734	1.0759	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	15WATKI 1	13.8	345	360	1.0724	0.9925	0.9300	1.0700	0.9429	1.0421	R	785	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FENKUN	115.0	345	360	1.0842	1.0228	0.9300	1.0700	0.9716	1.0739	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314526	3HANDSON	115.0	345	360	1.0706	1.0210	0.9300	1.0700	0.9700	1.0721	H	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314534	38 HAMPT	115.0	345	360	1.0772	1.0231	0.9300	1.0700	0.9719	1.0742	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.0848	1.0221	0.9300	1.0700	0.9710	1.0732	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0795	1.0241	0.9300	1.0700	0.9729	1.0753	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314824	3UNCAM 1	115.0	345	360	1.0855	1.0228	0.9300	1.0700	0.9716	1.0739	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0800	1.0247	0.9300	1.0700	0.9734	1.0759	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI 2	115.0	345	360	1.0800	1.0247	0.9300	1.0700	0.9734	1.0759	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	15WATKI 1	13.8	345	360	1.0714	0.9925	0.9300	1.0700	0.9429	1.0421	R	785	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0720	1.0247	0.9300	1.0700	0.9734	1.0759	H	801	314534 38 HAMPT 115 314541 3WATKINS 115 1
314827	3WATKI 2	115.0	345	360	1.0720	1.0247	0.9300	1.0700	0.9734	1.0759	H	801	314534 38 HAMPT 115 314541 3WATKINS 115 1
314516	3BRUNS 1	115.0	345	358	1.0795	1.0084	0.9300	1.0700	0.9580	1.0589	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314565	3CLUBHOUSE 1	115.0	345	362	1.0729	1.0010	0.9300	1.0700	0.9509	1.0510	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314675	3BRUNSWAY	115.0	345	358	1.0690	1.0064	0.9300	1.0700	0.9561	1.0568	R	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314676	3BRUNSWAY	115.0	345	358	1.0721	1.0079	0.9300	1.0700	0.9576	1.0583	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314693	3FARMAN D	115.0	345	358	1.0941	1.0036	0.9300	1.0700	0.9534	1.0537	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314704	3CLAWRENCE	115.0	345	358	1.0845	1.0065	0.9300	1.0700	0.9561	1.0568	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314721	350 HILL	115.0	345	358	1.0753	1.0048	0.9300	1.0700	0.9546	1.0550	R	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314782	2BRUNSWAY	69.0	345	358	1.1053	1.0282	0.9300	1.0700	0.9768	1.0796	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314785	2DANL/TWN	69.0	345	358	1.0493	0.9757	0.9300	1.0700	0.9269	1.0245	R	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314786	2GASBURG	69.0	345	358	1.0866	1.0122	0.9300	1.0700	0.9616	1.0628	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314787	2BRUNSWAY	69.0	345	358	1.0726	1.0008	0.9300	1.0700	0.9508	1.0508	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314850	3CLUBHOUSE 1	115.0	345	362	1.1034	1.0015	0.9300	1.0700	0.9514	1.0515	HR	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314872	2BRUNSWAY	69.0	345	358	1.0604	0.9877	0.9300	1.0700	0.9383	1.0370	R	855	314562 3CLUBHOUSE 115 314565 3CLUBHOUSE 115 21
314641	3KITTY H	115.0	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
314650	3KITTY 5	34.5	345	361	1.0720	1.0411	0.9300	1.0700	0.9890	1.0932	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
315146	3KITTYHKA	13.8	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
315147	3KITTYHKB	13.8	345	361	1.0720	1.0412	0.9300	1.0700	0.9891	1.0932	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
BS1105	3KITTY 3M4	1.0	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
BS1106	3KITTY 3M5	1.0	345	361	1.0720	1.0412	0.9300	1.0700	0.9891	1.0932	H	940	314635 3COLINGTWP 115 314641 3KITTY H 115 1
314635	3COLINGTWP	115.0	345	361	1.0720	1.0253	0.9300	1.0700	0.9741	1.0766	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
314636	3COLING2	115.0	345	361	1.0720	1.0254	0.9300	1.0700	0.9741	1.0766	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0717	1.0402	0.9300	1.0700	0.9882	1.0922	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
314646	3KITTY 4	34.5	345	361	1.0717	1.0402	0.9300	1.0700	0.9882	1.0922	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0726	1.0411	0.9300	1.0700	0.9890	1.0932	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
314829	3COLIN I	115.0	345	361	1.0720	1.0254	0.9300	1.0700	0.9741	1.0766	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
315146	3KITTYHKA	13.8	345	361	1.0717	1.0402	0.9300	1.0700	0.9882	1.0922	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
315147	3KITTYHKB	13.8	345	361	1.0727	1.0412	0.9300	1.0700	0.9891	1.0932	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
BS1105	3KITTY 3M4	1.0	345	361	1.0717	1.0402	0.9300	1.0700	0.9882	1.0922	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1
BS1106	3KITTY 3M5	1.0	345	361	1.0727	1.0412	0.9300	1.0700	0.9891	1.0932	H	941	314635 3COLINGTWP 115 314720 3 52T190 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314348	2GRETN 1	69.0	345	358	1.0803	1.0167	0.9300	1.0700	0.9659	1.0675	HR	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0802	1.0165	0.9300	1.0700	0.9656	1.0673	HR	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314737	2SW35T57	69.0	345	358	1.0702	1.0201	0.9300	1.0700	0.9691	1.0711	H	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314739	ZMT A TP	69.0	345	358	1.0702	1.0201	0.9300	1.0700	0.9691	1.0711	H	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN 1	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9659	1.0675	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314731	2GRETNA	69.0	345	358	1.0739	1.0164	0.9300	1.0700	0.9656	1.0673	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314732	2GRNA FB	69.0	345	358	1.0729	1.0165	0.9300	1.0700	0.9656	1.0673	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314763	3KIDOSTO	115.0	345	363	0.9255	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1062	314744 3BREMO 115 314763 3KIDOSTO 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:33 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:31 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV
 Case.File X:\S2015\sum2015(2013LF)_base_wpre_CSCNOSURRY230.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	LN	53.7	32.7	45.0	119.4	499	TX-1 3MICR17
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	106.0	83.3	89.0	119.1	405	LN 2102
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	104.4	81.8	89.0	117.4	405	LN 2102
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	103.1	83.3	89.0	115.8	183	LN 209
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	101.5	81.8	89.0	114.0	183	LN 209
314147	3MICR172	115	314160 1 TX503	13.2	TR	LN	50.8	33.1	45.0	112.8	455	TX-1 3MICR19
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	99.7	83.3	89.0	112.0	237	LN 263
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	98.5	83.3	89.0	110.7	415	LN 2113
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	98.2	81.8	89.0	110.4	237	LN 263
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	96.9	81.8	89.0	108.9	415	LN 2113
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	96.7	83.3	89.0	108.7	51	LN 58
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	96.7	83.3	89.0	108.6	258	LN 285
314025	1 TX500	13.2	314148 3MICR197	115	TR	LN	48.6	32.7	45.0	107.9	495	TX-1 6LIBERT
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	95.5	83.3	89.0	107.3	188	LN 214
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	95.2	81.8	89.0	106.9	51	LN 58
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	95.1	81.8	89.0	106.8	258	LN 285
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	93.9	81.8	89.0	105.5	188	LN 214
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	93.1	83.3	89.0	104.6	232	LN 261
314378	3FTEUS34	115	314381 3GRAFT34	115	LN	LN	92.7	70.1	89.0	104.1	405	LN 2102
314391	6LIGH209	230	314415 6WALR209	230	LN	LN	486.0	339.0	470.0	103.4	405	LN 2102
314387	3LANEXA	115	314388 6LANEXA	230	TR	LN	197.7	93.3	191.7	103.1	415	LN 2113
314377	3DOW 34	115	314378 3FTEUS34	115	LN	LN	91.6	81.8	89.0	103.0	232	LN 261
314377	3DOW 34	115	314387 3LANEXA	115	LN	LN	91.5	83.3	89.0	102.8	576	TX-1 3YORKTW

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:33 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15511) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.5	83.3	89.0	102.8	578	TX-1 6YORKTW
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	91.4	83.3	89.0	102.7	206	LN 234
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	90.0	70.1	89.0	101.1	183	LN 209
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	81.8	89.0	101.1	576	TX-1 3YORKTW
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	81.8	89.0	101.1	578	TX-1 6YORKTW
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	90.0	81.8	89.0	101.1	206	LN 234
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.9	83.3	89.0	99.9	303	LN 567
314682	3BUGS I	115	315151	1BUGS 2	13.8	TR	TR	69.9	69.9	70.0	99.8	**	Base Case **
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	LN	238.2	139.6	239.0	99.6	226	LN 255
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	89.5	89.5	90.0	99.5	**	Base Case **
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.6	83.3	89.0	99.5	315	LN 579A
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	88.4	83.3	89.0	99.4	77	LN 85
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	89.2	89.2	90.0	99.1	**	Base Case **
314212	6FRRIVER	230	314222	6HANOVER	230	LN	LN	790.2	612.3	797.0	99.1	395	LN 2090
314025	1 TX500	13.2	314148	3MICR197	115	TR	TR	44.5	32.7	45.0	98.9	152	LN 172
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.8	186	LN 210
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.8	212	LN 240
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.9	83.3	89.0	98.8	282	LN 544
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	87.5	83.3	89.0	98.4	262	LN 289
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.4	81.8	89.0	98.2	303	LN 567
314559	3CAROLNA	115	314581	3JACKSON	115	LN	LN	115.8	75.8	118.0	98.1	327	LN 2012
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	87.0	81.8	89.0	97.8	315	LN 579A
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.9	81.8	89.0	97.7	574	TX-1 6PENINS
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.9	83.3	89.0	97.6	77	LN 85
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.9	83.3	89.0	97.6	274	LN 531
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	83.3	89.0	97.1	683	TX-1 8SURREY
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.3	81.8	89.0	97.0	186	LN 212
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.3	81.8	89.0	97.0	212	LN 240
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.3	81.8	89.0	97.0	282	LN 544
314377	3DOW 34	115	314387	3LANEXA	115	LN	LN	86.4	83.3	89.0	97.0	575	TX-1 6SHELEN
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	86.0	70.1	89.0	96.6	237	LN 263
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	86.0	81.8	89.0	96.6	262	LN 289
314289	6DAREYTN	230	315067	1DARBY 1	13.8	TR	TR	86.4	86.4	90.0	96.0	**	Base Case **
314289	6DAREYTN	230	315068	1DARBY 2	13.8	TR	TR	86.4	86.4	90.0	96.0	**	Base Case **
314289	6DAREYTN	230	315069	1DARBY 3	13.8	TR	TR	86.4	86.4	90.0	96.0	**	Base Case **
314289	6DAREYTN	230	315070	1DARBY 4	13.8	TR	TR	86.4	86.4	90.0	96.0	**	Base Case **
314461	3DEEPC46	115	314513	3YADKIN	115	LN	LN	345.8	230.9	360.0	96.0	235	LN 262
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.4	81.8	89.0	96.0	574	TX-1 6PENINS
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	85.3	81.8	89.0	95.9	274	LN 531
314581	3JACKSON	115	314626	3WOODLND	115	LN	LN	113.2	73.2	118.0	95.9	327	LN 2012

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	LN	85.3	70.1	89.0	95.8	415 LN 2113	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	86.2	89.5	90.0	95.7	282 LN 544	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	86.2	89.2	90.0	95.7	282 LN 544	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	86.1	89.5	90.0	95.6	315 LN 579A	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	86.1	89.2	90.0	95.6	315 LN 579A	
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	181.7	175.8	190.0	95.6	407 LN 2104	
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	181.7	175.8	190.0	95.6	407 LN 2104	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.9	89.5	90.0	95.5	415 LN 2113	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.9	89.2	90.0	95.5	415 LN 2113	
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00	TR	TR	514.6	506.8	540.0	95.3	285 LN 548	
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	181.1	175.8	190.0	95.3	483 TX-1 6POSSU6	
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	181.1	175.8	190.0	95.3	483 TX-1 6POSSU6	
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	81.8	89.0	95.3	575 TX-1 6SHELEN	
314377	3DOW 34	115	314378	3FTEUS34	115	LN	LN	84.8	81.8	89.0	95.3	683 TX-1 8SURRY	
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.8	175.8	190.0	95.2	395 LN 2090	
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.8	175.8	190.0	95.2	395 LN 2090	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.7	89.5	90.0	95.2	405 LN 2102	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.7	89.2	90.0	95.2	405 LN 2102	
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.7	175.8	190.0	95.1	481 TX-1 6POSSU4	
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.7	175.8	190.0	95.1	482 TX-1 6POSSU5	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.5	89.5	90.0	95.0	263 LN 290	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.5	89.2	90.0	95.0	263 LN 290	
314074	6POSSUM	230	315008	1POSSM6A	18.0	TR	TR	180.3	175.8	190.0	94.9	475 TX-1 6POSSUM	
314074	6POSSUM	230	315009	1POSSM6B	18.0	TR	TR	180.3	175.8	190.0	94.9	475 TX-1 6POSSUM	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.4	89.5	90.0	94.8	206 LN 234	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.4	89.2	90.0	94.8	206 LN 234	
314543	6GRAVELA	230	315119	1GRAVEL3	13.8	TR	TR	85.2	89.5	90.0	94.7	232 LN 261	
314543	6GRAVELA	230	315120	1GRAVEL4	13.8	TR	TR	85.2	89.2	90.0	94.7	232 LN 261	
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00	TR	TR	511.6	506.8	540.0	94.7	284 LN 547	
314465	6ELIZ R	230	315110	1ELIZAR3	13.8	TR	TR	123.0	123.0	130.0	94.6	** Base Case **	**

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314072	6PL VIEW	230	314925	8PL VIEW	500		TR	939.0	810.7	993.6	94.5	504	TX-1 8BRMBL
314074	6POSSUM	230	315008	1POSSM6A	18.0		TR	179.2	175.8	190.0	94.3	479	TX-1 6POSSU2
314074	6POSSUM	230	315009	1POSSM6B	18.0		TR	179.2	175.8	190.0	94.3	479	TX-1 6POSSU2
314378	3FTEUS34	115	314381	3GRAFT34	115		LN	83.7	70.1	89.0	94.1	51	LN 58
314378	3FTEUS34	115	314381	3GRAFT34	115		LN	83.7	70.1	89.0	94.0	258	LN 285
314682	3BUGGS I	115	315150	1BUGGS I	13.8		TR	70.0	70.0	74.6	93.9	**	Base Case **
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00		TR	506.8	506.8	540.0	93.9	**	Base Case **
314377	3DOW 34	115	314387	3LANEXA	115		LN	83.3	83.3	89.0	93.6	**	Base Case **
314218	6ELMONT	230	314222	6HANOVER	230		LN	746.3	568.5	797.0	93.6	395	LN 2090
314901	8BATH CO	500	BS0461	BATH 3W1	1.00		TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0462	BATH 3W3	1.00		TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0463	BATH 3W5	1.00		TR	1009.9	1009.9	1080.0	93.5	**	Base Case **

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:33 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:33 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV
Case.File X:\S2015\sum_2015(20131F)_base_wpre_CSCNOSURRY230.sav
Subsys.File X:\S2015\vdvp.sub
Monit.File X:\S2015\vdvapsys.mon
Contin.File X:\S2015\sum2015_single.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314641	3KITTY H	115.0	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	45 LN 52	
314646	3KITTY 4	34.5	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	45 LN 52	
314650	3KITTY 5	34.5	345	361	1.0720	1.0411	0.9300	1.0700	0.9890	1.0932	H	45 LN 52	
315146	3KITTYHA	13.8	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	45 LN 52	
315147	3KITTYHB	13.8	345	361	1.0720	1.0412	0.9300	1.0700	0.9891	1.0932	H	45 LN 52	
315105	3KITTY 3A4	1.0	345	361	1.0711	1.0402	0.9300	1.0700	0.9882	1.0922	H	45 LN 52	
315106	3KITTY 3B5	1.0	345	361	1.0720	1.0412	0.9300	1.0700	0.9891	1.0932	H	45 LN 52	
314524	3FRANKIN	115.0	345	360	1.0813	1.0228	0.9300	1.0700	0.9716	1.0739	HR	61 LN 68	
314526	3HANDSON	115.0	345	360	1.0706	1.0210	0.9300	1.0700	0.9700	1.0721	H	61 LN 68	
314534	3S HAMPT	115.0	345	360	1.0773	1.0231	0.9300	1.0700	0.9719	1.0742	HR	61 LN 68	
314539	3UNCAMP	115.0	345	360	1.0848	1.0221	0.9300	1.0700	0.9710	1.0732	HR	61 LN 68	
314541	3WATKINS	115.0	345	360	1.0796	1.0241	0.9300	1.0700	0.9729	1.0753	HR	61 LN 68	
314824	3UNCAM 1	115.0	345	360	1.0856	1.0228	0.9300	1.0700	0.9716	1.0739	HR	61 LN 68	
314826	3WATKI 1	115.0	345	360	1.0801	1.0247	0.9300	1.0700	0.9734	1.0759	HR	61 LN 68	
314827	3WATKI 2	115.0	345	360	1.0801	1.0247	0.9300	1.0700	0.9734	1.0759	HR	61 LN 68	
315115	3SHAMPT1	13.8	345	360	1.0489	0.9925	0.9300	1.0700	0.9429	1.0421	R	61 LN 68	
314348	3GRETN 1	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9659	1.0675	HR	153 LN 173	
314731	3GRETN 1	69.0	345	358	1.0739	1.0164	0.9300	1.0700	0.9656	1.0673	HR	153 LN 173	
314732	3GRETN 2	69.0	345	358	1.0739	1.0165	0.9300	1.0700	0.9656	1.0673	HR	153 LN 173	
314874	21LN 174	69.0	345	351	1.0796	1.0206	0.9300	1.0700	0.9696	1.0716	HR	154 LN 174	
314878	21LN 178	69.0	345	351	1.0795	1.0206	0.9300	1.0700	0.9696	1.0716	HR	156 LN 178	
314879	21LN 179	69.0	345	351	1.0796	1.0206	0.9300	1.0700	0.9696	1.0716	HR	157 LN 179	
314880	21LN 180	69.0	345	351	1.0798	1.0206	0.9300	1.0700	0.9696	1.0716	HR	158 LN 180	
314122	35OMEGO	115.0	345	353	0.9609	1.0033	0.9300	1.0700	0.9531	1.0534	D	159 LN 181	
314051	31ONA197	115.0	345	353	0.9363	1.0031	0.9300	1.0700	0.9529	1.0532	D	172 LN 197	
314148	3MICR197	115.0	345	353	0.9119	1.0027	0.9300	1.0700	0.9526	1.0528	LD	172 LN 197	

PSS(mr)MUST 10.2 -- Managing and Utilizing System Transmission -- SUN, FEB 17 2013 13:33 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSIG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET CSC NO SURRY230KV

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314158	3GOW197	115.0	345	353	0.9483	1.0026	0.9300	1.0700	0.9525	1.0527	D	172 LN 197	
315119	IGRAVEL3	13.8	345	360	1.0352	0.9756	0.9300	1.0700	0.9268	1.0243	R	262 LN 289	
315120	IGRAVEL4	13.8	345	360	1.0355	0.9772	0.9300	1.0700	0.9283	1.0260	R	262 LN 289	
314014	SCANNONE	115.0	345	353	0.9032	1.0038	0.9300	1.0700	0.9536	1.0539	LD	326 LN 2011	
314051	3LONA197	115.0	345	353	0.9034	1.0031	0.9300	1.0700	0.9529	1.0532	LD	326 LN 2011	
314148	3MCR197	115.0	345	353	0.9034	1.0027	0.9300	1.0700	0.9526	1.0528	LD	326 LN 2011	
314155	3CANBR T	115.0	345	353	0.9033	1.0032	0.9300	1.0700	0.9530	1.0534	LD	326 LN 2011	
314158	3GOW197	115.0	345	353	0.9036	1.0026	0.9300	1.0700	0.9525	1.0527	LD	326 LN 2011	
315001	LOMF A	13.8	345	351	1.0228	0.9778	0.9300	1.0700	0.9289	1.0267	R	328 LN 2013	
315002	LOMF B	13.8	345	351	1.0228	0.9778	0.9300	1.0700	0.9289	1.0267	R	328 LN 2013	
315083	ISPRUNCA	13.8	345	357	1.0164	0.9667	0.9300	1.0700	0.9183	1.0150	R	367 LN 2055	
315085	ISPRUNCC	13.8	345	357	1.0178	0.9684	0.9300	1.0700	0.9200	1.0169	R	367 LN 2055	
315008	1POSSM6A	18.0	345	353	0.9266	0.9389	0.9300	1.0700	0.8920	0.9859	L	395 LN 2090	
315009	1POSSM6B	18.0	345	353	0.9266	0.9389	0.9300	1.0700	0.8920	0.9859	L	395 LN 2090	
315008	1POSSM6A	18.0	345	353	0.9246	0.9389	0.9300	1.0700	0.8920	0.9859	L	407 LN 2104	
315009	1POSSM6B	18.0	345	353	0.9246	0.9389	0.9300	1.0700	0.8920	0.9859	L	407 LN 2104	
314180	GHAYES	230.0	345	354	0.9450	1.0202	0.9300	1.0700	0.9692	1.0712	D	423 LN 2122	
314118	3MINN19V	115.0	345	353	0.9477	0.9988	0.9300	1.0700	0.9488	1.0487	D	470 TX-1 60X	
314167	3OX	115.0	345	352	0.9478	1.0063	0.9300	1.0700	0.9560	1.0566	D	470 TX-1 60X	
315008	1POSSM6A	18.0	345	353	0.9278	0.9389	0.9300	1.0700	0.8920	0.9859	L	475 TX-1 6FOSSUM	
315009	1POSSM6B	18.0	345	353	0.9278	0.9389	0.9300	1.0700	0.8920	0.9859	L	475 TX-1 6FOSSUM	
315009	1POSSM6B	18.0	345	353	0.9268	0.9389	0.9300	1.0700	0.8920	0.9859	L	481 TX-1 6FOSSU4	
315008	1POSSM6A	18.0	345	353	0.9268	0.9389	0.9300	1.0700	0.8920	0.9859	L	482 TX-1 6FOSSU5	
315008	1POSSM6A	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	483 TX-1 6FOSSU6	
315009	1POSSM6B	18.0	345	353	0.9259	0.9389	0.9300	1.0700	0.8920	0.9859	L	483 TX-1 6FOSSU6	
314122	3SOWEGO	115.0	345	353	0.9515	1.0033	0.9300	1.0700	0.9531	1.0534	D	492 TX-1 6BRISTE	
314156	3BRISTE	115.0	345	353	0.9515	1.0062	0.9300	1.0700	0.9558	1.0565	D	492 TX-1 6BRISTE	
314049	3LONA172	115.0	345	353	0.9300	0.9847	0.9300	1.0700	0.9355	1.0340	D	495 TX-1 6LIBERT	
314123	3WELLGTH	115.0	345	353	0.9283	0.9873	0.9300	1.0700	0.9379	1.0366	LD	495 TX-1 6LIBERT	
314141	3LIBERTY	115.0	345	353	0.9283	0.9883	0.9300	1.0700	0.9389	1.0377	LD	495 TX-1 6LIBERT	
314147	3MCR172	115.0	345	353	0.9298	0.9848	0.9300	1.0700	0.9386	1.0340	LD	495 TX-1 6LIBERT	
314157	3GOW172	115.0	345	353	0.9293	0.9858	0.9300	1.0700	0.9365	1.0351	LD	495 TX-1 6LIBERT	

CATEGORY B

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 9:22 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File X:\S2015\drv.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\vapsys.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo	Rating	Loading %	Ncon	Contingency Description
314174	3HARMONY	115	314176 6HARMONY	230	TR	220.2	83.2	191.8	114.8	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	243.4	142.6	239.0	101.8	1102	314766 6LOUISA 230 314777 6S ANNA 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	238.8	142.6	239.0	99.9	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
304223	3ROCKYMT115T	115	314554 3BTLEBRO	115	LN	91.7	16.6	94.0	97.6	850	314559 3CAROLINA 115 314578 3HORNRTN 115 1
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.2	828.3	993.6	96.6	307	314171 6BRAMBL 230 314933 8BRAMBLETON 500 1
314461	3DEEPC46	115	314513 3YADKIN	115	LN	343.9	229.2	360.0	95.5	691	314449 6CHESAPK 230 314514 6YADKIN 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	112.1	73.0	118.0	95.0	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	111.0	73.0	118.0	94.1	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314212	6FERRIVER	230	314222 6HANOVER	230	LN	747.7	546.2	797.0	93.8	285	314138 6MINE RD 230 314197 6LDYSMTL 230 1

AC Bus Voltage Violations

PSS (nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 9:25 <VOW003.0>

2015 SUMMER BASE CASE (LTSGL511) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case File X:\S2015\sum.2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File X:\S2015\drv.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\vapsys.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	LCUNINGC	18.0	345	366	1.0721	1.0721	0.9300	1.0700	1.0186	1.1258	H	**	Base Case **
315008	IPOSSM6A	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8892	0.9828	L	61	314011 3BULLRUN 115 314111 3HARISON 115 1
315009	IPOSSM6B	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8892	0.9828	L	61	314011 3BULLRUN 115 314111 3HARISON 115 1
314014	3CANNONB	115.0	345	353	0.9039	1.0017	0.9300	1.0700	0.9516	1.0518	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	310MA197	115.0	345	353	0.9041	1.0010	0.9300	1.0700	0.9510	1.0511	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MCR197	115.0	345	353	0.9041	1.0006	0.9300	1.0700	0.9506	1.0507	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANNB T	115.0	345	353	0.9043	1.0011	0.9300	1.0700	0.9511	1.0512	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GOW197	115.0	345	353	0.9043	1.0005	0.9300	1.0700	0.9505	1.0505	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	310MA197	115.0	345	353	0.9205	1.0010	0.9300	1.0700	0.9510	1.0511	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314148	3MCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0507	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314155	3CANNB T	115.0	345	353	0.9205	1.0011	0.9300	1.0700	0.9511	1.0512	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314158	3GOW197	115.0	345	353	0.9206	1.0005	0.9300	1.0700	0.9505	1.0505	LD	70	314014 3CANNONB 115 314155 3CANNB T 115 1
314160	1 TX503	13.2	345	353	1.0700	1.0059	0.9300	1.0700	0.9556	1.0562	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 60CCOQON 230 314068 60X 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 60CCOQON 230 314068 60X 230 1
314118	3MINNIEV	115.0	345	353	0.9457	0.9969	0.9300	1.0700	0.9471	1.0468	D	179	314068 60X 230 314167 30X 115 1
314167	30X	115.0	345	352	0.9458	1.0045	0.9300	1.0700	0.9543	1.0547	D	179	314068 60X 230 314167 30X 115 1
315008	IPOSSM6A	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8892	0.9828	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8892	0.9828	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8892	0.9828	L	204	314074 6POSSUM 230 315008 IPOSSM6A 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8892	0.9828	L	205	314074 6POSSUM 230 315009 IPOSSM6B 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9226	0.9359	0.9300	1.0700	0.8892	0.9828	L	206	314074 6POSSUM 230 315010 IPOSSM6S 18.0 1
315009	IPOSSM6B	18.0	345	353	0.9226	0.9359	0.9300	1.0700	0.8892	0.9828	L	206	314074 6POSSUM 230 315010 IPOSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9439	0.9969	0.9300	1.0700	0.9471	1.0468	D	255	314118 3MINNIEV 115 314167 30X 115 1
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0516	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	310MA172	115.0	345	353	0.9303	0.9828	0.9300	1.0700	0.9336	1.0319	D	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314123	3WELLGTON	115.0	345	353	0.9303	0.9828	0.9300	1.0700	0.9336	1.0319	D	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1
314147	3MCR172	115.0	345	353	0.9301	0.9828	0.9300	1.0700	0.9337	1.0320	D	260	314123 3WELLGTON 115 314141 3LIBERTY 115 1

PSS(nr)MUST 10.2 - Managing and Utilizing System Transmission - MON, FEB 18 2013 9:25 < UDF000.0 >

2015 SUMMER BASE CASE (LTS615511) REV. 04/02/2012

2013 LF WPREPROJECT 230KV ALT A GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltrIs e	Viol	Ncon	Contingency Description
314157	3GODWL72	115.0	345	353	0.9296	0.9839	0.9300	1.0700	0.9347	1.0330	LD	260	314123 JWEELGN 115 314141 3LIBERTY 115 1
314122	3BOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9314	1.0516	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0542	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314049	3LOWA172	115.0	345	353	0.9305	0.9828	0.9300	1.0700	0.9336	1.0319	D	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGN	115.0	345	353	0.9287	0.9853	0.9300	1.0700	0.9361	1.0346	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9287	0.9864	0.9300	1.0700	0.9371	1.0357	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314147	3MICR172	115.0	345	353	0.9303	0.9828	0.9300	1.0700	0.9337	1.0320	D	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314157	3GODWL72	115.0	345	353	0.9297	0.9839	0.9300	1.0700	0.9347	1.0330	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
315008	1POSSM6A	18.0	345	353	0.9251	0.9359	0.9300	1.0700	0.8892	0.9828	L	273	314134 3CRANES 230 314142 6STAFORD 230 1
315009	1POSSM6B	18.0	345	353	0.9251	0.9359	0.9300	1.0700	0.8892	0.9828	L	273	314134 3CRANES 230 314142 6STAFORD 230 1
314775	3NI RVER	115.0	345	363	0.9547	1.0132	0.9300	1.0700	0.9625	1.0638	D	275	314135 3CHANCE 115 314775 3NI RVER 115 1
314151	3SLABTN	115.0	345	355	0.9530	1.0051	0.9300	1.0700	0.9548	1.0553	D	280	314136 3FREDERG 115 314151 3SLABTN 115 1
315008	1POSSM6A	18.0	345	353	0.9210	0.9359	0.9300	1.0700	0.8892	0.9828	L	282	314137 3FREDERG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9210	0.9359	0.9300	1.0700	0.8892	0.9828	L	282	314137 3FREDERG 230 314138 6MINE RD 230 1
315008	1POSSM6A	18.0	345	353	0.9195	0.9359	0.9300	1.0700	0.8892	0.9828	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1POSSM6B	18.0	345	353	0.9195	0.9359	0.9300	1.0700	0.8892	0.9828	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MICR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0507	LD	295	314148 3MICR197 115 314155 3CANBR T 115 1
314158	3GODWL197	115.0	345	353	0.9206	1.0005	0.9300	1.0700	0.9505	1.0505	LD	295	314148 3MICR197 115 314155 3CANBR T 115 1
314176	3HARMONY	230.0	345	354	1.2225	1.0254	0.9300	1.0700	0.9732	1.0756	HR	318	314176 3HARMONY 230 314189 6PAPERMILL 230 1
314180	3HAYES	230.0	345	354	0.9523	1.0202	0.9300	1.0700	0.9673	1.0692	D	321	314180 3HAYES 230 314423 6YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.474	1.0193	0.9300	1.0700	0.9683	1.0703	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314526	3HANDSON	115.0	345	360	1.0755	1.0224	0.9300	1.0700	0.9712	1.0735	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAPET	115.0	345	360	1.0733	1.0244	0.9300	1.0700	0.9732	1.0756	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0733	1.0255	0.9300	1.0700	0.9742	1.0767	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0809	1.0178	0.9300	1.0700	0.9669	1.0686	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MARGT5V	115.0	345	362	1.1043	1.0170	0.9300	1.0700	0.9662	1.0679	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SEABORD	115.0	345	362	1.1158	1.0168	0.9300	1.0700	0.9659	1.0676	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.0737	1.0260	0.9300	1.0700	0.9747	1.0773	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.0737	1.0260	0.9300	1.0700	0.9747	1.0773	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1485	1.0204	0.9300	1.0700	0.9693	1.0714	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	3SHAMPTL	13.8	345	360	1.0447	0.9939	0.9300	1.0700	0.9442	1.0436	R	464	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	3SPRUNCA	13.8	345	357	1.0112	0.9626	0.9300	1.0700	0.9145	1.0108	R	464	314275 6BEELMEAD 230 314276 6BASIN 230 1
314328	6PLAZA	230.0	345	357	1.0127	0.9644	0.9300	1.0700	0.9162	1.0127	R	464	314275 6BEELMEAD 230 314276 6BASIN 230 1
315111	1LKINGA	13.8	345	359	0.9926	1.0055	0.9300	1.0700	0.9552	1.0558	LD	566	314328 6PLAZA 230 314338 6SOUTWEST 230 1
315112	1LKINGB	13.8	345	359	0.9926	0.9438	0.9300	1.0700	0.8968	0.9912	R	673	314444 6BOWERS 230 314514 6YADKIN 230 1
314524	3FRANKLN	115.0	345	360	1.0759	1.0241	0.9300	1.0700	0.9729	1.0753	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0778	1.0120	0.9300	1.0700	0.9613	1.0625	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAPET	115.0	345	360	1.0723	1.0244	0.9300	1.0700	0.9732	1.0756	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0790	1.0234	0.9300	1.0700	0.9722	1.0745	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0745	1.0255	0.9300	1.0700	0.9742	1.0767	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0798	1.0241	0.9300	1.0700	0.9728	1.0753	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0750	1.0260	0.9300	1.0700	0.9747	1.0773	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0750	1.0260	0.9300	1.0700	0.9747	1.0773	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	3SHAMPTL	13.8	345	360	1.0437	0.9939	0.9300	1.0700	0.9442	1.0436	R	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRANKLN	115.0	345	360	1.0824	1.0241	0.9300	1.0700	0.9729	1.0753	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 9:25 < UDF000.0 >

2015 SUMMER BASE CASE (LTS61511) REV. 04/02/2012

2013 LF WPREPROJECT 230KV ALT A GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	VoltrRis e	Viol	Ncon	Contingency Description
314526	BRANDSON	115.0	345	360	1.0717	1.0224	0.9300	1.0700	0.9712	1.0735	H	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314534	35 HAMPT	115.0	345	360	1.0784	1.0244	0.9300	1.0700	0.9732	1.0756	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.0860	1.0234	0.9300	1.0700	0.9722	1.0745	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0807	1.0255	0.9300	1.0700	0.9742	1.0767	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314824	3UNCAMP 1	115.0	345	360	1.0867	1.0241	0.9300	1.0700	0.9728	1.0752	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0812	1.0260	0.9300	1.0700	0.9747	1.0773	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI 2	115.0	345	360	1.0812	1.0260	0.9300	1.0700	0.9747	1.0773	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	1SHAMPT 1	13.8	345	360	1.0500	0.9939	0.9300	1.0700	0.9442	1.0436	R	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0721	1.0255	0.9300	1.0700	0.9742	1.0767	H	804	314534 35 HAMPT 115 314541 3WATKINS 115 1
314826	3WATKI 1	115.0	345	360	1.0726	1.0260	0.9300	1.0700	0.9747	1.0773	H	804	314534 35 HAMPT 115 314541 3WATKINS 115 1
314827	3WATKI 2	115.0	345	360	1.0726	1.0260	0.9300	1.0700	0.9747	1.0773	H	804	314534 35 HAMPT 115 314541 3WATKINS 115 1
314516	3BERUNS 1	115.0	345	358	1.0799	1.0090	0.9300	1.0700	0.9586	1.0595	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314565	3CLUBH571	115.0	345	362	1.0431	1.0015	0.9300	1.0700	0.9515	1.0516	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314675	3BERODNAX	115.0	345	358	1.0693	1.0070	0.9300	1.0700	0.9567	1.0574	R	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314676	3BERUNSWK	115.0	345	358	1.0793	1.0085	0.9300	1.0700	0.9581	1.0590	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314693	3ERNAN D	115.0	345	358	1.0943	1.0042	0.9300	1.0700	0.9539	1.0544	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314704	3LAURENC	115.0	345	358	1.0847	1.0070	0.9300	1.0700	0.9567	1.0574	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314721	350 HILL	115.0	345	358	1.0576	1.0054	0.9300	1.0700	0.9551	1.0556	R	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314782	3BERUNSWC	69.0	345	358	1.0418	1.0288	0.9300	1.0700	0.9773	1.0802	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314785	3DOANLTWN	69.0	345	358	1.0496	1.0763	0.9300	1.0700	0.9275	1.0251	R	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314786	3GASBURG	69.0	345	358	1.0869	1.0128	0.9300	1.0700	0.9621	1.0634	R	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314787	3BERUNSW2	69.0	345	358	1.0728	1.0014	0.9300	1.0700	0.9513	1.0515	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314850	3CLUBH 1	115.0	345	362	1.1037	1.0020	0.9300	1.0700	0.9519	1.0521	HR	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314872	3BERUNSWIC	69.0	345	358	1.0606	0.9883	0.9300	1.0700	0.9388	1.0377	R	859	314562 3CLUBHSE 115 314565 3CLUBH571 115 21
314641	3KITTY H	115.0	345	361	1.0715	1.0407	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0715	1.0407	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
314650	3KITTY 5	34.5	345	361	1.0724	1.0416	0.9300	1.0700	0.9895	1.0936	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
315146	3KITTYHKA	13.8	345	361	1.0725	1.0417	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
315147	3KITTYHKB	13.8	345	361	1.0725	1.0417	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
BS1105	KITT 3W4	1.0	345	361	1.0715	1.0407	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
BS1106	KITT 3W5	1.0	345	361	1.0725	1.0417	0.9300	1.0700	0.9886	1.0927	H	944	314635 3COLINGTP 115 314641 3KITTY H 115 1
314636	3COLING2	115.0	345	361	1.0724	1.0259	0.9300	1.0700	0.9745	1.0771	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0722	1.0407	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0730	1.0416	0.9300	1.0700	0.9895	1.0936	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0724	1.0259	0.9300	1.0700	0.9745	1.0771	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
315146	3KITTYHKA	13.8	345	361	1.0722	1.0407	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
315147	3KITTYHKB	13.8	345	361	1.0731	1.0417	0.9300	1.0700	0.9886	1.0937	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
BS1105	KITT 3W4	1.0	345	361	1.0722	1.0407	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
BS1106	KITT 3W5	1.0	345	361	1.0731	1.0417	0.9300	1.0700	0.9896	1.0937	H	945	314635 3COLINGTP 115 314720 3 52T190 115 1
314348	3GRETNA 1	69.0	345	358	1.0805	1.0169	0.9300	1.0700	0.9660	1.0677	HR	1052	314731 3GRETNA 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0802	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1052	314731 3GRETNA 69.0 314732 2GRNA FB 69.0 21
314737	2SW35T57	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0713	H	1052	314731 3GRETNA 69.0 314732 2GRNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0713	H	1052	314731 3GRETNA 69.0 314732 2GRNA FB 69.0 21
314348	3GRETNA 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9660	1.0677	HR	1053	314731 3GRETNA 69.0 314733 2GRNA DP 69.0 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 9:25 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314731	ZGRETN	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1053	314731 ZGRETN 69.0 314733 ZGRNA DP 69.0 1
314732	ZGRNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1053	314731 ZGRETN 69.0 314733 ZGRNA DP 69.0 1
314763	3K1DDSTO	115.0	345	363	0.9256	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1066	314744 3BREMO 115 314763 3K1DDSTO 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 13:09 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 13:08 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File X:\S2015\advp.sub
Monit.File X:\S2015\vapsys.mon
Contin.File X:\S2015\sum2015_single.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	56.3	32.5	45.0	125.0	499	TX-1 3MICR17
314147	3MICR172	115	314160 1 TX503	13.2	TR	51.6	33.3	45.0	114.6	455	TX-1 3MICR19
314025	1 TX500	13.2	314148 3MICR197	115	TR	50.1	32.5	45.0	111.2	495	TX-1 6LIBERT
314025	1 TX500	13.2	314148 3MICR197	115	TR	46.0	32.5	45.0	102.1	152	LN 172
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	242.7	142.6	239.0	101.6	226	LN 255
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.2	828.3	993.6	96.6	504	TX-1 8BRAMBL
314461	3DEEPC46	115	314513 3YADKIN	115	LN	343.9	229.2	360.0	95.5	235	LN 262
314559	3CAROLNA	115	314581 3JACKSON	115	LN	111.5	73.0	118.0	94.5	327	LN 2012
314212	6FRRIVER	230	314222 6HANOVER	230	LN	747.3	546.2	797.0	93.8	395	LN 2090

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 13:09 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 13:09 <VOW003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kv\alta.sav
Subsys.File X:\S2015\vdvp.sub
Monit.File X:\S2015\vdapsys.mon
Contn.File X:\S2015\sum2015_single.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	Voltbro P	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0722	1.0722	0.9300	1.0700	1.0186	1.1258	H	**	Base Case
314641	IKITTY H	115.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
314646	IKITTY 4	34.5	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
314650	IKITTY 5	34.5	345	361	1.0723	1.0415	0.9300	1.0700	0.9895	1.0936	H	45	LN 52
315146	IKITYHKA	13.8	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
315147	IKITYHKB	13.8	345	361	1.0724	1.0416	0.9300	1.0700	0.9886	1.0937	H	45	LN 52
B\$1105	KITT 3W4	1.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	45	LN 52
B\$1106	KITT 3W5	1.0	345	361	1.0724	1.0416	0.9300	1.0700	0.9886	1.0937	H	45	LN 52
314524	3FRNKLN	115.0	345	360	1.0825	1.0241	0.9300	1.0700	0.9729	1.0753	HR	61	LN 68
314526	3HANDSOM	115.0	345	360	1.0718	1.0224	0.9300	1.0700	0.9712	1.0735	H	61	LN 68
314534	3S HAMPT	115.0	345	360	1.0784	1.0244	0.9300	1.0700	0.9732	1.0756	HR	61	LN 68
314539	3UNCAMP	115.0	345	360	1.0860	1.0233	0.9300	1.0700	0.9722	1.0745	HR	61	LN 68
314541	3WATKINS	115.0	345	360	1.0807	1.0255	0.9300	1.0700	0.9742	1.0767	HR	61	LN 68
314824	3UNCAM 1	115.0	345	360	1.0867	1.0240	0.9300	1.0700	0.9728	1.0752	HR	61	LN 68
314826	3WATKI 1	115.0	345	360	1.0813	1.0260	0.9300	1.0700	0.9747	1.0773	HR	61	LN 68
314827	3WATKI 2	115.0	345	360	1.0813	1.0260	0.9300	1.0700	0.9747	1.0773	HR	61	LN 68
315115	1SHAMPT1	13.8	345	360	1.0501	0.9939	0.9300	1.0700	0.9442	1.0436	R	61	LN 68
315008	1POSSM6A	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	122	LN 134
315009	1POSSM6B	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	122	LN 134
314348	2GRETIN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9660	1.0677	HR	153	LN 173
314731	2GRETNA	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314732	2GRNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314874	21N 174	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	154	LN 174
314878	21N 178	69.0	345	351	1.0783	1.0195	0.9300	1.0700	0.9685	1.0705	HR	156	LN 178
314879	21N 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	157	LN 179
314880	21N 180	69.0	345	351	1.0786	1.0195	0.9300	1.0700	0.9685	1.0705	HR	158	LN 180

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 13:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0516	D	159	LN 181
314051	3LONAI197	115.0	345	353	0.9344	1.0010	0.9300	1.0700	0.9510	1.0511	D	172	LN 197
314148	3MICR197	115.0	345	353	0.9094	1.0006	0.9300	1.0700	0.9506	1.0507	LD	172	LN 197
314158	3GODW197	115.0	345	353	0.9460	1.0005	0.9300	1.0700	0.9505	1.0505	D	172	LN 197
314014	3CANNONB	115.0	345	353	0.9093	1.0017	0.9300	1.0700	0.9516	1.0518	LD	326	LN 2011
314051	3LONAI197	115.0	345	353	0.9095	1.0010	0.9300	1.0700	0.9510	1.0511	LD	326	LN 2011
314148	3MICR197	115.0	345	353	0.9095	1.0006	0.9300	1.0700	0.9506	1.0507	LD	326	LN 2011
314155	3CANBR T	115.0	345	353	0.9094	1.0011	0.9300	1.0700	0.9511	1.0512	LD	326	LN 2011
314158	3GODW197	115.0	345	353	0.9097	1.0005	0.9300	1.0700	0.9505	1.0505	LD	326	LN 2011
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	328	LN 2013
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	328	LN 2013
315003	1SPRUNCA	13.8	345	357	1.0114	0.9626	0.9300	1.0700	0.9145	1.0108	R	367	LN 2055
315085	1SPRUNCC	13.8	345	357	1.0128	0.9645	0.9300	1.0700	0.9162	1.0127	R	367	LN 2055
315008	1POSSM6A	18.0	345	353	0.9211	0.9360	0.9300	1.0700	0.8892	0.9828	L	395	LN 2090
315009	1POSSM6B	18.0	345	353	0.9211	0.9360	0.9300	1.0700	0.8892	0.9828	L	395	LN 2090
315008	1POSSM6A	18.0	345	353	0.9195	0.9360	0.9300	1.0700	0.8892	0.9828	L	407	LN 2104
315009	1POSSM6B	18.0	345	353	0.9194	0.9360	0.9300	1.0700	0.8892	0.9828	L	407	LN 2104
314180	6HAYES	230.0	345	354	0.9515	1.0183	0.9300	1.0700	0.9673	1.0692	D	423	LN 2122
314118	3MINNIEV	115.0	345	353	0.9457	0.9969	0.9300	1.0700	0.9471	1.0468	D	470	TX-1 60X
314167	3OX	115.0	345	352	0.9458	1.0045	0.9300	1.0700	0.9543	1.0547	D	470	TX-1 60X
315008	1POSSM6A	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828	L	475	TX-1 6POSSUM
315009	1POSSM6B	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828	L	475	TX-1 6POSSUM
315009	1POSSM6B	18.0	345	353	0.9226	0.9360	0.9300	1.0700	0.8892	0.9828	L	481	TX-1 6POSSU4
315008	1POSSM6A	18.0	345	353	0.9226	0.9360	0.9300	1.0700	0.8892	0.9828	L	482	TX-1 6POSSU5
315008	1POSSM6A	18.0	345	353	0.9227	0.9360	0.9300	1.0700	0.8892	0.9828	L	483	TX-1 6POSSU6
315009	1POSSM6B	18.0	345	353	0.9227	0.9360	0.9300	1.0700	0.8892	0.9828	L	483	TX-1 6POSSU6
314122	3SOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0516	D	492	TX-1 6BRISTE
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0547	D	492	TX-1 6BRISTE
314049	3LONAI172	115.0	345	353	0.9304	0.9828	0.9300	1.0700	0.9336	1.0319	D	495	TX-1 6LIBERT
314123	3WELLGTH	115.0	345	353	0.9287	0.9853	0.9300	1.0700	0.9361	1.0346	LD	495	TX-1 6LIBERT
314141	3LIBERTY	115.0	345	353	0.9287	0.9864	0.9300	1.0700	0.9371	1.0357	LD	495	TX-1 6LIBERT
314147	3MICR172	115.0	345	353	0.9303	0.9828	0.9300	1.0700	0.9337	1.0320	D	495	TX-1 6LIBERT
314157	3GODW172	115.0	345	353	0.9297	0.9838	0.9300	1.0700	0.9347	1.0330	LD	495	TX-1 6LIBERT

CATEGORY C

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 15:01 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 15:01 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltA.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vspsys.mon
 Contin.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 98.0 % of nominal rating													
**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8		TR	69.9	69.9	70.0	99.8	**	Base Case **
235496	01NSHEND	138	314809	3N SHEND	115		TR	509.5	90.2	283.0	180.0	7	2017&9020
235513	01STRASB	138	314797	4EDINBRG	138		LN	643.1	49.7	222.0	289.7	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138		TR	518.4	24.8	166.8	310.8	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138		TR	518.4	24.8	166.8	310.8	7	2017&9020
314796	3EDINBRG	115	314807	3MT JACK	115		LN	572.8	103.2	287.0	199.6	7	2017&9020
314798	3MERCK5	115	314802	3GROTOES	115		LN	509.9	74.6	251.0	203.1	7	2017&9020
314798	3MERCK5	115	314809	3N SHEND	115		LN	464.9	7.9	251.0	185.2	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5864.1	88.1	258.5	2268.5	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5941.0	89.2	311.8	1905.4	7	2017&9020
314799	3ENDLCAV	115	314800	6ENDLCAV	230		TR	5964.1	88.1	258.5	2268.5	7	2017&9020
314799	3ENDLCAV	115	314807	3MT JACK	115		LN	573.2	117.6	359.0	159.7	7	2017&9020
314799	3ENDLCAV	115	314809	3N SHEND	115		LN	748.2	82.6	251.0	298.1	7	2017&9020
314802	3GROTOES	115	314803	6GROTOES	230		TR	416.8	90.2	287.0	145.2	7	2017&9020
314538	6SURREY	230	315620	6SKIFCREEK	230		LN	987.2	718.5	1000.0	98.7	9	2146263
314461	3DEPC46	115	314513	3YADKIN	115		LN	412.4	229.2	414.0	99.6	15	262b&2018
314496	3SEWLSPT	115	314497	6SEWLSPT	230		TR	337.1	113.9	287.9	117.1	45	257&2099
314496	3SEWLSPT	115	314497	6SEWLSPT	230		TR	317.6	107.1	265.2	119.8	45	257&2099

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 15:01 <UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 15:01 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File X:\S2015\dvp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015_rtep_tower_contingency_dvp.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description ** Base Case **
315218	1CUNINGC	18.0	345	366	1.0722	1.0722	0.9300	1.0700	1.0186	1.1258	H	7	201769020
314796	3EDINBERG	115.0	345	364	1.6632	1.0224	0.9300	1.0700	0.9713	1.0735	HR	7	201769020
314797	4EDINBERG	138.0	345	364	1.5622	0.9993	0.9300	1.0700	0.9493	1.0492	HR	7	201769020
314798	3MERCK5	115.0	345	364	1.4425	0.9977	0.9300	1.0700	0.9478	1.0476	HR	7	201769020
314799	3ENDLCV	115.0	345	364	2.0984	0.9991	0.9300	1.0700	0.9491	1.0490	HR	7	201769020
314800	6ENDLCV	230.0	345	364	3.1483	1.0374	0.9300	1.0700	0.9856	1.0893	HR	7	201769020
314801	3GROTOES	115.0	345	364	1.1437	1.0027	0.9300	1.0700	0.9526	1.0528	HR	7	201769020
314802	6GROTOES	230.0	345	364	1.0750	1.0320	0.9300	1.0700	0.9804	1.0836	H	7	201769020
314807	3MT JACK	115.0	345	364	1.9024	1.0078	0.9300	1.0700	0.9575	1.0582	HR	7	201769020
314809	3N SHEND	115.0	345	364	1.7616	0.9973	0.9300	1.0700	0.9474	1.0472	HR	7	201769020
314814	3TIMBERV	115.0	345	364	2.1059	0.9887	0.9300	1.0700	0.9393	1.0381	HR	7	201769020
314886	3EDINB 1	115.0	345	364	1.6643	1.0231	0.9300	1.0700	0.9719	1.0742	HR	7	201769020
314887	3ENDLC 1	115.0	345	364	2.0999	0.9998	0.9300	1.0700	0.9498	1.0497	HR	7	201769020
314889	3MERCK 1	115.0	345	364	1.4434	0.9984	0.9300	1.0700	0.9484	1.0483	HR	7	201769020
315008	1POSSM6A	18.0	345	353	0.9215	0.9360	0.9300	1.0700	0.8892	0.9828	L	7	201769020
315009	1POSSM6B	18.0	345	353	0.9215	0.9360	0.9300	1.0700	0.8892	0.9828	L	7	201769020
314497	6SEWISPT	230.0	345	359	0.8452	1.0065	0.9300	1.0700	0.9562	1.0568	LD	45	25762099
314500	6NAVYS	230.0	345	359	0.8452	1.0065	0.9300	1.0700	0.9562	1.0568	LD	45	25762099
314501	6NAVYS1	230.0	345	359	0.8451	1.0065	0.9300	1.0700	0.9561	1.0568	LD	45	25762099
314505	6NAVYN	230.0	345	359	0.8452	1.0066	0.9300	1.0700	0.9562	1.0569	LD	45	25762099
314510	6NAVYN1	230.0	345	359	0.8450	1.0063	0.9300	1.0700	0.9560	1.0566	LD	45	25762099
315008	1POSSM6A	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L	47	200624462051
315009	1POSSM6B	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L	47	200624462051
315008	1POSSM6A	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L	50	2046220
315009	1POSSM6B	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L	50	2046220
315008	1POSSM6A	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L	58	23762022

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UpLim t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
315009	IPOSSM6B	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L	58	23762022
315001	IOMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	60	24862013
315002	IOMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	60	24862013
315008	IPOSSM6A	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	63	2516266
315009	IPOSSM6B	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	63	2516266
315008	IPOSSM6A	18.0	345	353	0.9234	0.9360	0.9300	1.0700	0.8892	0.9828	L	72	26662022
315009	IPOSSM6B	18.0	345	353	0.9234	0.9360	0.9300	1.0700	0.8892	0.9828	L	72	26662022
315008	IPOSSM6A	18.0	345	353	0.9214	0.9360	0.9300	1.0700	0.8892	0.9828	L	84	25662090
315009	IPOSSM6B	18.0	345	353	0.9214	0.9360	0.9300	1.0700	0.8892	0.9828	L	84	25662090

AC Branch Violations

PSS(R)MUST 11.0 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 12:13 <BRV003.0>

2015 SUMMER BASE CASE (LTSGL5811) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File E:\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File E:\peninsula_AC.sub
Monit.File E:\vapsys.mon
Contn.File E:\peninsula.con
Exclud.File none

***** Report on violations *****

Branches with WVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CRT	Type	ContMVA	BaseFlow	Rating	Loading†	Ncon	Contingency Description
314682	3BUGGS I	115	314178	3LANCAST	115	1	LN	69.9	70.0	99.8	675	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	317.7	269.0	115.9	675	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314191	3WHITE S	115	1	LN	327.7	28.4	121.8	675	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6MORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	275.2	25.7	110.5	675	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6MORNECK1
314173	3HARMONY	115	314191	3WHITE S	115	1	LN	340.0	35.7	201.2	675	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	325.6	19.4	121.0	676	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115	314191	3WHITE S	115	1	LN	342.4	28.4	127.3	676	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	290.3	25.7	116.6	676	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3MORNECK	115	1	LN	256.8	45.5	103.1	676	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	356.8	35.7	211.1	676	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	200.6	35.7	118.7	1003	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	280.7	19.4	104.3	1004	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115	314191	3WHITE S	115	1	LN	296.2	28.4	110.1	1004	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	309.1	35.7	182.3	1004	D:6DAHLGRE-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314538	6SURREY	230	315620	6SKIFPCREEK	230	1	LN	992.6	718.5	99.3	2870	D:6BENCHRC-6NP NEWS1 +6SURREY -6FOOLSVL1
314423	6YORKTWN	230	315620	6SKIFPCREEK	230	1	LN	547.5	541.0	101.2	2995	D:6BENCHRC-6CHICKTUK1 +6DENSEIGH-6SKIFPCRE1
314538	6SURREY	230	315620	6SKIFPCREEK	230	1	LN	1001.1	718.5	100.1	3007	D:6BENCHRC-6CHICKTUK1 +6LANEXA -6LIGH2091
314538	6SURREY	230	315620	6SKIFPCREEK	230	1	LN	992.6	718.5	99.3	3010	D:6BENCHRC-6CHICKTUK1 +6LIGH285-6WALR2851
314538	6SURREY	230	315620	6SKIFPCREEK	230	1	LN	997.3	718.5	99.7	3041	D:6BENCHRC-6CHICKTUK1 +6WINCHST-6FOOLSVL1
314538	6SURREY	230	315620	6SKIFPCREEK	230	1	LN	1012.8	718.5	100.0	3192	D:6BENCHRC-6CHICKTUK1 +6SURREY -6FOOLSVL1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	316.1	19.4	117.5	3910	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314191	3WHITE S	115	1	LN	332.4	28.4	123.6	3910	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6MORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	280.1	25.7	112.5	3910	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6MORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	345.9	35.7	204.7	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6MORNECK1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	325.5	19.4	121.0	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115	314191	3WHITE S	115	1	LN	342.4	28.4	127.3	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	289.8	25.7	116.4	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3MORNECK	115	1	LN	255.8	45.5	102.7	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	357.1	35.7	211.3	3911	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115	314178	3LANCAST	115	1	LN	313.1	19.4	116.4	4228	D:6BLCHWD-6COMORN 1 +6DUNNSVL-6MORNECK1

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
313813	30CRAN	115 314191	3WHITE S	115 1	LN	329.6	28.4	269.0	122.5	4228	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115 314178	3LANCAST	115 1	LN	276.7	25.7	249.0	111.1	4228	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	342.8	35.7	169.0	202.5	4228	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	30CRAN	115 314178	3LANCAST	115 1	LN	328.6	19.4	269.0	122.2	4229	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	30CRAN	115 314191	3WHITE S	115 1	LN	345.9	28.4	269.0	122.6	4229	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115 314178	3LANCAST	115 1	LN	292.5	25.7	249.0	117.5	4229	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115 314181	3NORNECK	115 1	LN	256.9	45.5	249.0	103.2	4229	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	361.8	35.7	169.0	214.1	4229	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	214.0	35.7	169.0	126.6	4862	D:60AKGROV-6WESTMORI 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	192.6	35.7	169.0	114.0	5509	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMORI
314423	6TORTWN	230 315620	6SKIFCREEK	230 1	LN	542.2	260.0	541.0	100.2	18630	D:6DENBIGH-6SKIFCREEK 1 +6WHIPALTN-6MARWICK1
314423	6TORTWN	230 315620	6SKIFCREEK	230 1	LN	570.7	260.0	541.0	105.5	18631	D:6DENBIGH-6SKIFCREEK 1 +6SKIFCREEK-6MARWICK1
314538	6SURY	230 315620	6SKIFCREEK	230 1	LN	1067.5	718.5	1000.0	106.8	21538	D:6LANEXA -6LIGH2091 +6LIGH295-6WALR2851
314538	6SURY	230 315620	6SKIFCREEK	230 1	LN	1030.5	718.5	1000.0	101.0	21562	D:6LANEXA -6LIGH2091 +6WALR285-6SKIFCREEK
314448	3CHESAPK	115 314449	6CHESAPK	230 2	TR	300.7	147.8	302.0	99.6	35465	D:3CHESAPK-3CHESPTX1 +3DEEPC46-3YADKIN 1
314451	3CHESPTX	115 314450	6CHESPTX	230 1	TR	293.0	141.4	293.9	99.7	36435	D:3CHESAPK-6CHESAPK2 +3DEEPC46-3YADKIN 1
314448	3CHESAPK	115 314449	6CHESAPK	230 2	TR	300.7	147.8	302.0	99.6	36626	D:6CHESAPK-6CHESPTX1 +3DEEPC46-3YADKIN 1
314461	3DEEPC46	115 314513	3YADKIN	115 1	LN	412.4	229.2	414.0	99.6	37007	D:6CHESAPK-6YADKIN 1 +6DOZIER -6ELIZ R 1
314461	3DEEPC46	115 314513	3YADKIN	115 1	LN	412.4	229.2	414.0	99.6	37008	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCH1
314448	3CHESAPK	115 314449	6CHESAPK	230 2	TR	300.7	147.8	302.0	99.6	37193	D:3CHESPTX-6CHESPTX1 +3DEEPC46-3YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	832.2	532.7	830.0	100.3	39962	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	832.1	532.7	830.0	100.3	40134	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	865.6	532.7	830.0	104.3	49346	D:6THRS279-6YADKIN 1 +8FENTRES-8YADKIN 1
314537	6SUFTOLK	230 314920	8SULFOLK	500 2	TR	1039.8	398.8	1004.3	103.5	54989	D:8SEPTA -8YADKIN 1 +8YADKIN -8SULFOLK1

AC Bus Voltage Violations

FSS(R)MUST 11.0 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 12:14 <VOV003.0>

2015 SUMMER BASE CASE (LTSGLS11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case File E:\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Subsys File E:\sum_2015(2013LF)_base_wpre_230kvAltA.sav
Monit. File E:\vapsys.mon
Contn. File E:\vapsys.con
Exclud. File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
313810	6DAHLGREN	230.0	345	354	0.3455	0.9991	0.9300	1.0700	0.9492	1.0491	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
313813	30CRAN	115.0	345	354	0.7150	1.0028	0.9300	1.0700	0.9527	1.0530	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314139	60AKGROW	230.0	345	354	0.3522	1.0009	0.9300	1.0700	0.9509	1.0510	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314173	3GARBER	115.0	345	354	0.5196	1.0026	0.9300	1.0700	0.9525	1.0528	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8642	1.0031	0.9300	1.0700	0.9530	1.0533	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314176	3LANCAST	115.0	345	354	0.5870	1.0042	0.9300	1.0700	0.9540	1.0544	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3986	1.0098	0.9300	1.0700	0.9593	1.0603	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3643	1.0008	0.9300	1.0700	0.9508	1.0508	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3613	1.0007	0.9300	1.0700	0.9506	1.0507	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9441	1.0030	0.9300	1.0700	0.9537	1.0540	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314187	3MAN 176	115.0	345	354	0.8486	0.9903	0.9300	1.0700	0.9408	1.0398	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314188	3WEST PT	115.0	345	354	0.9397	1.0037	0.9300	1.0700	0.9535	1.0539	D	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3282	1.0011	0.9300	1.0700	0.9511	1.0512	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7492	1.0021	0.9300	1.0700	0.9520	1.0522	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8647	1.0030	0.9300	1.0700	0.9536	1.0540	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8646	1.0036	0.9300	1.0700	0.9535	1.0538	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.8874	1.0047	0.9300	1.0700	0.9545	1.0550	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
315034	1NNECK1	13.2	345	354	0.4088	1.0357	0.9300	1.0700	0.9839	1.0875	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
315035	1NNECK2	13.2	345	354	0.4088	1.0357	0.9300	1.0700	0.9839	1.0875	LD	675	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2932	0.9991	0.9300	1.0700	0.9492	1.0491	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
313813	30CRAN	115.0	345	354	0.8467	1.0028	0.9300	1.0700	0.9527	1.0530	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
313828	3WHITEMARSH	230.0	345	354	0.2936	1.0001	0.9300	1.0700	0.9501	1.0501	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314139	60AKGROW	230.0	345	354	0.2999	1.0009	0.9300	1.0700	0.9509	1.0510	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2469	1.0040	0.9300	1.0700	0.9538	1.0542	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314173	3GARBER	115.0	345	354	0.8356	1.0031	0.9300	1.0700	0.9525	1.0528	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.9354	1.0244	0.9300	1.0700	0.9530	1.0533	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.6467	1.0042	0.9300	1.0700	0.9732	1.0756	D	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.4460	1.0042	0.9300	1.0700	0.9540	1.0544	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2742	1.0098	0.9300	1.0700	0.9593	1.0603	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2503	1.0008	0.9300	1.0700	0.9508	1.0508	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2475	1.0007	0.9300	1.0700	0.9506	1.0507	LD	676	D: 6DAHLGRE-6ARNOLD1 + 6JUNNSVL-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upllimi t	Voltdro p	Voltrise e	Viol	Ncon	Contingency Description
314184	3SHACKLE	115.0	345	354	0.8767	1.0038	0.9300	1.0700	0.9537	1.0540	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7289	0.9903	0.9300	1.0700	0.9408	1.0398	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.9076	1.0037	0.9300	1.0700	0.9535	1.0539	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.2445	1.0011	0.9300	1.0700	0.9511	1.0512	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8745	1.0021	0.9300	1.0700	0.9520	1.0522	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345	354	0.8463	1.0036	0.9300	1.0700	0.9536	1.0540	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8740	1.0036	0.9300	1.0700	0.9535	1.0538	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.7243	1.0047	0.9300	1.0700	0.9545	1.0550	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
315034	1INNECK1	13.2	345	354	0.2812	1.0357	0.9300	1.0700	0.9039	1.0875	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
315035	1INNECK2	13.2	345	354	0.2812	1.0357	0.9300	1.0700	0.9839	1.0875	LD	676	D:6DAHLGRC-6ARNOLD51 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8996	1.0183	0.9300	1.0700	0.9673	1.0692	LD	688	D:6DAHLGRC-6ARNOLD51 +6HAYES -6YORKTWH1
314139	6OAKGROW	230.0	345	354	0.7952	1.0009	0.9300	1.0700	0.9509	1.0510	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.9032	1.0026	0.9300	1.0700	0.9525	1.0528	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.8745	1.0098	0.9300	1.0700	0.9593	1.0603	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.7939	1.0008	0.9300	1.0700	0.9508	1.0508	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.7939	1.0007	0.9300	1.0700	0.9506	1.0507	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
314190	6WESTHOR	230.0	345	354	0.8969	1.0357	0.9300	1.0700	0.9839	1.0875	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
315034	1INNECK1	13.2	345	354	0.8969	1.0357	0.9300	1.0700	0.9511	1.0512	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
315035	1INNECK2	13.2	345	354	0.8969	1.0357	0.9300	1.0700	0.9839	1.0875	LD	1003	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6NORNECK1
313813	3OACRAN	115.0	345	354	0.7922	1.0028	0.9300	1.0700	0.9527	1.0530	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROW	230.0	345	354	0.5546	1.0009	0.9300	1.0700	0.9509	1.0510	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.5546	1.0040	0.9300	1.0700	0.9538	1.0542	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.8745	1.0026	0.9300	1.0700	0.9525	1.0528	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.9012	1.0031	0.9300	1.0700	0.9530	1.0533	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314176	3LANCAST	115.0	345	354	0.7724	1.0042	0.9300	1.0700	0.9540	1.0544	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.7724	1.0098	0.9300	1.0700	0.9593	1.0603	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.5597	1.0008	0.9300	1.0700	0.9508	1.0508	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.5594	1.0007	0.9300	1.0700	0.9506	1.0507	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.9554	1.0038	0.9300	1.0700	0.9537	1.0540	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.8925	0.9903	0.9300	1.0700	0.9408	1.0398	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345	354	0.5532	1.0011	0.9300	1.0700	0.9511	1.0512	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8745	1.0021	0.9300	1.0700	0.9520	1.0522	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345	354	0.8918	1.0038	0.9300	1.0700	0.9536	1.0540	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.9016	1.0036	0.9300	1.0700	0.9535	1.0538	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.7728	1.0047	0.9300	1.0700	0.9545	1.0550	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
315034	1INNECK1	13.2	345	354	0.5948	1.0357	0.9300	1.0700	0.9839	1.0875	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
315035	1INNECK2	13.2	345	354	0.5948	1.0357	0.9300	1.0700	0.9839	1.0875	LD	1004	D:6DAHLGRC-6OAKGROW1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8996	1.0183	0.9300	1.0700	0.9673	1.0692	LD	1016	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314180	6HAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	1343	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314180	6HAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	1659	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314180	6HAYES	230.0	345	354	0.8907	1.0183	0.9300	1.0700	0.9673	1.0692	LD	1994	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314180	6HAYES	230.0	345	354	0.8907	1.0183	0.9300	1.0700	0.9673	1.0692	LD	2318	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314180	6HAYES	230.0	345	354	0.8907	1.0183	0.9300	1.0700	0.9673	1.0692	LD	2641	D:6DAHLGRC-6OAKGROW1 +6HAYES -6YORKTWH1
314398	6NP NEWS	230.0	345	356	0.8927	1.0186	0.9300	1.0700	0.9677	1.0696	LD	2704	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6SHELBNK1
314399	6PMBROK	230.0	345	356	0.8912	1.0150	0.9300	1.0700	0.9643	1.0658	LD	2704	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8909	1.0113	0.9300	1.0700	0.9607	1.0618	LD	2704	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8945	1.0207	0.9300	1.0700	0.9697	1.0717	LD	2704	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8840	1.0186	0.9300	1.0700	0.9677	1.0696	LD	2705	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6TABB 1
314398	6PMBROK	230.0	345	356	0.8926	1.0150	0.9300	1.0700	0.9643	1.0658	LD	2705	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6TABB 1
314402	6PENINSLS	230.0	345	356	0.8912	1.0117	0.9300	1.0700	0.9612	1.0623	LD	2705	D:6DAHLGRC-6NP NEWS1 +6PENINSLS-6TABB 1

Bus #	Bus Name	KV	Acre	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315035	1NNECK2	13.2	345	354	0.7624	1.0357	0.9300	1.0700	0.9839	1.0875	LD	3910	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6NORNECK1
313810	60AHLGREN	230.0	345	354	0.2373	0.9991	0.9300	1.0700	0.9492	1.0491	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
313813	30CRAN	115.0	345	354	0.6476	1.0028	0.9300	1.0700	0.9527	1.0530	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
313828	3WHITEMARSH	115.0	345	354	0.2537	1.0001	0.9300	1.0700	0.9501	1.0508	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314131	GARNOLDS	230.0	345	354	0.2373	1.0007	0.9300	1.0700	0.9507	1.0508	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314139	60ARGROV	230.0	345	354	0.2442	1.0009	0.9300	1.0700	0.9509	1.0510	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314172	60UNNSVI	230.0	345	354	0.2228	1.0040	0.9300	1.0700	0.9538	1.0542	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314173	3GARNER	115.0	345	354	0.4232	1.0026	0.9300	1.0700	0.9525	1.0528	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314174	3HARMONY	115.0	345	354	0.2859	1.0031	0.9300	1.0700	0.9530	1.0533	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314176	6HARMONY	230.0	345	354	0.9354	1.0244	0.9300	1.0700	0.9732	1.0756	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314178	3LANCAST	115.0	345	354	0.2520	1.0042	0.9300	1.0700	0.9540	1.0544	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314181	6NORNECK	115.0	345	354	0.2777	1.0038	0.9300	1.0700	0.9593	1.0603	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314182	6NORNECK	230.0	345	354	0.2515	1.0007	0.9300	1.0700	0.9506	1.0507	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314183	6SANDERS	230.0	345	354	0.2768	1.0036	0.9300	1.0700	0.9537	1.0540	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314184	3SHACKLE	115.0	345	354	0.2792	1.0030	0.9300	1.0700	0.9408	1.0398	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314187	3WAN 176	115.0	345	354	0.2676	1.0037	0.9300	1.0700	0.9535	1.0539	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314188	3WEST PT	115.0	345	354	0.2543	1.0047	0.9300	1.0700	0.9545	1.0550	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314190	6WESTMOR	230.0	345	354	0.2405	1.0021	0.9300	1.0700	0.9511	1.0512	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314191	3WHITE S	115.0	345	354	0.6823	1.0021	0.9300	1.0700	0.9520	1.0522	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314193	3HARMO 1	115.0	345	354	0.2164	1.0038	0.9300	1.0700	0.9536	1.0540	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314195	3HARMO 2	115.0	345	354	0.2103	1.0036	0.9300	1.0700	0.9535	1.0538	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314204	1NNECK1	13.2	345	354	0.2543	1.0047	0.9300	1.0700	0.9545	1.0550	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
315035	1NNECK2	13.2	345	354	0.2848	1.0357	0.9300	1.0700	0.9839	1.0875	LD	3911	D: GARNOLDS-6COMORN 1 + 6DUNNSVI-6LANEZA 1
314180	6HAYES	230.0	345	354	0.2993	1.0183	0.9300	1.0700	0.9673	1.0692	LD	3923	D: GARNOLDS-6COMORN 1 + 6HAYES -6TORNTWNI
313813	30CRAN	115.0	345	354	0.6724	1.0028	0.9300	1.0700	0.9527	1.0530	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
313828	3WHITEMARSH	115.0	345	354	0.2194	1.0001	0.9300	1.0700	0.9501	1.0501	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314131	GARNOLDS	230.0	345	354	0.2897	1.0007	0.9300	1.0700	0.9507	1.0508	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314139	60ARGROV	230.0	345	354	0.2985	1.0009	0.9300	1.0700	0.9509	1.0510	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314173	3GARNER	115.0	345	354	0.2649	1.0026	0.9300	1.0700	0.9525	1.0528	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314174	3HARMONY	115.0	345	354	0.2729	1.0031	0.9300	1.0700	0.9530	1.0533	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314175	6COMORN	230.0	345	354	0.2896	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314178	3LANCAST	115.0	345	354	0.2416	1.0042	0.9300	1.0700	0.9540	1.0544	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314181	6NORNECK	115.0	345	354	0.2393	1.0038	0.9300	1.0700	0.9593	1.0603	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314182	6NORNECK	230.0	345	354	0.2108	1.0008	0.9300	1.0700	0.9508	1.0508	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314183	6SANDERS	230.0	345	354	0.2076	1.0007	0.9300	1.0700	0.9506	1.0507	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.2848	1.0038	0.9300	1.0700	0.9537	1.0540	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314187	3WAN 176	115.0	345	354	0.2119	1.0037	0.9300	1.0700	0.9538	1.0539	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314188	3WEST PT	115.0	345	354	0.2156	1.0037	0.9300	1.0700	0.9535	1.0539	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.2039	1.0011	0.9300	1.0700	0.9511	1.0512	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314191	3WHITE S	115.0	345	354	0.2088	1.0021	0.9300	1.0700	0.9520	1.0522	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314193	3HARMO 1	115.0	345	354	0.2284	1.0036	0.9300	1.0700	0.9535	1.0538	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
314195	3HARMO 2	115.0	345	354	0.2419	1.0047	0.9300	1.0700	0.9545	1.0550	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
315034	1NNECK1	13.2	345	354	0.2419	1.0357	0.9300	1.0700	0.9839	1.0875	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
315035	1NNECK2	13.2	345	354	0.2419	1.0357	0.9300	1.0700	0.9839	1.0875	LD	4228	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6NORNECK1
313810	60AHLGREN	230.0	345	354	0.2222	0.9991	0.9300	1.0700	0.9492	1.0491	LD	4229	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6LANEZA 1
313813	30CRAN	115.0	345	354	0.2623	1.0028	0.9300	1.0700	0.9527	1.0530	LD	4229	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6LANEZA 1
313828	3WHITEMARSH	115.0	345	354	0.2124	1.0001	0.9300	1.0700	0.9501	1.0501	LD	4229	D: 6B1RCHWD-6COMORN 1 + 6DUNNSVI-6LANEZA 1

Bus #	Bus Name	KV	Area	Zone	Cont/Vol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314131	GARNOLDS	230.0	345		354	0.2207	1.0007	1.9300	1.0700	0.9507	1.0508	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314139	GOARGROV	230.0	345		354	0.2284	1.0009	1.9300	1.0700	0.9509	1.0510	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345		354	0.2280	1.0040	1.9300	1.0700	0.9538	1.0542	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345		354	0.4357	1.0026	1.9300	1.0700	0.9525	1.0528	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345		354	0.8151	1.0031	1.9300	1.0700	0.9530	1.0533	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314175	6COMORN	230.0	345		354	0.2207	1.0010	1.9300	1.0700	0.9500	1.0510	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314176	6HARMONY	230.0	345		354	0.9341	1.0244	1.9300	1.0700	0.9732	1.0756	D	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314178	BLANCAST	115.0	345		354	0.6091	1.0042	1.9300	1.0700	0.9540	1.0544	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314181	3BONECK	115.0	345		354	0.2642	1.0098	1.9300	1.0700	0.9593	1.0603	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314182	6BONECK	230.0	345		354	0.2594	1.0098	1.9300	1.0700	0.9508	1.0508	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345		354	0.2365	1.0007	1.9300	1.0700	0.9506	1.0507	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345		354	0.8749	1.0038	1.9300	1.0700	0.9537	1.0540	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314187	5WAN 176	115.0	345		354	0.7264	0.9903	1.9300	1.0700	0.9408	1.0398	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314188	WEST PT	115.0	345		354	0.4962	1.0037	1.9300	1.0700	0.9535	1.0539	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345		354	0.2393	1.0011	1.9300	1.0700	0.9511	1.0512	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314191	3MHEITR 8	115.0	345		354	0.6775	1.0021	1.9300	1.0700	0.9520	1.0522	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345		354	0.8536	1.0038	1.9300	1.0700	0.9536	1.0540	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345		354	0.8125	1.0036	1.9300	1.0700	0.9535	1.0538	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345		354	0.8094	1.0047	1.9300	1.0700	0.9545	1.0550	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
315034	1INNECK1	13.2	345		354	0.2709	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
315035	1INNECK2	13.2	345		354	0.2709	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4229 D: 6B1RCHWD-6COMORN 1 + 6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345		354	0.8925	1.0183	1.9300	1.0700	0.9673	1.0692	LD	4241 D: 6B1RCHWD-6COMORN 1 + 6HAYES -6GYORKTWN1
314187	6HAYES	230.0	345		354	0.8923	1.0183	1.9300	1.0700	0.9673	1.0692	LD	4241 D: 6B1RCHWD-6COMORN 1 + 6HAYES -6GYORKTWN1
314173	3GARNER	115.0	345		354	0.9927	1.0026	1.9300	1.0700	0.9525	1.0528	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
314181	3BONECK	115.0	345		354	0.9978	1.0098	1.9300	1.0700	0.9593	1.0603	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
314182	6BONECK	230.0	345		354	0.8425	1.0008	1.9300	1.0700	0.9508	1.0508	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
314183	6SANDERS	230.0	345		354	0.8192	1.0007	1.9300	1.0700	0.9506	1.0507	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
314190	6WESTHOR	230.0	345		354	0.8127	1.0011	1.9300	1.0700	0.9511	1.0512	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
315034	1INNECK1	13.2	345		354	0.9208	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
315035	1INNECK2	13.2	345		354	0.9208	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4861 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6BONECK1
313813	3OCORN	115.0	345		354	0.9278	1.0028	1.9300	1.0700	0.9527	1.0530	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345		354	0.8586	1.0026	1.9300	1.0700	0.9525	1.0528	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314174	6DUNNSVL	230.0	345		354	0.7459	1.0040	1.9300	1.0700	0.9538	1.0542	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314175	3GARNER	115.0	345		354	0.8749	1.0038	1.9300	1.0700	0.9537	1.0540	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314178	BLANCAST	115.0	345		354	0.9201	1.0042	1.9300	1.0700	0.9540	1.0544	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314181	3BONECK	115.0	345		354	0.8169	1.0098	1.9300	1.0700	0.9593	1.0603	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314182	6BONECK	230.0	345		354	0.7471	1.0008	1.9300	1.0700	0.9508	1.0508	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345		354	0.7468	1.0007	1.9300	1.0700	0.9506	1.0507	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314190	6WESTHOR	230.0	345		354	0.7473	1.0011	1.9300	1.0700	0.9511	1.0512	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314191	3MHEITR 8	115.0	345		354	0.9368	1.0021	1.9300	1.0700	0.9520	1.0522	D	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345		354	0.9206	1.0047	1.9300	1.0700	0.9545	1.0550	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
315034	1INNECK1	13.2	345		354	0.9378	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
315035	1INNECK2	13.2	345		354	0.9378	1.0357	1.9300	1.0700	0.9839	1.0875	LD	4862 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345		354	0.8998	1.0183	1.9300	1.0700	0.9673	1.0692	LD	4874 D: 60AKGROV-6WESTMOR1 + 6DUNNSVL-6LANEXA 1
314181	3BONECK	230.0	345		354	0.9441	1.0183	1.9300	1.0700	0.9673	1.0692	LD	5189 D: 6DUNNSVL-6BONECK1 + 6HAYES -6GYORKTWN1
314182	6BONECK	115.0	345		354	0.9298	1.0098	1.9300	1.0700	0.9593	1.0603	LD	5194 D: 6DUNNSVL-6BONECK1 + 6BONECK-6SANDERS1
314182	6BONECK	230.0	345		354	0.8410	1.0008	1.9300	1.0700	0.9508	1.0508	LD	5194 D: 6DUNNSVL-6BONECK1 + 6BONECK-6SANDERS1
314173	3GARNER	115.0	345		354	0.9246	1.0026	1.9300	1.0700	0.9525	1.0528	LD	5195 D: 6DUNNSVL-6BONECK1 + 6SANDERS-6WESTMOR1
314181	3BONECK	115.0	345		354	0.8975	1.0098	1.9300	1.0700	0.9593	1.0603	LD	5195 D: 6DUNNSVL-6BONECK1 + 6SANDERS-6WESTMOR1
314182	6BONECK	230.0	345		354	0.8095	1.0007	1.9300	1.0700	0.9508	1.0508	LD	5195 D: 6DUNNSVL-6BONECK1 + 6SANDERS-6WESTMOR1
314183	6SANDERS	230.0	345		354	0.8098	1.0008	1.9300	1.0700	0.9504	1.0507	LD	5195 D: 6DUNNSVL-6BONECK1 + 6SANDERS-6WESTMOR1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	Voltrls a	Viol	Ncon	Contingency Description
315034	1NNECK1	13.2	345	354	0.92025	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5195	D: 6UNNSVL-6NORNECK1 + 6SANDERS-6WESTMOR1
315035	1NNECK2	13.2	345	354	0.92025	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5195	D: 6UNNSVL-6NORNECK1 + 6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	5503	D: 6UNNSVL-6LANEXA 1 + 6HAYES -6YORKTWN1
314172	6UNNSVL	230.0	345	354	0.8054	1.0040	0.9300	1.0700	0.9538	1.0542	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
314173	3GARNER	115.0	345	354	0.9202	1.0026	0.9300	1.0700	0.9525	1.0528	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
314181	3NORNECK	115.0	345	354	0.8927	1.0098	0.9300	1.0700	0.9593	1.0602	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
314182	6NORNECK	230.0	345	354	0.8065	1.0008	0.9300	1.0700	0.9508	1.0508	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
315034	1NNECK1	13.2	345	354	0.9256	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
315035	1NNECK2	13.2	345	354	0.9256	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5508	D: 6UNNSVL-6LANEXA 1 + 6NORNECK-6SANDERS1
314172	6UNNSVL	230.0	345	354	0.7533	1.0040	0.9300	1.0700	0.9538	1.0542	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314173	3GARNER	115.0	345	354	0.8595	1.0026	0.9300	1.0700	0.9525	1.0528	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314178	3LANCAST	115.0	345	354	0.9372	1.0042	0.9300	1.0700	0.9540	1.0544	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314181	3NORNECK	115.0	345	354	0.8383	1.0098	0.9300	1.0700	0.9593	1.0603	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314182	6NORNECK	230.0	345	354	0.7593	1.0008	0.9300	1.0700	0.9508	1.0508	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314183	6SANDERS	230.0	345	354	0.7537	1.0007	0.9300	1.0700	0.9506	1.0507	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314400	3LANCA 1	115.0	345	354	0.9377	1.0047	0.9300	1.0700	0.9545	1.0550	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
315034	1NNECK1	13.2	345	354	0.8596	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
315035	1NNECK2	13.2	345	354	0.8596	1.0357	0.9300	1.0700	0.9039	1.0875	LD	5509	D: 6UNNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8907	1.0183	0.9300	1.0700	0.9673	1.0692	LD	5816	D: 3GARNER -3LANCAST1 + 6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8532	1.0244	0.9300	1.0700	0.9732	1.0756	LD	6137	D: 3GARNER -3NORNECK1 + 6PAPERMI-6CORRECTN1
314189	6PAPERMI	230.0	345	354	0.8532	1.0244	0.9300	1.0700	0.9661	1.0677	LD	6159	D: 3GARNER -3NORNECK1 + 6CORRECTN-6LANEXA 1
314199	6PAPERMI	230.0	345	354	0.8573	1.0169	0.9300	1.0700	0.9653	1.0669	LD	6159	D: 3GARNER -3NORNECK1 + 6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8570	1.0161	0.9300	1.0700	0.9673	1.0692	LD	6439	D: 3HARMONY-3SHACKLE1 + 6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8781	1.0244	0.9300	1.0700	0.9732	1.0756	LD	6470	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.8723	1.0169	0.9300	1.0700	0.9661	1.0677	LD	6470	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8723	1.0161	0.9300	1.0700	0.9653	1.0669	LD	6470	D: 3HARMONY-3SHACKLE1 + 6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8913	1.0183	0.9300	1.0700	0.9673	1.0692	LD	7050	D: 3HARMONY-3WHITE S1 + 6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	7366	D: 3HARMONY-3HARMO 11 + 6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8669	1.0244	0.9300	1.0700	0.9732	1.0756	LD	7375	D: 3HARMONY-3HARMO 11 + 6PAPERMI-6CORRECTN1
314189	6PAPERMI	230.0	345	354	0.8619	1.0169	0.9300	1.0700	0.9661	1.0677	LD	7375	D: 3HARMONY-3HARMO 11 + 6PAPERMI-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8616	1.0244	0.9300	1.0700	0.9732	1.0756	LD	7397	D: 3HARMONY-3HARMO 11 + 6CORRECTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.8559	1.0169	0.9300	1.0700	0.9661	1.0677	LD	7397	D: 3HARMONY-3HARMO 11 + 6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8555	1.0161	0.9300	1.0700	0.9653	1.0669	LD	7397	D: 3HARMONY-3HARMO 11 + 6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	7673	D: 3HARMONY-3HARMO 21 + 6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8724	1.0244	0.9300	1.0700	0.9732	1.0756	LD	7682	D: 3HARMONY-3HARMO 21 + 6PAPERMI-6CORRECTN1
314189	6PAPERMI	230.0	345	354	0.8724	1.0244	0.9300	1.0700	0.9661	1.0677	LD	7682	D: 3HARMONY-3HARMO 21 + 6PAPERMI-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8665	1.0244	0.9300	1.0700	0.9732	1.0756	LD	7704	D: 3HARMONY-3HARMO 21 + 6CORRECTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.8607	1.0169	0.9300	1.0700	0.9661	1.0677	LD	7704	D: 3HARMONY-3HARMO 21 + 6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8604	1.0161	0.9300	1.0700	0.9653	1.0669	LD	7704	D: 3HARMONY-3HARMO 21 + 6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8934	1.0183	0.9300	1.0700	0.9673	1.0692	LD	8284	D: 6HARMONY-6PAPERMI1 + 6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8653	1.0244	0.9300	1.0700	0.9732	1.0756	LD	8597	D: 3HAYES89-6HAYES 1 + 6PAPERMI-6CORRECTN1
314189	6PAPERMI	230.0	345	354	0.8653	1.0244	0.9300	1.0700	0.9661	1.0677	LD	8597	D: 3HAYES89-6HAYES 1 + 6PAPERMI-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8427	1.0244	0.9300	1.0700	0.9732	1.0756	LD	8619	D: 3HAYES89-6HAYES 1 + 6CORRECTN-6LANEXA 1
314177	3HAYES89	115.0	345	354	0.9381	0.9988	0.9300	1.0700	0.9489	1.0486	LD	8619	D: 3HAYES89-6HAYES 1 + 6CORRECTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.9375	1.0169	0.9300	1.0700	0.9661	1.0677	LD	8619	D: 3HAYES89-6HAYES 1 + 6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.9372	1.0161	0.9300	1.0700	0.9653	1.0669	LD	8619	D: 3HAYES89-6HAYES 1 + 6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8919	1.0183	0.9300	1.0700	0.9673	1.0692	LD	8691	D: 3LANCAST-3LANCA 11 + 6HAYES -6YORKTWN1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	Voltris e	Viol	Ncon	Contingency Description
314176	GHARMONY	230.0	345	354	0.8754	1.0244	0.9300	1.0700	0.9732	1.0756	LD	8922	D: 3LANCAST-3LANCA 11 +6CORICTN-6LANEXA 1
314189	GAPEMILL	230.0	345	354	0.8656	1.0169	0.9300	1.0700	0.9661	1.0677	LD	8922	D: 3LANCAST-3LANCA 11 +6CORICTN-6LANEXA 1
314375	GCORCTN	230.0	345	354	0.8654	1.0161	0.9300	1.0700	0.9653	1.0669	LD	8922	D: 3LANCAST-3LANCA 11 +6CORICTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8900	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9194	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314180	GHAYES	230.0	345	354	0.8956	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9195	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9196	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK11
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9197	D: 6HAYES -6YORKTWN1 +3NORNECK-6NORNECK21
314180	GHAYES	230.0	345	354	0.8906	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9198	D: 6HAYES -6YORKTWN1 +6NORNECK-6SANDERS1
314180	GHAYES	230.0	345	354	0.8948	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9199	D: 6HAYES -6YORKTWN1 +6SANDERS-6WESTMOR1
314180	GHAYES	230.0	345	354	0.8948	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9200	D: 6HAYES -6YORKTWN1 +3SHACKLE-3WEST PT1
314176	GHARMONY	230.0	345	354	0.8566	1.0244	0.9300	1.0700	0.9732	1.0756	LD	9201	D: 6HAYES -6YORKTWN1 +3WEST PT-3LANEXA 1
314189	GAPEMILL	230.0	345	354	0.8654	1.0169	0.9300	1.0700	0.9661	1.0677	LD	9202	D: 6HAYES -6YORKTWN1 +6PAPEM1-6CORICTN1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9203	D: 6HAYES -6YORKTWN1 +6PAPEM1-6CORICTN1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9204	D: 6HAYES -6YORKTWN1 +30AKKIDG-30AKK1 11
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9205	D: 6HAYES -6YORKTWN1 +30AKKIDG-30AKK1 21
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9206	D: 6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9207	D: 6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9208	D: 6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9209	D: 6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9210	D: 6HAYES -6YORKTWN1 +6BIRINEC-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9211	D: 6HAYES -6YORKTWN1 +6BIRINEC-6VA BCH 1
314180	GHAYES	230.0	345	354	0.8921	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9212	D: 6HAYES -6YORKTWN1 +6PENNIMA-6KINGS M
314180	GHAYES	230.0	345	354	0.8920	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9213	D: 6HAYES -6YORKTWN1 +6PENNIMA-6WALR091
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9215	D: 6HAYES -6YORKTWN1 +3527767A-3527767B-3527767C-3527767D-3527767E-3527767F-3527767G-3527767H-3527767I-3527767J-3527767K-3527767L-3527767M-3527767N-3527767O-3527767P-3527767Q-3527767R-3527767S-3527767T-3527767U-3527767V-3527767W-3527767X-3527767Y-3527767Z-3527767AA-3527767AB-3527767AC-3527767AD-3527767AE-3527767AF-3527767AG-3527767AH-3527767AI-3527767AJ-3527767AK-3527767AL-3527767AM-3527767AN-3527767AO-3527767AP-3527767AQ-3527767AR-3527767AS-3527767AT-3527767AU-3527767AV-3527767AW-3527767AX-3527767AY-3527767AZ-3527767BA-3527767BB-3527767BC-3527767BD-3527767BE-3527767BF-3527767BG-3527767BH-3527767BI-3527767BJ-3527767BK-3527767BL-3527767BM-3527767BN-3527767BO-3527767BP-3527767BQ-3527767BR-3527767BS-3527767BT-3527767BU-3527767BV-3527767BW-3527767BX-3527767BY-3527767BZ-3527767CA-3527767CB-3527767CC-3527767CD-3527767CE-3527767CF-3527767CG-3527767CH-3527767CI-3527767CJ-3527767CK-3527767CL-3527767CM-3527767CN-3527767CO-3527767CP-3527767CQ-3527767CR-3527767CS-3527767CT-3527767CU-3527767CV-3527767CW-3527767CX-3527767CY-3527767CZ-3527767DA-3527767DB-3527767DC-3527767DD-3527767DE-3527767DF-3527767DG-3527767DH-3527767DI-3527767DJ-3527767DK-3527767DL-3527767DM-3527767DN-3527767DO-3527767DP-3527767DQ-3527767DR-3527767DS-3527767DT-3527767DU-3527767DV-3527767DW-3527767DX-3527767DY-3527767DZ-3527767EA-3527767EB-3527767EC-3527767ED-3527767EE-3527767EF-3527767EG-3527767EH-3527767EI-3527767EJ-3527767EK-3527767EL-3527767EM-3527767EN-3527767EO-3527767EP-3527767EQ-3527767ER-3527767ES-3527767ET-3527767EU-3527767EV-3527767EW-3527767EX-3527767EY-3527767EZ-3527767FA-3527767FB-3527767FC-3527767FD-3527767FE-3527767FF-3527767FG-3527767FH-3527767FI-3527767FJ-3527767FK-3527767FL-3527767FM-3527767FN-3527767FO-3527767FP-3527767FQ-3527767FR-3527767FS-3527767FT-3527767FU-3527767FV-3527767FW-3527767FX-3527767FY-3527767FZ-3527767GA-3527767GB-3527767GC-3527767GD-3527767GE-3527767GF-3527767GG-3527767GH-3527767GI-3527767GJ-3527767GK-3527767GL-3527767GM-3527767GN-3527767GO-3527767GP-3527767GQ-3527767GR-3527767GS-3527767GT-3527767GU-3527767GV-3527767GW-3527767GX-3527767GY-3527767GZ-3527767HA-3527767HB-3527767HC-3527767HD-3527767HE-3527767HF-3527767HG-3527767HH-3527767HI-3527767HJ-3527767HK-3527767HL-3527767HM-3527767HN-3527767HO-3527767HP-3527767HQ-3527767HR-3527767HS-3527767HT-3527767HU-3527767HV-3527767HW-3527767HX-3527767HY-3527767HZ-3527767IA-3527767IB-3527767IC-3527767ID-3527767IE-3527767IF-3527767IG-3527767IH-3527767II-3527767IJ-3527767IK-3527767IL-3527767IM-3527767IN-3527767IO-3527767IP-3527767IQ-3527767IR-3527767IS-3527767IT-3527767IU-3527767IV-3527767IW-3527767IX-3527767IY-3527767IZ-3527767JA-3527767JB-3527767JC-3527767JD-3527767JE-3527767JF-3527767JG-3527767JH-3527767JI-3527767JJ-3527767JK-3527767JL-3527767JM-3527767JN-3527767JO-3527767JP-3527767JQ-3527767JR-3527767JS-3527767JT-3527767JU-3527767JV-3527767JW-3527767JX-3527767JY-3527767JZ-3527767KA-3527767KB-3527767KC-3527767KD-3527767KE-3527767KF-3527767KG-3527767KH-3527767KI-3527767KL-3527767KM-3527767KN-3527767KO-3527767KP-3527767KQ-3527767KR-3527767KS-3527767KT-3527767KU-3527767KV-3527767KW-3527767KX-3527767KY-3527767KZ-3527767LA-3527767LB-3527767LC-3527767LD-3527767LE-3527767LF-3527767LG-3527767LH-3527767LI-3527767LJ-3527767LK-3527767LL-3527767LM-3527767LN-3527767LO-3527767LP-3527767LQ-3527767LR-3527767LS-3527767LT-3527767LU-3527767LV-3527767LW-3527767LX-3527767LY-3527767LZ-3527767MA-3527767MB-3527767MC-3527767MD-3527767ME-3527767MF-3527767MG-3527767MH-3527767MI-3527767MJ-3527767MK-3527767ML-3527767MN-3527767MO-3527767MP-3527767MQ-3527767MR-3527767MS-3527767MT-3527767MU-3527767MV-3527767MW-3527767MX-3527767MY-3527767MZ-3527767NA-3527767NB-3527767NC-3527767ND-3527767NE-3527767NF-3527767NG-3527767NH-3527767NI-3527767NJ-3527767NK-3527767NL-3527767NM-3527767NO-3527767NP-3527767NQ-3527767NR-3527767NS-3527767NT-3527767NU-3527767NV-3527767NW-3527767NX-3527767NY-3527767NZ-3527767OA-3527767OB-3527767OC-3527767OD-3527767OE-3527767OF-3527767OG-3527767OH-3527767OI-3527767OJ-3527767OK-3527767OL-3527767OM-3527767ON-3527767OO-3527767OP-3527767OQ-3527767OR-3527767OS-3527767OT-3527767OU-3527767OV-3527767OW-3527767OX-3527767OY-3527767OZ-3527767PA-3527767PB-3527767PC-3527767PD-3527767PE-3527767PF-3527767PG-3527767PH-3527767PI-3527767PJ-3527767PK-3527767PL-3527767PM-3527767PN-3527767PO-3527767PP-3527767PQ-3527767PR-3527767PS-3527767PT-3527767PU-3527767PV-3527767PW-3527767PX-3527767PY-3527767PZ-3527767QA-3527767QB-3527767QC-3527767QD-3527767QE-3527767QF-3527767QG-3527767QH-3527767QI-3527767QJ-3527767QK-3527767QL-3527767QM-3527767QN-3527767QO-3527767QP-3527767QQ-3527767QR-3527767QS-3527767QT-3527767QU-3527767QV-3527767QW-3527767QX-3527767QY-3527767QZ-3527767RA-3527767RB-3527767RC-3527767RD-3527767RE-3527767RF-3527767RG-3527767RH-3527767RI-3527767RJ-3527767RK-3527767RL-3527767RM-3527767RN-3527767RO-3527767RP-3527767RQ-3527767RR-3527767RS-3527767RT-3527767RU-3527767RV-3527767RW-3527767RX-3527767RY-3527767RZ-3527767SA-3527767SB-3527767SC-3527767SD-3527767SE-3527767SF-3527767SG-3527767SH-3527767SI-3527767SJ-3527767SK-3527767SL-3527767SM-3527767SN-3527767SO-3527767SP-3527767SQ-3527767SR-3527767SS-3527767ST-3527767SU-3527767SV-3527767SW-3527767SX-3527767SY-3527767SZ-3527767TA-3527767TB-3527767TC-3527767TD-3527767TE-3527767TF-3527767TG-3527767TH-3527767TI-3527767TJ-3527767TK-3527767TL-3527767TM-3527767TN-3527767TO-3527767TP-3527767TQ-3527767TR-3527767TS-3527767TT-3527767TU-3527767TV-3527767TW-3527767TX-3527767TY-3527767TZ-3527767UA-3527767UB-3527767UC-3527767UD-3527767UE-3527767UF-3527767UG-3527767UH-3527767UI-3527767UJ-3527767UK-3527767UL-3527767UM-3527767UN-3527767UO-3527767UP-3527767UQ-3527767UR-3527767US-3527767UT-3527767UU-3527767UV-3527767UW-3527767UX-3527767UY-3527767UZ-3527767VA-3527767VB-3527767VC-3527767VD-3527767VE-3527767VF-3527767VG-3527767VH-3527767VI-3527767VJ-3527767VK-3527767VL-3527767VM-3527767VN-3527767VO-3527767VP-3527767VQ-3527767VR-3527767VS-3527767VT-3527767VU-3527767VV-3527767VW-3527767VX-3527767VY-3527767VZ-3527767WA-3527767WB-3527767WC-3527767WD-3527767WE-3527767WF-3527767WG-3527767WH-3527767WI-3527767WJ-3527767WK-3527767WL-3527767WM-3527767WN-3527767WO-3527767WP-3527767WQ-3527767WR-3527767WS-3527767WT-3527767WU-3527767WV-3527767WW-3527767WX-3527767WY-3527767WZ-3527767XA-3527767XB-3527767XC-3527767XD-3527767XE-3527767XF-3527767XG-3527767XH-3527767XI-3527767XJ-3527767XK-3527767XL-3527767XM-3527767XN-3527767XO-3527767XP-3527767XQ-3527767XR-3527767XS-3527767XT-3527767XU-3527767XV-3527767XW-3527767XX-3527767XY-3527767XZ-3527767YA-3527767YB-3527767YC-3527767YD-3527767YE-3527767YF-3527767YG-3527767YH-3527767YI-3527767YJ-3527767YK-3527767YL-3527767YM-3527767YN-3527767YO-3527767YP-3527767YQ-3527767YR-3527767YS-3527767YT-3527767YU-3527767YV-3527767YW-3527767YX-3527767YY-3527767YZ-3527767ZA-3527767ZB-3527767ZC-3527767ZD-3527767ZE-3527767ZF-3527767ZG-3527767ZH-3527767ZI-3527767ZJ-3527767ZK-3527767ZL-3527767ZM-3527767ZN-3527767ZO-3527767ZP-3527767ZQ-3527767ZR-3527767ZS-3527767ZT-3527767ZU-3527767ZV-3527767ZW-3527767ZX-3527767ZY-3527767ZZ

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8900	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9235	D: GHAYES -6YORKTWN1 +3LANEXA -6LANEXA 1
314180	GHAYES	230.0	345	354	0.8901	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9236	D: GHAYES -6YORKTWN1 +3LANEXA -6LANEXA 2
314180	GHAYES	230.0	345	354	0.8976	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9237	D: GHAYES -6YORKTWN1 +6LANEXA -6LIGH2091
314180	GHAYES	230.0	345	354	0.8900	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9238	D: GHAYES -6YORKTWN1 +6LANEXA -6LANEX 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9239	D: GHAYES -6YORKTWN1 +3LEEN58-3YNN5 581
314180	GHAYES	230.0	345	354	0.8941	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9240	D: GHAYES -6YORKTWN1 +6LIGH285-6WALR2851
314180	GHAYES	230.0	345	354	0.8938	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9241	D: GHAYES -6YORKTWN1 +6LIGH209-6WALR2091
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9242	D: GHAYES -6YORKTWN1 +3MAGRUDR-3PENINS11
314180	GHAYES	230.0	345	354	0.8940	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9243	D: GHAYES -6YORKTWN1 +3MAGRUDR-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9244	D: GHAYES -6YORKTWN1 +3MERCURY-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9245	D: GHAYES -6YORKTWN1 +3NAS4 -3PENINS11
314180	GHAYES	230.0	345	354	0.8920	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9246	D: GHAYES -6YORKTWN1 +3NAS4 -3PENINS12
314180	GHAYES	230.0	345	354	0.8920	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9247	D: GHAYES -6YORKTWN1 +3NNWS58-3TOANOS81
314180	GHAYES	230.0	345	354	0.8901	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9248	D: GHAYES -6YORKTWN1 +6NP NEWS-6PEMBROK1
314180	GHAYES	230.0	345	354	0.8906	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9249	D: GHAYES -6YORKTWN1 +6NP NEWS-6NP NE 11
314180	GHAYES	230.0	345	354	0.8903	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9250	D: GHAYES -6YORKTWN1 +6PEMBROK-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9251	D: GHAYES -6YORKTWN1 +3PENINS1-3SEAFD761
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9252	D: GHAYES -6YORKTWN1 +3PENINS1-3SEAFD791
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9253	D: GHAYES -6YORKTWN1 +3PENINS1-30 CARBD1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9254	D: GHAYES -6YORKTWN1 +3PENINS1-3PEN1 11
314180	GHAYES	230.0	345	354	0.8912	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9255	D: GHAYES -6YORKTWN1 +3PENINS1-6PENINS11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9256	D: GHAYES -6YORKTWN1 +3PENINS1-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9257	D: GHAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9258	D: GHAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8920	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9259	D: GHAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9260	D: GHAYES -6YORKTWN1 +3SHELBNK-3WHEALTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9261	D: GHAYES -6YORKTWN1 +3SHELBNK-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8913	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9262	D: GHAYES -6YORKTWN1 +30 CARBD-3WHEALTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9263	D: GHAYES -6YORKTWN1 +30 CARBD-3WHEALTN1
314180	GHAYES	230.0	345	354	0.8905	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9264	D: GHAYES -6YORKTWN1 +6WALR285-6SKI FCR1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9265	D: GHAYES -6YORKTWN1 +3WALWICK-3WHEALTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9266	D: GHAYES -6YORKTWN1 +6WALWICK-3WHEALTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9267	D: GHAYES -6YORKTWN1 +3WHEALTN-6WHEALTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9268	D: GHAYES -6YORKTWN1 +3WHEALTN-6WHEALTN2
314180	GHAYES	230.0	345	354	0.8913	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9269	D: GHAYES -6YORKTWN1 +6WHEALTN-6MINCHST1
314180	GHAYES	230.0	345	354	0.8904	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9270	D: GHAYES -6YORKTWN1 +6WHEALTN-6WHEAL 11
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9271	D: GHAYES -6YORKTWN1 +6WALWICK-6POOLS11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9272	D: GHAYES -6YORKTWN1 +3YORKTWN-3YORK PS1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9273	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN21
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9274	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN21
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9275	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9276	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9277	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9278	D: GHAYES -6YORKTWN1 +3YORKTWN-1YORKTWN31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9279	D: GHAYES -6YORKTWN1 +3STORE -3LONGC271
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9280	D: GHAYES -6YORKTWN1 +3STORE -3WA BCH 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9281	D: GHAYES -6YORKTWN1 +3WAYSIDE-3BURNNG71
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9282	D: GHAYES -6YORKTWN1 +3WAYSIDE-3LONGC271
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9283	D: GHAYES -6YORKTWN1 +3BEERK151-360SFORT1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9284	D: GHAYES -6YORKTWN1 +3BEERK151-3SHEEVES 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9285	D: GHAYES -6YORKTWN1 +3BOWERS -3DEPC871
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9286	D: GHAYES -6YORKTWN1 +3BOWERS -3HOJGE F1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9287	D: GHAYES -6YORKTWN1 +6BOWERS -6CHRLND1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9288	D: GHAYES -6YORKTWN1 +6BOWERS -6YAKTN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9289	D: GHAYES -6YORKTWN1 +3BURTN67-3DAVIS671
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9290	D: GHAYES -6YORKTWN1 +3BURTN67-3DAVIS271
314180	GHAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9291	D: GHAYES -6YORKTWN1 +3CHESAPK-3JMN GAS1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9292	D: GHAYES -6YORKTWN1 +3CHESAPK-3CRADOCK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9293	D: GHAYES -6YORKTWN1 +3CHESAPK-3DEPC461
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9294	D: GHAYES -6YORKTWN1 +3CHESAPK-3DEPC871
314180	GHAYES	230.0	345	354	0.8912	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9295	D: GHAYES -6YORKTWN1 +3CHESAPK-3DOZIER 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9296	D: GHAYES -6YORKTWN1 +3CHESAPK-3GOSPORT1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9297	D: GHAYES -6YORKTWN1 +3CHESAPK-3REEVES 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9298	D: GHAYES -6YORKTWN1 +3CHESAPK-3CHESPTX1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9299	D: GHAYES -6YORKTWN1 +3CHESAPK-1CHESPK31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9300	D: GHAYES -6YORKTWN1 +3CHESAPK-1CHESPK41
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9301	D: GHAYES -6YORKTWN1 +3CHESAPK-1CHESPKA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9302	D: GHAYES -6YORKTWN1 +3CHESAPK-1CHESPKB1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9303	D: GHAYES -6YORKTWN1 +3CHESAPK-1CHESAPK2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9304	D: GHAYES -6YORKTWN1 +6CHESAPK-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9305	D: GHAYES -6YORKTWN1 +6CHESAPK-6CHESPTX1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9306	D: GHAYES -6YORKTWN1 +6CHESAPK-6YAKTN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9307	D: GHAYES -6YORKTWN1 +3CHESPTX-3CHESPTX1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9308	D: GHAYES -6YORKTWN1 +3CHRLND-3HOJGE F1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9309	D: GHAYES -6YORKTWN1 +3CHRLND-6CHRLND1
314180	GHAYES	230.0	345	354	0.8913	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9310	D: GHAYES -6YORKTWN1 +6CHRLND-6HARBORV1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9311	D: GHAYES -6YORKTWN1 +6CHRLND-6LK KING1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9312	D: GHAYES -6YORKTWN1 +6CHRLND-6SEWLSPT1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9313	D: GHAYES -6YORKTWN1 +6CHRLND-6SEWLSPT2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9314	D: GHAYES -6YORKTWN1 +6CHRLND-6CHRL 11
314180	GHAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9315	D: GHAYES -6YORKTWN1 +3JMN GAS-3GRASFLD1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9316	D: GHAYES -6YORKTWN1 +3CRADOCK-3REEVES 1
314180	GHAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9317	D: GHAYES -6YORKTWN1 +3CRADOCK-3SHEA 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9318	D: GHAYES -6YORKTWN1 +3DAVIS67-3CHENWCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9319	D: GHAYES -6YORKTWN1 +3DAVIS27-3CHENWCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9320	D: GHAYES -6YORKTWN1 +3DEPC46-3YAKTN 1
314180	GHAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9321	D: GHAYES -6YORKTWN1 +3DOZIER -3THOMPSON1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9322	D: GHAYES -6YORKTWN1 +6DOZIER -6CHENWCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9323	D: GHAYES -6YORKTWN1 +6DOZIER -6CHENWCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9324	D: GHAYES -6YORKTWN1 +6ELIZ R -6YAKTN 1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9325	D: GHAYES -6YORKTWN1 +6ELIZ R -6ELIZAR11
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9326	D: GHAYES -6YORKTWN1 +6ELIZ R -6ELIZAR21
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9327	D: GHAYES -6YORKTWN1 +6ELIZ R -6ELIZAR31
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9328	D: GHAYES -6YORKTWN1 +6FENTRES-6LANDSTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9329	D: GHAYES -6YORKTWN1 +6FENTRES-6THAS2791
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9330	D: GHAYES -6YORKTWN1 +6FENTRES-6HICKORY1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9331	D: GHAYES -6YORKTWN1 +6FENTRES-6FENTR 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9332	D: GHAYES -6YORKTWN1 +6FENTRES-6FENTRES1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9333	D: GHAYES -6YORKTWN1 +6FENTRES-6FENTRES2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9334	D: GHAYES -6YORKTWN1 +3GREATBR-3HICKORY1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9335	D: GHAYES -6YORKTWN1 +3GEASFLD-3GREAT B1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9336	D: GHAYES -6YORKTWN1 +6GGRN RUN-6GRENCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9337	D: GHAYES -6YORKTWN1 +6GGRN RUN-6LYNHAVN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9338	D: GHAYES -6YORKTWN1 +3GRENCH-3THOLE S1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9339	D: GHAYES -6YORKTWN1 +3GRENCH-3GRENW 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9340	D: GHAYES -6YORKTWN1 +3GRENCH-6GRENCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9341	D: GHAYES -6YORKTWN1 +3GRENCH-6GRENCH2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9342	D: GHAYES -6YORKTWN1 +6GRENCH-6GRENCH1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9343	D: GHAYES -6YORKTWN1 +6GRENCH-6THALLA 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9344	D: GHAYES -6YORKTWN1 +6GRENCH-6GRENW 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9345	D: GHAYES -6YORKTWN1 +6HARBORV-6YADKIN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9346	D: GHAYES -6YORKTWN1 +6HARBORV-6SMITFLD1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9347	D: GHAYES -6YORKTWN1 +3HICKORY-6HICKORY1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9348	D: GHAYES -6YORKTWN1 +3IND. PRK-3REEVES 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9349	D: GHAYES -6YORKTWN1 +3IND. PRK-3THOLE S1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9350	D: GHAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9351	D: GHAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9352	D: GHAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9353	D: GHAYES -6YORKTWN1 +6HUNTSMT-6THRS2791
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9354	D: GHAYES -6YORKTWN1 +6HUNTSMT-6STUFFOLK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9355	D: GHAYES -6YORKTWN1 +6LANDSTN-6LYNHAVN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9356	D: GHAYES -6YORKTWN1 +6LANDSTN-6STUMPY 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9357	D: GHAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9358	D: GHAYES -6YORKTWN1 +3LONDON-3PENDTWN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9359	D: GHAYES -6YORKTWN1 +3LONDON-3P ANNE 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9360	D: GHAYES -6YORKTWN1 +6HARBORV-6CRITTTN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9361	D: GHAYES -6YORKTWN1 +6LK KING-6LKKINGAL
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9362	D: GHAYES -6YORKTWN1 +6LK KING-6LKKINGBL
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9363	D: GHAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9364	D: GHAYES -6YORKTWN1 +6LYNHAVN-6THALLA 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9365	D: GHAYES -6YORKTWN1 +6LYNHAVN-6LYNHA 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9366	D: GHAYES -6YORKTWN1 +3MCLAUGH-3REEVES 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9367	D: GHAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9368	D: GHAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9369	D: GHAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9370	D: GHAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9371	D: GHAYES -6YORKTWN1 +3PENDTWN-3VA BCH 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9372	D: GHAYES -6YORKTWN1 +3REEVES -3REEVE 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9373	D: GHAYES -6YORKTWN1 +3REEVES -3REEVES 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9374	D: GHAYES -6YORKTWN1 +3REEVES -3REEVES 2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9375	D: GHAYES -6YORKTWN1 +3REEVES -6GRUITAN1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9376	D: GHAYES -6YORKTWN1 +3REEVES -6GREEVE 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9377	D: GHAYES -6YORKTWN1 +6GRUITAN-6SNORFLK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9378	D: GHAYES -6YORKTWN1 +3SEWISPT-3TAUSSIG1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9379	D: GHAYES -6YORKTWN1 +3SEWISPT-3THOLE S1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9380	D: GHAYES -6YORKTWN1 +3SEWISPT-6SEWISPT1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9381	D: GHAYES -6YORKTWN1 +3SEWISPT-6SEWISPT2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9382	D: GHAYES -6YORKTWN1 +6SEWISPT-6NAVYS 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9383	D: GHAYES -6YORKTWN1 +6SEWISPT-6NAVYS1 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9384	D: GHAYES -6YORKTWN1 +6SNORFLK-6THRS2791

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Noon	Contingency Description
314180	GHAYES	230.0	345	354	0.8920	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9385	D: GHAYES -EYORKTWN1 +6NAVYS -6NAVYN 1
314180	GHAYES	230.0	345	354	0.8912	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9386	D: GHAYES -EYORKTWN1 +6NAVYS1 -6NAVYN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9387	D: GHAYES -EYORKTWN1 +6STIMPY -6THRS2791
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9388	D: GHAYES -EYORKTWN1 +3THOLE S-3THOLE 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9389	D: GHAYES -EYORKTWN1 +6THRS279-6YADKIN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9390	D: GHAYES -EYORKTWN1 +3VA BCH -3VA BC 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9391	D: GHAYES -EYORKTWN1 +3YADKIN -6YADKIN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9392	D: GHAYES -EYORKTWN1 +3YADKIN -6YADKIN 2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9393	D: GHAYES -EYORKTWN1 +6YADKIN -6YADKIN 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9394	D: GHAYES -EYORKTWN1 +6YADKIN -8YADKIN 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9395	D: GHAYES -EYORKTWN1 +6YADKIN -8YADKIN 2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9396	D: GHAYES -EYORKTWN1 +6YADKIN -8YADKIN 3
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9397	D: GHAYES -EYORKTWN1 +6YADKIN -6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8912	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9398	D: GHAYES -EYORKTWN1 +6CHCKTUK-6KINGSFOL
314180	GHAYES	230.0	345	354	0.8913	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9399	D: GHAYES -EYORKTWN1 +6CHCKTUK-6SURY 1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9400	D: GHAYES -EYORKTWN1 +6CHCKTUK-6CHCKT 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9401	D: GHAYES -EYORKTWN1 +6CR1TTON-6SURY 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9402	D: GHAYES -EYORKTWN1 +3FRANKLIN -3UNCAMP 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9403	D: GHAYES -EYORKTWN1 +3FRANKLIN -3WATKINS1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9404	D: GHAYES -EYORKTWN1 +6KINGSFO-6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9405	D: GHAYES -EYORKTWN1 +3HANUSOM-3S HAMPT1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9406	D: GHAYES -EYORKTWN1 +3HOLLAND-3SUFFOLK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9407	D: GHAYES -EYORKTWN1 +6HOLLAND-3UNCAMP 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9408	D: GHAYES -EYORKTWN1 +3VOR106-3ORAR1231
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9409	D: GHAYES -EYORKTWN1 +3MYRTLE -3WINDSOR1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9410	D: GHAYES -EYORKTWN1 +3OAKR123-3SUFFCAP1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9411	D: GHAYES -EYORKTWN1 +6SMITFIELD-6SURY 1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9412	D: GHAYES -EYORKTWN1 +3S HAMPT-3WATKINS1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9413	D: GHAYES -EYORKTWN1 +3S HAMPT-1SHAMPT11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9414	D: GHAYES -EYORKTWN1 +3SUFFCAP-3SUFFOLK21
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9415	D: GHAYES -EYORKTWN1 +3SUFFCAP-3SUFFEC 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9416	D: GHAYES -EYORKTWN1 +3SUFFOLK-6SUFFOLK1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9417	D: GHAYES -EYORKTWN1 +3SUFFOLK-6SUFFOLK2
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9418	D: GHAYES -EYORKTWN1 +3SUFFOLK-6SUFFOLK3
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9419	D: GHAYES -EYORKTWN1 +6SUFFOLK-8SUFFOLK1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9420	D: GHAYES -EYORKTWN1 +6SUFFOLK-8SUFFOLK2
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9421	D: GHAYES -EYORKTWN1 +6SUFFOLK-8SUFFOLK3
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9422	D: GHAYES -EYORKTWN1 +6SURY -6POOLSVL1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9423	D: GHAYES -EYORKTWN1 +6SURY -6GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9424	D: GHAYES -EYORKTWN1 +6SURY -6GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9425	D: GHAYES -EYORKTWN1 +6SURY -6GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9426	D: GHAYES -EYORKTWN1 +6SURY -6GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9427	D: GHAYES -EYORKTWN1 +3UNCAMP -3UNCAMP 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9428	D: GHAYES -EYORKTWN1 +3WATKINS-3WATK 11
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9429	D: GHAYES -EYORKTWN1 +3WATKINS-3WATK 21
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9430	D: GHAYES -EYORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9431	D: GHAYES -EYORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9432	D: GHAYES -EYORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9433	D: GHAYES -EYORKTWN1 +6GRAVELA-1GRAVELA1
314180	GHAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9434	D: GHAYES -EYORKTWN1 +6LOUTO 1-8LOUTO1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9435	D: 6HAYES -6YORKTWN1 +BNOORS -1BNOORSVLL1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9436	D: 6HAYES -6YORKTWN1 +BNT ST 1-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9437	D: 6HAYES -6YORKTWN1 +BNT ST 2-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9438	D: 6HAYES -6YORKTWN1 +BNT ST 3-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9439	D: 6HAYES -6YORKTWN1 +BNT ST 4-BNT STM 1
314180	6HAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9440	D: 6HAYES -6YORKTWN1 +BNT ST 5-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9441	D: 6HAYES -6YORKTWN1 +BNT ST 6-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9442	D: 6HAYES -6YORKTWN1 +BNT ST 7-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9443	D: 6HAYES -6YORKTWN1 +BNT ST 8-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9444	D: 6HAYES -6YORKTWN1 +BNT ST 9-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9445	D: 6HAYES -6YORKTWN1 +BNT ST 10-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9446	D: 6HAYES -6YORKTWN1 +BNT ST 11-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9447	D: 6HAYES -6YORKTWN1 +BNT ST 12-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9448	D: 6HAYES -6YORKTWN1 +BNT ST 13-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9449	D: 6HAYES -6YORKTWN1 +BNT ST 14-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9450	D: 6HAYES -6YORKTWN1 +BNT ST 15-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9451	D: 6HAYES -6YORKTWN1 +BNT ST 16-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9452	D: 6HAYES -6YORKTWN1 +BNT ST 17-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9453	D: 6HAYES -6YORKTWN1 +BNT ST 18-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9454	D: 6HAYES -6YORKTWN1 +BNT ST 19-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9455	D: 6HAYES -6YORKTWN1 +BNT ST 20-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9456	D: 6HAYES -6YORKTWN1 +BNT ST 21-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9457	D: 6HAYES -6YORKTWN1 +BNT ST 22-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9458	D: 6HAYES -6YORKTWN1 +BNT ST 23-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9459	D: 6HAYES -6YORKTWN1 +BNT ST 24-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9460	D: 6HAYES -6YORKTWN1 +BNT ST 25-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9461	D: 6HAYES -6YORKTWN1 +BNT ST 26-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9462	D: 6HAYES -6YORKTWN1 +BNT ST 27-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9463	D: 6HAYES -6YORKTWN1 +BNT ST 28-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9464	D: 6HAYES -6YORKTWN1 +BNT ST 29-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9465	D: 6HAYES -6YORKTWN1 +BNT ST 30-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9466	D: 6HAYES -6YORKTWN1 +BNT ST 31-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9467	D: 6HAYES -6YORKTWN1 +BNT ST 32-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9468	D: 6HAYES -6YORKTWN1 +BNT ST 33-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9469	D: 6HAYES -6YORKTWN1 +BNT ST 34-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9470	D: 6HAYES -6YORKTWN1 +BNT ST 35-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9471	D: 6HAYES -6YORKTWN1 +BNT ST 36-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9472	D: 6HAYES -6YORKTWN1 +BNT ST 37-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9473	D: 6HAYES -6YORKTWN1 +BNT ST 38-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9474	D: 6HAYES -6YORKTWN1 +BNT ST 39-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9475	D: 6HAYES -6YORKTWN1 +BNT ST 40-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9476	D: 6HAYES -6YORKTWN1 +BNT ST 41-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9477	D: 6HAYES -6YORKTWN1 +BNT ST 42-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9478	D: 6HAYES -6YORKTWN1 +BNT ST 43-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9479	D: 6HAYES -6YORKTWN1 +BNT ST 44-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9480	D: 6HAYES -6YORKTWN1 +BNT ST 45-BNT STM 1
314180	6HAYES	230.0	345	354	0.8910	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9481	D: 6HAYES -6YORKTWN1 +BNT ST 46-BNT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9482	D: 6HAYES -6YORKTWN1 +BNT ST 47-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9483	D: 6HAYES -6YORKTWN1 +BNT ST 48-BNT STM 1
314180	6HAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9484	D: 6HAYES -6YORKTWN1 +BNT ST 49-BNT STM 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8659	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9485	D:6HAYES -6YORKTWN1 +8SURY -1SURY 21
314180	GHAYES	230.0	345	354	0.8942	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9486	D:6HAYES -6YORKTWN1 +8PL VIEW-8BR2MBLE1
314180	GHAYES	230.0	345	354	0.8908	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9487	D:6HAYES -6YORKTWN1 +BYADIN -8SULFOU41
314180	GHAYES	230.0	345	354	0.8942	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9488	D:6HAYES -6YORKTWN1 +8PORT R-1FST RY1
314180	GHAYES	230.0	345	354	0.8922	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9489	D:6HAYES -6YORKTWN1 +6SURY -6SK1PCRE1
314180	GHAYES	230.0	345	354	0.8942	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9490	D:6HAYES -6YORKTWN1 +3YMS 58-3SKI PCRE1
314180	GHAYES	230.0	345	354	0.8942	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9491	D:6HAYES -6YORKTWN1 +3DOW 34 -3SKI PCRE1
314180	GHAYES	230.0	345	354	0.8922	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9492	D:6HAYES -6YORKTWN1 +3FTEUS34-3SKI PCRE1
314180	GHAYES	230.0	345	354	0.8942	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9493	D:6HAYES -6YORKTWN1 +6SK1PCRE-3SKI PCRE1
314180	GHAYES	230.0	345	354	0.8909	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9494	D:6HAYES -6YORKTWN1 +6WHEALT-6MARWICK1
314180	GHAYES	230.0	345	354	0.8922	1.0183	0.9300	1.0700	0.9673	1.0692	LD	9495	D:6HAYES -6YORKTWN1 +6SK1PCRE-6MARWICK1
314181	3NORNECK	115.0	345	354	0.9296	1.0098	0.9300	1.0700	0.9593	1.0603	LD	9496	D:3NORNECK-3NORNECK1 +3NORNECK-6NORNECK2
314176	GHARMONY	230.0	345	354	0.8923	1.0244	0.9300	1.0700	0.9732	1.0756	LD	11310	D:3SHACKLE-3WEST PT1 +6CORRCTN-6LANEXA 1
314189	6PAPERMITL	230.0	345	354	0.8758	1.0169	0.9300	1.0700	0.9661	1.0677	LD	11310	D:3SHACKLE-3WEST PT1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8753	1.0161	0.9300	1.0700	0.9653	1.0669	LD	11310	D:3SHACKLE-3WEST PT1 +6CORRCTN-6LANEXA 1
314176	GHARMONY	230.0	345	354	0.8797	1.0244	0.9300	1.0700	0.9732	1.0756	LD	11582	D:3WEST PT-3LANEXA 1 +6PAPERMI-6CORRCTN1
314189	6PAPERMITL	230.0	345	354	0.8747	1.0169	0.9300	1.0700	0.9661	1.0677	LD	11582	D:3WEST PT-3LANEXA 1 +6PAPERMI-6CORRCTN1
314176	GHARMONY	230.0	345	354	0.8587	1.0244	0.9300	1.0700	0.9732	1.0756	LD	11604	D:3WEST PT-3LANEXA 1 +6CORRCTN-6LANEXA 1
314189	6PAPERMITL	230.0	345	354	0.8557	1.0169	0.9300	1.0700	0.9661	1.0677	LD	11604	D:3WEST PT-3LANEXA 1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8555	1.0161	0.9300	1.0700	0.9653	1.0669	LD	11604	D:3WEST PT-3LANEXA 1 +6CORRCTN-6LANEXA 1
314378	3FTEUS34	115.0	345	356	0.9394	0.9999	0.9300	1.0700	0.9499	1.0499	LD	19964	D:3GRAFT34-3YORKTWN1 +6SK1PCRE-3SKI PCRE1
314381	3GRAFT34	115.0	345	356	0.9375	0.9986	0.9300	1.0700	0.9487	1.0485	LD	19964	D:3GRAFT34-3YORKTWN1 +6SK1PCRE-3SKI PCRE1
314399	6PEMBROK	230.0	345	356	0.8744	1.0150	0.9300	1.0700	0.9643	1.0658	LD	24326	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8744	1.0150	0.9300	1.0700	0.9643	1.0658	LD	24326	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8759	1.0150	0.9300	1.0700	0.9643	1.0658	LD	24327	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314402	6PENINSL	230.0	345	356	0.8750	1.0117	0.9300	1.0700	0.9612	1.0623	LD	24327	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8759	1.0117	0.9300	1.0700	0.9607	1.0618	LD	24327	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8654	1.0150	0.9300	1.0700	0.9643	1.0658	LD	24332	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8720	1.0117	0.9300	1.0700	0.9612	1.0623	LD	24332	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8654	1.0117	0.9300	1.0700	0.9607	1.0618	LD	24332	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8620	1.0126	0.9300	1.0700	0.9620	1.0632	LD	24332	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8720	1.0117	0.9300	1.0700	0.9607	1.0618	LD	24817	D:6PEMBROK-6SHELBNK1 +6PENINSL-6TABB 1
314402	6PENINSL	230.0	345	356	0.8720	1.0117	0.9300	1.0700	0.9612	1.0623	LD	24818	D:6PEMBROK-6SHELBNK1 +6PENINSL-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8756	1.0117	0.9300	1.0700	0.9607	1.0618	LD	24818	D:6PEMBROK-6SHELBNK1 +6PENINSL-6TABB 1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	24823	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	24823	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	24823	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.9300	1.0700	0.9620	1.0632	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9607	1.0618	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8652	1.0117	0.9300	1.0700	0.9612	1.0623	LD	26272	D:6PENINSL-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8652	1.0126	0.930						

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314670	2ALTVSTA	69.0	345	358	0.8722	1.0324	0.9300	1.0700	0.9808	1.0840	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314671	4BEARSKN	138.0	345	358	0.5929	0.9965	0.9300	1.0700	0.9467	1.0463	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314680	2CHATHAM	69.0	345	358	0.9352	1.0047	0.9300	1.0700	0.9545	1.0550	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314685	2CHTN TP	69.0	345	358	0.8349	1.0053	0.9300	1.0700	0.9550	1.0558	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314689	3COMINTO	115.0	345	358	0.8482	0.9927	0.9300	1.0700	0.9431	1.0424	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314694	3GRIT	115.0	345	358	0.8717	1.0021	0.9300	1.0700	0.9520	1.0522	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314700	3HALL BR	115.0	345	358	0.8626	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314705	3HUET	115.0	345	358	0.8670	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314712	3OTTER R	115.0	345	358	0.8640	0.9999	0.9300	1.0700	0.9499	1.0499	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314714	3PERTH	115.0	345	358	0.9304	1.0104	0.9300	1.0700	0.9599	1.0609	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314728	2CLAX TP	69.0	345	358	0.8325	1.0028	0.9300	1.0700	0.9527	1.0520	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314729	2GLADYS	69.0	345	358	0.8477	1.0111	0.9300	1.0700	0.9605	1.0616	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314730	2GLDY TP	69.0	345	358	0.8675	1.0297	0.9300	1.0700	0.9658	1.0675	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314731	2GREINA	69.0	345	358	0.8478	1.0166	0.9300	1.0700	0.9658	1.0675	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314732	2GRNA FB	69.0	345	358	0.8478	1.0166	0.9300	1.0700	0.9658	1.0675	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314733	2GRNA DP	69.0	345	358	0.8478	1.0166	0.9300	1.0700	0.9658	1.0675	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314734	2KLOP DP	69.0	345	358	0.8625	1.0261	0.9300	1.0700	0.9748	1.0774	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314735	2KLOP TP	69.0	345	358	0.8626	1.0261	0.9300	1.0700	0.9748	1.0774	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314736	2SHRO DP	69.0	345	358	0.8357	1.0052	0.9300	1.0700	0.9549	1.0554	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314737	2SW35T57	69.0	345	358	0.8439	1.0203	0.9300	1.0700	0.9693	1.0713	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314738	2MT AIRY	69.0	345	358	0.8431	1.0148	0.9300	1.0700	0.9641	1.0656	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314739	2MT A TP	69.0	345	358	0.8539	1.0203	0.9300	1.0700	0.9693	1.0713	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314740	2ALTVS35	69.0	345	358	0.8711	1.0324	0.9300	1.0700	0.9808	1.0840	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314789	2BEARSKN	69.0	345	358	0.8929	0.9965	0.9300	1.0700	0.9467	1.0463	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314836	3BALCFLS	115.0	345	365	0.8472	0.9962	0.9300	1.0700	0.9467	1.0460	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314837	3BUNA V	115.0	345	365	0.8463	0.9952	0.9300	1.0700	0.9455	1.0450	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314838	3BUSTLEB	115.0	345	365	0.8528	0.9984	0.9300	1.0700	0.9485	1.0484	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314839	3BUSTLT T	115.0	345	365	0.8520	0.9966	0.9300	1.0700	0.9487	1.0485	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314840	6CLFTN F	230.0	345	365	0.8342	0.9802	0.9300	1.0700	0.9312	1.0292	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314841	4CLFTN F	138.0	345	365	0.8278	1.0359	0.9300	1.0700	0.9841	1.0877	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314842	4CONVGT2	138.0	345	365	0.8213	1.0255	0.9300	1.0700	0.9742	1.0768	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314843	4CONVGT1	138.0	345	365	0.8088	1.0238	0.9300	1.0700	0.9726	1.0750	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314844	3CRAIGSV	115.0	345	365	0.8464	0.9955	0.9300	1.0700	0.9457	1.0452	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314845	3EFFINGER	115.0	345	365	0.8510	0.9966	0.9300	1.0700	0.9487	1.0486	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314846	3FAIRFLD	115.0	345	365	0.8506	0.9977	0.9300	1.0700	0.9478	1.0476	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314847	4FUDGE H	138.0	345	365	0.8069	1.0217	0.9300	1.0700	0.9706	1.0728	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314848	3GLASGOW	115.0	345	365	0.8489	0.9972	0.9300	1.0700	0.9473	1.0471	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314849	3GOSHEN	115.0	345	365	0.8479	0.9964	0.9300	1.0700	0.9466	1.0463	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314851	3JAMES L	115.0	345	365	0.8429	0.9952	0.9300	1.0700	0.9455	1.0450	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314852	3JMS L T	115.0	345	365	0.8464	0.9956	0.9300	1.0700	0.9459	1.0454	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314853	3LEXNGTN	115.0	345	365	0.8537	0.9993	0.9300	1.0700	0.9494	1.0493	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314854	6LEXNGT1	230.0	345	365	0.8596	0.9921	0.9300	1.0700	0.9425	1.0417	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314855	6LOWMOOR	230.0	345	365	0.8507	0.9978	0.9300	1.0700	0.9308	1.0288	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314856	6LEXNGT2	230.0	345	365	0.8596	0.9921	0.9300	1.0700	0.9425	1.0417	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314857	4LOWMOOR	138.0	345	365	0.8220	1.0334	0.9300	1.0700	0.9817	1.0850	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314858	3ROCKB T	115.0	345	365	0.8476	0.9959	0.9300	1.0700	0.9461	1.0457	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314859	4MSTVACO	138.0	345	365	0.8026	1.0192	0.9300	1.0700	0.9682	1.0701	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314860	4E MILL	138.0	345	365	0.8053	1.0198	0.9300	1.0700	0.9688	1.0708	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314861	3SKINNER	115.0	345	365	0.8016	0.9748	0.9300	1.0700	0.9260	1.0235	LD	53529	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Noon	Contingency Description
314894	LOWMO 1	138.0	345	365	0.2221	1.0339	0.9300	1.0700	0.9822	1.0856	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
314901	8BATH CO	500.0	345	366	0.2699	1.0500	0.9300	1.0700	0.9975	1.1025	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
314912	8LEXNGTN	500.0	345	366	0.2894	1.0468	0.9300	1.0700	0.9944	1.0991	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315156	IHALLBRI	13.8	345	358	0.8656	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315165	IHURT 1	13.8	345	358	0.8977	0.9934	0.9300	1.0700	0.9438	1.0431	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315166	IHURT 2	13.8	345	358	0.8977	0.9934	0.9300	1.0700	0.9438	1.0431	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315201	IBATH 1A	20.5	345	366	0.2788	1.0283	0.9300	1.0700	0.9769	1.0797	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315202	IBATH 2B	20.5	345	366	0.2867	1.0283	0.9300	1.0700	0.9769	1.0797	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315203	IBATH 3C	20.5	345	366	0.2866	1.0278	0.9300	1.0700	0.9764	1.0792	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315204	IBATH 4D	20.5	345	366	0.2779	1.0278	0.9300	1.0700	0.9764	1.0792	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315205	IBATH 5E	20.5	345	366	0.2779	1.0281	0.9300	1.0700	0.9767	1.0795	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315206	IBATH 6F	20.5	345	366	0.2768	1.0281	0.9300	1.0700	0.9767	1.0795	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
B50461	BATH 3W1	1.0	345	366	0.2653	1.0249	0.9300	1.0700	0.9737	1.0762	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
B50462	BATH 3W3	1.0	345	366	0.2599	1.0224	0.9300	1.0700	0.9713	1.0735	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
B50463	BATH 3W5	1.0	345	366	0.2592	1.0227	0.9300	1.0700	0.9716	1.0739	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
B51032	HURT 3WD	1.0	345	358	0.9683	0.9995	0.9300	1.0700	0.9495	1.0495	LD	53529	D:8BATH CO-SVALLEY 1 +8DOOMS -8LEXNGTNI
315008	IPOSSM6A	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	55408	D:01MWBKR-8FRONT R2 +6BIRCHMD-6FINES 1
315009	IPOSSM6B	18.0	345	353	0.9258	0.9360	0.9300	1.0700	0.8892	0.9828	L	55408	D:01MWBKR-8FRONT R2 +6BIRCHMD-6FINES 1

CATEGORY D

PSS(r)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 12:27 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 12:26 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV ALT A GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltA.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\2015 Category D Alts.con
 Exclud.File none

***** Report on violations *****

Branches with MVA Flow more than 98.0 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314538	6SURRY	230	315620	6SKIFCREEK	230	LN	718.5	1000.0	132.8	4	ROW 567
314538	6SURRY	230	315620	6SKIFCREEK	230	LN	718.5	1000.0	126.2	1	ROW 436
314538	6SURRY	230	315620	6SKIFCREEK	230	LN	718.5	1000.0	124.7	6	Chickahominy
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	70.0	99.8	**	Base Case **
314538	6SURRY	230	315620	6SKIFCREEK	230	LN	718.5	1000.0	98.7	5	ROW 568

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 12:27 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 12:27 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV ALT A GEN RET
Case.File X:\S2015\sum.2015(2013LF)_base_wpre_230kvAltA.sav
Subsys.File X:\S2015\vdvp_sub
Monit.File X:\S2015\vdvpsys.mon
Contn.File X:\S2015\2015 Category D Alts.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description Base Case **
315218	ICUNINGC	18.0	345	366	1.0722	1.0722	0.9300	1.0700	1.0186	1.1258 H			** Base Case **
314176	CHARMONY	230.0	345	354	0.9187	1.0244	0.9300	1.0700	0.9732	1.0756 LD		7 Lanexa	
314189	PAPER MIL	230.0	345	354	0.9132	1.0169	0.9300	1.0700	0.9661	1.0677 LD		7 Lanexa	
314375	CORRECTIN	230.0	345	354	0.9129	1.0161	0.9300	1.0700	0.9653	1.0669 LD		7 Lanexa	
314387	LANEXA	115.0	345	356	0.9508	1.0074	0.9300	1.0700	0.9570	1.0577 D		7 Lanexa	
314396	3NNEWS58	115.0	345	356	0.9473	1.0041	0.9300	1.0700	0.9539	1.0543 D		7 Lanexa	
314411	3TOANOS8	115.0	345	356	0.9468	1.0036	0.9300	1.0700	0.9534	1.0538 D		7 Lanexa	
314180	CHAYES	230.0	345	354	0.9495	1.0183	0.9300	1.0700	0.9673	1.0692 D		9 Yorktown	

CATEGORY B

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 14:23 <BRV003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT 230KV B GEN RET

Case File X:\S2015\sum 2015 (2013LF) _base_wpre_230kvAltB.sav

Subsys File X:\S2015\dup.sub

Monit File X:\S2015\vapsys.mon

Contin File X:\S2015\vapsys.con

Exclud File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	56.3	32.5	45.0	125.0	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
314025	1 TX500	13.2	314148 3MICR197	115	TR	56.3	32.5	45.0	125.0	293	314147 3MICR172 115 314160 1 TX503 13.2 1
314147	3MICR172	115	314160 1 TX503	13.2	TR	51.6	33.3	45.0	114.6	95	314025 1 TX500 13.2 314148 3MICR197 115 1
314025	1 TX500	13.2	314148 3MICR197	115	TR	50.1	32.5	45.0	111.3	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314025	1 TX500	13.2	314148 3MICR197	115	TR	50.1	32.5	45.0	111.2	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	243.4	142.6	239.0	101.8	1103	314766 6LOUISA 230 314777 6S ANNA 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	236.8	142.6	239.0	99.9	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
304223	3ROCKYMT115T	115	314554 3BTLEBRO	115	LN	91.7	16.6	94.0	97.6	851	314559 3CAROLINA 115 314578 3HORNRTN 115 1
314025	1 TX500	13.2	314148 3MICR197	115	TR	43.5	32.5	45.0	96.7	292	314147 3MICR172 115 314157 3GODWI72 115 1
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.2	828.3	993.6	96.6	307	314171 6BRAMBEL 230 314933 8BRAMBLETON 500 1
314461	3DEEPC46	115	314513 3YADKIN	115	LN	344.0	229.3	360.0	95.6	691	314449 6CHESAPK 230 314514 6YADKIN 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	112.2	73.1	118.0	95.1	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314423	6YORKTWN	230	315620 6SKIFCREEK	230	LN	446.9	267.0	470.0	95.1	596	314376 6DENBIGH 230 315620 6SKIFCREEK 230 1
314559	3CAROLINA	115	314581 3JACKSON	115	LN	111.1	73.1	118.0	94.2	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1
314025	1 TX500	13.2	314148 3MICR197	115	TR	42.3	32.5	45.0	93.9	261	314123 3WELLGTN 115 314157 3GODWI72 115 1
314212	6FRRIVER	230	314222 6HANOVER	230	LN	747.7	546.4	797.0	93.8	285	31138 6MINE RD 230 314197 6LOYSM71 230 1
314147	3MICR172	115	314160 1 TX503	13.2	TR	42.1	33.3	45.0	93.6	69	314014 3CANNONB 115 314016 6CANNONB 230 1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 14:35 <VOW003.0>

2015 SUMMER BASE CASE (LITSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT 230KV B GEN RET

Case File X:\s2015\sum.2015(2013LF)_base_wpre_230kvAltB.sav

Subsys File X:\s2015\dvp.sub

Monit. File X:\s2015\vapsys.mon

Contn. File X:\s2015\vapsys.con

Exclud. File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0721	1.0721	0.9300	1.0700	1.0185	1.1257	H	**	Base Case **
315008	1POSSM6A	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8891	0.9827	L	61	314011 3BULLRUN 115 314111 3HARTISON 115 1
315009	1POSSM6B	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8891	0.9827	L	61	314011 3BULLRUN 115 314111 3HARTISON 115 1
314014	3CANNONB	115.0	345	353	0.9039	1.0017	0.9300	1.0700	0.9516	1.0518	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9041	1.0010	0.9300	1.0700	0.9510	1.0511	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314148	3MTCR197	115.0	345	353	0.9041	1.0006	0.9300	1.0700	0.9506	1.0507	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9040	1.0011	0.9300	1.0700	0.9511	1.0512	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GOWM197	115.0	345	353	0.9043	1.0005	0.9300	1.0700	0.9505	1.0505	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9205	1.0010	0.9300	1.0700	0.9510	1.0511	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314148	3MTCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0507	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9205	1.0011	0.9300	1.0700	0.9511	1.0512	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314158	3GOWM197	115.0	345	353	0.9206	1.0005	0.9300	1.0700	0.9505	1.0505	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314160	1 TX503	13.2	345	353	1.1070	1.0059	0.9300	1.0700	0.9556	1.0562	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOUN 230 314068 6OX 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOUN 230 314068 6OX 230 1
314118	3MINNIEV	115.0	345	353	0.9457	0.9969	0.9300	1.0700	0.9471	1.0468	D	179	314068 6OX 230 314167 3OX 115 1
314167	3OX	115.0	345	352	0.9458	1.0045	0.9300	1.0700	0.9543	1.0547	D	179	314068 6OX 230 314167 3OX 115 1
315008	1POSSM6A	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8891	0.9827	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8891	0.9827	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8891	0.9827	L	204	314074 6POSSUM 230 315008 1POSSM6A 18.0 1
315008	1POSSM6A	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8891	0.9827	L	205	314074 6POSSUM 230 315009 1POSSM6B 18.0 1
315008	1POSSM6A	18.0	345	353	0.9227	0.9359	0.9300	1.0700	0.8891	0.9827	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315009	1POSSM6B	18.0	345	353	0.9227	0.9359	0.9300	1.0700	0.8891	0.9827	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9439	0.9969	0.9300	1.0700	0.9471	1.0468	D	255	314116 3MINNIEV 115 314167 3OX 115 1
314122	3SOWEGO	115.0	345	353	0.9438	1.0015	0.9300	1.0700	0.9514	1.0516	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	3LOMA172	115.0	345	353	0.9303	0.9828	0.9300	1.0700	0.9336	1.0319	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9286	0.9853	0.9300	1.0700	0.9361	1.0346	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9301	0.9829	0.9300	1.0700	0.9337	1.0320	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Uplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314157	3GOWM172	115.0	345	353	0.9296	0.9839	0.9300	1.0700	0.9347	1.0330	LD	260	314123 3WELGTON 115 314141 3LIBERTY 115 1
314122	3SOWEGO	115.0	345	345	0.9504	1.0015	0.9300	1.0700	0.9514	1.0516	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0547	D	263	314130 6BRISTER 230 314156 3BRISTER 115 1
314049	3LQMA172	115.0	345	353	0.9305	0.9828	0.9300	1.0700	0.9336	1.0319	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELGTON	115.0	345	353	0.9287	0.9853	0.9300	1.0700	0.9361	1.0346	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9287	0.9864	0.9300	1.0700	0.9371	1.0357	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3MTCR172	115.0	345	353	0.9303	0.9829	0.9300	1.0700	0.9337	1.0320	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	3GOWM172	115.0	345	353	0.9297	0.9839	0.9300	1.0700	0.9347	1.0330	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
315008	1POSSM6A	18.0	345	353	0.9251	0.9359	0.9300	1.0700	0.8891	0.9827	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
315009	1POSSM6B	18.0	345	353	0.9251	0.9359	0.9300	1.0700	0.8891	0.9827	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
314775	3NI RYER	115.0	345	363	0.9547	1.0132	0.9300	1.0700	0.9625	1.0638	D	275	314135 3CHANCE 115 314775 3NI RYER 115 1
314151	3SLABTWN	115.0	345	355	0.9530	1.0051	0.9300	1.0700	0.9548	1.0553	D	280	314136 3FREDBERG 115 314151 3SLABTWN 115 1
315008	1POSSM6A	18.0	345	353	0.9211	0.9359	0.9300	1.0700	0.8891	0.9827	L	282	314137 6FREDBERG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9211	0.9359	0.9300	1.0700	0.8891	0.9827	L	282	314137 6FREDBERG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9195	0.9359	0.9300	1.0700	0.8891	0.9827	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
315009	1POSSM6B	18.0	345	353	0.9184	0.9359	0.9300	1.0700	0.8891	0.9827	L	289	314142 6STAFORD 230 314145 6AQUI HARB B 230 1
314148	3MTCR197	115.0	345	353	0.9284	1.0066	0.9300	1.0700	0.9506	1.0507	LD	295	314148 3MTCR197 115 314155 3CANB T 115 1
314158	3GOWM197	115.0	345	353	0.9286	1.0005	0.9300	1.0700	0.9505	1.0505	LD	295	314148 3MTCR197 115 314155 3CANB T 115 1
314176	6HARMONY	230.0	345	354	1.1701	1.0249	0.9300	1.0700	0.9736	1.0761	HR	318	314176 6HARMONY 230 314189 6PAPERMILL 230 1
314180	6HAYES	230.0	345	354	0.9522	1.0186	0.9300	1.0700	0.9677	1.0695	D	321	314180 6HAYES 230 314423 6YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1473	1.0193	0.9300	1.0700	0.9683	1.0703	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314526	3HANSOM	115.0	345	360	1.0732	1.0224	0.9300	1.0700	0.9712	1.0735	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0732	1.0244	0.9300	1.0700	0.9731	1.0756	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0731	1.0254	0.9300	1.0700	0.9742	1.0767	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0898	1.0177	0.9300	1.0700	0.9668	1.0686	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MARTTSV	115.0	345	362	1.1043	1.0170	0.9300	1.0700	0.9661	1.0678	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314604	3SABORD	115.0	345	362	1.1157	1.0168	0.9300	1.0700	0.9659	1.0676	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.0736	1.0260	0.9300	1.0700	0.9747	1.0773	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.0736	1.0260	0.9300	1.0700	0.9747	1.0773	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1484	1.0203	0.9300	1.0700	0.9693	1.0713	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	1SHAMPT1	13.8	345	360	1.0447	0.9939	0.9300	1.0700	0.9442	1.0436	R	791	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315083	1SPRUNCA	13.8	345	357	1.0115	0.9627	0.9300	1.0700	0.9146	1.0108	R	464	314275 6BELMEAD 230 314276 6BASIN 230 1
315085	1SPRUNCC	13.8	345	357	1.0129	0.9645	0.9300	1.0700	0.9163	1.0127	R	464	314275 6BELMEAD 230 314276 6BASIN 230 1
314328	6PLAZA	230.0	345	357	0.9104	1.0055	0.9300	1.0700	0.9552	1.0558	LD	566	314328 6PLAZA 230 314338 6SOUTHWEST 230 1
315111	1LAKKINGA	13.8	345	359	0.9927	0.9435	0.9300	1.0700	0.8963	0.9907	R	673	314444 6BOWERS 230 314514 6YADKIN 230 1
315112	1LAKKINGB	13.8	345	359	0.9927	0.9435	0.9300	1.0700	0.8963	0.9907	R	673	314444 6BOWERS 230 314514 6YADKIN 230 1
314524	3FRANKLIN	115.0	345	360	1.0758	1.0241	0.9300	1.0700	0.9729	1.0753	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0778	1.0119	0.9300	1.0700	0.9613	1.0625	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0723	1.0244	0.9300	1.0700	0.9731	1.0756	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0780	1.0233	0.9300	1.0700	0.9722	1.0745	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0744	1.0254	0.9300	1.0700	0.9742	1.0767	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAM 1	115.0	345	360	1.0797	1.0240	0.9300	1.0700	0.9728	1.0752	HR	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0750	1.0260	0.9300	1.0700	0.9747	1.0773	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0750	1.0260	0.9300	1.0700	0.9747	1.0773	H	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	1SHAMPT1	13.8	345	360	1.0436	0.9939	0.9300	1.0700	0.9442	1.0436	R	798	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRANKLIN	115.0	345	360	1.0824	1.0241	0.9300	1.0700	0.9729	1.0753	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upllimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314526	3HANTSON	115.0	345	360	1.0717	1.0224	0.9300	1.0700	0.9712	1.0735	H	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314534	3S HAMPT	115.0	345	360	1.0784	1.0244	0.9300	1.0700	0.9731	1.0756	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314539	3UNCAMP	115.0	345	360	1.0859	1.0233	0.9300	1.0700	0.9722	1.0745	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0807	1.0254	0.9300	1.0700	0.9742	1.0767	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314824	3UNCAM 1	115.0	345	360	1.0857	1.0240	0.9300	1.0700	0.9728	1.0752	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0942	1.0260	0.9300	1.0700	0.9747	1.0773	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314827	3WATKI 2	115.0	345	360	1.0942	1.0260	0.9300	1.0700	0.9747	1.0773	HR	799	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	3SHAMPT1	13.8	345	360	1.0500	0.9939	0.9300	1.0700	0.9442	1.0436	R	804	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0720	1.0254	0.9300	1.0700	0.9742	1.0773	H	804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314826	3WATKI 1	115.0	345	360	1.0726	1.0260	0.9300	1.0700	0.9747	1.0773	H	804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314827	3WATKI 2	115.0	345	360	1.0726	1.0260	0.9300	1.0700	0.9747	1.0773	H	804	314534 3S HAMPT 115 314541 3WATKINS 115 1
314516	3BRUNS 1	115.0	345	358	1.0799	1.0090	0.9300	1.0700	0.9586	1.0516	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314565	3CLUBH71	115.0	345	362	1.1031	1.0015	0.9300	1.0700	0.9514	1.0516	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314675	3BROONAX	115.0	345	358	1.0692	1.0070	0.9300	1.0700	0.9566	1.0573	R	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314676	3BRUNSWK	115.0	345	358	1.0793	1.0085	0.9300	1.0700	0.9581	1.0590	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314693	3FPMAN D	115.0	345	358	1.0943	1.0041	0.9300	1.0700	0.9539	1.0543	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314704	3JAWRENC	115.0	345	358	1.0847	1.0070	0.9300	1.0700	0.9567	1.0574	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314721	3SO HILL	115.0	345	358	1.0575	1.0053	0.9300	1.0700	0.9551	1.0556	R	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314782	2BRUNSWC	69.0	345	358	1.1048	1.0288	0.9300	1.0700	0.9773	1.0802	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314785	2DANLFWN	69.0	345	358	1.0495	0.9763	0.9300	1.0700	0.9275	1.0251	R	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314786	2GASBURG	69.0	345	358	1.0869	1.0128	0.9300	1.0700	0.9621	1.0634	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314787	2BRUNSW2	69.0	345	358	1.0728	1.0014	0.9300	1.0700	0.9513	1.0515	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314850	3CLUBH 1	115.0	345	362	1.1037	1.0020	0.9300	1.0700	0.9519	1.0521	HR	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314872	2BRUNSW1C	69.0	345	358	1.0606	0.9882	0.9300	1.0700	0.9388	1.0377	R	860	314562 3CLUBHSE 115 314565 3CLUBH71 115 21
314641	3KITTY H	115.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
315146	3KITTY 5	34.5	345	361	1.0723	1.0415	0.9300	1.0700	0.9895	1.0936	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
315147	3KITTYHKA	13.8	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
315147	3KITTYHKB	13.8	345	361	1.0724	1.0416	0.9300	1.0700	0.9895	1.0937	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
BS1105	KITT 3M4	1.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
BS1106	KITT 3M5	1.0	345	361	1.0724	1.0416	0.9300	1.0700	0.9895	1.0937	H	945	314635 3COLANGTP 115 314641 3KITTY H 115 1
314635	3COLANGTP	115.0	345	361	1.0723	1.0258	0.9300	1.0700	0.9745	1.0771	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314636	3COLING2	115.0	345	361	1.0723	1.0258	0.9300	1.0700	0.9745	1.0771	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0721	1.0406	0.9300	1.0700	0.9886	1.0927	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314646	3KITTY 4	34.5	345	361	1.0721	1.0406	0.9300	1.0700	0.9886	1.0927	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0720	1.0415	0.9300	1.0700	0.9895	1.0936	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0723	1.0258	0.9300	1.0700	0.9745	1.0771	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
315146	3KITTYHKA	13.8	345	361	1.0721	1.0406	0.9300	1.0700	0.9886	1.0927	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
315147	3KITTYHKB	13.8	345	361	1.0720	1.0416	0.9300	1.0700	0.9895	1.0937	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
BS1105	KITT 3M4	1.0	345	361	1.0721	1.0406	0.9300	1.0700	0.9886	1.0927	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
BS1106	KITT 3M5	1.0	345	361	1.0720	1.0416	0.9300	1.0700	0.9895	1.0937	H	946	314635 3COLANGTP 115 314720 3 52T190 115 1
314348	2GRETN 1	69.0	345	358	1.0805	1.0159	0.9300	1.0700	0.9650	1.0677	HR	1053	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0802	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1053	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314737	28W35F57	69.0	345	358	1.0703	1.0203	0.9300	1.0700	0.9693	1.0713	H	1053	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0713	H	1053	314731 2GRETN 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9660	1.0677	HR	1054	314731 2GRETN 69.0 314733 2GRNA DP 69.0 1

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314731	2GRETNA	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1054	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314732	2GRNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	1054	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314763	3KIDDESTO	115.0	345	363	0.9256	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1067	314744 3BREMO 115 314763 3KIDDESTO 115 1

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:26 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV B GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\sum2015_single_ALT.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	TR	56.3	32.5	45.0	125.0	509	TX-1 3MICR17
314147	3MICR172	115	314160 1 TX503	13.2	TR	TR	51.6	33.3	45.0	114.6	465	TX-1 3MICR19
314025	1 TX500	13.2	314148 3MICR197	115	TR	TR	50.1	32.5	45.0	111.2	505	TX-1 6LIBERT
314025	1 TX500	13.2	314148 3MICR197	115	TR	TR	46.0	32.5	45.0	102.1	155	LN 172
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	LN	242.7	142.6	239.0	101.5	231	LN 255
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	TR	960.2	828.3	993.6	96.6	514	TX-1 8BRAMBL
314461	3DEEPC46	115	314513 3YADKIN	115	LN	LN	344.0	229.3	360.0	95.6	240	LN 262
315201	1BATH 1A	20.5	B50461 BATH 3W1	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315202	1BATH 2B	20.5	B50461 BATH 3W1	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315203	1BATH 3C	20.5	B50462 BATH 3W3	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315204	1BATH 4D	20.5	B50462 BATH 3W3	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315205	1BATH 5E	20.5	B50463 BATH 3W5	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315206	1BATH 6F	20.5	B50463 BATH 3W5	1.00	TR	TR	514.4	506.8	540.0	95.3	295	LN 548
315201	1BATH 1A	20.5	B50461 BATH 3W1	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
315202	1BATH 2B	20.5	B50461 BATH 3W1	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
315203	1BATH 3C	20.5	B50462 BATH 3W3	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
315204	1BATH 4D	20.5	B50462 BATH 3W3	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
315205	1BATH 5E	20.5	B50463 BATH 3W5	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
315206	1BATH 6F	20.5	B50463 BATH 3W5	1.00	TR	TR	511.4	506.8	540.0	94.7	294	LN 547
314559	3CAROLINA	115	314581 3JACKSON	115	LN	LN	111.6	73.1	118.0	94.6	337	LN 2012
315201	1BATH 1A	20.5	B50461 BATH 3W1	1.00	TR	TR	508.9	506.8	540.0	94.2	300	LN 553
315202	1BATH 2B	20.5	B50461 BATH 3W1	1.00	TR	TR	508.9	506.8	540.0	94.2	300	LN 553
315203	1BATH 3C	20.5	B50462 BATH 3W3	1.00	TR	TR	508.9	506.8	540.0	94.2	300	LN 553

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00		TR	508.9	506.8	540.0	94.2	300	LN 553
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00		TR	508.9	506.8	540.0	94.2	300	LN 553
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00		TR	508.9	506.8	540.0	94.2	300	LN 553
315201	1BATH 1A	20.5	BS0461	BATH 3W1	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
315202	1BATH 2B	20.5	BS0461	BATH 3W1	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
315203	1BATH 3C	20.5	BS0462	BATH 3W3	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
315204	1BATH 4D	20.5	BS0462	BATH 3W3	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
315205	1BATH 5E	20.5	BS0463	BATH 3W5	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
315206	1BATH 6F	20.5	BS0463	BATH 3W5	1.00		TR	506.8	506.8	540.0	93.8	**	Base Case **
314212	6FRRIVER	230	314222	GHANOVER	230		LN	747.3	546.4	797.0	93.8	405	LN 2090
314901	8BATH CO	500	BS0461	BATH 3W1	1.00		TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0462	BATH 3W3	1.00		TR	1010.2	1010.2	1080.0	93.5	**	Base Case **
314901	8BATH CO	500	BS0463	BATH 3W5	1.00		TR	1009.9	1009.9	1080.0	93.5	**	Base Case **

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:27 <V0V003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT 230KV B GEN RET

Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav

Subsys.File X:\S2015\ldvp.sub

Monit.File X:\S2015\vpssys.mon

Contn.File X:\S2015\sum2015_single_Alt.con

Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description ** Base Case **
315218	ICUNINGC	18.0	345	366	1.0721	1.0721	0.9300	1.0700	1.0185	1.1257	H		
314641	3KITTY H	115.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
314646	1KITTY 4	34.5	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
314650	1KITTY 5	34.5	345	361	1.0723	1.0415	0.9300	1.0700	0.9895	1.0936	H	46 LN 52	
315146	1KITTYHKA	13.8	345	361	1.0723	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
315147	1KITTYHKB	13.8	345	361	1.0724	1.0416	0.9300	1.0700	0.9895	1.0937	H	46 LN 52	
B\$1105	KITT 3W4	1.0	345	361	1.0714	1.0406	0.9300	1.0700	0.9886	1.0927	H	46 LN 52	
B\$1106	KITT 3W5	1.0	345	361	1.0724	1.0416	0.9300	1.0700	0.9895	1.0937	H	46 LN 52	
314524	3FRNKLN	115.0	345	360	1.0824	1.0241	0.9300	1.0700	0.9729	1.0753	HR	64 LN 68	
314526	3HANDSOM	115.0	345	360	1.0718	1.0224	0.9300	1.0700	0.9712	1.0735	H	64 LN 68	
314534	3S HAMPT	115.0	345	360	1.0784	1.0244	0.9300	1.0700	0.9731	1.0756	HR	64 LN 68	
314539	3JUNCAMP	115.0	345	360	1.0860	1.0233	0.9300	1.0700	0.9722	1.0745	HR	64 LN 68	
314541	3WATKINS	115.0	345	360	1.0807	1.0254	0.9300	1.0700	0.9742	1.0767	HR	64 LN 68	
314824	3JUNCAM 1	115.0	345	360	1.0867	1.0240	0.9300	1.0700	0.9728	1.0752	HR	64 LN 68	
314826	3WATKI 1	115.0	345	360	1.0813	1.0260	0.9300	1.0700	0.9747	1.0773	HR	64 LN 68	
314827	3WATKI 2	115.0	345	360	1.0813	1.0260	0.9300	1.0700	0.9747	1.0773	HR	64 LN 68	
315115	1SHAMPT1	13.8	345	360	1.0500	0.9939	0.9300	1.0700	0.9442	1.0436	R	64 LN 68	
315008	1POSSM6A	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8891	0.9827	L	125 LN 134	
315009	1POSSM6B	18.0	345	353	0.9258	0.9359	0.9300	1.0700	0.8891	0.9827	L	125 LN 134	
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9660	1.0677	HR	156 LN 173	
314731	2GRETNA	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	156 LN 173	
314732	2GRNA FB	69.0	345	358	1.0740	1.0166	0.9300	1.0700	0.9658	1.0675	HR	156 LN 173	
314874	21N 174	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	157 LN 174	
314878	21N 178	69.0	345	351	1.0783	1.0195	0.9300	1.0700	0.9685	1.0705	HR	159 LN 178	
314879	21N 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	160 LN 179	
314880	21N 180	69.0	345	351	1.0786	1.0195	0.9300	1.0700	0.9685	1.0705	HR	161 LN 180	

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0516 D		162 LN 181	
314051	3LOMA197	115.0	345	353	0.9344	1.0010	0.9300	1.0700	0.9510	1.0511 D		175 LN 197	
314148	3MIGRI197	115.0	345	353	0.9094	1.0006	0.9300	1.0700	0.9506	1.0507 LD		175 LN 197	
314158	3GOW197	115.0	345	353	0.9460	1.0005	0.9300	1.0700	0.9505	1.0505 D		175 LN 197	
314014	3CANNONE	115.0	345	353	0.9023	1.0017	0.9300	1.0700	0.9516	1.0518 LD		336 LN 2011	
314051	3LOMA197	115.0	345	353	0.9005	1.0010	0.9300	1.0700	0.9510	1.0511 LD		336 LN 2011	
314148	3MIGRI197	115.0	345	353	0.9005	1.0006	0.9300	1.0700	0.9506	1.0507 LD		336 LN 2011	
314155	3CANBR T	115.0	345	353	0.9004	1.0011	0.9300	1.0700	0.9511	1.0512 LD		336 LN 2011	
314158	3GOW197	115.0	345	353	0.9007	1.0005	0.9300	1.0700	0.9505	1.0505 LD		336 LN 2011	
315001	1LOMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259 R		338 LN 2013	
315002	1LOMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259 R		338 LN 2013	
315083	1SPRUNCA	13.8	345	357	1.0115	0.9627	0.9300	1.0700	0.9146	1.0108 R		377 LN 2055	
315085	1SPRUNCC	13.8	345	357	1.0129	0.9645	0.9300	1.0700	0.9163	1.0127 R		377 LN 2055	
315008	1POSSM6A	18.0	345	353	0.9210	0.9359	0.9300	1.0700	0.8891	0.9827 L		405 LN 2090	
315009	1POSSM6B	18.0	345	353	0.9195	0.9359	0.9300	1.0700	0.8891	0.9827 L		405 LN 2090	
315008	1POSSM6A	18.0	345	353	0.9184	0.9359	0.9300	1.0700	0.8891	0.9827 L		417 LN 2104	
314180	6HAYES	230.0	345	354	0.9522	1.0186	0.9300	1.0700	0.9677	1.0695 D		433 LN 2122	
314118	3MINNTEV	115.0	345	353	0.9457	0.9969	0.9300	1.0700	0.9471	1.0468 D		480 TX-1 60X	
314167	9OX	115.0	345	352	0.9458	1.0045	0.9300	1.0700	0.9543	1.0547 D		480 TX-1 60X	
315008	1POSSM6A	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8891	0.9827 L		485 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9219	0.9359	0.9300	1.0700	0.8891	0.9827 L		485 TX-1 6POSSUM	
315008	1POSSM6A	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8891	0.9827 L		491 TX-1 6POSSU4	
315009	1POSSM6B	18.0	345	353	0.9225	0.9359	0.9300	1.0700	0.8891	0.9827 L		492 TX-1 6POSSU5	
315008	1POSSM6A	18.0	345	353	0.9227	0.9359	0.9300	1.0700	0.8891	0.9827 L		493 TX-1 6POSSU6	
315009	1POSSM6B	18.0	345	353	0.9227	0.9359	0.9300	1.0700	0.8891	0.9827 L		493 TX-1 6POSSU6	
314122	3SOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0516 D		502 TX-1 6BRISTE	
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0547 D		502 TX-1 6BRISTE	
314049	3LOMA172	115.0	345	353	0.9305	0.9828	0.9300	1.0700	0.9336	1.0319 D		505 TX-1 6LIBERT	
314123	3WELLGTH	115.0	345	353	0.9287	0.9853	0.9300	1.0700	0.9361	1.0346 LD		505 TX-1 6LIBERT	
314141	3LIBERTY	115.0	345	353	0.9287	0.9864	0.9300	1.0700	0.9371	1.0357 LD		505 TX-1 6LIBERT	
314147	3MIGRI172	115.0	345	353	0.9303	0.9829	0.9300	1.0700	0.9337	1.0320 D		505 TX-1 6LIBERT	
314157	3GOW172	115.0	345	353	0.9297	0.9839	0.9300	1.0700	0.9347	1.0330 LD		505 TX-1 6LIBERT	

CATEGORY C

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:03 <BRV003.0>
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT 230KV B GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav
 Subsys.File X:\S2015\sub_2015(2013LF)_base_wpre_230kvAltB.sav
 Monit.File X:\S2015\mon_2015(2013LF)_base_wpre_230kvAltB.sav
 Contin.File X:\S2015\2015_rtep_tower_contingency_DVP_alt.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **
235496	01NSHEND	138	314809	3N SHEND	115	TR	509.5	90.2	283.0	180.1	7	2017#9020
235513	01STRAB	138	314797	4EDINBRG	138	LN	643.1	49.7	222.0	289.7	7	2017#9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	518.4	24.8	166.8	310.8	7	2017#9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	518.4	24.8	166.8	310.8	7	2017#9020
314796	3EDINBRG	115	314807	3MT JACK	115	LN	572.9	103.2	287.0	199.6	7	2017#9020
314798	3MERCK5	115	314802	3GROTOES	115	LN	509.9	74.6	251.0	203.1	7	2017#9020
314798	3MERCK5	115	314809	3N SHEND	115	LN	464.9	7.9	251.0	185.2	7	2017#9020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5864.1	88.1	258.5	2268.5	7	2017#9020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5941.0	89.2	311.8	1905.4	7	2017#9020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5864.1	88.1	258.5	2268.5	7	2017#9020
314799	3ENDLCV	115	314807	3MT JACK	115	LN	573.2	117.6	359.0	159.7	7	2017#9020
314799	3ENDLCV	115	314809	3N SHEND	115	LN	748.2	82.6	251.0	298.1	7	2017#9020
314802	3GROTOES	115	314803	6GROTOES	230	TR	416.8	90.2	287.0	145.2	7	2017#9020
314461	3DEPC46	115	314513	3YADKIN	115	LN	412.5	229.3	414.0	99.6	15	262#2018
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	337.1	113.4	287.9	117.1	47	257#2099
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	317.6	106.7	265.2	119.8	47	257#2099

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:03 <V0V003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV B GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav
Subsys.File X:\S2015\wvapsys.mon
Monit.File X:\S2015\wvapsys.mon
Conting.File X:\S2015\2015_rtep_tower_contingency_DVP_alt.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description ** Base Case **
315218	LCUNINC	18.0	345	366	1.0721	1.0721	0.9300	1.0700	1.0185	1.1257	H		7 201769020
314796	JEDINBRG	115.0	345	364	1.6632	1.0224	0.9300	1.0700	0.9713	1.0735	HR		7 201769020
314797	4EDINBRG	138.0	345	364	1.5622	0.9993	0.9300	1.0700	0.9493	1.0432	HR		7 201769020
314798	3MERCK5	115.0	345	364	1.4425	0.9977	0.9300	1.0700	0.9478	1.0476	HR		7 201769020
314799	3ENDLCV	115.0	345	364	2.0984	0.9991	0.9300	1.0700	0.9491	1.0490	HR		7 201769020
314800	6ENDLCV	230.0	345	364	3.1481	1.0374	0.9300	1.0700	0.9856	1.0893	HR		7 201769020
314801	3GROTOES	115.0	345	364	1.1437	1.0027	0.9300	1.0700	0.9526	1.0528	HR		7 201769020
314802	6GROTOES	230.0	345	364	1.0750	1.0320	0.9300	1.0700	0.9804	1.0836	H		7 201769020
314807	3MT JACK	115.0	345	364	1.9024	1.0078	0.9300	1.0700	0.9575	1.0582	HR		7 201769020
314809	3N SHEND	115.0	345	364	1.7616	0.9973	0.9300	1.0700	0.9474	1.0472	HR		7 201769020
314814	3TIMBERV	115.0	345	364	2.1059	0.9887	0.9300	1.0700	0.9393	1.0381	HR		7 201769020
314866	3EDINB 1	115.0	345	364	1.6643	1.0231	0.9300	1.0700	0.9719	1.0742	HR		7 201769020
314887	3ENDLC 1	115.0	345	364	2.0999	0.9998	0.9300	1.0700	0.9498	1.0497	HR		7 201769020
314889	3MERCK 1	115.0	345	364	1.4434	0.9984	0.9300	1.0700	0.9484	1.0483	HR		7 201769020
315008	1POSSM6A	18.0	345	353	0.9214	0.9359	0.9300	1.0700	0.8891	0.9827	L		7 201769020
315009	1POSSM6B	18.0	345	353	0.9214	0.9359	0.9300	1.0700	0.8891	0.9827	L		7 201769020
314497	6SEWLEPT	230.0	345	359	0.8452	1.0065	0.9300	1.0700	0.9562	1.0568	LD		47 25762099
314500	6NAVYS	230.0	345	359	0.8452	1.0065	0.9300	1.0700	0.9562	1.0568	LD		47 25762099
314501	6NAVYS1	230.0	345	359	0.8452	1.0065	0.9300	1.0700	0.9561	1.0568	LD		47 25762099
314505	6NAVYN	230.0	345	359	0.8452	1.0066	0.9300	1.0700	0.9562	1.0569	LD		47 25762099
314510	6NAVYN1	230.0	345	359	0.8450	1.0063	0.9300	1.0700	0.9560	1.0567	LD		47 25762099
315008	1POSSM6A	18.0	345	353	0.9255	0.9359	0.9300	1.0700	0.8891	0.9827	L		49 200624462051
315009	1POSSM6B	18.0	345	353	0.9255	0.9359	0.9300	1.0700	0.8891	0.9827	L		49 200624462051
315008	1POSSM6A	18.0	345	353	0.9223	0.9359	0.9300	1.0700	0.8891	0.9827	L		52 20446220
315009	1POSSM6B	18.0	345	353	0.9223	0.9359	0.9300	1.0700	0.8891	0.9827	L		52 20446220
315008	1POSSM6A	18.0	345	353	0.9255	0.9359	0.9300	1.0700	0.8891	0.9827	L		60 23762022

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	UppLimi t	VoltDro p	VoltRis e	Viol	Noon	Contingency Description
315009	IPOSSMEB	18.0	345	353	0.9255	0.9359	0.9300	1.0700	0.8891	0.9827	L	60	23742022
315001	IOMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	62	24842013
315002	IOMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	62	24842013
315008	IPOSSM6A	18.0	345	353	0.9259	0.9359	0.9300	1.0700	0.8891	0.9827	L	65	2514266
315009	IPOSSMEB	18.0	345	353	0.9259	0.9359	0.9300	1.0700	0.8891	0.9827	L	65	2514266
315008	IPOSSM6A	18.0	345	353	0.9234	0.9359	0.9300	1.0700	0.8891	0.9827	L	74	26642022
315009	IPOSSMEB	18.0	345	353	0.9234	0.9359	0.9300	1.0700	0.8891	0.9827	L	74	26642022
315008	IPOSSM6A	18.0	345	353	0.9213	0.9359	0.9300	1.0700	0.8891	0.9827	L	86	25642090
315009	IPOSSMEB	18.0	345	353	0.9213	0.9359	0.9300	1.0700	0.8891	0.9827	L	86	25642090

AC Branch Violations

PSS(R)MUST 11.0 -- Managing and Utilizing System Transmission -- WED, FEB 20 2013 8:06 <BRV003.0>
2015 SUMMER BASE CASE (ITSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV B GEN RET
Case File K:\Peter Nedwick\Year2011\Skiffest Creek Application\Rebuttal Study\S2015\sum 2015(2013)F_base_wpre_230kvAltB.sav
Subsys File K:\Peter Nedwick\Year2011\Skiffest Creek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit File K:\Peter Nedwick\Year2011\Skiffest Creek Application\Rebuttal Study\S2015\wapsys.mon
Contn File K:\Peter Nedwick\Year2011\Skiffest Creek Application\Rebuttal Study\S2015\peninsula.con
Exclud File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

From bus	To bus	CKT	Type	ContbVA	BaseFlow	Rating	Loading%	Noon	Contingency Description
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	413.6	36.1	169.0	244.7	4242	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	405.3	36.1	169.0	239.8	3923	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	382.7	36.1	169.0	226.5	678	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6LANEXA 1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	370.3	36.1	169.0	219.1	4241	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6ORNECK1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	361.3	36.1	169.0	213.8	3922	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6ORNECK1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	346.1	36.1	169.0	204.8	677	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6ORNECK1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	322.9	36.1	169.0	191.1	1007	D:6DAHLGRE-6OARGROVI +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	407.8	28.7	269.0	151.6	4242	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	399.1	28.7	269.0	148.4	3923	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	394.0	19.7	269.0	146.5	4242	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	385.3	19.7	269.0	143.2	3923	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	377.4	36.1	169.0	140.5	4877	D:6OARGROV-6WESTMORI +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	378.6	28.7	269.0	139.6	678	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6LANEXA 1
314173 3GARNER	115 314178 3LANCAST	115 1	LN	346.3	25.4	249.0	139.1	4242	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314173 3GARNER	115 314178 3LANCAST	115 1	LN	337.8	25.4	249.0	135.7	3923	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	364.2	28.7	269.0	135.4	4241	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	361.5	19.7	269.0	134.4	678	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	354.1	28.7	269.0	131.7	3922	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	350.7	19.7	269.0	130.4	4241	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6ORNECK1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	215.8	36.1	169.0	127.7	1006	D:6DAHLGRE-6OARGROVI +6DUNNSVL-6ORNECK1
314173 3GARNER	115 314178 3LANCAST	115 1	LN	314.9	25.4	249.0	126.5	678	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6LANEXA 1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	340.3	19.7	269.0	126.5	3922	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6ORNECK1
314173 3GARNER	115 314191 3ORNECK	115 1	LN	342.4	45.1	249.0	125.5	4242	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314174 3HARMONY	115 314191 3WHITE S	115 1	LN	210.2	36.1	169.0	124.1	5526	D:6DUNNSVL-6LANEXA 1 +6SANTERS-6WESTMORI
314173 3GARNER	115 314178 3LANCAST	115 1	LN	309.0	25.4	249.0	124.1	4241	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	331.4	28.7	269.0	123.2	677	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6ORNECK1
314173 3GARNER	115 314181 3ORNECK	115 1	LN	304.2	45.1	249.0	122.2	3923	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6LANEXA 1
314173 3GARNER	115 314178 3LANCAST	115 1	LN	297.4	25.4	249.0	119.5	3922	D:6ARNOLDIS-6COMGRN 1 +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	314.4	19.7	269.0	116.9	677	D:6DAHLGRE-6OARGROVI +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314191 3WHITE S	115 1	LN	309.9	28.7	269.0	115.2	1007	D:6DAHLGRE-6OARGROVI +6DUNNSVL-6LANEXA 1
314173 3GARNER	115 314181 3ORNECK	115 1	LN	281.8	45.1	249.0	113.2	678	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6LANEXA 1
314173 3GARNER	115 314181 3ORNECK	115 1	LN	284.8	45.1	249.0	113.2	4241	D:6BTRCHMD-6COMGRN 1 +6DUNNSVL-6ORNECK1
314173 3GARNER	115 314178 3LANCAST	115 1	LN	276.9	25.4	249.0	111.2	677	D:6DAHLGRE-6ARNOLDIS1 +6DUNNSVL-6ORNECK1
313813 3OCGRAN	115 314178 3LANCAST	115 1	LN	293.4	19.7	269.0	109.1	1007	D:6DAHLGRE-6OARGROVI +6DUNNSVL-6LANEXA 1

**	From bus	** **	To bus	** CKT	Type	ContMVA	Baseflow	Rating	Loading%	Noon	Contingency Description
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	583.0	267.0	541.0	107.8	18692	D:6DENBIGH-6SKIFCRE1 +6SKIFCRE-6WAWICK1
314173	3GARNER	115 314181	6GNORNECK	115 3	LN	268.2	45.1	249.0	107.7	3922	D:6CARNOLDS-6GNORIN 1 +6DUNNSVL-6GNORNECK1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	865.5	532.6	830.0	104.3	49571	D:6THRS279-6YADKIN 1 +6FENTRES-6YADKIN 1
314537	6SUFFOLK	230 314928	6SULFOLK	500 2	TR	1043.3	399.8	1004.3	103.9	55308	D:8SEPTA -6YADKIN 1 +6YADKIN -6SULFOLK1
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	555.0	267.0	541.0	102.6	18691	D:6DENBIGH-6SKIFCRE1 +6WHEALYN-6WAWICK1
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	553.6	267.0	541.0	102.3	3004	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6SKIFCRE1
314173	3GARNER	115 314178	3LANCAST	115 1	LN	252.0	25.4	249.0	101.2	1007	D:6DAHLGRS-6OARGROV1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	170.9	36.1	169.0	101.2	4876	D:6OAKGROV-6WESTMORI +6DUNNSVL-6GNORNECK1
314174	3HARMONY	115 314191	3WHITE S	115 1	LN	169.8	36.1	169.0	100.4	5525	D:6DUNNSVL-6LANEXA 1 +6GNORNECK-6SANDERS1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	891.7	532.6	830.0	100.2	40120	D:6DOZIER -6ELIZ R.1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	831.7	532.6	830.0	100.2	40293	D:6DOZIER -6GRENWCHI +6THRS279-6YADKIN 1
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	294.1	141.5	293.9	100.1	36574	D:6CHESAPK-6CHESAPK2 +6DEEPC46-6YADKIN 1
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	541.2	267.0	541.0	100.0	2681	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6SKIFCRE1
314448	6CHESAPK	115 314449	6CHESAPK	230 2	TR	301.7	147.9	302.0	99.9	35599	D:6CHESAPK-6CHESPTX1 +6DEEPC46-6YADKIN 1
314448	6CHESAPK	115 314449	6CHESAPK	230 2	TR	301.7	147.9	302.0	99.9	36766	D:6CHESAPK-6CHESPTX1 +6DEEPC46-6YADKIN 1
314461	6DEEPC46	115 314513	6YADKIN	115 1	LN	412.6	229.3	414.0	99.7	37336	D:6CHESAPK-6CHESPTX1 +6DEEPC46-6YADKIN 1
314461	6DEEPC46	115 314513	6YADKIN	115 1	LN	412.6	229.3	414.0	99.7	37150	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCHI
314423	GYOKTWN	230 315620	6SKIFCREK	230 1	LN	536.2	267.0	541.0	99.1	18982	D:6DENBIGH-6YOKTWN1 +6SKIFCRE-6WAWICK1
314537	6SUFFOLK	230 314928	6SULFOLK	500 1	TR	1043.3	399.8	1053.5	99.0	55308	D:8SEPTA -6YADKIN 1 +6YADKIN -6SULFOLK1

AC Bus Voltage Violations

PSS(R)MUST 11.0 -- Managing and Utilizing System Transmission -- WED, FEB 20 2013 8:07 <V0V003.0>
2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV B GEN RET
Case File K:\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\sum_2013\2013LF_base_vpre_230kv\altb.sav
Subsys File K:\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\geninsula_ac.sub
Monit File K:\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\Wpaysys.mon
Contn File K:\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\geninsula.com
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
313810	6DAHUGREN	230.0	345	354	0.75946	0.9993	0.9300	1.0700	0.9494	1.0493	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
313813	JOCCAN	115.0	345	354	0.7972	1.0033	0.9300	1.0700	0.9531	1.0534	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314139	FOARGROW	230.0	345	354	0.75922	1.0012	0.9300	1.0700	0.9511	1.0512	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314173	3GARNER	115.0	345	354	0.7497	1.0030	0.9300	1.0700	0.9529	1.0532	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314174	3HARMONY	115.0	345	354	0.76263	1.0036	0.9300	1.0700	0.9534	1.0537	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314178	3LANCAST	115.0	345	354	0.76439	1.0046	0.9300	1.0700	0.9544	1.0549	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314181	3NORNECK	115.0	345	354	0.76455	1.0101	0.9300	1.0700	0.9596	1.0606	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314182	6NORNECK	230.0	345	354	0.76232	1.0011	0.9300	1.0700	0.9511	1.0512	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314183	6SANDERS	230.0	345	354	0.76202	1.0010	0.9300	1.0700	0.9509	1.0510	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314184	35HCHLES	115.0	345	354	0.76850	1.0043	0.9300	1.0700	0.9541	1.0545	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314187	3WAN 176	115.0	345	354	0.78220	0.9907	0.9300	1.0700	0.9412	1.0402	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314190	6WESTBOD	230.0	345	354	0.74770	1.0014	0.9300	1.0700	0.9513	1.0515	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314191	3WHITE S	115.0	345	354	0.74770	1.0014	0.9300	1.0700	0.9513	1.0515	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314195	3HARMO 1	115.0	345	354	0.76942	1.0025	0.9300	1.0700	0.9524	1.0526	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.76948	1.0042	0.9300	1.0700	0.9540	1.0545	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.78237	1.0051	0.9300	1.0700	0.9549	1.0554	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
315034	3INNECK1	13.2	345	354	0.75923	1.0360	0.9300	1.0700	0.9842	1.0876	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
315035	3INNECK2	13.2	345	354	0.75923	1.0360	0.9300	1.0700	0.9842	1.0876	LD	677	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6NORNECK1
313810	6DAHUGREN	230.0	345	354	0.75978	0.9993	0.9300	1.0700	0.9494	1.0493	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
313813	JOCCAN	115.0	345	354	0.79723	1.0033	0.9300	1.0700	0.9531	1.0534	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314139	FOARGROW	230.0	345	354	0.76024	1.0012	0.9300	1.0700	0.9511	1.0512	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314172	6UNNSVI	230.0	345	354	0.76070	1.0043	0.9300	1.0700	0.9541	1.0545	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314173	3GARNER	115.0	345	354	0.76853	1.0030	0.9300	1.0700	0.9529	1.0532	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.76924	1.0036	0.9300	1.0700	0.9534	1.0537	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.76942	1.0046	0.9300	1.0700	0.9544	1.0549	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.76982	1.0101	0.9300	1.0700	0.9596	1.0606	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.76972	1.0011	0.9300	1.0700	0.9511	1.0512	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.76972	1.0010	0.9300	1.0700	0.9509	1.0510	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.78774	0.9907	0.9300	1.0700	0.9412	1.0402	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314190	6WESTBOD	230.0	345	354	0.76048	1.0014	0.9300	1.0700	0.9513	1.0515	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.76142	1.0025	0.9300	1.0700	0.9524	1.0526	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314195	3HARMO 1	115.0	345	354	0.78923	1.0042	0.9300	1.0700	0.9540	1.0545	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314195	3HARMO 2	115.0	345	354	0.78923	1.0042	0.9300	1.0700	0.9540	1.0545	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.77025	1.0051	0.9300	1.0700	0.9549	1.0554	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1
315034	3INNECK1	13.2	345	354	0.76551	1.0360	0.9300	1.0700	0.9842	1.0876	LD	678	D: 6DAHUGRE-6APNOLD01 + 6UNNSVI-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	Voltrise	Viol	Ncon	Contingency Description
315035	INNEHC22	13.2	345	354	0.8525	1.0360	0.9300	1.0700	0.9842	1.0878	LD	678	D:6AHLGRE-6AAROLLO1 +6DUNSVTL-GLANEXA 1
313813	DOCRAN	115.0	345	354	0.8978	1.0033	0.9300	1.0700	0.9534	1.0534	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314139	6AORGROV	230.0	345	354	0.8022	1.0012	0.9300	1.0700	0.9511	1.0512	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314173	EGARNER	115.0	345	354	0.8962	1.0030	0.9300	1.0700	0.9529	1.0532	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314178	ELANCAST	115.0	345	354	0.8346	1.0046	0.9300	1.0700	0.9549	1.0549	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314181	6AORHECK	115.0	345	354	0.8077	1.0101	0.9300	1.0700	0.9556	1.0606	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314182	6AORGROV	230.0	345	354	0.8009	1.0011	0.9300	1.0700	0.9511	1.0512	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314183	6AAROLLO	230.0	345	354	0.8059	1.0010	0.9300	1.0700	0.9509	1.0510	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314190	6AESTHRO	230.0	345	354	0.8028	1.0014	0.9300	1.0700	0.9513	1.0515	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314191	3WHITE S	115.0	345	354	0.8055	1.0025	0.9300	1.0700	0.9524	1.0526	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
314400	ELANCA 1	115.0	345	354	0.8290	1.0051	0.9300	1.0700	0.9549	1.0554	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
315034	INNEHC21	13.2	345	354	0.8284	1.0360	0.9300	1.0700	0.9842	1.0878	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
315035	INNEHC22	13.2	345	354	0.8284	1.0360	0.9300	1.0700	0.9842	1.0878	LD	1006	D:6AHLGRE-6AORGROV1 +6DUNSVTL-6AORHECK1
313813	DOCRAN	115.0	345	354	0.7566	1.0033	0.9300	1.0700	0.9531	1.0534	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314139	6AORGROV	230.0	345	354	0.8086	1.0012	0.9300	1.0700	0.9511	1.0512	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314172	6AORGROV	230.0	345	354	0.8060	1.0043	0.9300	1.0700	0.9541	1.0545	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314173	EGARNER	115.0	345	354	0.7865	1.0030	0.9300	1.0700	0.9529	1.0532	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314174	3HARNOV	115.0	345	354	0.8552	1.0036	0.9300	1.0700	0.9534	1.0537	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314176	ELANCAST	115.0	345	354	0.7199	1.0046	0.9300	1.0700	0.9544	1.0549	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314181	6AORHECK	115.0	345	354	0.8052	1.0101	0.9300	1.0700	0.9596	1.0606	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314182	6AORGROV	230.0	345	354	0.8076	1.0011	0.9300	1.0700	0.9511	1.0512	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314183	6AAROLLO	230.0	345	354	0.8077	1.0010	0.9300	1.0700	0.9509	1.0510	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314184	3HARNOV	115.0	345	354	0.8049	1.0043	0.9300	1.0700	0.9541	1.0545	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314187	3HARNOV	115.0	345	354	0.8458	0.9907	0.9300	1.0700	0.9412	1.0402	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314190	6AESTHRO	230.0	345	354	0.8062	1.0014	0.9300	1.0700	0.9513	1.0515	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314191	3WHITE S	115.0	345	354	0.7559	1.0025	0.9300	1.0700	0.9524	1.0526	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314395	3HARNO 1	115.0	345	354	0.8528	1.0042	0.9300	1.0700	0.9540	1.0545	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314395	3HARNO 2	115.0	345	354	0.8526	1.0041	0.9300	1.0700	0.9538	1.0543	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
314400	ELANCA 1	115.0	345	354	0.7154	1.0051	0.9300	1.0700	0.9549	1.0554	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
315034	INNEHC22	13.2	345	354	0.8243	1.0360	0.9300	1.0700	0.9842	1.0878	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
315035	INNEHC22	13.2	345	354	0.8243	1.0360	0.9300	1.0700	0.9842	1.0878	LD	1007	D:6AHLGRE-6AORGROV1 +6DUNSVTL-GLANEXA 1
313810	6AHLGREN	230.0	345	354	0.8981	0.9993	0.9300	1.0700	0.9494	1.0493	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
313813	DOCRAN	115.0	345	354	0.7962	1.0033	0.9300	1.0700	0.9531	1.0534	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314131	6AAROLLO5	230.0	345	354	0.8982	1.0009	0.9300	1.0700	0.9508	1.0509	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314139	6AORGROV	230.0	345	354	0.8246	1.0012	0.9300	1.0700	0.9529	1.0532	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314173	EGARNER	115.0	345	354	0.8456	1.0030	0.9300	1.0700	0.9529	1.0532	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314174	3HARNOV	115.0	345	354	0.8904	1.0036	0.9300	1.0700	0.9534	1.0537	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314178	ELANCAST	115.0	345	354	0.7824	1.0046	0.9300	1.0700	0.9544	1.0549	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314181	6AORHECK	115.0	345	354	0.8165	1.0019	0.9300	1.0700	0.9596	1.0606	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314182	6AORGROV	230.0	345	354	0.8043	1.0011	0.9300	1.0700	0.9511	1.0512	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314183	6AAROLLO5	230.0	345	354	0.8988	1.0010	0.9300	1.0700	0.9509	1.0510	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314187	3HARNO 1	115.0	345	354	0.8769	0.9907	0.9300	1.0700	0.9412	1.0402	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314190	6AESTHRO	230.0	345	354	0.8023	1.0014	0.9300	1.0700	0.9524	1.0526	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314191	3WHITE S	115.0	345	354	0.8225	1.0025	0.9300	1.0700	0.9524	1.0526	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314385	3HARNO 1	115.0	345	354	0.8410	1.0042	0.9300	1.0700	0.9540	1.0545	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314395	3HARNO 2	115.0	345	354	0.8408	1.0041	0.9300	1.0700	0.9538	1.0543	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
314400	ELANCA 1	115.0	345	354	0.7848	1.0051	0.9300	1.0700	0.9549	1.0554	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
315034	INNEHC21	13.2	345	354	0.8242	1.0360	0.9300	1.0700	0.9842	1.0878	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
315035	INNEHC22	13.2	345	354	0.8242	1.0360	0.9300	1.0700	0.9842	1.0878	LD	3922	D:6AROLLO5-6COMOR 1 +6DUNSVTL-6AORHECK1
313810	6AHLGREN	230.0	345	354	0.8992	0.9993	0.9300	1.0700	0.9494	1.0493	LD	3923	D:6AROLLO5-6COMOR 1 +6DUNSVTL-GLANEXA 1
313813	DOCRAN	115.0	345	354	0.7969	1.0023	0.9300	1.0700	0.9531	1.0534	LD	3923	D:6AROLLO5-6COMOR 1 +6DUNSVTL-GLANEXA 1
314131	6AAROLLO5	230.0	345	354	0.8989	1.0009	0.9300	1.0700	0.9508	1.0509	LD	3923	D:6AROLLO5-6COMOR 1 +6DUNSVTL-GLANEXA 1
314139	6AORGROV	230.0	345	354	0.8252	1.0012	0.9300	1.0700	0.9529	1.0532	LD	3923	D:6AROLLO5-6COMOR 1 +6DUNSVTL-GLANEXA 1
314173	EGARNER	115.0	345	354	0.8457	1.0030	0.9300	1.0700	0.9529	1.0532	LD	3923	D:6AROLLO5-6COMOR 1 +6DUNSVTL-GLANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314173	SCARNE	115.0	345	354	0.6035	1.0030	0.9300	1.0700	0.9529	1.0532	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314174	SHARNEY	115.0	345	354	0.6044	1.0036	0.9300	1.0700	0.9534	1.0537	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314176	BLANCAST	115.0	345	354	0.7827	1.0046	0.9300	1.0700	0.9549	1.0549	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314181	INORNECK	115.0	345	354	0.6206	1.0101	0.9300	1.0700	0.9596	1.0606	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314182	GNORNECK	230.0	345	354	0.6086	1.0011	0.9300	1.0700	0.9511	1.0512	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314183	ESANDERS	230.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9509	1.0510	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314187	WIAN 176	115.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9507	1.0402	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314190	EWESTHOR	230.0	345	354	0.6062	1.0013	0.9300	1.0700	0.9513	1.0515	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314191	WHITTE S	115.0	345	354	0.8139	1.0025	0.9300	1.0700	0.9524	1.0526	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 1	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 2	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
314400	BLANCA 1	115.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
315034	INNECK1	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
315035	INNECK2	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	3923	D: EARNOLDS-6COMORN 1 + GOUNNSVI-GLANEXA 1
313810	GDALGRN	230.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
313813	JOCCRAM	115.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314131	EARNOLDS	230.0	345	354	0.5902	1.0009	0.9300	1.0700	0.9508	1.0509	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314139	GOARGROW	230.0	345	354	0.5902	1.0012	0.9300	1.0700	0.9511	1.0512	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314173	SCARNE	115.0	345	354	0.6035	1.0030	0.9300	1.0700	0.9529	1.0532	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314174	SHARNEY	115.0	345	354	0.6044	1.0036	0.9300	1.0700	0.9534	1.0537	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314176	BLANCAST	115.0	345	354	0.7827	1.0046	0.9300	1.0700	0.9549	1.0549	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314181	INORNECK	115.0	345	354	0.6206	1.0101	0.9300	1.0700	0.9596	1.0606	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314182	GNORNECK	230.0	345	354	0.6086	1.0011	0.9300	1.0700	0.9511	1.0512	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314183	ESANDERS	230.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314187	WIAN 176	115.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9507	1.0402	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314190	EWESTHOR	230.0	345	354	0.6062	1.0013	0.9300	1.0700	0.9513	1.0515	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314191	WHITTE S	115.0	345	354	0.8139	1.0025	0.9300	1.0700	0.9524	1.0526	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 1	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 2	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314400	BLANCA 1	115.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
315034	INNECK1	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
315035	INNECK2	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	4241	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
313810	GDALGRN	230.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
313813	JOCCRAM	115.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314131	EARNOLDS	230.0	345	354	0.5902	1.0009	0.9300	1.0700	0.9508	1.0509	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314139	GOARGROW	230.0	345	354	0.5902	1.0012	0.9300	1.0700	0.9511	1.0512	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314173	SCARNE	115.0	345	354	0.6035	1.0030	0.9300	1.0700	0.9529	1.0532	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314174	SHARNEY	115.0	345	354	0.6044	1.0036	0.9300	1.0700	0.9534	1.0537	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314176	BLANCAST	115.0	345	354	0.7827	1.0046	0.9300	1.0700	0.9549	1.0549	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314181	INORNECK	115.0	345	354	0.6206	1.0101	0.9300	1.0700	0.9596	1.0606	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314182	GNORNECK	230.0	345	354	0.6086	1.0011	0.9300	1.0700	0.9511	1.0512	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314183	ESANDERS	230.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314187	WIAN 176	115.0	345	354	0.6072	1.0010	0.9300	1.0700	0.9507	1.0402	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314190	EWESTHOR	230.0	345	354	0.6062	1.0013	0.9300	1.0700	0.9513	1.0515	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314191	WHITTE S	115.0	345	354	0.8139	1.0025	0.9300	1.0700	0.9524	1.0526	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 1	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314395	SHARMO 2	115.0	345	354	0.8202	1.0042	0.9300	1.0700	0.9540	1.0545	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314400	BLANCA 1	115.0	345	354	0.7827	1.0041	0.9300	1.0700	0.9549	1.0549	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
315034	INNECK1	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
315035	INNECK2	13.2	345	354	0.6065	1.0360	0.9300	1.0700	0.9542	1.0878	LD	4242	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1
314173	SCARNE	115.0	345	354	0.6035	1.0030	0.9300	1.0700	0.9529	1.0532	LD	4876	D: 6B1RCHWD-6COMORN 1 + GOUNNSVI-GLANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314181	314181-3NORHECK	115.0	345	354	0.8528	1.0101	0.9300	1.0700	0.9596	1.0606	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
314182	314182-6NORHECK	230.0	345	354	0.8527	1.0011	0.9300	1.0700	0.9511	1.0512	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
314183	314183-6NORHECK	230.0	345	354	0.8524	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
314190	314190-6WESTMOR	230.0	345	354	0.8529	1.0014	0.9300	1.0700	0.9513	1.0515	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
315034	315034-1NORHECK	13.2	345	354	0.8450	1.0360	0.9300	1.0700	0.9842	1.0878	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
315035	315035-1NORHECK	13.2	345	354	0.8450	1.0360	0.9300	1.0700	0.9842	1.0878	LD	4876	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6SANDERCK 1
313811	313811-3OCHMAN	115.0	345	354	0.8583	1.0033	0.9300	1.0700	0.9511	1.0534	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314373	314373-6CONNSVL	230.0	345	354	0.7245	1.0043	0.9300	1.0700	0.9541	1.0545	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314173	314173-3KARNER	115.0	345	354	0.7250	1.0030	0.9300	1.0700	0.9529	1.0532	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314178	314178-3LANCAST	115.0	345	354	0.8461	1.0046	0.9300	1.0700	0.9544	1.0549	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314181	314181-3NORHECK	115.0	345	354	0.8464	1.0010	0.9300	1.0700	0.9596	1.0606	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314182	314182-6NORHECK	230.0	345	354	0.7258	1.0011	0.9300	1.0700	0.9511	1.0512	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314183	314183-6SANDERS	230.0	345	354	0.7453	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314190	314190-6WESTMOR	230.0	345	354	0.7440	1.0014	0.9300	1.0700	0.9513	1.0515	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314191	314191-6WHITE S	115.0	345	354	0.8700	1.0025	0.9300	1.0700	0.9524	1.0526	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314400	314400-3LANCA 1	115.0	345	354	0.8486	1.0011	0.9300	1.0700	0.9549	1.0554	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
315034	315034-1NORHECK	13.2	345	354	0.7450	1.0360	0.9300	1.0700	0.9842	1.0878	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
315035	315035-1NORHECK	13.2	345	354	0.7450	1.0360	0.9300	1.0700	0.9842	1.0878	LD	4877	D: 60AKGROV-6WESTMOR 1 + 6CONNSVL-6LANEXA 1
314182	314182-6NORHECK	230.0	345	354	0.8039	1.0011	0.9300	1.0700	0.9511	1.0512	LD	5210	D: 60CONNSVL-6NORHECK 1 + 6NORHECK-6SANDERS 1
314173	314173-3KARNER	115.0	345	354	0.8078	1.0030	0.9300	1.0700	0.9529	1.0532	LD	5211	D: 60CONNSVL-6NORHECK 1 + 6SANDERS-6WESTMOR 1
314181	314181-3NORHECK	115.0	345	354	0.8625	1.0010	0.9300	1.0700	0.9596	1.0606	LD	5211	D: 60CONNSVL-6NORHECK 1 + 6SANDERS-6WESTMOR 1
314182	314182-6NORHECK	230.0	345	354	0.8454	1.0011	0.9300	1.0700	0.9511	1.0512	LD	5210	D: 60CONNSVL-6NORHECK 1 + 6SANDERS-6WESTMOR 1
314183	314183-6SANDERS	230.0	345	354	0.8459	1.0033	0.9300	1.0700	0.9531	1.0534	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314184	314184-3OCHMAN	115.0	345	354	0.8509	1.0043	0.9300	1.0700	0.9541	1.0545	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314172	314172-6CONNSVL	230.0	345	354	0.7459	1.0043	0.9300	1.0700	0.9529	1.0532	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314173	314173-3KARNER	115.0	345	354	0.9669	1.0030	0.9300	1.0700	0.9549	1.0549	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314178	314178-3LANCAST	115.0	345	354	0.8723	1.0046	0.9300	1.0700	0.9544	1.0549	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314181	314181-3NORHECK	115.0	345	354	0.7607	1.0101	0.9300	1.0700	0.9596	1.0606	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314182	314182-6NORHECK	230.0	345	354	0.7471	1.0011	0.9300	1.0700	0.9511	1.0512	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314183	314183-6SANDERS	230.0	345	354	0.7485	1.0010	0.9300	1.0700	0.9509	1.0510	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314191	314191-6WHITE S	115.0	345	354	0.8909	1.0025	0.9300	1.0700	0.9524	1.0526	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314192	314192-6WHITE S	115.0	345	354	0.8708	1.0025	0.9300	1.0700	0.9541	1.0545	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314400	314400-3LANCA 1	115.0	345	354	0.8727	1.0051	0.9300	1.0700	0.9549	1.0549	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
315034	315034-1NORHECK	13.2	345	354	0.7602	1.0360	0.9300	1.0700	0.9842	1.0878	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
315035	315035-1NORHECK	13.2	345	354	0.7602	1.0360	0.9300	1.0700	0.9842	1.0878	LD	5226	D: 60CONNSVL-6LANEXA 1 + 6SANDERS-6WESTMOR 1
314348	314348-2GREAT S	69.0	345	358	0.8718	1.0169	0.9300	1.0700	0.9660	1.0677	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314354	314354-3ZULTYS 1	69.0	345	358	0.8710	1.0327	0.9300	1.0700	0.9810	1.0843	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314515	314515-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314666	314666-3ZULTYS 1	115.0	345	358	0.8623	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314670	314670-3ZULTYS 1	138.0	345	358	0.8437	1.0984	0.9300	1.0700	0.9485	1.0483	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314678	314678-3ZULTYS 1	69.0	345	358	0.8708	1.0324	0.9300	1.0700	0.9808	1.0840	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314679	314679-3ZULTYS 1	138.0	345	358	0.8927	1.0965	0.9300	1.0700	0.9467	1.0463	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314680	314680-3ZULTYS 1	69.0	345	358	0.8619	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314681	314681-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314682	314682-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314683	314683-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314684	314684-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314685	314685-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314686	314686-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314687	314687-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314688	314688-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314689	314689-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314690	314690-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314691	314691-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314692	314692-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314693	314693-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314694	314694-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314695	314695-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314696	314696-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314697	314697-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314698	314698-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314699	314699-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1
314700	314700-3ZULTYS 1	115.0	345	358	0.8618	1.0005	0.9300	1.0700	0.9505	1.0505	LD	53807	D: 80BATH CO-RVALLLEY 1 + 8DOOMS -81EXNGTN 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314705	3HRT	115.0	345	358	0.8468	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314712	3OTTEN R	115.0	345	358	0.8637	0.9999	0.9300	1.0700	0.9499	1.0499	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314727	2CLAK DP	69.0	345	358	0.8922	1.0021	0.9300	1.0700	0.9520	1.0520	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314728	2CLAK TP	69.0	345	358	0.8300	1.0028	0.9300	1.0700	0.9520	1.0530	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314729	2GLADW8	69.0	345	358	0.8478	1.0111	0.9300	1.0700	0.9605	1.0616	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314730	2GLD TP	69.0	345	358	0.8672	1.0297	0.9300	1.0700	0.9782	1.0812	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314731	2GRETHA	69.0	345	358	0.8478	1.0166	0.9300	1.0700	0.9658	1.0675	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314732	2GRMA FB	69.0	345	358	0.8478	1.0166	0.9300	1.0700	0.9658	1.0675	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314733	2GRMA DP	69.0	345	358	0.8457	1.0149	0.9300	1.0700	0.9641	1.0656	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314734	2ZLOP DP	69.0	345	358	0.8629	1.0261	0.9300	1.0700	0.9748	1.0774	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314735	2ZLOP TP	69.0	345	358	0.8823	1.0261	0.9300	1.0700	0.9748	1.0774	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314736	2SHKO DP	69.0	345	358	0.8252	1.0051	0.9300	1.0700	0.9549	1.0554	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314737	2SHKO TP	69.0	345	358	0.8336	1.0203	0.9300	1.0700	0.9693	1.0713	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314738	2MT APT	69.0	345	358	0.8478	1.0148	0.9300	1.0700	0.9641	1.0655	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314739	2MT A TP	69.0	345	358	0.8536	1.0203	0.9300	1.0700	0.9693	1.0713	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314740	2ALTVS35	69.0	345	358	0.8708	1.0324	0.9300	1.0700	0.9808	1.0840	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314789	2BANSN	69.0	345	358	0.8427	0.9965	0.9300	1.0700	0.9467	1.0463	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314836	3BALZPLS	115.0	345	365	0.2468	0.9962	0.9300	1.0700	0.9463	1.0460	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314837	3BUNA V	115.0	345	365	0.2452	0.9984	0.9300	1.0700	0.9485	1.0484	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314838	3BUSTLRB	115.0	345	365	0.2512	0.9986	0.9300	1.0700	0.9487	1.0485	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314839	3BUSTLT	115.0	345	365	0.2514	0.9986	0.9300	1.0700	0.9487	1.0485	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314840	3CLFTN F	230.0	345	365	0.2314	0.9802	0.9300	1.0700	0.9312	1.0292	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314841	3CLFTN F	138.0	345	365	0.2272	1.0359	0.9300	1.0700	0.9841	1.0777	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314842	4CONVGT2	138.0	345	365	0.2472	0.9964	0.9300	1.0700	0.9425	1.0417	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314843	4CONVGT1	138.0	345	365	0.2893	1.0238	0.9300	1.0700	0.9726	1.0750	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314844	4TRATGVR	115.0	345	365	0.2457	0.9955	0.9300	1.0700	0.9457	1.0452	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314845	4TRATGVR	115.0	345	365	0.2453	0.9986	0.9300	1.0700	0.9487	1.0485	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314846	4TRATD	115.0	345	365	0.2459	0.9977	0.9300	1.0700	0.9478	1.0476	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314847	4TRTGE H	138.0	345	365	0.2953	1.0217	0.9300	1.0700	0.9706	1.0728	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314848	3CLAROW	115.0	345	365	0.2442	0.9972	0.9300	1.0700	0.9473	1.0471	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314849	3GOSHEN	115.0	345	365	0.2472	0.9964	0.9300	1.0700	0.9466	1.0463	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314851	3JAMES L	115.0	345	365	0.2452	0.9952	0.9300	1.0700	0.9450	1.0450	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314852	3JMS L T	115.0	345	365	0.2458	0.9956	0.9300	1.0700	0.9454	1.0454	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314853	3LENGTTH	115.0	345	365	0.2506	0.9993	0.9300	1.0700	0.9494	1.0493	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314854	6LENGT71	230.0	345	365	0.2590	0.9921	0.9300	1.0700	0.9798	1.0288	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314855	6LENGW08	230.0	345	365	0.2401	0.9798	0.9300	1.0700	0.9308	1.0288	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314856	6LENGT72	230.0	345	365	0.2589	0.9921	0.9300	1.0700	0.9425	1.0417	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314857	6LENGW08	138.0	345	365	0.2213	1.0334	0.9300	1.0700	0.9817	1.0850	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314858	3ROCKB T	115.0	345	365	0.2459	0.9959	0.9300	1.0700	0.9461	1.0457	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314859	4KSTVACO	138.0	345	365	0.2019	1.0192	0.9300	1.0700	0.9682	1.0701	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314860	4E MLL	138.0	345	365	0.2026	1.0198	0.9300	1.0700	0.9688	1.0708	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314861	3KTHREB	115.0	345	365	0.8013	0.9748	0.9300	1.0700	0.9260	1.0235	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314894	4LOWW0	138.0	345	365	0.2214	1.0239	0.9300	1.0700	0.9822	1.0856	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314901	8BATH CO	500.0	345	366	0.2694	1.0500	0.9300	1.0700	0.9975	1.1025	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
314912	8LENGTTH	500.0	345	366	0.2887	1.0463	0.9300	1.0700	0.9944	1.0991	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315156	1HALLDRI	13.8	345	358	0.8634	1.0000	0.9300	1.0700	0.9500	1.0500	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315165	1HURT 1	13.8	345	358	0.8974	0.9935	0.9300	1.0700	0.9438	1.0431	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315166	1HURT 2	13.8	345	358	0.8974	0.9935	0.9300	1.0700	0.9438	1.0431	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315201	1BATH 1A	20.5	345	366	0.2779	1.0293	0.9300	1.0700	0.9769	1.0797	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315202	1BATH 2B	20.5	345	366	0.2869	1.0283	0.9300	1.0700	0.9769	1.0797	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315203	1BATH 3C	20.5	345	366	0.2859	1.0278	0.9300	1.0700	0.9764	1.0792	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315204	1BATH 4D	20.5	345	366	0.2772	1.0270	0.9300	1.0700	0.9764	1.0792	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315205	1BATH 5E	20.5	345	366	0.2772	1.0281	0.9300	1.0700	0.9767	1.0795	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1
315206	1BATH 6F	20.5	345	366	0.2762	1.0281	0.9300	1.0700	0.9767	1.0795	LD	53807	D:8BATH CO-EVALLEY 1 +8DOOMS -8LENGTH1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
B50461	BATH 3B1	1.0	345	366	0.2646	1.0249	0.9300	1.0700	0.9737	1.0762	LD	53807	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
B50462	BATH 3B3	1.0	345	366	0.2588	1.0224	0.9300	1.0700	0.9713	1.0735	LD	53807	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
B50463	BATH 3W5	1.0	345	366	0.2583	1.0227	0.9300	1.0700	0.9716	1.0739	LD	53807	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1
B51032	HURT 3W0	1.0	345	358	0.8622	0.9995	0.9300	1.0700	0.9495	1.0495	LD	53807	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTN1

CATEGORY D

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:42 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV B GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav
Subsys.File X:\S2015\dvp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015 Category D Alts.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating %	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	70.0	99.8	**	Base Case **

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:42 <V0V003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT 230KV B GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kvAltB.sav
Subsys.File X:\S2015\vdvp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015 Category D Alts.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0721	1.0721	0.9300	1.0700	1.0185	1.1257	H	**	Base Case **
314176	GHARMONY	230.0	345	354	0.9136	1.0249	0.9300	1.0700	0.9736	1.0761	LD	7	Lanexa
314189	6PAPERMI	230.0	345	354	0.9081	1.0173	0.9300	1.0700	0.9665	1.0682	LD	7	Lanexa
314375	6CORRCTN	230.0	345	354	0.9078	1.0165	0.9300	1.0700	0.9657	1.0674	LD	7	Lanexa
314387	31ANEXA	115.0	345	356	0.9505	1.0078	0.9300	1.0700	0.9574	1.0582	D	7	Lanexa
314396	31NEWS58	115.0	345	356	0.9470	1.0045	0.9300	1.0700	0.9543	1.0547	D	7	Lanexa
314411	31TORNO58	115.0	345	356	0.9465	1.0040	0.9300	1.0700	0.9538	1.0542	D	7	Lanexa
314180	6HAYES	230.0	345	354	0.9517	1.0186	0.9300	1.0700	0.9677	1.0695	D	9	Yorktown

CATEGORY B

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:54 <BRV003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
Subsys.File X:\S2015\dvp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\vapsys.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	243.6	142.7	239.0	101.9	1098	314766 6LOUISA 230 314777 6S ANNA 230 1
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	239.0	142.7	239.0	100.0	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
304223	3ROCKYMT115T	115	314554 3BTLBRO	115	LN	91.7	16.3	94.0	97.5	846	314559 3CAROLNA 115 314578 3HORNRTN 115 1
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.6	828.6	993.6	96.7	307	314171 6BRAMB 230 314933 8BRAMBLETON 500 1
314418	6WHEALTN	230	314421 6WINCHST	230	LN	546.7	396.3	574.0	95.2	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	84.6	62.6	89.0	95.1	610	314388 6LANEXA 230 314391 6LIGH209 230 1
314461	3DEEPC46	115	314513 3YADKIN	115	LN	342.5	227.7	360.0	95.1	688	314449 6CHESAPK 230 314514 6YADKIN 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	84.3	62.6	89.0	94.7	609	314387 3LANEXA 115 314396 3NNEWS58 115 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	84.3	62.6	89.0	94.7	620	314396 3NNEWS58 115 314411 3TOAND58 115 1
314212	6FRIVER	230	314222 6HANOVER	230	LN	750.7	547.0	797.0	94.2	285	314138 6MINE RD 230 314197 6LDYSMT1 230 1
314559	3CAROLNA	115	314581 3JACKSON	115	LN	111.1	72.4	118.0	94.1	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314377	3DOW 34	115	314387 3LANEXA	115	LN	83.4	62.6	89.0	93.7	813	314538 6SURREY 230 314540 6POOLSVL 230 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:56 < UDF000.0 >
2015 SUMMER BASE CASE (LTS615511) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:56 <UOV003.0>
2015 SUMMER BASE CASE (LTS615511) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET
Case File X:\S2015\sum_2015(2013LF)_base_wpre_230kv_Altc.sav
Subsys File X:\S2015\drv.sub
Monit File X:\S2015\wapsys.mon
Contn File X:\S2015\wapsys.con
Exclud File none

***** Report on Violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0188	1.1261	H	**	Base Case **
315008	IPOSSM6A	18.0	345	353	0.9255	0.9357	0.9300	1.0700	0.8889	0.9825	L	61 314011	3BULLRUN 115 314111 3HARISON 115 1
315009	IPOSSM6B	18.0	345	353	0.9255	0.9357	0.9300	1.0700	0.8889	0.9825	L	61 314011	3BULLRUN 115 314111 3HARISON 115 1
314014	3CANNONB	115.0	345	353	0.9038	1.0016	0.9300	1.0700	0.9516	1.0517	LD	69 314014	3CANNONB 115 314016 6CANNONB 230 1
314051	3LOWA197	115.0	345	353	0.9041	1.0010	0.9300	1.0700	0.9509	1.0510	LD	69 314014	3CANNONB 115 314016 6CANNONB 230 1
314148	3MCR197	115.0	345	353	0.9041	1.0006	0.9300	1.0700	0.9506	1.0506	LD	69 314014	3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9040	1.0011	0.9300	1.0700	0.9510	1.0511	LD	69 314014	3CANNONB 115 314016 6CANNONB 230 1
314051	3LOWA197	115.0	345	353	0.9205	1.0010	0.9300	1.0700	0.9509	1.0510	LD	70 314014	3CANNONB 115 314155 3CANBR T 115 1
314148	3MCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0506	LD	70 314014	3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9204	1.0011	0.9300	1.0700	0.9510	1.0511	LD	70 314014	3CANNONB 115 314155 3CANBR T 115 1
314158	3GOW197	115.0	345	353	0.9205	1.0005	0.9300	1.0700	0.9504	1.0505	LD	70 314014	3CANNONB 115 314155 3CANBR T 115 1
314160	1 TX503	13.2	345	353	1.0700	1.0058	0.9300	1.0700	0.9555	1.0561	HR	96 314025	1 TX500 13.2 314160 1 TX503 13.2 21
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175 314067	60CCOQUIN 230 314068 60X 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175 314067	60CCOQUIN 230 314068 60X 230 1
314118	3MINNIEV	115.0	345	353	0.9456	0.9969	0.9300	1.0700	0.9471	1.0467	D	179 314068	60X 230 314167 30X 115 1
314167	30X	115.0	345	352	0.9457	1.0045	0.9300	1.0700	0.9543	1.0547	D	179 314068	60X 230 314167 30X 115 1
315008	IPOSSM6A	18.0	345	353	0.9217	0.9357	0.9300	1.0700	0.8889	0.9825	L	191 314073	3POSSUM 115 314074 6POSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9217	0.9357	0.9300	1.0700	0.8889	0.9825	L	191 314073	3POSSUM 115 314074 6POSSUM 230 1
315009	IPOSSM6B	18.0	345	353	0.9219	0.9357	0.9300	1.0700	0.8889	0.9825	L	204 314074	6POSSUM 230 315008 IPOSSM6A 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9219	0.9357	0.9300	1.0700	0.8889	0.9825	L	204 314074	6POSSUM 230 315009 IPOSSM6B 18.0 1
315008	IPOSSM6A	18.0	345	353	0.9225	0.9357	0.9300	1.0700	0.8889	0.9825	L	206 314074	6POSSUM 230 315010 IPOSSM6S 18.0 1
315009	IPOSSM6B	18.0	345	353	0.9225	0.9357	0.9300	1.0700	0.8889	0.9825	L	206 314074	6POSSUM 230 315010 IPOSSM6S 18.0 1
314118	3MINNIEV	115.0	345	353	0.9438	0.9969	0.9300	1.0700	0.9471	1.0467	D	253 314118	3MINNIEV 115 314156 3BRISTER 115 1
314122	3SOWEZO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0516	D	259 314122	3SOWEZO 115 314141 3LIBERTY 115 1
314049	3LOWA172	115.0	345	353	0.9203	0.9827	0.9300	1.0700	0.9336	1.0319	D	260 314123	3WELLGYN 115 314141 3LIBERTY 115 1
314123	3WELLGYN	115.0	345	353	0.9285	0.9853	0.9300	1.0700	0.9360	1.0345	LD	260 314123	3WELLGYN 115 314141 3LIBERTY 115 1
314147	3MCR172	115.0	345	353	0.9301	0.9828	0.9300	1.0700	0.9337	1.0319	D	260 314123	3WELLGYN 115 314141 3LIBERTY 115 1

Bus #	Bus Name	KV	Area	Zone	ContVol. t	BaseVol t	LowLimi t	UppLimi t	VoltDro p	VoltRis e	Viol	Noon	Contingency Description
314157	3GOWM172	115.0	345	353	0.9296	0.9836	0.9300	1.0700	0.9346	1.0330	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314122	3SOWE60	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0516	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0546	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314049	3LOM172	115.0	345	353	0.9304	0.9827	0.9300	1.0700	0.9336	1.0319	D	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9286	0.9853	0.9300	1.0700	0.9360	1.0345	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9286	0.9863	0.9300	1.0700	0.9370	1.0357	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314147	3MCR197	115.0	345	353	0.9302	0.9828	0.9300	1.0700	0.9377	1.0319	D	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
314157	3GOWM172	115.0	345	353	0.9297	0.9836	0.9300	1.0700	0.9346	1.0330	LD	269	314133 3LIBERTY 230 314141 3LIBERTY 115 1
315008	1POSSM6A	18.0	345	353	0.9251	0.9357	0.9300	1.0700	0.8889	0.9825	L	273	314134 3CRANES 230 314142 6STAFORD 230 1
315009	1POSSM6B	18.0	345	353	0.9251	0.9357	0.9300	1.0700	0.8889	0.9825	L	273	314134 3CRANES 230 314142 6STAFORD 230 1
314775	3NI RVER	115.0	345	363	0.9546	1.0132	0.9300	1.0700	0.9625	1.0638	D	275	314135 3CHANCE 115 314775 3NI RVER 115 1
314151	3SLABTWN	115.0	345	355	0.9530	1.0051	0.9300	1.0700	0.9549	1.0554	D	280	314136 3FREDRNG 115 314151 3SLABTWN 115 1
315008	1POSSM6A	18.0	345	353	0.9203	0.9357	0.9300	1.0700	0.8889	0.9825	L	282	314137 3FREDRNG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9203	0.9357	0.9300	1.0700	0.8889	0.9825	L	282	314137 3FREDRNG 230 314138 6MINE RD 230 1
315008	1POSSM6A	18.0	345	353	0.9195	0.9357	0.9300	1.0700	0.8889	0.9825	L	289	314142 6STAFORD 230 314145 6AQUIT HARB B 230 1
315009	1POSSM6B	18.0	345	353	0.9184	0.9357	0.9300	1.0700	0.8889	0.9825	L	289	314142 6STAFORD 230 314145 6AQUIT HARB B 230 1
314148	3MCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0506	LD	289	314148 3MCR197 115 314155 3CANBR T 115 1
314158	3GOWM197	115.0	345	353	0.9205	1.0005	0.9300	1.0700	0.9504	1.0505	LD	289	314148 3MCR197 115 314155 3CANBR T 115 1
314176	3HARMONY	230.0	345	354	1.1430	1.0307	0.9300	1.0700	0.9791	1.0822	HR	318	314176 3HARMONY 230 314189 6PAPERMILL 230 1
314180	3HAYES	230.0	345	354	0.9612	1.0376	0.9300	1.0700	0.9658	1.0895	D	321	314180 3HAYES 230 314423 3YORKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1453	1.0197	0.9300	1.0700	0.9667	1.0749	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314526	3HANDSON	115.0	345	360	1.0743	1.0237	0.9300	1.0700	0.9725	1.0749	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314534	3S HAMP	115.0	345	360	1.0724	1.0258	0.9300	1.0700	0.9745	1.0771	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314541	3WATKINS	115.0	345	360	1.0723	1.0269	0.9300	1.0700	0.9755	1.0782	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314558	3BOYKINS	115.0	345	362	1.0790	1.0189	0.9300	1.0700	0.9679	1.0698	HR	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314587	3HARGTSV	115.0	345	362	1.1024	1.0179	0.9300	1.0700	0.9670	1.0688	HR	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314604	3SEABORD	115.0	345	362	1.1138	1.0176	0.9300	1.0700	0.9667	1.0684	HR	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314825	3WATKI 1	115.0	345	360	1.0728	1.0274	0.9300	1.0700	0.9760	1.0788	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314827	3WATKI 2	115.0	345	360	1.0728	1.0274	0.9300	1.0700	0.9760	1.0788	H	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314835	3CAROL 1	115.0	345	362	1.1463	1.0208	0.9300	1.0700	0.9697	1.0718	HR	431	314259 3CAR56 1 115 314559 3CAROLNA 115 1
314328	3PLAZA	230.0	345	357	0.9204	1.0056	0.9300	1.0700	0.9553	1.0559	LD	566	314328 3PLAZA 230 314338 6SOWEST 230 1
314382	3GRAFT58	115.0	345	356	0.9411	0.9938	0.9300	1.0700	0.9441	1.0435	D	603	314382 3GRAFT58 115 314422 3YORKTWN 115 1
314524	3FRANKLN	115.0	345	360	1.0764	1.0255	0.9300	1.0700	0.9743	1.0768	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0784	1.0136	0.9300	1.0700	0.9630	1.0643	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMP	115.0	345	360	1.0728	1.0258	0.9300	1.0700	0.9745	1.0771	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3JUNCAMP	115.0	345	360	1.0796	1.0249	0.9300	1.0700	0.9736	1.0761	HR	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0750	1.0269	0.9300	1.0700	0.9755	1.0782	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3JUNCAM 1	115.0	345	360	1.0803	1.0256	0.9300	1.0700	0.9743	1.0768	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0755	1.0274	0.9300	1.0700	0.9760	1.0788	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0755	1.0274	0.9300	1.0700	0.9760	1.0788	H	795	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRANKLN	115.0	345	360	1.0800	1.0255	0.9300	1.0700	0.9743	1.0768	HR	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1
314534	3S HAMP	115.0	345	360	1.0760	1.0258	0.9300	1.0700	0.9745	1.0771	H	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1
314539	3JUNCAMP	115.0	345	360	1.0835	1.0249	0.9300	1.0700	0.9736	1.0761	HR	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1
314541	3WATKINS	115.0	345	360	1.0793	1.0269	0.9300	1.0700	0.9755	1.0782	HR	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1
314824	3JUNCAM 1	115.0	345	360	1.0793	1.0269	0.9300	1.0700	0.9743	1.0768	HR	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1
314826	3WATKI 1	115.0	345	360	1.0843	1.0274	0.9300	1.0700	0.9760	1.0788	HR	796	314527 3HOLLAND 115 314539 3JUNCAMP 115 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 15:56 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS615511) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UpLim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314827	SWATKI 2	115.0	345	360	1.0789	1.0274	0.9300	1.0700	0.9760	1.0788	HR	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
315115	ISHAMPT1	13.8	345	360	1.0475	0.9954	0.9300	1.0700	0.9456	1.0451	R	796	314527 3HOLLAND 115 314539 3UNCAMP 115 1
314516	3BRUNS 1	115.0	345	358	1.0797	1.0092	0.9300	1.0700	0.9587	1.0596	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314565	3CLHSH71	115.0	345	362	1.1030	1.0017	0.9300	1.0700	0.9516	1.0518	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314675	3BROUNAX	115.0	345	358	1.0691	1.0071	0.9300	1.0700	0.9568	1.0575	R	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314676	3BRUNSWR	115.0	345	358	1.0792	1.0087	0.9300	1.0700	0.9582	1.0591	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314693	3PEMAN D	115.0	345	358	1.0942	1.0043	0.9300	1.0700	0.9541	1.0545	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314704	3LAWRNC	115.0	345	358	1.0846	1.0072	0.9300	1.0700	0.9568	1.0576	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314721	3SO HILL	115.0	345	358	1.0574	1.0055	0.9300	1.0700	0.9552	1.0557	R	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314782	2BRUNSWC	69.0	345	358	1.0516	1.0289	0.9300	1.0700	0.9775	1.0804	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314785	2DANL/TWN	69.0	345	358	1.0494	0.9765	0.9300	1.0700	0.9277	1.0253	R	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314786	2GRASBURG	69.0	345	358	1.0868	1.0129	0.9300	1.0700	0.9623	1.0636	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314787	2BRUNSW2	69.0	345	358	1.0727	1.0015	0.9300	1.0700	0.9515	1.0516	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314850	3CLHBS 1	115.0	345	362	1.1036	1.0022	0.9300	1.0700	0.9521	1.0523	HR	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314872	2BRUNSWIC	69.0	345	358	1.0605	0.9884	0.9300	1.0700	0.9390	1.0378	R	855	314562 3CLUBHSE 115 314565 3CLHSH71 115 21
314641	3KITTY H	115.0	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
314646	3KITTY 4	34.5	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
314650	3KITTY 5	34.5	345	361	1.0745	1.0423	0.9300	1.0700	0.9902	1.0944	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
315146	3KITTYHKA	13.8	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
315147	3KITTYHKB	13.8	345	361	1.0746	1.0424	0.9300	1.0700	0.9903	1.0945	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
BS1105	KITT 3W4	1.0	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
BS1106	KITT 3W5	1.0	345	361	1.0746	1.0424	0.9300	1.0700	0.9903	1.0945	H	940	314635 3COLNGTGP 115 314641 3KITTY H 115 1
314635	3COLNGTGP	115.0	345	361	1.0745	1.0266	0.9300	1.0700	0.9752	1.0779	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314636	3COLNG2	115.0	345	361	1.0745	1.0266	0.9300	1.0700	0.9753	1.0779	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314641	3KITTY H	115.0	345	361	1.0743	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314646	3KITTY 4	34.5	345	361	1.0743	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314650	3KITTY 5	34.5	345	361	1.0751	1.0423	0.9300	1.0700	0.9902	1.0944	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314829	3COLIN 1	115.0	345	361	1.0745	1.0266	0.9300	1.0700	0.9753	1.0779	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
315146	3KITTYHKA	13.8	345	361	1.0743	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
315147	3KITTYHKB	13.8	345	361	1.0752	1.0424	0.9300	1.0700	0.9903	1.0945	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
BS1105	KITT 3W4	1.0	345	361	1.0743	1.0414	0.9300	1.0700	0.9893	1.0935	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
BS1106	KITT 3W5	1.0	345	361	1.0752	1.0424	0.9300	1.0700	0.9903	1.0945	H	941	314635 3COLNGTGP 115 314720 3 52T190 115 1
314348	2GRETN 1	69.0	345	358	1.0805	1.0169	0.9300	1.0700	0.9661	1.0678	HR	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314732	2GRNA FB	69.0	345	358	1.0803	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314737	2SW35T57	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0714	H	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0704	1.0203	0.9300	1.0700	0.9693	1.0714	H	1048	314731 2GRETNA 69.0 314732 2GRNA FB 69.0 21
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9661	1.0678	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314731	2GRETNA	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314732	2GRNA FB	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	1049	314731 2GRETNA 69.0 314733 2GRNA DP 69.0 1
314763	3KIDDESTO	115.0	345	363	0.9258	0.9931	0.9300	1.0700	0.9435	1.0428	LD	1062	314744 3BREMO 115 314763 3KIDDESTO 115 1

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 16:53 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
 Subsys.File X:\S2015\divp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314025	1 TX500	13.2	314148 3MICR197	115	TR	56.3	32.5	45.0	125.0	499	TX-1 3MICR17
314147	3MICR172	115	314160 1 TX503	13.2	TR	51.6	33.3	45.0	114.6	455	TX-1 3MICR19
314025	1 TX500	13.2	314148 3MICR197	115	TR	50.1	32.5	45.0	111.2	495	TX-1 6LIBERT
314025	1 TX500	13.2	314148 3MICR197	115	TR	46.0	32.5	45.0	102.1	152	LN 172
314757	3GORDNVL	115	314776 3SOMRSET	115	LN	242.9	142.7	239.0	101.6	226	LN 255
314072	6PL VIEW	230	314925 8PL VIEW	500	TR	960.6	828.6	993.6	96.7	504	TX-1 8BRAMBL
314461	3DEEPC46	115	314513 3YADKIN	115	LN	342.5	227.7	360.0	95.1	235	LN 262
314212	6FERRIVER	230	314222 6HANOVER	230	LN	750.3	547.0	797.0	94.1	395	LN 2090
314418	6WHEALTN	230	314421 6WINCHST	230	LN	538.2	396.3	574.0	93.8	237	LN 263
314559	3CAROLINA	115	314581 3JACKSON	115	LN	110.4	72.4	118.0	93.6	327	LN 2012

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 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 16:55 <VOV003.0>
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum2015(2013LF)_base_wpre_230kv AltC.sav
 Subsys.File X:\S2015\sdvp.sub
 Monit.File X:\S2015\vpasys.mon
 Contin.File X:\S2015\sum2015_single.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0188	1.1261	H	45	LN 52
314641	IKITTY H	115.0	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
314646	IKITTY 4	34.5	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
314650	IKITTY 5	34.5	345	361	1.0745	1.0423	0.9300	1.0700	0.9902	1.0944	H	45	LN 52
315146	IKITYHKA	13.8	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
315147	IKITYHKB	13.8	345	361	1.0746	1.0424	0.9300	1.0700	0.9903	1.0945	H	45	LN 52
B91105	KITT 3W4	1.0	345	361	1.0736	1.0414	0.9300	1.0700	0.9893	1.0935	H	45	LN 52
B91106	KITT 3W5	1.0	345	361	1.0746	1.0424	0.9300	1.0700	0.9903	1.0945	H	45	LN 52
314524	3FRKLN	115.0	345	360	1.0801	1.0255	0.9300	1.0700	0.9743	1.0768	HR	61	LN 68
314534	3S HAMPT	115.0	345	360	1.0761	1.0258	0.9300	1.0700	0.9745	1.0771	HR	61	LN 68
314539	3UNCAMP	115.0	345	360	1.0836	1.0249	0.9300	1.0700	0.9736	1.0761	HR	61	LN 68
314541	3WATKINS	115.0	345	360	1.0783	1.0269	0.9300	1.0700	0.9755	1.0782	HR	61	LN 68
314824	3UNCAM 1	115.0	345	360	1.0843	1.0256	0.9300	1.0700	0.9743	1.0768	HR	61	LN 68
314826	3WATKI 1	115.0	345	360	1.0789	1.0274	0.9300	1.0700	0.9760	1.0788	HR	61	LN 68
314827	3WATKI 2	115.0	345	360	1.0789	1.0274	0.9300	1.0700	0.9760	1.0788	HR	61	LN 68
315115	1SHAMPT1	13.8	345	360	1.0476	0.9954	0.9300	1.0700	0.9456	1.0451	R	61	LN 68
315008	1POSSM6A	18.0	345	353	0.9255	0.9357	0.9300	1.0700	0.8889	0.9825	L	122	LN 134
315009	1POSSM6B	18.0	345	353	0.9255	0.9357	0.9300	1.0700	0.8889	0.9825	L	122	LN 134
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9661	1.0678	HR	153	LN 173
314731	2GRETN A	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314732	2GRNA FB	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153	LN 173
314874	2LN 174	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	154	LN 174
314878	2LN 178	69.0	345	351	1.0782	1.0195	0.9300	1.0700	0.9685	1.0705	HR	156	LN 178
314879	2LN 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	157	LN 179
314880	2LN 180	69.0	345	351	1.0785	1.0195	0.9300	1.0700	0.9685	1.0705	HR	158	LN 180
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0516	D	159	LN 181

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 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltBro P	VoltRis e	Viol	Ncon	Contingency Description
314051	310WA197	115.0	345	353	0.9343	1.0010	0.9300	1.0700	0.9509	1.0510 D		172 LN 197	
314148	3MICR197	115.0	345	353	0.9091	1.0006	0.9300	1.0700	0.9506	1.0506 LD		172 LN 197	
314158	3GOW197	115.0	345	353	0.9469	1.0005	0.9300	1.0700	0.9504	1.0505 D		172 LN 197	
314014	3CANNONE	115.0	345	353	0.9002	1.0016	0.9300	1.0700	0.9516	1.0517 LD		326 LN 2011	
314051	310WA197	115.0	345	353	0.9005	1.0010	0.9300	1.0700	0.9509	1.0510 LD		326 LN 2011	
314148	3MICR197	115.0	345	353	0.9005	1.0006	0.9300	1.0700	0.9506	1.0506 LD		326 LN 2011	
314155	3CANBR T	115.0	345	353	0.9004	1.0011	0.9300	1.0700	0.9510	1.0511 LD		326 LN 2011	
314158	3GOW197	115.0	345	353	0.9007	1.0005	0.9300	1.0700	0.9504	1.0505 LD		326 LN 2011	
315001	10MF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259 R		328 LN 2013	
315002	10MF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259 R		328 LN 2013	
315008	1POSSM6A	18.0	345	353	0.9204	0.9357	0.9300	1.0700	0.8889	0.9825 L		395 LN 2090	
315009	1POSSM6B	18.0	345	353	0.9204	0.9357	0.9300	1.0700	0.8889	0.9825 L		395 LN 2090	
315008	1POSSM6A	18.0	345	353	0.9195	0.9357	0.9300	1.0700	0.8889	0.9825 L		407 LN 2104	
315009	1POSSM6B	18.0	345	353	0.9184	0.9357	0.9300	1.0700	0.8889	0.9825 L		407 LN 2104	
314180	6HAYES	230.0	345	354	0.9612	1.0376	0.9300	1.0700	0.9858	1.0895 D		423 LN 2122	
314118	3MINN1EV	115.0	345	353	0.9456	0.9969	0.9300	1.0700	0.9471	1.0467 D		470 TX-1 60X	
314167	30X	115.0	345	352	0.9457	1.0045	0.9300	1.0700	0.9543	1.0547 D		470 TX-1 60X	
315008	1POSSM6A	18.0	345	353	0.9217	0.9357	0.9300	1.0700	0.8889	0.9825 L		475 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9217	0.9357	0.9300	1.0700	0.8889	0.9825 L		475 TX-1 6POSSUM	
315009	1POSSM6B	18.0	345	353	0.9219	0.9357	0.9300	1.0700	0.8889	0.9825 L		481 TX-1 6POSSU4	
315008	1POSSM6A	18.0	345	353	0.9219	0.9357	0.9300	1.0700	0.8889	0.9825 L		482 TX-1 6POSSU5	
315008	1POSSM6A	18.0	345	353	0.9225	0.9357	0.9300	1.0700	0.8889	0.9825 L		483 TX-1 6POSSU6	
315009	1POSSM6B	18.0	345	353	0.9225	0.9357	0.9300	1.0700	0.8889	0.9825 L		483 TX-1 6POSSU6	
314122	3SOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0516 D		492 TX-1 6BRISTE	
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0546 D		492 TX-1 6BRISTE	
314049	310WA172	115.0	345	353	0.9304	0.9827	0.9300	1.0700	0.9336	1.0319 D		495 TX-1 6LIBERT	
314123	3WELLGTON	115.0	345	353	0.9286	0.9853	0.9300	1.0700	0.9360	1.0345 LD		495 TX-1 6LIBERT	
314141	3LIBERTY	115.0	345	353	0.9286	0.9863	0.9300	1.0700	0.9370	1.0357 LD		495 TX-1 6LIBERT	
314147	3MICR172	115.0	345	353	0.9302	0.9828	0.9300	1.0700	0.9337	1.0319 D		495 TX-1 6LIBERT	
314157	3GOW172	115.0	345	353	0.9297	0.9838	0.9300	1.0700	0.9346	1.0330 LD		495 TX-1 6LIBERT	

CATEGORY C

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:51 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:51 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contn.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **
235496	01NSHEND	138	314809	3N SHEND	115	TR	513.0	90.3	283.0	181.3	7	2017&9020
235513	01STRASB	138	314797	4EDINBRG	138	LN	645.5	49.7	222.0	290.7	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	523.0	24.8	166.8	313.6	7	2017&9020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	523.0	24.8	166.8	313.6	7	2017&9020
314796	3EDINBRG	115	314807	3MT JACK	115	LN	574.7	103.2	287.0	200.2	7	2017&9020
314798	3MERCK5	115	314802	3GROTOES	115	LN	513.7	74.6	251.0	204.7	7	2017&9020
314798	3MERCK5	115	314809	3N SHEND	115	LN	468.7	7.9	251.0	186.7	7	2017&9020
314799	3ENDICAV	115	314800	6ENDICAV	230	TR	5921.6	88.1	258.5	2290.8	7	2017&9020
314799	3ENDICAV	115	314800	6ENDICAV	230	TR	5999.3	89.3	311.8	1924.1	7	2017&9020
314799	3ENDICAV	115	314800	6ENDICAV	230	TR	5921.6	88.1	258.5	2290.8	7	2017&9020
314799	3ENDICAV	115	314807	3MT JACK	115	LN	575.2	117.6	359.0	160.2	7	2017&9020
314799	3ENDICAV	115	314809	3N SHEND	115	LN	752.7	82.6	251.0	299.9	7	2017&9020
314802	3GROTOES	115	314803	6GROTOES	230	TR	424.0	90.2	287.0	146.7	7	2017&9020
314377	3DOW 34	115	314378	3FTEUS34	115	LN	130.8	61.0	103.0	126.9	9	214&263
314377	3DOW 34	115	314387	3LANEXA	115	LN	132.3	62.6	103.0	128.4	9	214&263
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	118.7	49.7	103.0	115.2	9	214&263
314391	6LIGH209	230	314415	6WALR209	230	LN	558.7	243.0	541.0	103.3	9	214&263
314461	3DEEPC46	115	314513	3YADKIN	115	LN	411.2	227.7	414.0	99.3	15	262b&2018
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	337.3	118.3	287.9	117.2	45	257&2099
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	317.8	111.2	265.2	119.8	45	257&2099

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:51 <VOW003.0>
 2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\avapsys.mon
 Contin.File X:\S2015\2015_rtep_tower_contingency_DWP.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	Voltris e	Viol	Ncon	Contingency Description ** Base Case **
315218	LCUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0188	1.1261	H	7	201769020
314796	BEDINBRG	115.0	345	364	1.6723	1.0223	0.9300	1.0700	0.9712	1.0734	HR	7	201769020
314797	4EDINBRG	138.0	345	364	1.5706	0.9992	0.9300	1.0700	0.9493	1.0492	HR	7	201769020
314798	3MERCK5	115.0	345	364	1.4477	0.9977	0.9300	1.0700	0.9478	1.0476	HR	7	201769020
314799	5ENDLCAV	115.0	345	364	2.1087	0.9991	0.9300	1.0700	0.9491	1.0490	HR	7	201769020
314800	6ENDLCAV	230.0	345	364	3.1635	1.0374	0.9300	1.0700	0.9855	1.0893	HR	7	201769020
314802	3GROTOES	115.0	345	364	1.1480	1.0027	0.9300	1.0700	0.9525	1.0528	HR	7	201769020
314803	6GROTOES	230.0	345	364	1.0755	1.0320	0.9300	1.0700	0.9804	1.0836	H	7	201769020
314807	3MT JACK	115.0	345	364	1.9221	1.0078	0.9300	1.0700	0.9574	1.0582	HR	7	201769020
314809	3N SHEND	115.0	345	364	1.7698	0.9973	0.9300	1.0700	0.9474	1.0471	HR	7	201769020
314814	3TIMBERV	115.0	345	364	2.1181	0.9887	0.9300	1.0700	0.9392	1.0381	HR	7	201769020
314886	BEDINB 1	115.0	345	364	1.6732	1.0230	0.9300	1.0700	0.9719	1.0742	HR	7	201769020
314887	BENDLC 1	115.0	345	364	2.1101	0.9997	0.9300	1.0700	0.9497	1.0497	HR	7	201769020
314889	3MERCK 1	115.0	345	364	1.4467	0.9983	0.9300	1.0700	0.9484	1.0482	HR	7	201769020
315008	1POSSM6A	18.0	345	353	0.9211	0.9357	0.9300	1.0700	0.8889	0.9825	L	7	201769020
315009	1POSSM6B	18.0	345	353	0.9211	0.9357	0.9300	1.0700	0.8889	0.9825	L	7	201769020
314180	GHATES	230.0	345	354	0.9852	1.0376	0.9300	1.0700	0.9858	1.0895	D	9	2146263
314376	6DENBIGH	230.0	345	356	0.9771	1.0299	0.9300	1.0700	0.9784	1.0814	D	9	2146263
314386	6KINGS M	230.0	345	356	0.9759	1.0273	0.9300	1.0700	0.9759	1.0787	D	9	2146263
314398	6NP NEWS	230.0	345	356	0.9930	1.0381	0.9300	1.0700	0.9862	1.0900	D	9	2146263
314399	6FENEROK	230.0	345	356	0.9815	1.0371	0.9300	1.0700	0.9852	1.0889	D	9	2146263
314402	6PENINSL	230.0	345	356	0.9836	1.0406	0.9300	1.0700	0.9886	1.0927	D	9	2146263
314407	6SHELLENK	230.0	345	356	0.9801	1.0360	0.9300	1.0700	0.9842	1.0878	D	9	2146263
314409	6TABB	230.0	345	356	0.9826	1.0382	0.9300	1.0700	0.9863	1.0901	D	9	2146263
314423	6YORKTWN	230.0	345	356	0.9838	1.0361	0.9300	1.0700	0.9843	1.0879	D	9	2146263
314442	6NP NE 1	230.0	345	356	0.9850	1.0402	0.9300	1.0700	0.9882	1.0922	D	9	2146263

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 16:51 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314450	GYORKT 1	230.0	345	356	0.9871	1.0395	0.9300	1.0700	0.9875	1.0915	D	9	2144263
315062	ICHEST57	13.8	345	357	1.0447	0.9886	0.9300	1.0700	0.9392	1.0381	R	9	2144263
315064	ICHEST58	13.8	345	357	1.0519	0.9879	0.9300	1.0700	0.9385	1.0373	R	9	2144263
315092	LYORKTN3	25.0	345	356	0.9338	1.0361	0.9300	1.0700	0.9843	1.0879	D	9	2144263
314331	EOE	230.0	345	357	1.0704	1.0260	0.9300	1.0700	0.9747	1.0773	H	19	200242003
314180	HAVES	230.0	345	354	1.0707	1.0376	0.9300	1.0700	0.9858	1.0895	H	21	2094285
314402	GENINEL	230.0	345	356	1.0706	1.0406	0.9300	1.0700	0.9886	1.0927	H	21	2094285
314450	GYORKT 1	230.0	345	356	1.0728	1.0395	0.9300	1.0700	0.9875	1.0915	H	21	2094285
314497	SEMLSP	230.0	345	359	0.8454	1.0065	0.9300	1.0700	0.9561	1.0568	LD	45	25742099
314500	GNAYS	230.0	345	359	0.8454	1.0065	0.9300	1.0700	0.9561	1.0568	LD	45	25742099
314501	GNAYST	230.0	345	359	0.8454	1.0064	0.9300	1.0700	0.9561	1.0567	LD	45	25742099
314505	GNAYN	230.0	345	359	0.8454	1.0065	0.9300	1.0700	0.9562	1.0568	LD	45	25742099
314510	GNAYN1	230.0	345	359	0.8452	1.0063	0.9300	1.0700	0.9560	1.0566	LD	45	25742099
315008	IPOSSM6A	18.0	345	353	0.9252	0.9357	0.9300	1.0700	0.8889	0.9825	L	47	20042442051
315009	IPOSSM6B	18.0	345	353	0.9252	0.9357	0.9300	1.0700	0.8889	0.9825	L	50	2044220
315008	IPOSSM6A	18.0	345	353	0.9220	0.9357	0.9300	1.0700	0.8889	0.9825	L	50	2044220
315009	IPOSSM6B	18.0	345	353	0.9220	0.9357	0.9300	1.0700	0.8889	0.9825	L	58	23742022
315008	IPOSSM6A	18.0	345	353	0.9252	0.9357	0.9300	1.0700	0.8889	0.9825	L	58	23742022
315009	IPOSSM6B	18.0	345	353	0.9252	0.9357	0.9300	1.0700	0.8889	0.9825	L	60	24842013
315001	LOMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	63	2514266
315002	LOMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	63	2514266
315008	IPOSSM6A	18.0	345	353	0.9256	0.9357	0.9300	1.0700	0.8889	0.9825	L	72	26642022
315009	IPOSSM6B	18.0	345	353	0.9256	0.9357	0.9300	1.0700	0.8889	0.9825	L	72	26642022
315008	IPOSSM6A	18.0	345	353	0.9231	0.9357	0.9300	1.0700	0.8889	0.9825	L	84	25642090
315009	IPOSSM6B	18.0	345	353	0.9231	0.9357	0.9300	1.0700	0.8889	0.9825	L	84	25642090
315008	IPOSSM6A	18.0	345	353	0.9207	0.9357	0.9300	1.0700	0.8889	0.9825	L	84	25642090
315009	IPOSSM6B	18.0	345	353	0.9207	0.9357	0.9300	1.0700	0.8889	0.9825	L	84	25642090

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:07 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT GEN RET

Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiiffesCreek Application\Rebuttal Study\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	1	TR	69.9	70.0	99.8	**	Base Case **
313813	3OCRA	115	314178	3LANCAST	115	1	LN	310.9	269.0	115.6	663	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	327.3	269.0	121.7	663	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	273.5	30.1	109.8	663	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	340.4	169.0	201.4	663	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314178	3LANCAST	115	1	LN	324.4	269.0	120.6	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	341.5	269.0	126.9	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178	3LANCAST	115	1	LN	288.6	249.0	115.9	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181	3NORNECK	115	1	LN	254.1	249.0	102.0	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	356.4	169.0	210.9	664	D:6DAHLGRE-6ARNOLDS1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	188.0	169.0	111.2	985	D:6DAHLGRE-60AKGROV1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115	314182	6NORNECK	230	2	TR	226.0	206.6	109.4	985	D:6DAHLGRE-60AKGROV1 +6DUNNSVL-6NORNECK1
313813	3OCRA	115	314191	3WHITE S	115	1	LN	277.7	269.0	103.2	986	D:6DAHLGRE-60AKGROV1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	289.0	169.0	171.0	986	D:6DAHLGRE-60AKGROV1 +6DUNNSVL-6LANEXA 1
314377	3DOW 34	115	314378	3FTEUS34	115	1	LN	106.9	103.0	103.8	2640	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	108.4	103.0	105.3	2640	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314418	6WHEALT	230	314421	6WINCHST	230	1	LN	575.3	671.0	100.6	2643	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FTEUS34	115	1	LN	102.3	103.0	99.3	2644	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.8	103.0	100.8	2644	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314378	3FTEUS34	115	1	LN	117.9	103.0	114.5	2671	D:6BENCHRC-6NP NEWS1 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	119.5	103.0	116.0	2671	D:6BENCHRC-6NP NEWS1 +6WHEALT-6WINCHST1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	LN	106.8	103.0	103.6	2671	D:6BENCHRC-6NP NEWS1 +6WHEALT-6WINCHST1
314377	3DOW 34	115	314378	3FTEUS34	115	1	LN	131.8	103.0	128.0	2673	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	133.3	103.0	129.4	2673	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381	3GRAFT34	115	1	LN	119.4	103.0	115.9	2673	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314391	6LIGH209	230	314415 6WALR209	230	1	LN	559.5	243.0	541.0	103.4	2673	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	133.4	61.0	103.0	129.6	2819	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	134.9	62.6	103.0	131.0	2819	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	121.1	49.7	103.0	117.6	2819	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	567.2	243.0	541.0	104.8	2819	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	102.8	62.6	103.0	99.8	2953	D:6BENCHRC-6CHCKTUK1 +3LANEXA -3NNWS581
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	108.6	61.0	103.0	105.4	2956	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	110.1	62.6	103.0	106.9	2956	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	672.9	396.3	671.0	100.3	2956	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	689.1	396.3	671.0	102.7	2959	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	103.9	61.0	103.0	100.9	2960	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	105.5	62.6	103.0	102.4	2960	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	102.8	62.6	103.0	99.8	2966	D:6BENCHRC-6CHCKTUK1 +3NNWS58-3TOANO581
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	120.6	61.0	103.0	117.1	2987	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	122.1	62.6	103.0	118.6	2987	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	109.1	49.7	103.0	105.9	2987	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	135.5	61.0	103.0	131.5	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	136.9	62.6	103.0	133.0	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	122.9	49.7	103.0	119.3	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	572.6	243.0	541.0	105.8	2989	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	137.2	61.0	103.0	133.2	3135	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	138.7	62.6	103.0	134.7	3135	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	124.6	49.7	103.0	121.0	3135	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	580.2	243.0	541.0	107.2	3135	D:6BENCHRC-6CHCKTUK1 +6SURREY -6POOLSVL1
313813	3OCRAN	115	314178 3LANCAST	115	1	LN	312.8	16.3	269.0	116.3	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115	314191 3WHITE S	115	1	LN	328.7	24.1	269.0	122.2	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178 3LANCAST	115	1	LN	277.1	30.1	249.0	111.3	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191 3WHITE S	115	1	LN	341.5	31.1	169.0	202.1	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115	314178 3LANCAST	115	1	LN	322.9	16.3	269.0	120.1	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAN	115	314191 3WHITE S	115	1	LN	340.0	24.1	269.0	126.4	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178 3LANCAST	115	1	LN	287.2	30.1	249.0	115.3	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181 3NORNECK	115	1	LN	252.4	50.2	249.0	101.4	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191 3WHITE S	115	1	LN	355.2	31.1	169.0	210.2	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAN	115	314178 3LANCAST	115	1	LN	311.9	16.3	269.0	116.0	4150	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115	314191 3WHITE S	115	1	LN	327.9	24.1	269.0	121.9	4150	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115	314178 3LANCAST	115	1	LN	275.7	30.1	249.0	110.7	4150	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115	314191 3WHITE S	115	1	LN	339.4	31.1	169.0	200.8	4150	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115	314178 3LANCAST	115	1	LN	324.6	16.3	269.0	120.7	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAN	115	314191 3WHITE S	115	1	LN	341.8	24.1	269.0	127.1	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314178 3LANCAST	115	1	LN	288.5	30.1	249.0	115.9	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115	314181 3NORNECK	115	1	LN	253.7	50.2	249.0	101.9	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115	314191 3WHITE S	115	1	LN	357.2	31.1	169.0	211.4	4151	D:6BIRCHWD-6COMORN 1 +6DUNNSVL-6LANEXA 1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314174	3HARMONY	115	314191	3WHITE S	115	1	LN	218.8	31.1	169.0	129.5	4772	D: 60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314177	3HARMONY	115	314191	3WHITE S	115	1	LN	192.3	31.1	169.0	113.8	5407	D: 6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	102.2	62.6	103.0	99.2	14503	D: 6PENNNIMA-6KINGS M1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	103.4	61.0	103.0	100.4	14533	D: 6PENNNIMA-6KINGS M1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	105.0	62.6	103.0	102.0	14533	D: 6PENNNIMA-6KINGS M1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	104.5	61.0	103.0	101.4	14679	D: 6PENNNIMA-6KINGS M1 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	106.1	62.6	103.0	103.0	14779	D: 6PENNNIMA-6KINGS M1 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	102.2	61.0	103.0	99.2	14779	D: 6PENNNIMA-6KINGS M1 +6LIGH285-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.8	62.6	103.0	100.8	14779	D: 6PENNNIMA-6WALR2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	104.8	61.0	103.0	101.8	14809	D: 6PENNNIMA-6WALR2091 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	106.5	62.6	103.0	103.4	14809	D: 6PENNNIMA-6WALR2091 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	105.9	61.0	103.0	102.8	14955	D: 6PENNNIMA-6WALR2091 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	107.5	62.6	103.0	104.4	14955	D: 6PENNNIMA-6WALR2091 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	108.6	61.0	103.0	105.4	18010	D: 6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	110.2	62.6	103.0	107.0	18010	D: 6DENBIGH-6WALR2851 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	103.6	61.0	103.0	100.5	18014	D: 6DENBIGH-6WALR2851 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	105.2	62.6	103.0	102.1	18014	D: 6DENBIGH-6WALR2851 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	102.7	62.6	103.0	99.7	18043	D: 6DENBIGH-6WALR2851 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	102.0	61.0	103.0	99.1	18189	D: 6DENBIGH-6WALR2851 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.7	62.6	103.0	100.7	18189	D: 6DENBIGH-6WALR2851 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	103.3	62.6	103.0	100.3	18273	D: 6DENBIGH-6YORKTWN1 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	104.4	61.0	103.0	101.3	20341	D: 3KINGS M-3TOANO581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	105.9	62.6	103.0	102.8	20341	D: 3KINGS M-3TOANO581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	102.3	62.6	103.0	99.3	20374	D: 3KINGS M-3TOANO581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.2	62.6	103.0	100.1	20520	D: 3KINGS M-3TOANO581 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	102.9	62.6	103.0	99.9	20881	D: 3KINGS M-6YORKTWN1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	102.3	61.0	103.0	99.3	21027	D: 3KINGS M-6YORKTWN1 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.9	62.6	103.0	100.9	21027	D: 3KINGS M-6YORKTWN1 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	111.5	61.0	103.0	108.2	21100	D: 3LANEXA -3NNWS581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	113.0	62.6	103.0	109.7	21100	D: 3LANEXA -3NNWS581 +6LANEXA -6LIGH2091
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	106.9	61.0	103.0	103.8	21104	D: 3LANEXA -3NNWS581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	108.5	62.6	103.0	105.3	21104	D: 3LANEXA -3NNWS581 +6LIGH209-6WALR2091
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	103.2	62.6	103.0	100.1	21131	D: 3LANEXA -3NNWS581 +6WHEALTHN-6WINCHST1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	107.3	61.0	103.0	104.2	21133	D: 3LANEXA -3NNWS581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	108.9	62.6	103.0	105.7	21133	D: 3LANEXA -3NNWS581 +6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	108.2	61.0	103.0	105.0	21279	D: 3LANEXA -3NNWS581 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	109.8	62.6	103.0	106.6	21279	D: 3LANEXA -3NNWS581 +6SUNRY -6POOLSVL1
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	114.9	61.0	103.0	111.6	21853	D: 6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	116.5	62.6	103.0	113.1	21853	D: 6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314378	3FEUS34	115	314381	3GRAFT34	115	1	LN	103.5	49.7	103.0	100.5	21853	D: 6LANEXA -6LIGH2091 +6LIGH285-6WALR2851
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	111.5	61.0	103.0	108.2	21860	D: 6LANEXA -6LIGH2091 +3NNWS58-3TOANO581
314377	3DOW 34	115	314387	3LANEXA	115	1	LN	113.0	62.6	103.0	109.7	21860	D: 6LANEXA -6LIGH2091 +3NNWS58-3TOANO581
314377	3DOW 34	115	314378	3FEUS34	115	1	LN	109.2	61.0	103.0	106.0	21881	D: 6LANEXA -6LIGH2091 +6WHEALTHN-6WINCHST1

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Neon	Contingency Description
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	110.8	62.6	103.0	107.6	21881	D: 6LANEXA - 6LIGH2091 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	116.3	61.0	103.0	112.9	21883	D: 6LANEXA - 6LIGH2091 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	117.9	62.6	103.0	114.5	21883	D: 6LANEXA - 6LIGH2091 + 6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	105.0	49.7	103.0	101.9	21883	D: 6LANEXA - 6LIGH2091 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	117.4	61.0	103.0	113.9	22029	D: 6LANEXA - 6LIGH2091 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	118.9	62.6	103.0	115.5	22029	D: 6LANEXA - 6LIGH2091 + 6SURREY - 6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	106.0	49.7	103.0	103.0	22029	D: 6LANEXA - 6LIGH2091 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	103.1	62.6	103.0	100.1	22032	D: 6LANEXA - 6LIGH2091 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	109.9	61.0	103.0	106.7	22595	D: 6LIGH285-6WALR2851 + 6LIGH209-6WALR2091
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	111.4	62.6	103.0	108.2	22595	D: 6LIGH285-6WALR2851 + 6LIGH209-6WALR2091
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	106.1	61.0	103.0	103.0	22624	D: 6LIGH285-6WALR2851 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	107.7	62.6	103.0	104.5	22624	D: 6LIGH285-6WALR2851 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	107.0	61.0	103.0	103.9	22770	D: 6LIGH285-6WALR2851 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	108.7	62.6	103.0	105.5	22770	D: 6LIGH285-6WALR2851 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	106.9	61.0	103.0	103.8	22846	D: 6LIGH209-6WALR2091 + 3NNNEWS58-3TOANO581
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	108.4	62.6	103.0	105.3	22846	D: 6LIGH209-6WALR2091 + 3NNNEWS58-3TOANO581
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	104.8	62.6	103.0	101.7	22867	D: 6LIGH209-6WALR2091 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	106.4	61.0	103.0	103.3	22867	D: 6LIGH209-6WALR2091 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	111.7	61.0	103.0	108.4	22869	D: 6LIGH209-6WALR2091 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	113.3	62.6	103.0	110.0	22869	D: 6LIGH209-6WALR2091 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	112.7	61.0	103.0	109.5	23015	D: 6LIGH209-6WALR2091 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	114.3	62.6	103.0	111.0	23015	D: 6LIGH209-6WALR2091 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	103.1	62.6	103.0	100.1	24316	D: 3NNNEWS58-3TOANO581 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	107.3	61.0	103.0	104.2	24316	D: 3NNNEWS58-3TOANO581 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	108.9	62.6	103.0	105.7	24318	D: 3NNNEWS58-3TOANO581 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	108.2	61.0	103.0	105.0	24464	D: 3NNNEWS58-3TOANO581 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	109.8	62.6	103.0	106.6	24464	D: 3NNNEWS58-3TOANO581 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	107.4	61.0	103.0	104.3	24554	D: 6NP NEWS-6PEMBROK1 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	109.0	62.6	103.0	105.8	24554	D: 6NP NEWS-6PEMBROK1 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	120.0	61.0	103.0	116.5	24556	D: 6NP NEWS-6PEMBROK1 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	121.4	62.6	103.0	117.9	24556	D: 6NP NEWS-6PEMBROK1 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314381 3GRAFT34	115	1	LN	107.6	49.7	103.0	104.5	24556	D: 6NP NEWS-6PEMBROK1 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	121.5	61.0	103.0	118.0	24702	D: 6NP NEWS-6PEMBROK1 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	123.0	62.6	103.0	119.4	24702	D: 6NP NEWS-6PEMBROK1 + 6SURREY - 6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	109.2	49.7	103.0	106.0	24702	D: 6NP NEWS-6PEMBROK1 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	107.4	61.0	103.0	104.3	25027	D: 6PEMBROK-6SHELBK1 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	109.0	62.6	103.0	105.8	25027	D: 6PEMBROK-6SHELBK1 + 6WHEALTIN-6WINCHST1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	120.0	61.0	103.0	116.5	25029	D: 6PEMBROK-6SHELBK1 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	121.5	62.6	103.0	117.9	25029	D: 6PEMBROK-6SHELBK1 + 6WINCHST-6POOLSVL1
314378	3FTEUS34	115	314381 3GRAFT34	115	1	LN	107.6	49.7	103.0	104.5	25029	D: 6PEMBROK-6SHELBK1 + 6WINCHST-6POOLSVL1
314377	3DOW 34	115	314378 3FTEUS34	115	1	LN	121.6	61.0	103.0	118.0	25175	D: 6PEMBROK-6SHELBK1 + 6SURREY - 6POOLSVL1
314377	3DOW 34	115	314387 3LANEXA	115	1	LN	123.0	62.6	103.0	119.5	25175	D: 6PEMBROK-6SHELBK1 + 6SURREY - 6POOLSVL1

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314378	3FTEUS34	115 314381	3GRAFT34	115 1	LN	109.2	49.7	103.0	106.1	25175	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVLJ
314461	3DEEPC46	115 314513	3YADKIN	115 1	LN	411.2	227.7	414.0	99.3	36155	D:6CHESAPK-6YADKIN 1 +6DOZIER -6ELIZ R 1
314461	3DEEPC46	115 314513	3YADKIN	115 1	LN	411.2	227.7	414.0	99.3	36156	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCH1
314451	3CHESPTX	115 314460	6CHESPTX	230 1	TR	291.1	140.4	293.9	99.0	38778	D:3DEEPC46-3YADKIN 1 -3CHESAPK-6CHESAPK2
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	836.5	532.7	830.0	100.8	39014	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	836.4	532.7	830.0	100.8	39180	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1
314449	6CHESAPK	230 314514	6YADKIN	230 1	LN	864.8	532.7	830.0	104.2	47993	D:6THRS279-6YADKIN 1 +8FENTRES-8YADKIN 1
314537	6SUFFOLK	230 314928	8SULFOLK	500 2	TR	1017.6	390.8	1004.3	101.3	53051	D:8SEPTA -8YADKIN 1 +8YADKIN -8SULFOLK1

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:08 <VOV003.0>

2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012

2013 LF WPREPROJECT

GEN RET

Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum 2015(2013LF) base_wpre_230KV AltC.sav
Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
313810	6DAHLGREN	230.0	345	354	0.3339	0.9996	0.9300	1.0700	0.9496	1.0498	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
313813	3OCGRAN	115.0	345	354	0.7033	1.0015	0.9300	1.0700	0.9514	1.0515	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3415	1.0021	0.9300	1.0700	0.9520	1.0522	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.5079	1.0027	0.9300	1.0700	0.9525	1.0528	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8528	1.0011	0.9300	1.0700	0.9510	1.0511	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314178	3LANGCAST	115.0	345	354	0.6752	1.0030	0.9300	1.0700	0.9528	1.0531	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3866	1.0113	0.9300	1.0700	0.9608	1.0619	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3526	1.0027	0.9300	1.0700	0.9525	1.0528	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3496	1.0024	0.9300	1.0700	0.9523	1.0525	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9040	1.0010	0.9300	1.0700	0.9509	1.0510	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314187	3WAN 176	115.0	345	354	0.8370	0.9881	0.9300	1.0700	0.9387	1.0376	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3464	1.0026	0.9300	1.0700	0.9525	1.0527	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7335	1.0006	0.9300	1.0700	0.9506	1.0506	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8534	1.0017	0.9300	1.0700	0.9516	1.0518	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8532	1.0015	0.9300	1.0700	0.9515	1.0516	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6756	1.0035	0.9300	1.0700	0.9533	1.0536	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
315034	1NNECK1	13.2	345	354	0.3965	1.0373	0.9300	1.0700	0.9854	1.0891	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
315035	1NNECK2	13.2	345	354	0.3965	1.0373	0.9300	1.0700	0.9854	1.0891	LD	663	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2255	0.9998	0.9300	1.0700	0.9498	1.0498	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115.0	345	354	0.6374	1.0015	0.9300	1.0700	0.9514	1.0515	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMARE	115.0	345	354	0.9050	1.0029	0.9300	1.0700	0.9527	1.0530	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2322	1.0021	0.9300	1.0700	0.9520	1.0522	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2411	1.0066	0.9300	1.0700	0.9563	1.0569	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4126	1.0027	0.9300	1.0700	0.9525	1.0528	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8059	1.0011	0.9300	1.0700	0.9510	1.0511	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314178	3LANGCAST	115.0	345	354	0.6047	1.0030	0.9300	1.0700	0.9528	1.0531	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2663	1.0113	0.9300	1.0700	0.9608	1.0619	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2425	1.0027	0.9300	1.0700	0.9525	1.0528	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2397	1.0024	0.9300	1.0700	0.9523	1.0525	LD	664	D: 6DAHLGREN-6ARNOLD1 +6DUNNSVL-6LANEXA 1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:10 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314184	3SHACKLE	115.0	345	354	0.8683	1.0010	0.9300	1.0700	0.9509	1.0510	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314187	3MAN 176	115.0	345	354	0.7890	0.9981	0.9300	1.0700	0.9387	1.0376	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.8995	1.0003	0.9300	1.0700	0.9525	1.0503	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.6721	1.0006	0.9300	1.0700	0.9525	1.0527	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8064	1.0017	0.9300	1.0700	0.9516	1.0516	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8063	1.0015	0.9300	1.0700	0.9515	1.0516	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6050	1.0035	0.9300	1.0700	0.9533	1.0536	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2731	1.0373	0.9300	1.0700	0.9854	1.0891	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.2731	1.0373	0.9300	1.0700	0.9854	1.0891	LD	664	D:6DAHLGREG-BARNOLDS1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.8799	1.0021	0.9300	1.0700	0.9520	1.0522	LD	985	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.8785	1.0027	0.9300	1.0700	0.9525	1.0528	LD	985	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.8786	1.0024	0.9300	1.0700	0.9523	1.0523	LD	985	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.8795	1.0026	0.9300	1.0700	0.9525	1.0527	LD	985	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6NORNECK1
313813	3OCCAN	115.0	345	354	0.8408	1.0015	0.9300	1.0700	0.9514	1.0515	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.6105	1.0021	0.9300	1.0700	0.9520	1.0522	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.6079	1.0066	0.9300	1.0700	0.9563	1.0569	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.7266	1.0027	0.9300	1.0700	0.9525	1.0528	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.8257	1.0030	0.9300	1.0700	0.9528	1.0531	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.8257	1.0013	0.9300	1.0700	0.9528	1.0531	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.6094	1.0027	0.9300	1.0700	0.9525	1.0528	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.6192	1.0024	0.9300	1.0700	0.9523	1.0525	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314187	3MAN 176	115.0	345	354	0.9192	0.9981	0.9300	1.0700	0.9387	1.0376	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.6101	1.0026	0.9300	1.0700	0.9525	1.0527	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.8578	1.0006	0.9300	1.0700	0.9506	1.0506	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.8261	1.0035	0.9300	1.0700	0.9533	1.0536	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.6816	1.0373	0.9300	1.0700	0.9854	1.0891	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.6816	1.0373	0.9300	1.0700	0.9854	1.0891	LD	986	D:6DAHLGREG-6OAKGROV1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	1319	D:6ROCKLAN-6WARWICK1 +6HAYES --6YORKTWN1
314180	6HAYES	230.0	345	354	0.8916	1.0376	0.9300	1.0700	0.9858	1.0895	LD	1639	D:6ROCKLAN-6YORKTWN1 +6HAYES --6YORKTWN1
314180	6HAYES	230.0	345	354	0.8931	1.0376	0.9300	1.0700	0.9858	1.0895	LD	1958	D:6OCCAN --3LANCAST1 +6HAYES --6YORKTWN1
314180	6HAYES	230.0	345	354	0.8895	1.0376	0.9300	1.0700	0.9858	1.0895	LD	2276	D:6OCCAN --3WHITE S1 +6HAYES --6YORKTWN1
314180	6HAYES	230.0	345	354	0.8895	1.0376	0.9300	1.0700	0.9858	1.0895	LD	2593	D:6BENCHRC-6NP NEWS1 +6HAYES --6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8951	1.0381	0.9300	1.0700	0.9862	1.0900	LD	2659	D:6BENCHRC-6NP NEWS1 +6PENINSL-6SHELBNK1
314399	6PMEROK	230.0	345	356	0.8940	1.0371	0.9300	1.0700	0.9852	1.0899	LD	2659	D:6BENCHRC-6NP NEWS1 +6PENINSL-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8929	1.0360	0.9300	1.0700	0.9842	1.0878	LD	2659	D:6BENCHRC-6NP NEWS1 +6PENINSL-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8969	1.0402	0.9300	1.0700	0.9882	1.0922	LD	2659	D:6BENCHRC-6NP NEWS1 +6PENINSL-6SHELBNK1
314180	6HAYES	230.0	345	354	0.8922	1.0376	0.9300	1.0700	0.9858	1.0895	LD	2909	D:6BENCHRC-6CHCKTUK1 +6HAYES --6YORKTWN1
313816	6BENCHRCH	230.0	345	360	0.8971	1.0347	0.9300	1.0700	0.9830	1.0865	LD	2975	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8877	1.0381	0.9300	1.0700	0.9862	1.0900	LD	2975	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELBNK1
314399	6PMEROK	230.0	345	356	0.8868	1.0371	0.9300	1.0700	0.9852	1.0889	LD	2975	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8858	1.0360	0.9300	1.0700	0.9842	1.0878	LD	2975	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELBNK1
314442	6NP NE 1	230.0	345	356	0.8895	1.0402	0.9300	1.0700	0.9882	1.0922	LD	2975	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELBNK1
314180	6HAYES	230.0	345	354	0.8776	1.0307	0.9300	1.0700	0.9791	1.0822	LD	3255	D:3WHITEA-3HARMONY1 +6CORRCTN-6LANEXA 1
314189	6PAPERWILL	230.0	345	354	0.8719	1.0222	0.9300	1.0700	0.9711	1.0733	LD	3255	D:3WHITEA-3HARMONY1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8716	1.0212	0.9300	1.0700	0.9701	1.0723	LD	3255	D:3WHITEA-3HARMONY1 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8917	1.0307	0.9300	1.0700	0.9791	1.0822	LD	3569	D:3WHITEA-3HAYES91 +6CORRCTN-6LANEXA 1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:10 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314189	6PAPERHILL	230.0	345	354	0.8661	1.0222	0.9300	1.0700	0.9711	1.0733	LD	3569	D:3WHITEMA-3HAYES91 +6CORRTN-6LANEXA 1
314375	6CORRTN	230.0	345	354	0.8658	1.0212	0.9300	1.0700	0.9701	1.0723	LD	3569	D:3WHITEMA-3HAYES91 +6CORRTN-6LANEXA 1
313810	6DAHLGREN	230.0	345	354	0.3334	0.9998	0.9300	1.0700	0.9498	1.0498	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115.0	345	354	0.7249	1.0015	0.9300	1.0700	0.9514	1.0515	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314131	6ARNOLDS	230.0	345	354	0.3330	1.0012	0.9300	1.0700	0.9511	1.0512	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3415	1.0021	0.9300	1.0700	0.9520	1.0522	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314173	3GARNER	115.0	345	354	0.5252	1.0027	0.9300	1.0700	0.9525	1.0528	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8749	1.0011	0.9300	1.0700	0.9510	1.0511	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314178	3LANCAST	115.0	345	354	0.6967	1.0030	0.9300	1.0700	0.9528	1.0531	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.4033	1.0113	0.9300	1.0700	0.9608	1.0619	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3536	1.0077	0.9300	1.0700	0.9525	1.0528	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3503	1.0024	0.9300	1.0700	0.9523	1.0525	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314187	3WAN 176	115.0	345	354	0.8596	0.9881	0.9300	1.0700	0.9387	1.0376	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3468	1.0026	0.9300	1.0700	0.9525	1.0527	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314191	3WHITE 8	115.0	345	354	0.7553	1.0006	0.9300	1.0700	0.9506	1.0506	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314395	3HARMO 1	115.0	345	354	0.8755	1.0017	0.9300	1.0700	0.9516	1.0518	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8753	1.0015	0.9300	1.0700	0.9515	1.0516	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6970	1.0035	0.9300	1.0700	0.9533	1.0536	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
315034	1NNECK1	13.2	345	354	0.4137	1.0373	0.9300	1.0700	0.9854	1.0891	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
315035	1NNECK2	13.2	345	354	0.4137	1.0373	0.9300	1.0700	0.9854	1.0891	LD	3838	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2296	0.9998	0.9300	1.0700	0.9498	1.0498	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313813	3OCRAN	115.0	345	354	0.6379	1.0015	0.9300	1.0700	0.9514	1.0515	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMA	115.0	345	354	0.9049	1.0029	0.9300	1.0700	0.9527	1.0530	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314131	6ARNOLDS	230.0	345	354	0.2296	1.0021	0.9300	1.0700	0.9511	1.0512	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2363	1.0022	0.9300	1.0700	0.9520	1.0522	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.2450	1.0066	0.9300	1.0700	0.9563	1.0569	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.4145	1.0027	0.9300	1.0700	0.9525	1.0528	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.8058	1.0011	0.9300	1.0700	0.9510	1.0511	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6054	1.0030	0.9300	1.0700	0.9528	1.0531	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2698	1.0113	0.9300	1.0700	0.9608	1.0619	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2464	1.0027	0.9300	1.0700	0.9525	1.0528	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2437	1.0024	0.9300	1.0700	0.9523	1.0525	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.8682	1.0010	0.9300	1.0700	0.9509	1.0510	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7990	0.9881	0.9300	1.0700	0.9387	1.0376	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.8994	1.0003	0.9300	1.0700	0.9503	1.0503	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.2408	1.0026	0.9300	1.0700	0.9525	1.0527	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314191	3WHITE 8	115.0	345	354	0.6725	1.0006	0.9300	1.0700	0.9506	1.0506	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314395	3HARMO 1	115.0	345	354	0.8062	1.0015	0.9300	1.0700	0.9515	1.0516	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6057	1.0035	0.9300	1.0700	0.9533	1.0536	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
315034	1NNECK1	13.2	345	354	0.2767	1.0373	0.9300	1.0700	0.9854	1.0891	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
315035	1NNECK2	13.2	345	354	0.2767	1.0373	0.9300	1.0700	0.9854	1.0891	LD	3839	D:6ARNOLDS-6COMORN 1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8923	1.0376	0.9300	1.0700	0.9858	1.0895	LD	3851	D:6ARNOLDS-6COMORN 1 +6HAYES -6YORKTWN1
313810	6DAHLGREN	230.0	345	354	0.3109	0.9998	0.9300	1.0700	0.9498	1.0498	LD	4150	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
313813	3OCRAN	115.0	345	354	0.6377	1.0015	0.9300	1.0700	0.9514	1.0515	LD	4150	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314131	6ARNOLDS	230.0	345	354	0.3102	1.0021	0.9300	1.0700	0.9511	1.0512	LD	4150	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1
314139	6OAKGROV	230.0	345	354	0.3192	1.0021	0.9300	1.0700	0.9520	1.0522	LD	4150	D:6BTRCHWD-6COMORN 1 +6DUNNSVL-6NORNECK1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314173	3GARNER	115.0	345	354	0.4957	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314174	3HARMONY	115.0	345	354	0.8505	1.0011	0.9300	1.0700	0.9510	1.0511	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314175	6COMORN	230.0	345	354	0.3101	1.0014	0.9300	1.0700	0.9514	1.0515	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314178	3LANCAST	115.0	345	354	0.6686	1.0030	0.9300	1.0700	0.9528	1.0531	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314181	3NORNECK	115.0	345	354	0.3674	1.0113	0.9300	1.0700	0.9608	1.0619	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314182	6NORNECK	230.0	345	354	0.3318	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314183	6SANDERS	230.0	345	354	0.3284	1.0024	0.9300	1.0700	0.9523	1.0528	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314184	3SHACKLE	115.0	345	354	0.9027	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314187	3WAN 176	115.0	345	354	0.6346	0.9981	0.9300	1.0700	0.9387	1.0376	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314190	6WESTMOR	230.0	345	354	0.3247	1.0026	0.9300	1.0700	0.9525	1.0527	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314191	3WHITE S	115.0	345	354	0.7288	1.0006	0.9300	1.0700	0.9506	1.0506	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314385	3HARMO 1	115.0	345	354	0.8511	1.0017	0.9300	1.0700	0.9516	1.0518	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314395	3HARMO 2	115.0	345	354	0.8509	1.0015	0.9300	1.0700	0.9519	1.0516	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
314400	3LANCA 1	115.0	345	354	0.6690	1.0035	0.9300	1.0700	0.9533	1.0536	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
315034	1NNECKC1	13.2	345	354	0.3768	1.0373	0.9300	1.0700	0.9854	1.0891	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
315035	1NNECKC2	13.2	345	354	0.3768	1.0373	0.9300	1.0700	0.9854	1.0891	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6NORNECK1
313810	6DAHLGREN	230.0	345	354	0.2210	0.9998	0.9300	1.0700	0.9498	1.0498	LD	4150	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115.0	345	354	0.6364	1.0015	0.9300	1.0700	0.9514	1.0515	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
313828	3WHITEMARE	115.0	345	354	0.9047	1.0029	0.9300	1.0700	0.9527	1.0530	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314131	3GARNOLDS	230.0	345	354	0.2282	1.0021	0.9300	1.0700	0.9520	1.0522	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314139	6OAKGROV	230.0	345	354	0.2377	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.4110	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314173	3GARNER	115.0	345	354	0.8053	1.0011	0.9300	1.0700	0.9510	1.0511	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314175	6COMORN	230.0	345	354	0.2205	1.0014	0.9300	1.0700	0.9514	1.0515	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.6036	1.0030	0.9300	1.0700	0.9528	1.0531	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.2636	1.0113	0.9300	1.0700	0.9608	1.0619	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.2391	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.2362	1.0024	0.9300	1.0700	0.9523	1.0525	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.8679	1.0010	0.9300	1.0700	0.9509	1.0510	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.7884	0.9981	0.9300	1.0700	0.9387	1.0376	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.8992	1.0003	0.9300	1.0700	0.9503	1.0503	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.2330	1.0026	0.9300	1.0700	0.9525	1.0527	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314195	3HARMO 1	115.0	345	354	0.6713	1.0006	0.9300	1.0700	0.9506	1.0506	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314385	3HARMO 2	115.0	345	354	0.8058	1.0017	0.9300	1.0700	0.9516	1.0518	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314395	3LANCA 1	115.0	345	354	0.8057	1.0035	0.9300	1.0700	0.9515	1.0516	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.6040	1.0035	0.9300	1.0700	0.9533	1.0536	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
315034	1NNECKC1	13.2	345	354	0.2704	1.0373	0.9300	1.0700	0.9854	1.0891	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
315035	1NNECKC2	13.2	345	354	0.8913	1.0376	0.9300	1.0700	0.9858	1.0895	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8914	1.0376	0.9300	1.0700	0.9858	1.0895	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.9000	1.0113	0.9300	1.0700	0.9608	1.0619	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.8144	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.8142	1.0024	0.9300	1.0700	0.9523	1.0525	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.9135	1.0015	0.9300	1.0700	0.9514	1.0515	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
313813	3OCGRAN	115.0	345	354	0.8135	1.0015	0.9300	1.0700	0.9514	1.0515	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1
314172	6DUNNSVL	230.0	345	354	0.7265	1.0066	0.9300	1.0700	0.9563	1.0569	LD	4151	D: 6BIRCHWD-6COMOR 1 +6DUNNSVL-6LANEXA 1

PSS(m)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:10 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314173	3GARNER	115.0	345	354	0.8401	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314178	3LANCAST	115.0	345	354	0.9050	1.0030	0.9300	1.0700	0.9528	1.0531	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314181	3NORNECK	115.0	345	354	0.7960	1.0113	0.9300	1.0700	0.9618	1.0619	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314182	6NORNECK	230.0	345	354	0.7278	1.0027	0.9300	1.0700	0.9525	1.0528	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314183	6SANDERS	230.0	345	354	0.7275	1.0024	0.9300	1.0700	0.9523	1.0525	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314190	6WESTMOR	230.0	345	354	0.7280	1.0026	0.9300	1.0700	0.9525	1.0527	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314400	3LANCA 1	115.0	345	354	0.9055	1.0035	0.9300	1.0700	0.9533	1.0536	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
315034	1NNECK1	13.2	345	354	0.8164	1.0373	0.9300	1.0700	0.9854	1.0891	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
315035	1NNECK2	13.2	345	354	0.8164	1.0373	0.9300	1.0700	0.9854	1.0891	LD	4772	D:60AKGROV-6WESTMOR1 +6DUNNSVL-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8918	1.0376	0.9300	1.0700	0.9858	1.0895	LD	4784	D:60AKGROV-6WESTMOR1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8914	1.0376	0.9300	1.0700	0.9858	1.0895	LD	5093	D:6DUNNSVL-6NORNECK1 +6HAYES -6YORKTWN1
314181	3NORNECK	115.0	345	354	0.8415	1.0027	0.9300	1.0700	0.9525	1.0528	LD	5098	D:6DUNNSVL-6NORNECK1 +6NORNECK-6SANDERS1
314182	6NORNECK	230.0	345	354	0.8960	1.0113	0.9300	1.0700	0.9608	1.0619	LD	5099	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314183	6SANDERS	230.0	345	354	0.8081	1.0027	0.9300	1.0700	0.9525	1.0528	LD	5099	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
315034	1NNECK1	13.2	345	354	0.8075	1.0024	0.9300	1.0700	0.9523	1.0525	LD	5099	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
315035	1NNECK2	13.2	345	354	0.9189	1.0373	0.9300	1.0700	0.9854	1.0891	LD	5099	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314172	6DUNNSVL	230.0	345	354	0.9189	1.0373	0.9300	1.0700	0.9854	1.0891	LD	5099	D:6DUNNSVL-6NORNECK1 +6SANDERS-6WESTMOR1
314181	3NORNECK	115.0	345	354	0.8914	1.0376	0.9300	1.0700	0.9858	1.0895	LD	5401	D:6DUNNSVL-6LANEXA 1 +6HAYES -6YORKTWN1
314182	6NORNECK	230.0	345	354	0.8975	1.0066	0.9300	1.0700	0.9563	1.0569	LD	5406	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314181	3NORNECK	115.0	345	354	0.8986	1.0113	0.9300	1.0700	0.9525	1.0528	LD	5406	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
315034	1NNECK1	13.2	345	354	0.9179	1.0373	0.9300	1.0700	0.9854	1.0891	LD	5406	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
315035	1NNECK2	13.2	345	354	0.9179	1.0373	0.9300	1.0700	0.9854	1.0891	LD	5406	D:6DUNNSVL-6LANEXA 1 +6NORNECK-6SANDERS1
314172	6DUNNSVL	230.0	345	354	0.7547	1.0066	0.9300	1.0700	0.9563	1.0569	LD	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314173	3GARNER	115.0	345	354	0.8399	1.0027	0.9300	1.0700	0.9525	1.0528	LD	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314181	3NORNECK	115.0	345	354	0.7559	1.0027	0.9300	1.0700	0.9525	1.0528	LD	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314182	6NORNECK	230.0	345	354	0.7553	1.0024	0.9300	1.0700	0.9523	1.0525	LD	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
315034	1NNECK1	13.2	345	354	0.8614	1.0373	0.9300	1.0700	0.9854	1.0891	LD	5407	D:6DUNNSVL-6LANEXA 1 +6SANDERS-6WESTMOR1
314180	6HAYES	230.0	345	354	0.8932	1.0376	0.9300	1.0700	0.9858	1.0895	LD	5708	D:3GARNER -3LANCAST1 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8906	1.0307	0.9300	1.0700	0.9791	1.0822	LD	6014	D:3GARNER -3NORNECK1 +6HAYES -6YORKTWN1
314189	6PAPERMILL	230.0	345	354	0.8943	1.0307	0.9300	1.0700	0.9791	1.0822	LD	6023	D:3GARNER -3NORNECK1 +6PAPERMILL-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8955	1.0222	0.9300	1.0700	0.9711	1.0733	LD	6023	D:3GARNER -3NORNECK1 +6PAPERMILL-6CORRECTN1
314180	6HAYES	230.0	345	354	0.8600	1.0307	0.9300	1.0700	0.9791	1.0822	LD	6045	D:3GARNER -3NORNECK1 +6CORRECTN-6LANEXA 1
314176	6PAPERMILL	230.0	345	354	0.8540	1.0222	0.9300	1.0700	0.9711	1.0733	LD	6045	D:3GARNER -3NORNECK1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8537	1.0212	0.9300	1.0700	0.9701	1.0723	LD	6045	D:3GARNER -3NORNECK1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	6319	D:3HARMONY-3SHACKLE1 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8647	1.0307	0.9300	1.0700	0.9791	1.0822	LD	6350	D:3HARMONY-3SHACKLE1 +6CORRECTN-6LANEXA 1
314189	6PAPERMILL	230.0	345	354	0.8589	1.0222	0.9300	1.0700	0.9711	1.0733	LD	6350	D:3HARMONY-3SHACKLE1 +6CORRECTN-6LANEXA 1
314375	6CORRECTN	230.0	345	354	0.8586	1.0212	0.9300	1.0700	0.9701	1.0723	LD	6350	D:3HARMONY-3SHACKLE1 +6CORRECTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	6926	D:3HARMONY-3HARMO 11 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8633	1.0307	0.9300	1.0700	0.9791	1.0822	LD	7228	D:3HARMONY-3HARMO 11 +6HAYES -6YORKTWN1
314189	6PAPERMILL	230.0	345	354	0.8599	1.0222	0.9300	1.0700	0.9711	1.0733	LD	7237	D:3HARMONY-3HARMO 11 +6PAPERMILL-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8582	1.0307	0.9300	1.0700	0.9791	1.0822	LD	7237	D:3HARMONY-3HARMO 11 +6PAPERMILL-6CORRECTN1
314180	6HAYES	230.0	345	354	0.8599	1.0222	0.9300	1.0700	0.9711	1.0733	LD	7259	D:3HARMONY-3HARMO 11 +6CORRECTN-6LANEXA 1
314176	6PAPERMILL	230.0	345	354	0.8539	1.0222	0.9300	1.0700	0.9711	1.0733	LD	7259	D:3HARMONY-3HARMO 11 +6CORRECTN-6LANEXA 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314375	6CORRCTN	230.0	345	354	0.8536	1.0212	0.9300	1.0700	0.9700	1.0723	LD	7259	D:3HARMONY-3HARMO 11 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8893	1.0376	0.9300	1.0700	0.9858	1.0895	LD	7529	D:3HARMONY-3HARMO 21 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8894	1.0307	0.9300	1.0700	0.9791	1.0822	LD	7538	D:3HARMONY-3HARMO 21 +6PAPERMI-6CORRCTN1
314189	6PAPERMI1	230.0	345	354	0.8845	1.0222	0.9300	1.0700	0.9711	1.0723	LD	7538	D:3HARMONY-3HARMO 21 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8627	1.0307	0.9300	1.0700	0.9791	1.0822	LD	7560	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314189	6PAPERMI1	230.0	345	354	0.8567	1.0222	0.9300	1.0700	0.9711	1.0723	LD	7560	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8565	1.0212	0.9300	1.0700	0.9701	1.0723	LD	7560	D:3HARMONY-3HARMO 21 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8177	1.0307	0.9300	1.0700	0.9858	1.0822	LD	8128	D:6HARMONY-6PAPERMI1 +3HAYES9-6HAYES 1
314180	6HAYES	230.0	345	354	0.8839	1.0376	0.9300	1.0700	0.9858	1.0895	LD	8128	D:6HARMONY-6PAPERMI1 +3HAYES9-6HAYES 1
314176	6HARMONY	230.0	345	354	0.8555	1.0307	0.9300	1.0700	0.9791	1.0822	LD	8435	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI1	230.0	345	354	0.8503	1.0222	0.9300	1.0700	0.9711	1.0723	LD	8435	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8414	1.0307	0.9300	1.0700	0.9791	1.0822	LD	8457	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314189	6PAPERMI1	230.0	345	354	0.8352	1.0222	0.9300	1.0700	0.9711	1.0723	LD	8457	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8349	1.0212	0.9300	1.0700	0.9701	1.0723	LD	8457	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8905	1.0376	0.9300	1.0700	0.9858	1.0895	LD	8723	D:3LANCAST-3LANCA 11 +6HAYES -6YORKTWN1
314176	6HARMONY	230.0	345	354	0.8672	1.0307	0.9300	1.0700	0.9791	1.0822	LD	8754	D:3LANCAST-3LANCA 11 +6CORRCTN-6LANEXA 1
314189	6PAPERMI1	230.0	345	354	0.8815	1.0222	0.9300	1.0700	0.9711	1.0723	LD	8754	D:3LANCAST-3LANCA 11 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8812	1.0212	0.9300	1.0700	0.9701	1.0723	LD	8754	D:3LANCAST-3LANCA 11 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8921	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9020	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314189	6PAPERMI1	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9021	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9022	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9023	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9024	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314189	6PAPERMI1	230.0	345	354	0.8918	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9025	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8923	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9026	D:6HAYES -6YORKTWN1 +3SHACKLE-3WEST PT1
314189	6PAPERMI1	230.0	345	354	0.8938	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9027	D:6HAYES -6YORKTWN1 +3WEST PT-3LANEXA 1
314180	6HAYES	230.0	345	354	0.8562	1.0307	0.9300	1.0700	0.9791	1.0822	LD	9028	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8510	1.0222	0.9300	1.0700	0.9711	1.0723	LD	9028	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI1	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9029	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9030	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3KINGS FI
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9031	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9032	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9033	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9034	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9035	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9036	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9037	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8911	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9038	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8911	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9039	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9040	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9041	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9042	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9043	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8905	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9044	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314189	6PAPERMI1	230.0	345	354	0.8913	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9045	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321
314180	6HAYES	230.0	345	354	0.8922	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9046	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKR12321

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 25 2013 7:10 < UDF000.0 >
 2015 SUMMER BASE CASE (LTS15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314180	GHAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9047	D:6HAYES -6YORKTWN1 +3COLEND-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8906	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9048	D:6HAYES -6YORKTWN1 +3COPELAND-3NEWS751
314180	GHAYES	230.0	345	354	0.8906	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9049	D:6HAYES -6YORKTWN1 +3COPELAND-3WHEALTWN1
314176	GHARMONY	230.0	345	354	0.8908	1.0307	0.9300	1.0700	0.9791	1.0822	LD	9050	D:6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9050	D:6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314189	6PAPERHILL	230.0	345	354	0.8946	1.0222	0.9300	1.0700	0.9711	1.0733	LD	9050	D:6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314375	6CORRTN	230.0	345	354	0.8943	1.0212	0.9300	1.0700	0.9701	1.0723	LD	9050	D:6HAYES -6YORKTWN1 +6CORRECTN-6LANEXA 1
314180	GHAYES	230.0	345	354	0.8921	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9051	D:6HAYES -6YORKTWN1 +6DENBIGH-6WALR2851
314180	GHAYES	230.0	345	354	0.8906	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9052	D:6HAYES -6YORKTWN1 +6DENBIGH-6YORKTWN1
314180	GHAYES	230.0	345	354	0.8906	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9053	D:6HAYES -6YORKTWN1 +3DOW 34 -3FTEUS341
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9054	D:6HAYES -6YORKTWN1 +3DOW 34 -3LANEXA 1
314180	GHAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9055	D:6HAYES -6YORKTWN1 +3FTEUS34-3GRAFT341
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9056	D:6HAYES -6YORKTWN1 +3FTEUS38-3GRAFT581
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9057	D:6HAYES -6YORKTWN1 +3FTEUS58-3LEBAN581
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9058	D:6HAYES -6YORKTWN1 +3GRAFT34-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9059	D:6HAYES -6YORKTWN1 +3GRAFT58-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9060	D:6HAYES -6YORKTWN1 +3KINGS M-3TOANOS81
314180	GHAYES	230.0	345	354	0.8904	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9061	D:6HAYES -6YORKTWN1 +3KINGS M-3YANWS 581
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9062	D:6HAYES -6YORKTWN1 +6KINGS M-6YORKTWN1
314180	GHAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9063	D:6HAYES -6YORKTWN1 +3LANEXA -3NEWS581
314180	GHAYES	230.0	345	354	0.8915	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9064	D:6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 1
314180	GHAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9065	D:6HAYES -6YORKTWN1 +3LANEXA -6LANEXA 2
314180	GHAYES	230.0	345	354	0.8905	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9066	D:6HAYES -6YORKTWN1 +6LANEXA -6LIGH2091
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9067	D:6HAYES -6YORKTWN1 +6LANEXA -6LANEX 11
314180	GHAYES	230.0	345	354	0.8920	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9068	D:6HAYES -6YORKTWN1 +3LEBAN58-3YANWS 581
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9069	D:6HAYES -6YORKTWN1 +6LIGH285-6WALR2851
314180	GHAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9070	D:6HAYES -6YORKTWN1 +6LIGH209-6WALR2091
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9071	D:6HAYES -6YORKTWN1 +3MAGRUOR-3PENINSLL
314180	GHAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9072	D:6HAYES -6YORKTWN1 +3MAGRUOR-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8918	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9073	D:6HAYES -6YORKTWN1 +3MERCURY-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9074	D:6HAYES -6YORKTWN1 +3NADA -3PENINSLL
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9075	D:6HAYES -6YORKTWN1 +3NADA -3PENINSLL
314180	GHAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9076	D:6HAYES -6YORKTWN1 +3NEWS58-3TOANOS81
314180	GHAYES	230.0	345	354	0.8919	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9077	D:6HAYES -6YORKTWN1 +6NP NEWS-6NP NE 11
314180	GHAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9078	D:6HAYES -6YORKTWN1 +6PEMBROK-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8919	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9079	D:6HAYES -6YORKTWN1 +6PEMBROK-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9080	D:6HAYES -6YORKTWN1 +3PENINSLL-3SEAFD761
314180	GHAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9081	D:6HAYES -6YORKTWN1 +3PENINSLL-3SEAFD791
314180	GHAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9082	D:6HAYES -6YORKTWN1 +3PENINSLL-3U CARBOL
314180	GHAYES	230.0	345	354	0.8921	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9083	D:6HAYES -6YORKTWN1 +3PENINSLL-3PENIN 11
314180	GHAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9084	D:6HAYES -6YORKTWN1 +3PENINSLL-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8914	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9085	D:6HAYES -6YORKTWN1 +6PENINSLL-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9086	D:6HAYES -6YORKTWN1 +6PENINSLL-6TABB 1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9087	D:6HAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9088	D:6HAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8909	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9089	D:6HAYES -6YORKTWN1 +3SHELBNK-3WHEALTWN1
314180	GHAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9090	D:6HAYES -6YORKTWN1 +3SHELBNK-6SHELBNK1

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9091	D:6HAYES -6YORKTWN1 +6TABB -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9092	D:6HAYES -6YORKTWN1 +3U CARPD-3WHEALTNI
314180	6HAYES	230.0	345	354	0.8915	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9093	D:6HAYES -6YORKTWN1 +3WAEWICK-3WHEALTNI
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9094	D:6HAYES -6YORKTWN1 +6WAEWICK-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9095	D:6HAYES -6YORKTWN1 +3WHEALTNI-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9096	D:6HAYES -6YORKTWN1 +3WHEALTNI-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9097	D:6HAYES -6YORKTWN1 +6WHEALTNI-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9098	D:6HAYES -6YORKTWN1 +6WHEALTNI-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8921	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9099	D:6HAYES -6YORKTWN1 +6WHEALTNI-6WHEALTNI
314180	6HAYES	230.0	345	354	0.8916	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9100	D:6HAYES -6YORKTWN1 +3YORKTWN-3YORK PSI
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9101	D:6HAYES -6YORKTWN1 +3YORKTWN-3YORK PSI
314180	6HAYES	230.0	345	354	0.8917	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9102	D:6HAYES -6YORKTWN1 +6YORKTWN-6YORKTNI
314180	6HAYES	230.0	345	354	0.8916	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9103	D:6HAYES -6YORKTWN1 +6YORKTWN-6YORKTNI
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9104	D:6HAYES -6YORKTWN1 +6YORKTWN-6YORKTNI
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9105	D:6HAYES -6YORKTWN1 +3ALEX CR-3BOWERS 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9106	D:6HAYES -6YORKTWN1 +3STORE -3LONGC271
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9107	D:6HAYES -6YORKTWN1 +3STORE -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9108	D:6HAYES -6YORKTWN1 +3BAYSIDE-3BURTN671
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9109	D:6HAYES -6YORKTWN1 +3BAYSIDE-3LONGC271
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9110	D:6HAYES -6YORKTWN1 +3BERKLS1-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9111	D:6HAYES -6YORKTWN1 +3BERKLS1-3REEVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9112	D:6HAYES -6YORKTWN1 +3BOWERS -3DEEPC871
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9113	D:6HAYES -6YORKTWN1 +3BOWERS -3HODGE F1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9114	D:6HAYES -6YORKTWN1 +6BOWERS -6CHRLIND
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9115	D:6HAYES -6YORKTWN1 +6BOWERS -6YAKIN 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9116	D:6HAYES -6YORKTWN1 +3BURTN67-3DAVIS671
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9117	D:6HAYES -6YORKTWN1 +3BURTN67-3DAVIS271
314180	6HAYES	230.0	345	354	0.8902	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9118	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHN GAS1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9119	D:6HAYES -6YORKTWN1 +3CHESAPK-3CRDOCK1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9120	D:6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC461
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9121	D:6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC871
314180	6HAYES	230.0	345	354	0.8903	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9122	D:6HAYES -6YORKTWN1 +3CHESAPK-3DOZIER 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9123	D:6HAYES -6YORKTWN1 +3CHESAPK-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9124	D:6HAYES -6YORKTWN1 +3CHESAPK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9125	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTX1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9126	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK31
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9127	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9128	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9129	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9130	D:6HAYES -6YORKTWN1 +6CHESAPK-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9131	D:6HAYES -6YORKTWN1 +6CHESAPK-6CHESPK31
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9132	D:6HAYES -6YORKTWN1 +6CHESAPK-6YAKIN 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9133	D:6HAYES -6YORKTWN1 +3CHESPTX-6CHESPTX1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9134	D:6HAYES -6YORKTWN1 +3CHRLIND-3HODGE F1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9135	D:6HAYES -6YORKTWN1 +3CHRLIND-6CHRLIND1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9136	D:6HAYES -6YORKTWN1 +6CHRLIND-6HARBORV1
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9137	D:6HAYES -6YORKTWN1 +6CHRLIND-6JAK KING1

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9138	D: 6HAYES -6YORKTWN1 +6CHRLND-6SEWISPT1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9139	D: 6HAYES -6YORKTWN1 +6CHRLND-6SEWISPT2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9140	D: 6HAYES -6YORKTWN1 +6CHRLND-6CHRLND 11
314180	6HAYES	230.0	345	354	0.8902	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9141	D: 6HAYES -6YORKTWN1 +3CMN GAS-3GRASFLD1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9142	D: 6HAYES -6YORKTWN1 +3RADOCK-3REVES 1
314180	6HAYES	230.0	345	354	0.8902	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9143	D: 6HAYES -6YORKTWN1 +3RADOCK-3SHEA 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9144	D: 6HAYES -6YORKTWN1 +3DAVIS67-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9145	D: 6HAYES -6YORKTWN1 +3DAVIS27-3GRENWCH1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9146	D: 6HAYES -6YORKTWN1 +3DEPC46-3YADKIN 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9147	D: 6HAYES -6YORKTWN1 +3DOZIER-3THOMPSN1
314180	6HAYES	230.0	345	354	0.8902	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9148	D: 6HAYES -6YORKTWN1 +6DOZIER-6ELIZ R 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9149	D: 6HAYES -6YORKTWN1 +6DOZIER-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9150	D: 6HAYES -6YORKTWN1 +6ELIZ R -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9151	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR11
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9152	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR21
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9153	D: 6HAYES -6YORKTWN1 +6ELIZ R -1ELIZAR31
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9154	D: 6HAYES -6YORKTWN1 +6FENTRES-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9155	D: 6HAYES -6YORKTWN1 +6FENTRES-6THRSZ791
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9156	D: 6HAYES -6YORKTWN1 +6FENTRES-6HICKORY1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9157	D: 6HAYES -6YORKTWN1 +6FENTRES-6PENTR 11
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9158	D: 6HAYES -6YORKTWN1 +6FENTRES-8FENTRES1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9159	D: 6HAYES -6YORKTWN1 +6FENTRES-8FENTRES2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9160	D: 6HAYES -6YORKTWN1 +3GREATBR-3HICKORY1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9161	D: 6HAYES -6YORKTWN1 +3GRASFLD-3GREAT BL
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9162	D: 6HAYES -6YORKTWN1 +6GRN RUN-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9163	D: 6HAYES -6YORKTWN1 +6GRN RUN-6LYNIAVW1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9164	D: 6HAYES -6YORKTWN1 +3GRENWCH-3THOLE S1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9165	D: 6HAYES -6YORKTWN1 +3GRENWCH-3GRENW 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9166	D: 6HAYES -6YORKTWN1 +3GRENWCH-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9167	D: 6HAYES -6YORKTWN1 +3GRENWCH-6GRENWCH2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9168	D: 6HAYES -6YORKTWN1 +6GRENWCH-6REVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9169	D: 6HAYES -6YORKTWN1 +6GRENWCH-6THALIA 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9170	D: 6HAYES -6YORKTWN1 +6GRENWCH-6GRENW 11
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9171	D: 6HAYES -6YORKTWN1 +6HARBORV-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9172	D: 6HAYES -6YORKTWN1 +6HARBORV-6SMITFLD1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9173	D: 6HAYES -6YORKTWN1 +3HICKORY-6HICKORY1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9174	D: 6HAYES -6YORKTWN1 +3IND PRK-3REVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9175	D: 6HAYES -6YORKTWN1 +3IND PRK-3THOLE S1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9176	D: 6HAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9177	D: 6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9178	D: 6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9179	D: 6HAYES -6YORKTWN1 +6HUNTSN-6THRSZ791
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9180	D: 6HAYES -6YORKTWN1 +6HUNTSN-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9181	D: 6HAYES -6YORKTWN1 +6LANDSTN-6LYNIAVW1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9182	D: 6HAYES -6YORKTWN1 +6LANDSTN-6STUMPY 1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9183	D: 6HAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9184	D: 6HAYES -6YORKTWN1 +3LONDONB-3PENOLDTWN1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9185	D:6HAYES -6YORKTWN1 +3LONDONB-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9186	D:6HAYES -6YORKTWN1 +6HARBORV-6CRITTON1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9187	D:6HAYES -6YORKTWN1 +6LJ KING-1LKRTING1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9188	D:6HAYES -6YORKTWN1 +6LJ KING-1LKRTING1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9189	D:6HAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9190	D:6HAYES -6YORKTWN1 +6LYNHAVN-6THALIA 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9191	D:6HAYES -6YORKTWN1 +6LYNHAVN-6LYNHA 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9192	D:6HAYES -6YORKTWN1 +3MCLAUGH-3REEVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9193	D:6HAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9194	D:6HAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9195	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9196	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9197	D:6HAYES -6YORKTWN1 +3PENDLITN-3VA BCH 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9198	D:6HAYES -6YORKTWN1 +3REEVES -3REEVE 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9199	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9200	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9201	D:6HAYES -6YORKTWN1 +6REEVES -6RURITANI
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9202	D:6HAYES -6YORKTWN1 +6RURITAN-6RURITAN 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9203	D:6HAYES -6YORKTWN1 +6RURITAN-6RURITAN 2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9204	D:6HAYES -6YORKTWN1 +3SEWLSPT-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9205	D:6HAYES -6YORKTWN1 +3SEWLSPT-3THOLE S1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9206	D:6HAYES -6YORKTWN1 +3SEWLSPT-3THOLE SPT1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9207	D:6HAYES -6YORKTWN1 +3SEWLSPT-6SEWLSPT2
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9208	D:6HAYES -6YORKTWN1 +6SEWLSPT-6NAVYS 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9209	D:6HAYES -6YORKTWN1 +6SEWLSPT-6NAVYS1 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9210	D:6HAYES -6YORKTWN1 +6SNORFLK-6THRS2791
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9211	D:6HAYES -6YORKTWN1 +6NAVYS -6NAVYN 1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9212	D:6HAYES -6YORKTWN1 +6NAVYS1 -6NAVYN1 1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9213	D:6HAYES -6YORKTWN1 +6STUMPY -6THRS2791
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9214	D:6HAYES -6YORKTWN1 +3THOLE S-3THOLE 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9215	D:6HAYES -6YORKTWN1 +6THRS279-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9216	D:6HAYES -6YORKTWN1 +3VA BCH -3VA BC 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9217	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9218	D:6HAYES -6YORKTWN1 +6YADKIN -6YADK1 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9219	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9220	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 2
314180	6HAYES	230.0	345	354	0.8910	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9221	D:6HAYES -6YORKTWN1 +6CHCKTUK-6KINGSP01
314180	6HAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9222	D:6HAYES -6YORKTWN1 +6CHCKTUK-6SURRY 1
314180	6HAYES	230.0	345	354	0.8915	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9223	D:6HAYES -6YORKTWN1 +6CHCKTUK-6CHCKT 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9224	D:6HAYES -6YORKTWN1 +6CRITTON-6SURRY 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9225	D:6HAYES -6YORKTWN1 +3FRANKLIN -3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9226	D:6HAYES -6YORKTWN1 +3FRANKLIN -3WATKINS1
314180	6HAYES	230.0	345	354	0.8904	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9227	D:6HAYES -6YORKTWN1 +6KINGSFO-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9228	D:6HAYES -6YORKTWN1 +3HANDSON-3S HAMPT1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9229	D:6HAYES -6YORKTWN1 +3HOLLAND-3SUFFOLK1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9230	D:6HAYES -6YORKTWN1 +3HOLLAND-3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9231	D:6HAYES -6YORKTWN1 +3IVOR106-3OAKR1231

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9232	D: 6HAYES -6YORKTWN1 +3WATKINS-3WINDSORI
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9233	D: 6HAYES -6YORKTWN1 +30AKR123-3SUFFCAP1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9234	D: 6HAYES -6YORKTWN1 +6SMITFLD-6SUNRY
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9235	D: 6HAYES -6YORKTWN1 +3S HAMPT-3WATKINS1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9236	D: 6HAYES -6YORKTWN1 +3S HAMPT-1SHAMPT11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9237	D: 6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFOLK21
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9238	D: 6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFOLK 11
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9239	D: 6HAYES -6YORKTWN1 +3SUFFOLK-3SUFFOLK 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9240	D: 6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9241	D: 6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK2
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9242	D: 6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK3
314180	6HAYES	230.0	345	354	0.8896	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9243	D: 6HAYES -6YORKTWN1 +6SUFFOLK-8SUFFOLK1
314180	6HAYES	230.0	345	354	0.8896	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9244	D: 6HAYES -6YORKTWN1 +6SUFFOLK-8SUFFOLK2
314180	6HAYES	230.0	345	354	0.8922	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9245	D: 6HAYES -6YORKTWN1 +6SUNRY -6FOOLSVLL
314180	6HAYES	230.0	345	354	0.8894	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9246	D: 6HAYES -6YORKTWN1 +6SUNRY -6GRAVELA1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9247	D: 6HAYES -6YORKTWN1 +6SUNRY -6GRAVELA1
314180	6HAYES	230.0	345	354	0.8908	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9248	D: 6HAYES -6YORKTWN1 +6SUNRY -1SUNRY 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9249	D: 6HAYES -6YORKTWN1 +6SUNRY -1GRAVELC1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9250	D: 6HAYES -6YORKTWN1 +3UNCAMP -3UNCAMP 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9251	D: 6HAYES -6YORKTWN1 +3WATKINS-3WATKI 11
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9252	D: 6HAYES -6YORKTWN1 +3WATKINS-3WATKI 21
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9253	D: 6HAYES -6YORKTWN1 +6GRAVELA-1GRAVEL31
314180	6HAYES	230.0	345	354	0.8897	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9254	D: 6HAYES -6YORKTWN1 +6GRAVELA-1GRAVEL41
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9255	D: 6HAYES -6YORKTWN1 +6GRAVELB-1GRAVEL51
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9256	D: 6HAYES -6YORKTWN1 +6GRAVELB-1GRAVEL61
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9257	D: 6HAYES -6YORKTWN1 +8LOUDO-1-8LOUDOUN1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9258	D: 6HAYES -6YORKTWN1 +8MORRIS-1-8MORRISVLL
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9259	D: 6HAYES -6YORKTWN1 +8MT ST 1-8MT STM 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9260	D: 6HAYES -6YORKTWN1 +8MT ST 2-8MT STM 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9261	D: 6HAYES -6YORKTWN1 +8BRISTER-8CHANCE 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9262	D: 6HAYES -6YORKTWN1 +8BRISTER-8MORRISVLL
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9263	D: 6HAYES -6YORKTWN1 +8BRISTER-8BOX 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9264	D: 6HAYES -6YORKTWN1 +8BATH CO-8LEVANGTNI
314180	6HAYES	230.0	345	354	0.8900	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9265	D: 6HAYES -6YORKTWN1 +8BATH CO-8VALLEY 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9266	D: 6HAYES -6YORKTWN1 + B50461 BATH 3W1 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9267	D: 6HAYES -6YORKTWN1 + B50462 BATH 3W3 1
314180	6HAYES	230.0	345	354	0.8901	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9268	D: 6HAYES -6YORKTWN1 + B50463 BATH 3W5 1
314180	6HAYES	230.0	345	354	0.8923	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9269	D: 6HAYES -6YORKTWN1 +8CARSON -8CLOVER 1
314180	6HAYES	230.0	345	354	0.8893	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9270	D: 6HAYES -6YORKTWN1 +8CARSON -8MDLTHAM1
314180	6HAYES	230.0	345	354	0.8893	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9271	D: 6HAYES -6YORKTWN1 +8CARSON -8TIVEFRKI
314180	6HAYES	230.0	345	354	0.8916	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9272	D: 6HAYES -6YORKTWN1 +8CARSON -8SUFFOLK1
314180	6HAYES	230.0	345	354	0.8915	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9273	D: 6HAYES -6YORKTWN1 +8CHICKAHM-8ELMONT 1
314180	6HAYES	230.0	345	354	0.8912	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9274	D: 6HAYES -6YORKTWN1 +8CHICKAHM-8SUNRY 1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9275	D: 6HAYES -6YORKTWN1 +8CLIFTON-8LOUDOUN1
314180	6HAYES	230.0	345	354	0.8899	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9276	D: 6HAYES -6YORKTWN1 +8CLIFTON-8BOX 1
314180	6HAYES	230.0	345	354	0.8898	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9277	D: 6HAYES -6YORKTWN1 +8CHANCE -8UDYSMT1
314180	6HAYES	230.0	345	354	0.8907	1.0376	0.9300	1.0700	0.9858	1.0895	LD	9278	D: 6HAYES -6YORKTWN1 +8DOOMS -8CUNNING1

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Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314407	6SHELBNK	230.0	345	356	0.8705	1.0360	0.9300	1.0700	0.9842	1.0878	LD	25015	D:6PMBROK-6SHELBNK1 +6PENINSL-6SHELBNK1
314497	6SEWLSFT	230.0	345	359	0.8753	1.0065	0.9300	1.0700	0.9561	1.0568	LD	37223	D:6CHRLND-6SEWLSFT1 +6CHRLND-6SEWLSFT2
314500	6NAVYS	230.0	345	359	0.8753	1.0065	0.9300	1.0700	0.9561	1.0568	LD	37223	D:6CHRLND-6SEWLSFT1 +6CHRLND-6SEWLSFT2
314501	6NAVYS1	230.0	345	359	0.8752	1.0064	0.9300	1.0700	0.9561	1.0567	LD	37223	D:6CHRLND-6SEWLSFT1 +6CHRLND-6SEWLSFT2
314505	6NAVYN	230.0	345	359	0.8753	1.0065	0.9300	1.0700	0.9562	1.0568	LD	37223	D:6CHRLND-6SEWLSFT1 +6CHRLND-6SEWLSFT2
314510	6NAVYN1	230.0	345	359	0.8751	1.0063	0.9300	1.0700	0.9560	1.0566	LD	37223	D:6CHRLND-6SEWLSFT1 +6CHRLND-6SEWLSFT2
314348	2GRETN I	69.0	345	358	0.8454	1.0169	0.9300	1.0700	0.9661	1.0678	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314354	2ALTWS 1	69.0	345	358	0.8698	1.0327	0.9300	1.0700	0.9810	1.0843	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314515	3ALTWS 1	115.0	345	358	0.8604	1.0005	0.9300	1.0700	0.9505	1.0506	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314666	3ALTWSA	115.0	345	358	0.8600	1.0000	0.9300	1.0700	0.9500	1.0500	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314667	4ALTVSTA	138.0	345	358	0.8485	0.9984	0.9300	1.0700	0.9485	1.0483	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314668	4BANISTR	138.0	345	358	0.9076	0.9946	0.9300	1.0700	0.9449	1.0444	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314670	2ALTVSTA	69.0	345	358	0.8696	1.0324	0.9300	1.0700	0.9808	1.0840	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314671	4BEARSKN	138.0	345	358	0.8889	0.9966	0.9300	1.0700	0.9467	1.0464	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314680	2CHATHAM	69.0	345	358	0.8323	1.0047	0.9300	1.0700	0.9545	1.0550	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314685	2CHTM TP	69.0	345	358	0.8329	1.0053	0.9300	1.0700	0.9551	1.0556	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314689	3DOMINIO	115.0	345	358	0.8404	0.9927	0.9300	1.0700	0.9431	1.0424	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314694	3GRIT	115.0	345	358	0.8762	1.0021	0.9300	1.0700	0.9520	1.0522	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314700	3HALL BR	115.0	345	358	0.8620	1.0000	0.9300	1.0700	0.9500	1.0500	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314705	3HURT	115.0	345	358	0.8654	1.0000	0.9300	1.0700	0.9500	1.0500	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314712	3OTTER R	115.0	345	358	0.8624	0.9999	0.9300	1.0700	0.9499	1.0499	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314727	2CLMX DP	69.0	345	358	0.8295	1.0029	0.9300	1.0700	0.9521	1.0523	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314728	2CLMX TP	69.0	345	358	0.8302	1.0022	0.9300	1.0700	0.9521	1.0520	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314729	2GLADYS	69.0	345	358	0.8456	1.0111	0.9300	1.0700	0.9606	1.0617	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314730	2GLDY TP	69.0	345	358	0.8658	1.0297	0.9300	1.0700	0.9783	1.0812	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314731	2GRETN A	69.0	345	358	0.8452	1.0167	0.9300	1.0700	0.9658	1.0675	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314732	2GRNA FB	69.0	345	358	0.8452	1.0167	0.9300	1.0700	0.9658	1.0675	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314733	2GRNA DP	69.0	345	358	0.8432	1.0149	0.9300	1.0700	0.9642	1.0656	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314734	2KLOP DP	69.0	345	358	0.8607	1.0261	0.9300	1.0700	0.9748	1.0774	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314735	2KLOP TP	69.0	345	358	0.8607	1.0261	0.9300	1.0700	0.9748	1.0774	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314736	2SHKO DP	69.0	345	358	0.8327	1.0052	0.9300	1.0700	0.9549	1.0554	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314737	2SM35T57	69.0	345	358	0.8516	1.0203	0.9300	1.0700	0.9693	1.0714	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314738	2MT AIRY	69.0	345	358	0.8456	1.0148	0.9300	1.0700	0.9641	1.0656	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314739	2MT A TP	69.0	345	358	0.8516	1.0203	0.9300	1.0700	0.9693	1.0714	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314740	2ALTWS35	69.0	345	358	0.8696	1.0324	0.9300	1.0700	0.9808	1.0840	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314789	2BEARSKN	69.0	345	358	0.8889	0.9966	0.9300	1.0700	0.9467	1.0464	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314836	3BALCFIS	115.0	345	365	0.3768	0.9962	0.9300	1.0700	0.9463	1.0460	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314837	3BUENA V	115.0	345	365	0.3756	0.9952	0.9300	1.0700	0.9455	1.0450	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314838	3BUSTLEB	115.0	345	365	0.3811	0.9985	0.9300	1.0700	0.9485	1.0484	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314839	3BUSTLE T	115.0	345	365	0.3813	0.9986	0.9300	1.0700	0.9487	1.0485	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314840	6CLFTN F	230.0	345	365	0.3601	0.9802	0.9300	1.0700	0.9312	1.0292	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314841	4CLFTN F	138.0	345	365	0.3648	1.0359	0.9300	1.0700	0.9411	1.0877	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314842	4COVNGT2	138.0	345	365	0.3482	1.0255	0.9300	1.0700	0.9742	1.0768	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314843	4COVNGT1	138.0	345	365	0.3457	1.0236	0.9300	1.0700	0.9726	1.0750	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314844	3CRAISV	115.0	345	365	0.3760	0.9955	0.9300	1.0700	0.9457	1.0452	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314845	3EFFNGR	115.0	345	365	0.3905	0.9986	0.9300	1.0700	0.9487	1.0486	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314846	3FAIRFLD	115.0	345	365	0.3799	0.9977	0.9300	1.0700	0.9478	1.0476	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314847	4FDJGE H	138.0	345	365	0.3428	1.0217	0.9300	1.0700	0.9706	1.0728	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314848	3GLASGOW	115.0	345	365	0.3784	0.9972	0.9300	1.0700	0.9473	1.0471	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314849	3GOSHEN	115.0	345	365	0.3774	0.9964	0.9300	1.0700	0.9466	1.0463	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314851	3JAMES L	115.0	345	365	0.3754	0.9952	0.9300	1.0700	0.9455	1.0450	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314852	3JMS L T	115.0	345	365	0.3760	0.9956	0.9300	1.0700	0.9459	1.0454	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314853	3LEXNGTN	115.0	345	365	0.3825	0.9993	0.9300	1.0700	0.9494	1.0493	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314854	6LEXNGT1	230.0	345	365	0.3867	0.9921	0.9300	1.0700	0.9425	1.0417	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314855	6LOWMOOR	230.0	345	365	0.3587	0.9798	0.9300	1.0700	0.9308	1.0288	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314856	6LEXNGT2	230.0	345	365	0.3867	0.9921	0.9300	1.0700	0.9425	1.0417	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314857	4LOWMOOR	138.0	345	365	0.3592	1.0334	0.9300	1.0700	0.9817	1.0850	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314858	3ROCKB T	115.0	345	365	0.3770	0.9959	0.9300	1.0700	0.9461	1.0457	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314859	4WSTVACO	138.0	345	365	0.3393	1.0192	0.9300	1.0700	0.9682	1.0701	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314860	4E MILL	138.0	345	365	0.3401	1.0198	0.9300	1.0700	0.9688	1.0708	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314861	3SKINMER	115.0	345	365	0.7823	0.9747	0.9300	1.0700	0.9260	1.0235	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314894	4LOWMO 1	138.0	345	365	0.3594	1.0339	0.9300	1.0700	0.9822	1.0856	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314901	8BATH CO	500.0	345	366	0.4120	1.0500	0.9300	1.0700	0.9975	1.1025	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
314912	8LEXNGTN	500.0	345	366	0.4217	1.0468	0.9300	1.0700	0.9944	1.0991	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315156	1HALLBRI	13.8	345	358	0.8620	1.0000	0.9300	1.0700	0.9500	1.0500	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315165	1HURT 1	13.8	345	358	0.8980	0.9934	0.9300	1.0700	0.9437	1.0430	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315166	1HURT 2	13.8	345	358	0.8980	0.9934	0.9300	1.0700	0.9437	1.0430	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315201	1BATH 1A	20.5	345	366	0.4198	1.0283	0.9300	1.0700	0.9769	1.0797	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315202	1BATH 2B	20.5	345	366	0.4269	1.0283	0.9300	1.0700	0.9769	1.0798	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315203	1BATH 3C	20.5	345	366	0.4271	1.0278	0.9300	1.0700	0.9764	1.0792	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315204	1BATH 4D	20.5	345	366	0.4193	1.0279	0.9300	1.0700	0.9765	1.0792	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315205	1BATH 5E	20.5	345	366	0.4196	1.0281	0.9300	1.0700	0.9767	1.0795	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
315206	1BATH 6F	20.5	345	366	0.4187	1.0281	0.9300	1.0700	0.9767	1.0795	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0461	BATH 3W1	1.0	345	366	0.4029	1.0249	0.9300	1.0700	0.9737	1.0762	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0462	BATH 3W3	1.0	345	366	0.3992	1.0224	0.9300	1.0700	0.9713	1.0735	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS0463	BATH 3W5	1.0	345	366	0.3992	1.0228	0.9300	1.0700	0.9716	1.0739	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI
BS1032	HURT 3WD	1.0	345	358	0.8668	0.9995	0.9300	1.0700	0.9495	1.0495	LD	51714	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGTNI

CATEGORY D

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 17:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 17:08 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT GEN RET
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC.sav
 Subsys.File X:\S2015\divp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\2015 Category D.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **
314418	6WHEALTN	230	314421	6WINCHST	230	LN	781.6	396.3	671.0	116.5	1	ROW 436
314278	6BERMUDA	230	314286	6CHSTF A	230	LN	657.7	4.0	541.0	121.6	4	ROW 567
314278	6BERMUDA	230	314303	6HOPEWLL	230	LN	657.9	4.3	549.0	119.8	4	ROW 567
314287	6CHSTF B	230	314303	6HOPEWLL	230	LN	557.6	34.9	549.0	101.6	4	ROW 567
314377	3DOW 34	115	314378	3FTEUS34	115	LN	109.6	61.0	103.0	105.5	4	ROW 567
314377	3DOW 34	115	314387	3LANEXA	115	LN	110.2	62.6	103.0	107.0	4	ROW 567
314377	3DOW 34	115	314378	3FTEUS34	115	LN	130.8	61.0	103.0	126.9	5	ROW 568
314377	3DOW 34	115	314387	3LANEXA	115	LN	132.3	62.6	103.0	128.4	5	ROW 568
314378	3FTEUS34	115	314381	3GRAFT34	115	LN	118.7	49.7	103.0	115.2	5	ROW 568
314391	6LIGH209	230	314415	6WALR209	230	LN	558.7	243.0	541.0	103.3	5	ROW 568
314418	6WHEALTN	230	314421	6WINCHST	230	LN	740.3	396.3	671.0	110.3	6	Chickahominy

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- MON, FEB 18 2013 17:09 <VOW003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT GEN RET
Case.File X:\S2015\sum 2015 (2013LF)_base_wpre_230kW AltC.sav
Subsys.File X:\S2015\dvp.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\2015 Category D.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLimi t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
315218	1CUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0188	1.1261	H	**	Base Case **
315062	1CHESTS7	13.8	345	357	1.0447	0.9886	0.9300	1.0700	0.9392	1.0381	R	4	ROW 567
315064	1CHESTS8	13.8	345	357	1.0519	0.9879	0.9300	1.0700	0.9385	1.0373	R	4	ROW 567
314180	6HAYES	230.0	345	354	0.9852	1.0376	0.9300	1.0700	0.9858	1.0895	D	5	ROW 568
314376	6DENBIGH	230.0	345	356	0.9771	1.0299	0.9300	1.0700	0.9784	1.0814	D	5	ROW 568
314386	6KINGS M	230.0	345	356	0.9759	1.0273	0.9300	1.0700	0.9759	1.0787	D	5	ROW 568
314398	6NP NEWS	230.0	345	356	0.9830	1.0381	0.9300	1.0700	0.9862	1.0900	D	5	ROW 568
314399	6FEMPBOK	230.0	345	356	0.9815	1.0371	0.9300	1.0700	0.9852	1.0889	D	5	ROW 568
314402	6PENINSL	230.0	345	356	0.9836	1.0406	0.9300	1.0700	0.9886	1.0927	D	5	ROW 568
314407	6SHELLENK	230.0	345	356	0.9801	1.0360	0.9300	1.0700	0.9842	1.0878	D	5	ROW 568
314409	6TABB	230.0	345	356	0.9826	1.0382	0.9300	1.0700	0.9863	1.0901	D	5	ROW 568
314423	6YORKTWN	230.0	345	356	0.9838	1.0361	0.9300	1.0700	0.9843	1.0879	D	5	ROW 568
314442	6NP NE 1	230.0	345	356	0.9850	1.0402	0.9300	1.0700	0.9882	1.0922	D	5	ROW 568
314450	6YORKT 1	230.0	345	356	0.9871	1.0395	0.9300	1.0700	0.9875	1.0915	D	5	ROW 568
315062	1CHESTS7	13.8	345	357	1.0447	0.9886	0.9300	1.0700	0.9392	1.0381	R	5	ROW 568
315064	1CHESTS8	13.8	345	357	1.0519	0.9879	0.9300	1.0700	0.9385	1.0373	R	5	ROW 568
315092	1YORKTN3	25.0	345	356	0.9838	1.0361	0.9300	1.0700	0.9843	1.0879	D	5	ROW 568
314176	6CHARMONY	230.0	345	354	0.9307	1.0307	0.9300	1.0700	0.9791	1.0822	D	7	Lanexa
314189	6PAPERMIL	230.0	345	354	0.9253	1.0222	0.9300	1.0700	0.9711	1.0733	LD	7	Lanexa
314375	6CORRECTN	230.0	345	354	0.9251	1.0212	0.9300	1.0700	0.9701	1.0723	LD	7	Lanexa
314180	6HAYES	230.0	345	354	0.9551	1.0376	0.9300	1.0700	0.9858	1.0895	D	9	Yorktown
314379	3TEUS58	115.0	345	356	0.9380	0.9875	0.9300	1.0700	0.9381	1.0369	D	10	Yorktown15
314382	3GRAFT58	115.0	345	356	0.9380	0.9938	0.9300	1.0700	0.9441	1.0435	D	10	Yorktown15

CATEGORY B

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 6:58 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC_open3458.sav
Subsys File X:\S2015\drv.sub
Monit File X:\S2015\vapsys.mon
Contn File X:\S2015\vapsys.con
Exclud File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	243.6	142.7	239.0	101.9	1094	314766 6LOUISA 230 314777 6S ANNA 230 1
314757	3GORDNVL	115	314776	3SOMRSET	115	LN	239.0	142.7	239.0	100.0	401	314232 6NO ANNA 230 314766 6LOUISA 230 1
314418	6WHEALTN	230	314421	6WINCHST	230	LN	568.1	399.9	574.0	99.0	28	313818 6BENCHRCH 230 314522 6CHCKTUK 230 1
304223	3ROCKYMT115T	115	314554	3BTLEBRO	115	LN	91.7	16.2	94.0	97.6	842	314559 3CAROLNA 115 314578 3HORNETN 115 1
314418	6WHEALTN	230	314421	6WINCHST	230	LN	555.5	399.9	574.0	96.8	27	313818 6BENCHRCH 230 314398 6NP NEWS 230 1
314072	6PL VIEW	230	314925	8PL VIEW	500	TR	960.5	828.6	993.6	96.7	307	314171 6BRAMBEL 230 314933 8BRAMBLETON 500 1
314461	3DEEPC46	115	314513	3YADKTN	115	LN	342.9	228.0	360.0	95.3	685	314449 6CHESAPK 230 314514 6YADKTN 230 1
314559	3CAROLNA	115	314581	3JACKSON	115	LN	111.6	72.7	118.0	94.5	441	314266 6NORTHAMPTON 230 314599 6ROA VAL 230 1
314212	6FRRIVER	230	314222	6HANOVER	230	LN	750.1	546.7	797.0	94.1	285	314138 6MINE RD 230 314197 6LEYSMT1 230 1
314559	3CAROLNA	115	314581	3JACKSON	115	LN	110.4	72.7	118.0	93.6	440	314266 6NORTHAMPTON 230 314569 6EARLEYS 230 1

AC Bus Voltage Violations

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 6:59 <VOW000.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case File X:\2015\sum_2013\lf_base_wpre_230kv_alc_open3458.sav
Subsys File X:\2015\ldvp_sub
Monit File X:\2015\lvpapsys.mon
Contn File X:\2015\lvpapsys.con
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
315008	1POSSM6A	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	61	314011 3BULLUN 115 314111 3HARTON 115 1
315009	1POSSM6B	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	61	314011 3BULLUN 115 314111 3HARTON 115 1
314014	3CANNONB	115.0	345	353	0.9038	1.0016	0.9300	1.0700	0.9515	1.0517	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9042	1.0010	0.9300	1.0700	0.9509	1.0510	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314146	3MTCR197	115.0	345	353	0.9043	1.0006	0.9300	1.0700	0.9506	1.0506	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314155	3CANBR T	115.0	345	353	0.9040	1.0011	0.9300	1.0700	0.9501	1.0511	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314158	3GOLW197	115.0	345	353	0.9042	1.0005	0.9300	1.0700	0.9504	1.0505	LD	69	314014 3CANNONB 115 314016 6CANNONB 230 1
314051	3LOMA197	115.0	345	353	0.9205	1.0010	0.9300	1.0700	0.9509	1.0510	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314148	3MTCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9506	1.0506	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314155	3CANBR T	115.0	345	353	0.9204	1.0011	0.9300	1.0700	0.9510	1.0511	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
314158	3GOLW197	115.0	345	353	0.9205	1.0005	0.9300	1.0700	0.9504	1.0505	LD	70	314014 3CANNONB 115 314155 3CANBR T 115 1
315008	1POSSM6A	18.0	345	353	0.9270	0.9360	0.9300	1.0700	0.8892	0.9828	L	93	314023 6CRYSTAL 230 314041 6GLEBE 230 1
315009	1POSSM6B	18.0	345	353	0.9270	0.9360	0.9300	1.0700	0.8892	0.9828	L	93	314023 6CRYSTAL 230 314041 6GLEBE 230 1
314160	1 TX503	13.2	345	353	1.1070	1.0058	0.9300	1.0700	0.9555	1.0561	HR	96	314025 1 TX500 13.2 314160 1 TX503 13.2 21
315008	1POSSM6A	18.0	345	353	0.9284	0.9360	0.9300	1.0700	0.8892	0.9828	L	160	314061 6LOUOUN 230 314102 6ARCOLA 230 1
315009	1POSSM6B	18.0	345	353	0.9284	0.9360	0.9300	1.0700	0.8892	0.9828	L	160	314061 6LOUOUN 230 314102 6ARCOLA 230 1
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOQUN 230 314068 6OX 230 1
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R	175	314067 6OCCOQUN 230 314068 6OX 230 1
314118	3MINTEV	115.0	345	353	0.9456	0.9969	0.9300	1.0700	0.9471	1.0467	D	179	314068 6OX 230 314167 3OX 115 1
314167	3OX	115.0	345	352	0.9457	1.0045	0.9300	1.0700	0.9543	1.0547	D	179	314068 6OX 230 314167 3OX 115 1
315008	1POSSM6A	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315009	1POSSM6B	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828	L	191	314073 3POSSUM 115 314074 6POSSUM 230 1
315008	1POSSM6A	18.0	345	353	0.9221	0.9360	0.9300	1.0700	0.8892	0.9828	L	202	314074 6POSSUM 230 315006 1POSSM 4 22.0 1
315009	1POSSM6B	18.0	345	353	0.9221	0.9360	0.9300	1.0700	0.8892	0.9828	L	202	314074 6POSSUM 230 315006 1POSSM 4 22.0 1
315008	1POSSM6A	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L	204	314074 6POSSUM 230 315008 1POSSM6B 18.0 1
315009	1POSSM6B	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L	204	314074 6POSSUM 230 315008 1POSSM6B 18.0 1
315008	1POSSM6A	18.0	345	353	0.9228	0.9360	0.9300	1.0700	0.8892	0.9828	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315009	1POSSM6B	18.0	345	353	0.9228	0.9360	0.9300	1.0700	0.8892	0.9828	L	206	314074 6POSSUM 230 315010 1POSSM6S 18.0 1
315008	1POSSM6A	18.0	345	353	0.9256	0.9360	0.9300	1.0700	0.8892	0.9828	L	245	314102 6ARCOLA 230 314168 6NEW RD 230 1
315009	1POSSM6B	18.0	345	353	0.9256	0.9360	0.9300	1.0700	0.8892	0.9828	L	245	314102 6ARCOLA 230 314168 6NEW RD 230 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314118	3MINNTEV	115.0	345	353	0.9438	0.9969	0.9300	1.0700	0.9471	1.0467	D	255	314118 3MINNTEV 115 314167 30X 115 1
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0515	D	259	314122 3SOWEGO 115 314156 3BRISTER 115 1
314049	3LOMAL72	115.0	345	353	0.9303	0.9827	0.9300	1.0700	0.9336	1.0319	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9285	0.9853	0.9300	1.0700	0.9360	1.0345	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9301	0.9828	0.9300	1.0700	0.9337	1.0319	D	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314157	3GOLOW172	115.0	345	353	0.9296	0.9838	0.9300	1.0700	0.9346	1.0330	LD	260	314123 3WELLGTN 115 314141 3LIBERTY 115 1
314122	3SOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0515	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314156	3BRISTER	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0546	D	263	314130 3BRISTER 230 314156 3BRISTER 115 1
314049	3LOMAL72	115.0	345	353	0.9304	0.9827	0.9300	1.0700	0.9336	1.0319	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314123	3WELLGTN	115.0	345	353	0.9286	0.9853	0.9300	1.0700	0.9360	1.0345	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314141	3LIBERTY	115.0	345	353	0.9286	0.9863	0.9300	1.0700	0.9370	1.0357	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314147	3MTCR172	115.0	345	353	0.9302	0.9828	0.9300	1.0700	0.9337	1.0319	D	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
314157	3GOLOW172	115.0	345	353	0.9297	0.9838	0.9300	1.0700	0.9346	1.0330	LD	269	314133 6LIBERTY 230 314141 3LIBERTY 115 1
315008	1POSSM6A	18.0	345	353	0.9251	0.9360	0.9300	1.0700	0.8892	0.9828	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
315009	1POSSM6B	18.0	345	353	0.9251	0.9360	0.9300	1.0700	0.8892	0.9828	L	273	314134 6CRANES 230 314142 6STAFORD 230 1
314775	3NI RVER	115.0	345	363	0.9546	1.0131	0.9300	1.0700	0.9625	1.0638	D	275	314135 3CHANCE 115 314775 3NI RVER 115 1
314151	3SLABTWN	115.0	345	355	0.9530	1.0049	0.9300	1.0700	0.9547	1.0552	D	280	314136 3FREDORG 230 314151 3SLABTWN 115 1
315008	1POSSM6A	18.0	345	353	0.9213	0.9360	0.9300	1.0700	0.8892	0.9828	L	282	314137 6FREDORG 230 314138 6MINE RD 230 1
315009	1POSSM6B	18.0	345	353	0.9213	0.9360	0.9300	1.0700	0.8892	0.9828	L	282	314137 6FREDORG 230 314138 6MINE RD 230 1
315008	1POSSM6A	18.0	345	353	0.9195	0.9360	0.9300	1.0700	0.8892	0.9828	L	289	314142 6STAFORD 230 314145 6ACUI HARB B 230 1
315009	1POSSM6B	18.0	345	353	0.9195	0.9360	0.9300	1.0700	0.8892	0.9828	L	289	314142 6STAFORD 230 314145 6ACUI HARB B 230 1
314148	3MTCR197	115.0	345	353	0.9204	1.0006	0.9300	1.0700	0.9505	1.0506	LD	295	314148 3MTCR197 115 314155 3CANBR T 115 1
314158	3GOLOW197	115.0	345	353	0.9205	1.0005	0.9300	1.0700	0.9504	1.0505	LD	295	314148 3MTCR197 115 314155 3CANBR T 115 1
315008	1POSSM6A	18.0	345	353	0.9295	0.9360	0.9300	1.0700	0.8892	0.9828	L	305	314166 3NEW RD 115 314168 6NEW RD 230 1
315009	1POSSM6B	18.0	345	353	0.9295	0.9360	0.9300	1.0700	0.8892	0.9828	L	305	314166 3NEW RD 115 314168 6NEW RD 230 1
314176	3HARMONY	230.0	345	354	1.1394	1.0265	0.9300	1.0700	0.9752	1.0778	HR	318	314176 3HARMONY 230 314189 6PAPERMILL 230 1
314180	3HAYES	230.0	345	354	0.9496	1.0257	0.9300	1.0700	0.9744	1.0770	D	321	314180 3HAYES 230 314423 6YOKTWN 230 1
314259	3CAR56 1	115.0	345	362	1.1492	1.0189	0.9300	1.0700	0.9680	1.0699	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314524	3FRANKLIN	115.0	345	360	1.0701	1.0217	0.9300	1.0700	0.9707	1.0728	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314526	3HANDSOM	115.0	345	360	1.0753	1.0204	0.9300	1.0700	0.9693	1.0714	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314534	3S HAMPT	115.0	345	360	1.0753	1.0222	0.9300	1.0700	0.9711	1.0733	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314541	3WATKINS	115.0	345	360	1.0752	1.0232	0.9300	1.0700	0.9721	1.0744	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314558	3BOYKINS	115.0	345	362	1.0826	1.0161	0.9300	1.0700	0.9653	1.0669	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314587	3MARGT SV	115.0	345	362	1.1061	1.0159	0.9300	1.0700	0.9651	1.0667	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314589	3MURPHYS	115.0	345	362	1.0570	1.0061	0.9300	1.0700	0.9558	1.0564	H	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314600	3SEABORD	115.0	345	362	1.1178	1.0159	0.9300	1.0700	0.9651	1.0667	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314826	3WATKI 1	115.0	345	360	1.0757	1.0238	0.9300	1.0700	0.9726	1.0750	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314827	3WATKI 2	115.0	345	360	1.0757	1.0238	0.9300	1.0700	0.9726	1.0750	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
314835	3CAROL 1	115.0	345	362	1.1504	1.0200	0.9300	1.0700	0.9650	1.0710	HR	431	314259 3CAR56 1 115 314559 3CAROLINA 115 1
315115	3SHAMPT1	13.8	345	360	1.0468	0.9916	0.9300	1.0700	0.9420	1.0412	R	464	314275 6EELMAD 230 314276 6BRASN 230 1
315083	3ISFRUNCA	13.8	345	357	1.0105	0.9624	0.9300	1.0700	0.9143	1.0105	R	464	314275 6EELMAD 230 314276 6BRASN 230 1
314328	6PLAZA	230.0	345	357	0.9104	1.0055	0.9300	1.0700	0.9552	1.0558	LD	568	314328 6PLAZA 230 314338 6SOUTEST 230 1
314524	3FRANKLIN	115.0	345	360	1.0754	1.0217	0.9300	1.0700	0.9707	1.0728	HR	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314527	3HOLLAND	115.0	345	360	1.0774	1.0091	0.9300	1.0700	0.9586	1.0595	HR	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0718	1.0222	0.9300	1.0700	0.9711	1.0733	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0786	1.0209	0.9300	1.0700	0.9698	1.0719	HR	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0740	1.0232	0.9300	1.0700	0.9721	1.0744	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3HUNCAM 1	115.0	345	360	1.0723	1.0216	0.9300	1.0700	0.9705	1.0726	HR	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 10:09 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC_open3458.sav
Subsys.File X:\S2015\drv.sub
Monit.File X:\S2015\vapsys.mon
Contn.File X:\S2015\sum2015_single.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 93.5 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314757	3GORDNVL	115	314776	3SOMRSET	115 LN	242.9	142.7	239.0	101.6	226	LN 255
314418	6WHEALTN	230	314421	6WINCHST	230 LN	558.0	399.9	574.0	97.2	237	LN 263
314072	6PL VIEW	230	314925	8PL VIEW	500 TR	960.5	828.6	993.6	96.7	504	TX-1 8BRAMBL
314461	3DEEPC46	115	314513	3YADKIN	115 LN	342.9	228.0	360.0	95.3	235	LN 262
314212	6FRRIVER	230	314222	6HANOVER	230 LN	749.6	546.7	797.0	94.1	395	LN 2090
314559	3CAROLNA	115	314581	3JACKSON	115 LN	110.9	72.7	118.0	94.0	327	LN 2012

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 10:10 <VOW003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC_open3458.sav
Subsys.File X:\S2015\cvp.sub
Monit.File X:\S2015\vapsys.mon
Contin.File X:\S2015\sum2015_single.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	Voltdro P	Voltris e	Viol	Ncon	Contingency Description ** Base Case **
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H		
314524	3FRNKLN	115.0	345	360	1.0820	1.0217	0.9300	1.0700	0.9707	1.0728	HR	61 LN 68	
314526	3HANDSOM	115.0	345	360	1.0714	1.0204	0.9300	1.0700	0.9693	1.0714	H	61 LN 68	
314534	3S HAMPT	115.0	345	360	1.0780	1.0222	0.9300	1.0700	0.9711	1.0733	HR	61 LN 68	
314539	3UNCAMP	115.0	345	360	1.0856	1.0209	0.9300	1.0700	0.9698	1.0719	HR	61 LN 68	
314541	3WATKINS	115.0	345	360	1.0803	1.0232	0.9300	1.0700	0.9721	1.0744	HR	61 LN 68	
314824	3UNCAM 1	115.0	345	360	1.0863	1.0216	0.9300	1.0700	0.9705	1.0726	HR	61 LN 68	
314826	3WATKI 1	115.0	345	360	1.0809	1.0238	0.9300	1.0700	0.9726	1.0750	HR	61 LN 68	
314827	3WATKI 2	115.0	345	360	1.0809	1.0238	0.9300	1.0700	0.9726	1.0750	HR	61 LN 68	
315115	1SHAMPT1	13.8	345	360	1.0496	0.9916	0.9300	1.0700	0.9420	1.0412	R	61 LN 68	
315008	1POSSM6A	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	122 LN 134	
315009	1POSSM6B	18.0	345	353	0.9259	0.9360	0.9300	1.0700	0.8892	0.9828	L	122 LN 134	
314348	2GRETN 1	69.0	345	358	1.0743	1.0169	0.9300	1.0700	0.9661	1.0678	HR	153 LN 173	
314731	2GRETN A	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153 LN 173	
314732	2GRNA FB	69.0	345	358	1.0741	1.0167	0.9300	1.0700	0.9658	1.0675	HR	153 LN 173	
314874	2LN 174	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	154 LN 174	
314878	2LN 178	69.0	345	351	1.0782	1.0195	0.9300	1.0700	0.9685	1.0705	HR	156 LN 178	
314879	2LN 179	69.0	345	351	1.0784	1.0195	0.9300	1.0700	0.9685	1.0705	HR	157 LN 179	
314880	2LN 180	69.0	345	351	1.0785	1.0195	0.9300	1.0700	0.9685	1.0705	HR	158 LN 180	
314122	3SOWEGO	115.0	345	353	0.9498	1.0015	0.9300	1.0700	0.9514	1.0515	D	159 LN 181	
314051	31OWA197	115.0	345	353	0.9343	1.0010	0.9300	1.0700	0.9509	1.0510	D	172 LN 197	
314148	3MICR197	115.0	345	353	0.9091	1.0006	0.9300	1.0700	0.9506	1.0506	LD	172 LN 197	
314158	3GOWD197	115.0	345	353	0.9469	1.0005	0.9300	1.0700	0.9504	1.0505	D	172 LN 197	
314014	3CANNONB	115.0	345	353	0.9002	1.0016	0.9300	1.0700	0.9515	1.0517	LD	326 LN 2011	
314051	31OWA197	115.0	345	353	0.9005	1.0010	0.9300	1.0700	0.9509	1.0510	LD	326 LN 2011	
314148	3MICR197	115.0	345	353	0.9005	1.0006	0.9300	1.0700	0.9506	1.0506	LD	326 LN 2011	

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	VoltDro P	VoltRis e	Viol	Ncon	Contingency Description
314155	3CANER T	115.0	345	353	0.9004	1.0011	0.9300	1.0700	0.9510	1.0511 LD		326 LN 2011	
314158	3GOWW197	115.0	345	353	0.9007	1.0005	0.9300	1.0700	0.9504	1.0505 LD		326 LN 2011	
315001	LOWE A	13.8	345	351	1.0282	0.9770	0.9300	1.0700	0.9282	1.0259 R		328 LN 2013	
315002	LOWE B	13.8	345	351	1.0288	0.9770	0.9300	1.0700	0.9282	1.0259 R		328 LN 2013	
315083	ISPRUNCA	13.8	345	357	1.0105	0.9624	0.9300	1.0700	0.9143	1.0105 R		367 LN 2055	
315008	IPSSM6A	18.0	345	353	0.9213	0.9360	0.9300	1.0700	0.8892	0.9828 L		395 LN 2090	
315009	IPSSM6B	18.0	345	353	0.9213	0.9360	0.9300	1.0700	0.8892	0.9828 L		395 LN 2090	
315008	IPSSM6A	18.0	345	353	0.9195	0.9360	0.9300	1.0700	0.8892	0.9828 L		407 LN 2104	
315009	IPSSM6B	18.0	345	353	0.9184	0.9360	0.9300	1.0700	0.8892	0.9828 L		407 LN 2104	
311180	WHAYES	230.0	345	354	0.9496	1.0257	0.9300	1.0700	0.9744	1.0770 D		423 LN 2122	
314118	3MINNIEV	115.0	345	353	0.9456	0.9969	0.9300	1.0700	0.9471	1.0467 D		470 TX-1 60X	
314167	3OX	115.0	345	352	0.9457	1.0045	0.9300	1.0700	0.9543	1.0547 D		470 TX-1 60X	
315008	IPSSM6A	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828 L		475 TX-1 6POSSUM	
315009	IPSSM6B	18.0	345	353	0.9220	0.9360	0.9300	1.0700	0.8892	0.9828 L		475 TX-1 6POSSUM	
315008	IPSSM6A	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828 L		481 TX-1 6POSSUM	
315009	IPSSM6B	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828 L		482 TX-1 6POSSUM	
315008	IPSSM6A	18.0	345	353	0.9228	0.9360	0.9300	1.0700	0.8892	0.9828 L		483 TX-1 6POSSUM	
315009	IPSSM6B	18.0	345	353	0.9228	0.9360	0.9300	1.0700	0.8892	0.9828 L		483 TX-1 6POSSUM	
314122	3SOWEGO	115.0	345	353	0.9504	1.0015	0.9300	1.0700	0.9514	1.0515 D		492 TX-1 6BRISTE	
314156	3BRISTE	115.0	345	353	0.9504	1.0044	0.9300	1.0700	0.9542	1.0546 D		492 TX-1 6BRISTE	
314049	3LOWA172	115.0	345	353	0.9304	0.9827	0.9300	1.0700	0.9336	1.0319 D		495 TX-1 6LIBERT	
314123	3WELIGN	115.0	345	353	0.9286	0.9853	0.9300	1.0700	0.9360	1.0345 LD		495 TX-1 6LIBERT	
314141	3LIBERTY	115.0	345	353	0.9286	0.9863	0.9300	1.0700	0.9370	1.0357 LD		495 TX-1 6LIBERT	
314147	3MICR172	115.0	345	353	0.9302	0.9828	0.9300	1.0700	0.9337	1.0319 D		495 TX-1 6LIBERT	
314157	3GOWW172	115.0	345	353	0.9297	0.9838	0.9300	1.0700	0.9346	1.0330 LD		495 TX-1 6LIBERT	

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314826	3WATKI 1	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	1SHAMPT1	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314524	3FRANKLIN	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314526	3SHANDSON	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314534	3S HAMPT	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314539	3UNCAMP	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314541	3WATKINS	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314824	3UNCAMP 1	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314826	3WATKI 1	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314827	3WATKI 2	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
315115	1SHAMPT1	115.0	345	360	1.0746	1.0238	0.9300	1.0700	0.9726	1.0750	H	791	314527 3HOLLAND 115 314536 3SUFFOLK 115 1
314516	3BRUNS 1	115.0	345	358	1.0746	1.0090	0.9300	1.0700	0.9585	1.0594	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314565	3CLUBHSE 1	115.0	345	362	1.0746	1.0014	0.9300	1.0700	0.9514	1.0515	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314675	3BROWNAX	115.0	345	358	1.0692	1.0070	0.9300	1.0700	0.9566	1.0573	R	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314676	3BRUNSWK	115.0	345	358	1.0746	1.0085	0.9300	1.0700	0.9581	1.0589	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314693	3FRANKLIN	115.0	345	358	1.0746	1.0041	0.9300	1.0700	0.9539	1.0543	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314704	3LAURENC	115.0	345	358	1.0746	1.0070	0.9300	1.0700	0.9566	1.0573	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314721	3SO HILL	115.0	345	358	1.0746	1.0053	0.9300	1.0700	0.9531	1.0536	R	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314782	2BRUNSWC	69.0	345	358	1.0746	1.0287	0.9300	1.0700	0.9773	1.0802	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314785	2DANLAWN	69.0	345	358	1.0746	0.9763	0.9300	1.0700	0.9275	1.0251	R	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314786	2GASBURG	69.0	345	358	1.0746	1.0127	0.9300	1.0700	0.9621	1.0634	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314787	2BRUNSW2	69.0	345	358	1.0746	1.0127	0.9300	1.0700	0.9513	1.0514	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314850	3CLUBHSE 1	115.0	345	362	1.0746	1.0013	0.9300	1.0700	0.9518	1.0520	H	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314872	2BRUNSWIC	69.0	345	358	1.0606	0.9882	0.9300	1.0700	0.9388	1.0376	R	851	314562 3CLUBHSE 115 314565 3CLUBHSE 115 21
314348	2GRETNA 1	69.0	345	358	1.0746	1.0169	0.9300	1.0700	0.9661	1.0675	H	1044	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314732	2GRETNA FB	69.0	345	358	1.0746	1.0167	0.9300	1.0700	0.9658	1.0675	H	1044	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314737	2SW35757	69.0	345	358	1.0746	1.0203	0.9300	1.0700	0.9693	1.0713	H	1044	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314739	2MT A TP	69.0	345	358	1.0746	1.0203	0.9300	1.0700	0.9693	1.0714	H	1044	314731 2GRETNA 69.0 314732 2GRETNA FB 69.0 21
314348	2GRETNA 1	69.0	345	358	1.0746	1.0169	0.9300	1.0700	0.9661	1.0678	H	1045	314733 2GRETNA DP 69.0 1
314731	2GRETNA	69.0	345	358	1.0746	1.0167	0.9300	1.0700	0.9658	1.0675	H	1045	314733 2GRETNA DP 69.0 1
314732	2GRETNA FB	69.0	345	358	1.0746	1.0167	0.9300	1.0700	0.9658	1.0675	H	1045	314733 2GRETNA DP 69.0 1
314763	3KIDSTO	115.0	345	363	0.9256	0.9931	0.9300	1.0700	0.9435	1.0428	ID	1058	314744 3BEMO 115 1

CATEGORY C

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 17:09 <V0V003.0>
2015 SUMMER BASE CASE (LTSGL5S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case File X:\S2015\sum_2015(2013LF)_base_wpre_230KV AltC_open3458.sav
Subsys File X:\S2015\drv.sub
Monit File X:\S2015\vepsys.mon
Contn File X:\S2015\2015_rtep_tower_contingency_DWP.con
Exclud File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Uplimi t	VoltDro P	Voltris e	Viol	Ncon	Contingency Description ** Base Case **
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	7	201769020
314796	JEDINBRG	115.0	345	364	1.6661	1.0223	0.9300	1.0700	0.9712	1.0735	HR	7	201769020
314797	JEDINBRG	138.0	345	364	1.5648	0.9992	0.9300	1.0700	0.9493	1.0493	HR	7	201769020
314798	3MERCK5	115.0	345	364	2.4476	0.9977	0.9300	1.0700	0.9478	1.0476	HR	7	201769020
314799	3ENDLCV	115.0	345	364	2.1030	0.9991	0.9300	1.0700	0.9491	1.0490	HR	7	201769020
314800	3ENDLCV	230.0	345	364	2.1550	1.0374	0.9300	1.0700	0.9856	1.0893	HR	7	201769020
314802	3GROTORS	115.0	345	364	1.1495	1.0027	0.9300	1.0700	0.9525	1.0528	HR	7	201769020
314803	6GROTORS	230.0	345	364	1.0750	1.0320	0.9300	1.0700	0.9804	1.0836	H	7	201769020
314807	3MT JACK	115.0	345	364	1.9962	1.0078	0.9300	1.0700	0.9574	1.0582	HR	7	201769020
314809	3N SHEND	115.0	345	364	2.7660	0.9973	0.9300	1.0700	0.9474	1.0471	HR	7	201769020
314814	3TIMBERV	115.0	345	364	2.1113	0.9887	0.9300	1.0700	0.9392	1.0381	HR	7	201769020
314886	3EDINB 1	115.0	345	364	1.6572	1.0230	0.9300	1.0700	0.9719	1.0742	HR	7	201769020
314887	3ENDLC 1	115.0	345	364	2.1045	0.9997	0.9300	1.0700	0.9497	1.0497	HR	7	201769020
314889	3MERCK 1	115.0	345	364	1.4465	0.9983	0.9300	1.0700	0.9484	1.0482	HR	7	201769020
315008	1POSSM6A	18.0	345	353	0.9214	0.9360	0.9300	1.0700	0.8892	0.9828	L	7	201769020
315009	1POSSM6B	18.0	345	353	0.9214	0.9360	0.9300	1.0700	0.8892	0.9828	L	7	201769020
313812	6GROCKLANI	230.0	345	356	0.9345	1.0187	0.9300	1.0700	0.9659	1.0676	D	9	2146263
314180	6HAYES	230.0	345	354	0.9417	1.0257	0.9300	1.0700	0.9744	1.0770	D	9	2146263
314296	6PENNINGAN	230.0	345	356	0.9403	1.0170	0.9300	1.0700	0.9661	1.0678	D	9	2146263
314376	6DENBIGH	230.0	345	356	0.9357	1.0191	0.9300	1.0700	0.9682	1.0701	D	9	2146263
314386	6KINGS M	230.0	345	356	0.9395	1.0181	0.9300	1.0700	0.9672	1.0690	D	9	2146263
314390	6LIGH285	230.0	345	356	0.9390	1.0113	0.9300	1.0700	0.9607	1.0619	D	9	2146263
314391	6LIGH209	230.0	345	356	0.9477	1.0145	0.9300	1.0700	0.9638	1.0652	D	9	2146263
314398	6NP NEWS	230.0	345	356	0.9052	1.0120	0.9300	1.0700	0.9614	1.0626	LD	9	2146263
314399	6PEMEROK	230.0	345	356	0.9063	1.0130	0.9300	1.0700	0.9624	1.0637	LD	9	2146263
314402	6PENINSLS	230.0	345	356	0.9238	1.0223	0.9300	1.0700	0.9712	1.0734	LD	9	2146263

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	UppLim t	VoltDro P	VoltRis e	Viol	Noon	Contingency Description
314407	6SHELBNK	230.0	345	356	0.9078	1.0140	0.9300	1.0700	0.9633	1.0647	LD		9 2144263
314409	6TABB	230.0	345	356	0.9283	1.0222	0.9300	1.0700	0.9711	1.0733	LD		9 2144263
314413	6WALR285	230.0	345	356	0.9357	1.0117	0.9300	1.0700	0.9611	1.0623	D		9 2144263
314415	6WALR209	230.0	345	356	0.9426	1.0148	0.9300	1.0700	0.9641	1.0656	D		9 2144263
314416	6WARWICK	230.0	345	356	0.9343	1.0161	0.9300	1.0700	0.9653	1.0669	D		9 2144263
314418	6WHEALTN	230.0	345	356	0.9346	1.0145	0.9300	1.0700	0.9638	1.0653	D		9 2144263
314421	6WTCNCHST	230.0	345	356	0.9344	1.0142	0.9300	1.0700	0.9635	1.0650	D		9 2144263
314423	6YORKTWN	230.0	345	356	0.9400	1.0241	0.9300	1.0700	0.9729	1.0754	D		9 2144263
314445	6WHEAL 1	230.0	345	356	0.9365	1.0166	0.9300	1.0700	0.9658	1.0674	D		9 2144263
314450	6YORKT 1	230.0	345	356	0.9431	1.0275	0.9300	1.0700	0.9761	1.0789	D		9 2144263
315062	1CHESTS7	13.8	345	357	1.0448	0.9843	0.9300	1.0700	0.9445	1.0440	R		9 2144263
315064	1CHESTS8	13.8	345	357	1.0519	0.9935	0.9300	1.0700	0.9439	1.0432	R		9 2144263
315092	1YORKTN3	25.0	345	356	0.9400	1.0241	0.9300	1.0700	0.9729	1.0754	D		9 2144263
314331	6POE	230.0	345	357	1.0702	1.0259	0.9300	1.0700	0.9746	1.0772	H		19 200242003
314497	6SEWLEFT	230.0	345	359	0.8464	1.0063	0.9300	1.0700	0.9560	1.0566	LD		45 25742099
314500	6NAVYS	230.0	345	359	0.8463	1.0063	0.9300	1.0700	0.9560	1.0566	LD		45 25742099
314501	6NAVYS1	230.0	345	359	0.8463	1.0062	0.9300	1.0700	0.9559	1.0566	LD		45 25742099
314505	6NAVYN	230.0	345	359	0.8464	1.0063	0.9300	1.0700	0.9560	1.0566	LD		45 25742099
314510	6NAVYN1	230.0	345	359	0.8461	1.0061	0.9300	1.0700	0.9558	1.0564	LD		45 25742099
315008	1POSSMEA	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L		47 20024442051
315009	1POSSMEB	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L		47 20024442051
315008	1POSSMEA	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L		50 2044220
315009	1POSSMEB	18.0	345	353	0.9223	0.9360	0.9300	1.0700	0.8892	0.9828	L		50 2044220
315008	1POSSMEA	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L		58 23742022
315009	1POSSMEB	18.0	345	353	0.9255	0.9360	0.9300	1.0700	0.8892	0.9828	L		58 23742022
315001	1OMF A	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R		60 24842013
315002	1OMF B	13.8	345	351	1.0328	0.9770	0.9300	1.0700	0.9282	1.0259	R		60 24842013
315008	1POSSMEA	18.0	345	353	0.9260	0.9360	0.9300	1.0700	0.8892	0.9828	L		63 2514266
315009	1POSSMEB	18.0	345	353	0.9260	0.9360	0.9300	1.0700	0.8892	0.9828	L		63 2514266
315008	1POSSMEA	18.0	345	353	0.9234	0.9360	0.9300	1.0700	0.8892	0.9828	L		72 26642022
315009	1POSSMEB	18.0	345	353	0.9234	0.9360	0.9300	1.0700	0.8892	0.9828	L		72 26642022
315008	1POSSMEA	18.0	345	353	0.9216	0.9360	0.9300	1.0700	0.8892	0.9828	L		84 25642090
315009	1POSSMEB	18.0	345	353	0.9216	0.9360	0.9300	1.0700	0.8892	0.9828	L		84 25642090

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 17:08 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230KV AltC_open3458.sav
 Subsys.File X:\S2015\dvp.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\2015_rtep_tower_contingency_DVP.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	** **	To bus	** CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	70.0	99.8	**	Base Case **
235496	01NSHEND	138	314809	3N SHEND	115	TR	90.3	283.0	181.4	7	201769020
235513	01STRAB	138	314797	4EDINBRG	138	LN	49.7	222.0	290.7	7	201769020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	521.2	166.8	312.4	7	201769020
314796	3EDINBRG	115	314797	4EDINBRG	138	TR	521.2	166.8	312.4	7	201769020
314796	3EDINBRG	115	314807	3MT JACK	115	LN	575.0	287.0	200.3	7	201769020
314798	3MERCK5	115	314802	3GROTOES	115	LN	509.5	251.0	203.0	7	201769020
314798	3MERCK5	115	314809	3N SHEND	115	LN	464.3	251.0	185.0	7	201769020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5889.8	258.5	2278.5	7	201769020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5967.1	311.8	1913.7	7	201769020
314799	3ENDLCV	115	314800	6ENDLCV	230	TR	5889.8	258.5	2278.5	7	201769020
314799	3ENDLCV	115	314807	3MT JACK	115	LN	575.4	359.0	160.3	7	201769020
314799	3ENDLCV	115	314809	3N SHEND	115	LN	748.9	251.0	298.4	7	201769020
314802	3GROTOES	115	314803	6GROTOES	230	TR	427.8	287.0	149.0	7	201769020
314177	3HAYES89	115	314180	6HAYES	230	TR	279.6	268.6	104.1	9	2146263
314296	6PENNNMAN	230	314386	6KINGS M	230	LN	580.1	541.0	107.2	9	2146263
314296	6PENNNMAN	230	314415	6WALR209	230	LN	597.0	541.0	110.3	9	2146263
314386	6KINGS M	230	314423	6YORKTWN	230	LN	554.2	541.0	102.4	9	2146263
314391	6LIGH209	230	314415	6WALR209	230	LN	676.4	541.0	125.0	9	2146263
314406	3SHELBNK	115	314407	6SHELBNK	230	TR	275.0	268.6	102.4	9	2146263
314461	3DEEPC46	115	314513	3YADKIN	115	LN	411.8	228.0	99.5	15	262662018
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	338.2	287.9	117.5	45	25762099
314496	3SEWLSPT	115	314497	6SEWLSPT	230	TR	318.6	265.2	120.1	45	25762099

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:06 <BRV003.0>
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65
Case.File H:\Trans Customer Planning\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\sum.2015(2013LF)_base_wpre_230kV AltC_open34584
Subsys.File H:\Trans Customer Planning\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula_AC.sub
Monit.File H:\Trans Customer Planning\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\vapsys.mon
Contn.File H:\Trans Customer Planning\Year2011\SkiffesCreek Application\Rebuttal Study\S2015\peninsula.con
Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314391	6LIGH209	230	314415	6WALR209	230	1	LN	941.5	262.3	541.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	927.8	262.3	541.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNNIMAN	230	314415	6WALR209	230	1	LN	843.3	194.0	541.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNNIMAN	230	314415	6WALR209	230	1	LN	826.7	194.0	541.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNNIMAN	230	314386	6KINGS M	230	1	LN	823.1	178.1	541.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNNIMAN	230	314386	6KINGS M	230	1	LN	807.4	178.1	541.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314366	6KINGS M	230	314423	6YORKTWN	230	1	LN	794.6	154.7	541.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	780.4	262.3	541.0	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314366	6KINGS M	230	314423	6YORKTWN	230	1	LN	776.1	154.7	541.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	757.5	262.3	541.0	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314214	6CHCKAHM	230	314390	6LIGH285	230	1	LN	1081.0	377.2	830.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314214	6CHCKAHM	230	314390	6LIGH285	230	1	LN	1070.1	377.2	830.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNNIMAN	230	314415	6WALR209	230	1	LN	689.0	194.0	541.0	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314296	6PENNNIMAN	230	314386	6KINGS M	230	1	LN	671.4	178.1	541.0	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENNNIMAN	230	314415	6WALR209	230	1	LN	667.5	194.0	541.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	1001.4	309.6	812.0	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	990.4	309.6	812.0	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	658.3	262.3	541.0	24203	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	658.7	262.3	541.0	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314188	3WEST PT	115	314387	3LANEXA	115	1	LN	333.4	51.5	275.0	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314188	3WEST PT	115	314387	3LANEXA	115	1	LN	332.6	51.5	275.0	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENNNIMAN	230	314386	6KINGS M	230	1	LN	650.0	178.1	541.0	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	647.9	262.3	541.0	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415	6WALR209	230	1	LN	648.3	262.3	541.0	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314417	3WHEALTN	115	314418	6WHEALTN	230	2	TR	345.0	118.4	289.0		

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

**	From bus	**	To bus	**	Ckt	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description
314391	6LIGH209	230	314415 6WALR209	230	1	LN	646.2	262.3	541.0	119.4	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314386	6KINGS M	230	314423 6YORKTWN	230	1	LN	643.7	154.7	541.0	119.0	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314390	6LIGH285	230	314413 6WALR285	230	1	LN	976.8	293.8	830.0	117.7	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314390	6LIGH285	230	314413 6WALR285	230	1	LN	961.6	293.8	830.0	115.9	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	626.6	262.3	541.0	115.8	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1
314401	3PENINSL	115	314412 3U CARB	115	1	LN	157.2	35.3	136.0	115.6	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314412	3U CARB	115	314417 3WHEALTN	115	1	LN	157.2	35.4	136.0	115.6	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314386	6KINGS M	230	314423 6YORKTWN	230	1	LN	622.6	154.7	541.0	115.1	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115	314418 6WHEALTN	230	2	TR	326.4	118.4	289.0	113.0	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	749.0	395.8	671.0	111.6	2613	D:6BENCHRC-6CHCKTUK1 +6LANEXA -6LIGH2091
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	745.4	395.8	671.0	111.1	2616	D:6BENCHRC-6CHCKTUK1 +6LIGH285-6WALR2851
314214	6CHCKAHM	230	314390 6LIGH285	230	1	LN	920.1	377.2	830.0	110.9	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314401	3PENINSL	115	314412 3U CARB	115	1	LN	150.3	35.3	136.0	110.5	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314412	3U CARB	115	314417 3WHEALTN	115	1	LN	150.3	35.4	136.0	110.5	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	731.5	395.8	671.0	109.0	2299	D:6BENCHRC-6NP NEWS1 +6LANEXA -6LIGH2091
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	728.2	395.8	671.0	108.5	2302	D:6BENCHRC-6NP NEWS1 +6LIGH285-6WALR2851
313812	6ROCKLANDING	230	314423 6YORKTWN	230	1	LN	585.4	66.2	541.0	108.2	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314214	6CHCKAHM	230	314390 6LIGH285	230	1	LN	896.0	377.2	830.0	108.0	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	722.7	395.8	671.0	107.7	2617	D:6BENCHRC-6CHCKTUK1 +6LIGH209-6WALR2091
314406	3SHELBNK	115	314407 6SHELBNK	230	1	TR	287.0	96.2	268.6	106.9	1847	D:6ROCKLAN-6YORKTWN1 +6SURY -6POOLSVL1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	576.9	262.3	541.0	106.6	21798	D:6LIGH285-6WALR2851 +6SURY -6POOLSVL1
314296	6PENNNAN	230	314415 6WALR209	230	1	LN	573.3	194.0	541.0	106.0	24203	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314296	6PENNNAN	230	314415 6WALR209	230	1	LN	573.0	194.0	541.0	105.9	23730	D:6NP NEWS-6PEMBROK1 +6SURY -6POOLSVL1
314423	6YORKTWN	230	314425 3YORK PS	115	1	TR	300.0	105.7	284.4	105.5	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	570.7	262.3	541.0	105.5	21652	D:6LIGH285-6WALR2851 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	707.0	395.8	671.0	105.4	2600	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6WALR2851
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	706.2	395.8	671.0	105.2	2303	D:6BENCHRC-6NP NEWS1 +6LIGH209-6WALR2091
314422	3YORKTWN	115	314425 3YORK PS	115	1	TR	299.1	104.4	284.4	105.2	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314376	6DENBIGH	230	314413 6WALR285	230	1	LN	871.2	228.8	830.0	105.0	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314296	6PENNNAN	230	314415 6WALR209	230	1	LN	564.2	194.0	541.0	104.3	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314449	6CHESAPK	230	314514 6YADKIN	230	1	LN	866.0	532.9	830.0	104.3	47021	D:6THRS279-6YADKIN I +6FENTRES-8YADKIN I
314296	6PENNNAN	230	314415 6WALR209	230	1	LN	563.2	194.0	541.0	104.1	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314296	6PENNNAN	230	314415 6WALR209	230	1	LN	562.9	194.0	541.0	104.0	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314339	6SPRUNCE	230	315083 1SPRUNCA	13.8	1	TR	69.9	58.2	67.5	103.5	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314339	6SPRUNCE	230	315083 1SPRUNCA	13.8	1	TR	69.9	58.2	67.5	103.5	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
313812	6ROCKLANDING	230	314423 6YORKTWN	230	1	LN	559.5	66.2	541.0	103.4	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230	314391 6LIGH209	230	1	LN	837.3	309.6	812.0	103.1	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314418	6WHEALTN	230	314421 6WINCHST	230	1	LN	690.7	395.8	671.0	102.9	2286	D:6BENCHRC-6NP NEWS1 +6DENBIGH-6WALR2851
314423	6YORKTWN	230	314425 3YORK PS	115	1	TR	292.5	105.7	284.4	102.9	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1
314391	6LIGH209	230	314415 6WALR209	230	1	LN	556.6	262.3	541.0	102.9	24055	D:6PEMBROK-6SHELBNK1 +6WHEALTN-6WINCHST1
314296	6PENNNAN	230	314386 6KINGS M	230	1	LN	556.4	178.1	541.0	102.9	24203	D:6PEMBROK-6SHELBNK1 +6SURY -6POOLSVL1
314376	6DENBIGH	230	314413 6WALR285	230	1	LN	853.2	228.8	830.0	102.8	2646	D:6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1

**	From bus	**	**	To bus	**	CKT	Type	ContMVA	BaseFlow	Rating	Loading%	Ncon	Contingency Description	
314391	6LIGH209	230	314415	6WALR209	230	1	LN	556.4	262.3	541.0	102.8	23582	D:6NP NEWS-6PEMBROK1 +6WHEALTN-6WINCHST1	
314296	6PENNNIN	230	314386	6KINGS M	230	1	LN	556.1	178.1	541.0	102.8	23730	D:6NP NEWS-6PEMBROK1 +6SURREY -6POOLSVL1	
314417	3WHEALTN	115	314418	6WHEALTN	230	2	TR	295.8	118.4	289.0	102.4	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB -1	
314422	3YORKTWN	115	314425	3YORK PS	115	1	TR	291.0	104.4	284.4	102.3	2324	D:6BENCHRC-6NP NEWS1 +6TABB -6YORKTWN1	
314418	6WHEALTN	230	314421	6WINCHST	230	1	LN	686.5	395.8	671.0	102.3	2588	D:6BENCHRC-6CHCKTUK1 +6PENNIMA-6WALR2091	
314537	6SUFFOLK	230	314928	8SULFOLK	500	2	TR	1027.3	393.5	1004.3	102.3	52079	D:8SEPTA -8YADKIN 1 +8YADKIN -8SULFOLK1	
314418	6WHEALTN	230	314421	6WINCHST	230	1	LN	679.0	395.8	671.0	101.2	2587	D:6BENCHRC-6CHCKTUK1 +6PENNINA-6KINGS M1	
314296	6PENNNIN	230	314386	6KINGS M	230	1	LN	547.4	178.1	541.0	101.2	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1	
314296	6PENNNIN	230	314386	6KINGS M	230	1	LN	546.4	178.1	541.0	101.0	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1	
314406	3SHELBNK	115	314407	6SHELBNK	230	1	TR	271.0	96.2	268.6	100.9	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1	
314296	6PENNNIN	230	314415	6WALR209	230	1	LN	545.9	194.0	541.0	100.9	2330	D:6BENCHRC-6NP NEWS1 +6WHEALTN-6WINCHST1	
314296	6PENNNIN	230	314386	6KINGS M	230	1	LN	546.0	178.1	541.0	100.9	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1	
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	836.9	532.9	830.0	100.8	38042	D:6DOZIER -6ELIZ R 1 +6THRS279-6YADKIN 1	
314449	6CHESAPK	230	314514	6YADKIN	230	1	LN	836.9	532.9	830.0	100.8	38208	D:6DOZIER -6GRENWCH1 +6THRS279-6YADKIN 1	
314388	6LANEXA	230	314391	6LIGH209	230	1	LN	813.8	309.6	812.0	100.2	2332	D:6BENCHRC-6NP NEWS1 +6WINCHST-6POOLSVL1	
314418	6WHEALTN	230	314421	6WINCHST	230	1	LN	670.1	395.8	671.0	99.9	2274	D:6BENCHRC-6NP NEWS1 +6PENNIMA-6WALR2091	
314394	6LIGH209	230	314415	6WALR209	230	1	LN	540.5	262.3	541.0	99.9	17742	D:6DENBIGH-6WALR2851 +6SURREY -6POOLSVL1	
314682	3BUGGS 1	115	315151	1BUGGS 2	13.8	1	TR	69.9	69.9	70.0	99.8	**	**	Base Case
314418	6WHEALTN	230	314421	6WINCHST	230	1	LN	667.7	395.8	671.0	99.5	2601	D:6BENCHRC-6CHCKTUK1 +6DENBIGH-6YORKTWN1	
314418	6WHEALTN	230	314421	6WINCHST	230	1	LN	667.7	395.8	671.0	99.5	2609	D:6BENCHRC-6CHCKTUK1 +6KINGS M-6YORKTWN1	
314461	3DEEPC46	115	314513	3YADKIN	115	1	LN	411.4	227.9	414.0	99.4	35183	D:6CHESAPK-6YADKIN 1 +6DOZIER -6ELIZ R 1	
314461	3DEEPC46	115	314513	3YADKIN	115	1	LN	411.4	227.9	414.0	99.4	35184	D:6CHESAPK-6YADKIN 1 +6DOZIER -6GRENWCH1	
314390	6LIGH285	230	314413	6WALR285	230	1	LN	822.2	293.8	830.0	99.1	2478	D:6BENCHRC-6NP NEWS1 +6SURREY -6POOLSVL1	
314451	3CHESPTX	115	314460	6CHESPTX	230	1	TR	291.1	140.4	293.9	99.1	37806	D:3DEEPC46-3YADKIN 1 +3CHESAPK-6CHESAPK2	

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

65.sav

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:07 <VOW003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65
 Case.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\sum_2015(2013LF)_base_wpre_230kv_Altc_open345865.sav
 Subsys.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\peninsula_AC.sub
 Monit.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\wapsys.mon
 Contn.File H:\Trans Customer Planning\Peter Nedwick\Year2011\SkiffesCreek Application\Rebuttal Study\2015\peninsula.con
 Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRaise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	1306	D:6ROCKLAN-6HAYES +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8897	1.0241	0.9300	1.0700	0.9729	1.0753	LD	1623	D:6ROCKLAN-6YORKTWN1 +6HAYES -6YORKTWN1
313812	6ROCKLAN	230.0	345	356	0.8840	1.0158	0.9300	1.0700	0.9650	1.0666	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314116	6HAYES	230.0	345	356	0.8844	1.0153	0.9300	1.0700	0.9645	1.0660	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314118	6HAYES	230.0	345	356	0.8867	1.0140	0.9300	1.0700	0.9633	1.0647	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8865	1.0137	0.9300	1.0700	0.9630	1.0644	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
314445	6HAYES	230.0	345	356	0.8885	1.0160	0.9300	1.0700	0.9652	1.0666	LD	1701	D:6ROCKLAN-6YORKTWN1 +6WINCHST-6POOLSVL1
313812	6ROCKLAN	230.0	345	356	0.9002	1.0158	0.9300	1.0700	0.9650	1.0666	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314116	6HAYES	230.0	345	356	0.9006	1.0153	0.9300	1.0700	0.9645	1.0660	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314118	6HAYES	230.0	345	356	0.9028	1.0140	0.9300	1.0700	0.9633	1.0647	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.9027	1.0137	0.9300	1.0700	0.9630	1.0644	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314445	6HAYES	230.0	345	356	0.9047	1.0160	0.9300	1.0700	0.9652	1.0666	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.9093	1.0093	0.9300	1.0700	0.9588	1.0597	LD	1847	D:6ROCKLAN-6YORKTWN1 +6SURREY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8993	1.0241	0.9300	1.0700	0.9729	1.0753	LD	1919	D:30CRAN -31LANCAST1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2254	D:6BENCHIRC-6NP NEWS1 +6HAYES -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8927	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2318	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314399	6PENBROK	230.0	345	356	0.8916	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2318	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8905	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2318	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314442	6NP NE.1	230.0	345	356	0.8945	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2318	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6SHELBNK1
314398	6NP NEWS	230.0	345	356	0.8907	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2319	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6TABB 1
314399	6PENBROK	230.0	345	356	0.8797	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2319	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8783	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2319	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8797	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2319	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6TABB 1
314442	6NP NE.1	230.0	345	356	0.8825	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2319	D:6BENCHIRC-6NP NEWS1 +6PENINSI-6TABB 1
314399	6NP NEWS	230.0	345	356	0.8680	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2324	D:6BENCHIRC-6NP NEWS1 +6TABB -6YORKTWN1
314399	6PENBROK	230.0	345	356	0.8670	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2324	D:6BENCHIRC-6NP NEWS1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8647	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2324	D:6BENCHIRC-6NP NEWS1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8661	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2324	D:6BENCHIRC-6NP NEWS1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8632	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2324	D:6BENCHIRC-6NP NEWS1 +6TABB -6YORKTWN1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314442	GNP NE 1	230.0	345	356	0.8508	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2324	D: 6BENCHRC-GNP NEWS1 +6TABB -6YORKTWN1
314398	GNP NEWS	230.0	345	356	0.9074	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
314399	6PENBRK	230.0	345	356	0.9083	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
314402	6PENINS	230.0	345	356	0.9064	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
314407	6SHLEBK	230.0	345	356	0.9051	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
314409	6TABB	230.0	345	356	0.9245	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
314442	GNP NE 1	230.0	345	356	0.9093	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2330	D: 6BENCHRC-GNP NEWS1 +6WHEALTN-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.8047	1.0158	0.9300	1.0700	0.9650	1.0666	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314176	6HARMONY	230.0	345	354	0.9053	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314177	6HAYES9	115.0	345	354	0.9185	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314180	6GAYES	230.0	345	354	0.9257	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314189	6PAPERMILL	230.0	345	354	0.9158	1.0171	0.9300	1.0700	0.9662	1.0679	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314296	6PENINMAN	230.0	345	356	0.8502	1.0159	0.9300	1.0700	0.9651	1.0666	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8373	0.9948	0.9300	1.0700	0.9451	1.0446	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314372	3ELOXOMC	115.0	345	356	0.8500	0.9867	0.9300	1.0700	0.9374	1.0361	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.8455	0.9892	0.9300	1.0700	0.9397	1.0386	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314374	3COPELAND	115.0	345	356	0.8646	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.9279	1.0178	0.9300	1.0700	0.9669	1.0687	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314379	3FTBUS56	115.0	345	356	0.9254	0.9851	0.9300	1.0700	0.9358	1.0343	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.9361	0.9939	0.9300	1.0700	0.9442	1.0436	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.9306	0.9894	0.9300	1.0700	0.9400	1.0389	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8450	1.0169	0.9300	1.0700	0.9660	1.0677	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314389	3LEBAN5	115.0	345	356	0.8247	0.9835	0.9300	1.0700	0.9343	1.0329	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.8604	1.0104	0.9300	1.0700	0.9599	1.0609	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230.0	345	356	0.8751	1.0136	0.9300	1.0700	0.9629	1.0642	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314392	3MACGRUDR	115.0	345	356	0.8605	0.9953	0.9300	1.0700	0.9456	1.0451	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314393	3MERCURY	115.0	345	356	0.8566	0.9923	0.9300	1.0700	0.9427	1.0420	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314394	3NAGA	115.0	345	356	0.8623	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314397	3NCHWST5	115.0	345	356	0.8646	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314398	GNP NEWS	230.0	345	356	0.7924	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314399	6PENBRK	230.0	345	356	0.7917	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314401	3PENINS	115.0	345	356	0.8613	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314402	6PENINS	230.0	345	356	0.7964	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.8420	0.9944	0.9300	1.0700	0.9447	1.0441	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.8424	0.9940	0.9300	1.0700	0.9443	1.0437	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314406	6SHLEBK	115.0	345	356	0.8621	0.9970	0.9300	1.0700	0.9472	1.0469	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314407	6SHLEBK	230.0	345	356	0.7912	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.8042	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314412	30 CARBID	115.0	345	356	0.8613	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314413	6WALR265	230.0	345	356	0.8505	1.0107	0.9300	1.0700	0.9602	1.0613	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314414	3WAWICK	115.0	345	356	0.8540	0.9909	0.9300	1.0700	0.9413	1.0404	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.8031	1.0138	0.9300	1.0700	0.9631	1.0645	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314416	6WAWICK	230.0	345	356	0.8031	1.0153	0.9300	1.0700	0.9645	1.0660	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115.0	345	356	0.8656	0.9956	0.9300	1.0700	0.9458	1.0453	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.7993	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.8627	0.9962	0.9300	1.0700	0.9464	1.0460	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.7991	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2332	D: 6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1

PSS(nr)MUST 10.2 – Managing and Utilizing System Transmission – THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S1) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314422	3YORKTN	115.0	345	356	0.8374	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314423	6YORKTN	230.0	345	356	0.8227	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314424	3YORKS 58	115.0	345	356	0.8224	0.9832	0.9300	1.0700	0.9340	1.0324	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8366	0.9952	0.9300	1.0700	0.9454	1.0449	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314442	6NP NE,1	230.0	345	356	0.7940	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.7999	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8254	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
315091	1YORKTW2	18.0	345	356	0.8374	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
315092	1YORKTN3	25.0	345	356	0.8227	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2332	D:6BENCHRC-GNP NEWS1 +6WINCHST-6POOLSVL1
313612	6ROCKLAND	230.0	345	356	0.7899	1.0158	0.9300	1.0700	0.9650	1.0666	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8976	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314177	3HAYESB9	115.0	345	354	0.9038	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.8153	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314189	6PAPERHILL	230.0	345	354	0.9089	1.0171	0.9300	1.0700	0.9662	1.0679	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314296	6PENMAN	230.0	345	356	0.8381	1.0159	0.9300	1.0700	0.9651	1.0666	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8213	0.9948	0.9300	1.0700	0.9451	1.0446	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314372	3BLOXONC	115.0	345	356	0.8329	0.9867	0.9300	1.0700	0.9374	1.0361	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.8245	0.9892	0.9300	1.0700	0.9397	1.0386	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314374	3COPELAND	115.0	345	356	0.8479	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314375	6CORRECTN	230.0	345	354	0.9235	1.0178	0.9300	1.0700	0.9656	1.0673	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.8441	1.0164	0.9300	1.0700	0.9669	1.0687	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314379	3FTEUS8	115.0	345	356	0.8092	0.9851	0.9300	1.0700	0.9358	1.0343	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.8202	0.9939	0.9300	1.0700	0.9442	1.0436	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.8245	0.9894	0.9300	1.0700	0.9400	1.0389	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8325	1.0169	0.9300	1.0700	0.9660	1.0677	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314388	6LANEXA	230.0	345	356	0.9195	1.0160	0.9300	1.0700	0.9552	1.0668	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314389	3LEGAN58	115.0	345	356	0.8072	0.9835	0.9300	1.0700	0.9343	1.0326	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314390	6LIGH285	230.0	345	356	0.8498	1.0104	0.9300	1.0700	0.9599	1.0609	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314391	6LIGH209	230.0	345	356	0.8652	1.0136	0.9300	1.0700	0.9629	1.0642	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314392	3MAGRUDR	115.0	345	356	0.8437	0.9953	0.9300	1.0700	0.9456	1.0451	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314393	3MERCURY	115.0	345	356	0.8396	0.9823	0.9300	1.0700	0.9427	1.0420	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314394	3WASA	115.0	345	356	0.8446	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314398	3NENWS75	115.0	345	356	0.8479	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314399	6NP NEWS	230.0	345	356	0.7767	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314399	6FEMBROK	230.0	345	356	0.7761	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314401	3PENINSL	115.0	345	356	0.8446	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314402	6PENINSL	230.0	345	356	0.7841	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.8269	0.9944	0.9300	1.0700	0.9447	1.0441	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.8263	0.9943	0.9300	1.0700	0.9443	1.0437	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314406	3SHELBNK	115.0	345	356	0.8482	0.9970	0.9300	1.0700	0.9472	1.0469	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314407	6SHELBNK	230.0	345	356	0.7756	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314409	6TABE	230.0	345	356	0.7841	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314412	30 CARBD	115.0	345	356	0.8447	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314413	6WALR285	230.0	345	356	0.8389	1.0107	0.9300	1.0700	0.9602	1.0613	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314414	3WAWICK	115.0	345	356	0.8374	0.9909	0.9300	1.0700	0.9413	1.0404	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314415	6WALR209	230.0	345	356	0.8502	1.0138	0.9300	1.0700	0.9631	1.0645	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1
314416	6WAWICK	230.0	345	356	0.7883	1.0153	0.9300	1.0700	0.9645	1.0660	LD	2478	D:6BENCHRC-GNP NEWS1 +6SURRY -6POOLSVL1

PSS(nr)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	FlowLimit	Upplimit	VoltDrop	VoltRaise	Viol	Ncon	Contingency Description
314411	6WHEALTN	115.0	345	356	0.8489	0.9956	0.9300	1.0700	0.9458	1.0453	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.7836	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314420	6PENIN 1	115.0	345	356	0.9450	0.9962	0.9300	1.0700	0.9464	1.0460	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.7834	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314422	6YORKTWN	115.0	345	356	0.8215	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8082	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314424	6YNNIS 58	115.0	345	356	0.8059	0.9832	0.9300	1.0700	0.9340	1.0324	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314425	6YORK PS	115.0	345	356	0.8206	0.9952	0.9300	1.0700	0.9454	1.0449	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.7793	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.8209	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8209	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.7841	1.0093	0.9300	1.0700	0.9588	1.0597	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
315091	6YORKTWN2	18.0	345	356	0.8215	0.9849	0.9300	1.0700	0.9452	1.0447	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
315092	6YORKTWN3	25.0	345	356	0.8082	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2478	D:6BENCHRC-6NP NEWS1 +6SURY -6POOLSVL1
316180	6HAYES	230.0	345	354	0.8904	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2568	D:6BENCHRC-6CHCKTUK1 +6HAYES -6YORKTWN1
313818	6BENCHRC	230.0	345	360	0.8882	1.0265	0.9300	1.0700	0.9752	1.0778	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELEBNK1
314398	6NP NEWS	230.0	345	356	0.8888	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELEBNK1
314399	6EMBROK	230.0	345	356	0.8879	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2632	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6SHELEBNK1
314402	6PENINSL	230.0	345	356	0.8972	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314407	6SHELEBNK	230.0	345	356	0.8900	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314442	6NP NE 1	230.0	345	356	0.8836	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
313818	6BENCHRC	230.0	345	360	0.8668	1.0265	0.9300	1.0700	0.9752	1.0778	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314398	6NP NEWS	230.0	345	356	0.8675	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2633	D:6BENCHRC-6CHCKTUK1 +6PENINSL-6TABB 1
314399	6EMBROK	230.0	345	356	0.8666	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314402	6PENINSL	230.0	345	356	0.8645	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314407	6SHELEBNK	230.0	345	356	0.8658	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8630	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2638	D:6BENCHRC-6CHCKTUK1 +6TABB -6YORKTWN1
314442	6NP NE 1	230.0	345	356	0.8623	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.9074	1.0158	0.9300	1.0700	0.9650	1.0666	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313818	6BENCHRC	230.0	345	360	0.8932	1.0265	0.9300	1.0700	0.9752	1.0778	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314180	6HAYES	230.0	345	354	0.9144	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314376	6DORNBIGH	230.0	345	356	0.9155	1.0178	0.9300	1.0700	0.9669	1.0687	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314398	6NP NEWS	230.0	345	356	0.8939	1.0242	0.9300	1.0700	0.9730	1.0729	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314399	6EMBROK	230.0	345	356	0.8928	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314402	6PENINSL	230.0	345	356	0.8953	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314407	6SHELEBNK	230.0	345	356	0.8958	1.0198	0.9300	1.0700	0.9688	1.0703	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314409	6TABB	230.0	345	356	0.9077	1.0153	0.9300	1.0700	0.9645	1.0660	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314418	6WHEALTN	230.0	345	356	0.9052	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314423	6YORKTWN	230.0	345	356	0.9164	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314442	6NP NE 1	230.0	345	356	0.8956	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
314445	6WHEAL 1	230.0	345	356	0.9070	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2644	D:6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1

PSS(n)MUST 10.2 -- Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314450	GYORRT 1	230.0	345	356	0.9244	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2644	D: 6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
315092	YORKTN3	25.0	345	356	0.9164	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2644	D: 6BENCHRC-6CHCKTUK1 +6WHEALTN-6WINCHST1
313812	SROCKLAND	230.0	345	356	0.9644	1.0158	0.9300	1.0700	0.9650	1.0666	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313813	SOCRAN	115.0	345	354	0.9086	1.0043	0.9300	1.0700	0.9540	1.0545	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313818	BENCHRC	230.0	345	360	0.6462	1.0265	0.9300	1.0700	0.9752	1.0778	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313828	WHITEMAR	115.0	345	354	0.7074	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314172	EDUNNSVL	230.0	345	354	0.9064	1.0035	0.9300	1.0700	0.9533	1.0537	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314173	SCARNER	115.0	345	354	0.9104	1.0024	0.9300	1.0700	0.9523	1.0525	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314174	SHARMONY	115.0	345	354	0.7891	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314176	SHARMONY	230.0	345	354	0.8479	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314177	SHAYES89	115.0	345	354	0.6859	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314178	BLANCAST	115.0	345	354	0.9093	1.0049	0.9300	1.0700	0.9546	1.0551	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314180	GRAYES	230.0	345	354	0.6979	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314182	GNORNECK	230.0	345	354	0.9167	1.0001	0.9300	1.0700	0.9501	1.0501	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314184	SHACKLE	115.0	345	354	0.8120	0.9943	0.9300	1.0700	0.9446	1.0440	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314187	SWAN 176	115.0	345	354	0.7878	0.9817	0.9300	1.0700	0.9326	1.0308	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314188	SWEST PT	115.0	345	354	0.8268	0.9935	0.9300	1.0700	0.9438	1.0432	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314189	WEPAPERML	230.0	345	354	0.8620	1.0171	0.9300	1.0700	0.9662	1.0679	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314191	WHITE S	115.0	345	354	0.7916	0.9920	0.9300	1.0700	0.9424	1.0416	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314243	3PROV 92	115.0	345	355	0.9093	0.9960	0.9300	1.0700	0.9462	1.0458	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314296	6PENNING	230.0	345	356	0.7424	1.0159	0.9300	1.0700	0.9651	1.0666	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.6428	0.9948	0.9300	1.0700	0.9451	1.0446	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314372	3ELOXMC	115.0	345	356	0.6162	0.9867	0.9300	1.0700	0.9374	1.0361	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314373	3COLONY	115.0	345	356	0.6293	0.9892	0.9300	1.0700	0.9397	1.0386	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314374	3COPELMD	115.0	345	356	0.6352	0.9947	0.9300	1.0700	0.9400	1.0444	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314375	6CORRCTN	230.0	345	354	0.8675	1.0164	0.9300	1.0700	0.9656	1.0673	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.6987	1.0178	0.9300	1.0700	0.9669	1.0687	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314377	3DOW 34	115.0	345	356	0.8464	0.9867	0.9300	1.0700	0.9374	1.0360	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314378	3FTUS34	115.0	345	356	0.8421	0.9847	0.9300	1.0700	0.9354	1.0339	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314379	3FTUS58	115.0	345	356	0.6275	0.9851	0.9300	1.0700	0.9358	1.0343	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.6413	0.9939	0.9300	1.0700	0.9442	1.0436	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.6342	0.9894	0.9300	1.0700	0.9400	1.0389	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314384	3KINGS M	115.0	345	356	0.8246	0.9683	0.9300	1.0700	0.9198	1.0167	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314385	3SHAMO 1	115.0	345	354	0.7856	0.9954	0.9300	1.0700	0.9456	1.0451	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.7320	1.0169	0.9300	1.0700	0.9660	1.0677	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314387	3LANEXA	115.0	345	356	0.8579	0.9957	0.9300	1.0700	0.9459	1.0455	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314388	6LANEXA	230.0	345	356	0.8745	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314389	3LEGANS8	115.0	345	356	0.6250	0.9835	0.9300	1.0700	0.9433	1.0326	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314390	6LIGH285	230.0	345	356	0.7654	1.0104	0.9300	1.0700	0.9599	1.0609	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314391	6LIGH209	230.0	345	356	0.7890	1.0136	0.9300	1.0700	0.9629	1.0642	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314392	3MAGUOR	115.0	345	356	0.6328	0.9953	0.9300	1.0700	0.9456	1.0451	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314393	3MERCURY	115.0	345	356	0.6304	0.9923	0.9300	1.0700	0.9427	1.0420	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314394	3NADA	115.0	345	356	0.6304	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314395	3SHAMO 2	115.0	345	354	0.7852	0.9952	0.9300	1.0700	0.9454	1.0450	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314396	3NEWSS58	115.0	345	356	0.8445	0.9851	0.9300	1.0700	0.9358	1.0343	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314397	3NEWS75	115.0	345	356	0.6352	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314398	6WP NEWS	230.0	345	356	0.8473	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1

PSS(n)MUST 10.2 - Managing and Utilizing System Transmission -- THU, FEB 21 2013 7:09 < UDF000.0 >
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 34 58 & 65

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314399	6FENBRCK	230.0	345	356	0.6476	1.0218	0.9300	1.0700	0.9707	1.0729	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314400	3LANCA 1	115.0	345	354	0.6097	1.0054	0.9300	1.0700	0.9551	1.0556	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314401	3PENINSL	115.0	345	356	0.6364	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.6563	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.6403	0.9944	0.9300	1.0700	0.9447	1.0441	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.6397	0.9940	0.9300	1.0700	0.9443	1.0437	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314406	3SHELBNK	115.0	345	356	0.6322	0.9970	0.9300	1.0700	0.9472	1.0469	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314407	6SHELBNK	230.0	345	356	0.6480	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.6641	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314411	3TORANOS8	115.0	345	356	0.6428	0.9836	0.9300	1.0700	0.9344	1.0328	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314412	3U CARD	115.0	345	356	0.6364	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314413	6WALR285	230.0	345	356	0.7454	1.0107	0.9300	1.0700	0.9602	1.0613	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314414	3WARKICK	115.0	345	356	0.6307	0.9909	0.9300	1.0700	0.9413	1.0404	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.7642	1.0138	0.9300	1.0700	0.9631	1.0645	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314416	6WARKICK	230.0	345	356	0.6627	1.0153	0.9300	1.0700	0.9645	1.0660	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314417	3WHEALTN	115.0	345	356	0.6366	0.9956	0.9300	1.0700	0.9458	1.0453	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.6581	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.6367	0.9962	0.9300	1.0700	0.9464	1.0460	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.6579	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.6429	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.6846	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314424	3YNMS 58	115.0	345	356	0.6246	0.9832	0.9300	1.0700	0.9340	1.0324	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.6435	0.9952	0.9300	1.0700	0.9454	1.0449	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.6763	1.0180	0.9300	1.0700	0.9671	1.0689	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.6487	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314445	6WHEAL 1	230.0	345	356	0.6584	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.6868	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
315091	1YORKT2	18.0	345	356	0.6429	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
315092	1YORKT3	25.0	345	356	0.6846	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2646	D: 6BENCHRC-6CHCKTUK1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.6663	1.0158	0.9300	1.0700	0.9650	1.0666	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
313813	3OCKAN	115.0	345	354	0.6086	1.0043	0.9300	1.0700	0.9540	1.0545	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
313818	6BENCHURCH	230.0	345	360	0.6482	1.0265	0.9300	1.0700	0.9752	1.0778	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
313828	3WHITTENARS	115.0	345	354	0.7079	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314172	6DUNNSVL	230.0	345	354	0.6086	1.0035	0.9300	1.0700	0.9533	1.0537	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314173	3GARNER	115.0	345	354	0.6104	1.0024	0.9300	1.0700	0.9523	1.0525	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314174	3HARMONY	115.0	345	354	0.7821	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8477	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314177	3HAYES89	115.0	345	354	0.6848	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314178	3LANCAST	115.0	345	354	0.6086	1.0049	0.9300	1.0700	0.9546	1.0551	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314180	6HAYES	230.0	345	354	0.6890	1.0241	0.9300	1.0700	0.9729	1.0753	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314182	6MORNECK	230.0	345	354	0.9265	1.0001	0.9300	1.0700	0.9501	1.0501	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314184	3SHACKLE	115.0	345	354	0.8149	0.9943	0.9300	1.0700	0.9446	1.0440	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314187	3WAN 176	115.0	345	354	0.7680	0.9817	0.9300	1.0700	0.9326	1.0308	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314188	3WEST PT	115.0	345	354	0.8256	0.9935	0.9300	1.0700	0.9438	1.0432	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314189	6PAPEHILL	230.0	345	354	0.8672	1.0171	0.9300	1.0700	0.9662	1.0679	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314191	3WHITE S	115.0	345	354	0.7817	0.9920	0.9300	1.0700	0.9424	1.0416	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314243	3PROV 92	115.0	345	355	0.8891	0.9960	0.9300	1.0700	0.9462	1.0458	LD	2792	D: 6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314296	6PENNIAN	230.0	345	356	0.7427	1.0159	0.9300	1.0700	0.9651	1.0666	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314371	3AMOXO Y	115.0	345	356	0.6447	0.9947	0.9300	1.0700	0.9451	1.0446	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314372	3BLOXOM	115.0	345	356	0.6182	0.9947	0.9300	1.0700	0.9374	1.0361	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314373	3COLONY	115.0	345	356	0.6315	0.9892	0.9300	1.0700	0.9397	1.0386	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314374	3COPELND	115.0	345	356	0.6375	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314375	6CORRGTN	230.0	345	354	0.8672	1.0164	0.9300	1.0700	0.9656	1.0673	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.6995	1.0178	0.9300	1.0700	0.9669	1.0687	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314377	3DOW 34	115.0	345	356	0.8462	0.9867	0.9300	1.0700	0.9374	1.0360	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314378	3FTEUS34	115.0	345	356	0.8438	0.9847	0.9300	1.0700	0.9354	1.0339	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314379	3FTEUS38	115.0	345	356	0.6293	0.9951	0.9300	1.0700	0.9358	1.0343	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.6432	0.9959	0.9300	1.0700	0.9442	1.0436	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.6361	0.9894	0.9300	1.0700	0.9400	1.0389	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314384	3KINGS M	115.0	345	356	0.8244	0.9683	0.9300	1.0700	0.9198	1.0167	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314385	3KARMO 1	115.0	345	354	0.7857	0.9954	0.9300	1.0700	0.9456	1.0451	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314386	6KINGS M	230.0	345	356	0.7323	1.0169	0.9300	1.0700	0.9660	1.0677	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314387	3LANEXA	115.0	345	356	0.8742	0.9957	0.9300	1.0700	0.9459	1.0455	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314388	6LANEXA	230.0	345	356	0.8742	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314389	3LERANS8	115.0	345	356	0.6272	0.9835	0.9300	1.0700	0.9343	1.0326	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314390	6LIGH285	230.0	345	356	0.7694	1.0104	0.9300	1.0700	0.9599	1.0609	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314391	6LIGH209	230.0	345	356	0.7889	1.0136	0.9300	1.0700	0.9629	1.0642	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314392	3MAGHUR	115.0	345	356	0.6349	0.9953	0.9300	1.0700	0.9456	1.0451	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314393	3MERCURY	115.0	345	356	0.8270	0.9923	0.9300	1.0700	0.9427	1.0420	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314394	3NAXA	115.0	345	356	0.6385	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314395	3NARMO 2	115.0	345	354	0.7895	0.9952	0.9300	1.0700	0.9454	1.0450	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314396	3NEWS58	115.0	345	356	0.8443	0.9851	0.9300	1.0700	0.9358	1.0343	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314397	3NEWS75	115.0	345	356	0.6375	0.9947	0.9300	1.0700	0.9450	1.0444	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314398	6NP NEWS	230.0	345	356	0.6492	1.0242	0.9300	1.0700	0.9730	1.0755	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314399	6PENBROK	230.0	345	356	0.6495	1.0218	0.9300	1.0700	0.9700	1.0729	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314400	3LANCA 1	115.0	345	354	0.9097	1.0054	0.9300	1.0700	0.9551	1.0556	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314401	3PENINSL	115.0	345	356	0.6392	0.9958	0.9300	1.0700	0.9460	1.0455	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314402	6PENINSL	230.0	345	356	0.6580	1.0194	0.9300	1.0700	0.9685	1.0704	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314403	3SEAPD76	115.0	345	356	0.6422	0.9944	0.9300	1.0700	0.9447	1.0441	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314404	3SEAPD79	115.0	345	356	0.6416	0.9940	0.9300	1.0700	0.9443	1.0437	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314406	3SHELEBK	115.0	345	356	0.6343	0.9970	0.9300	1.0700	0.9472	1.0469	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314407	6SHELEBK	230.0	345	356	0.6498	1.0193	0.9300	1.0700	0.9684	1.0703	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314409	6TABB	230.0	345	356	0.6657	1.0198	0.9300	1.0700	0.9688	1.0708	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314411	3TOANOS8	115.0	345	356	0.8428	0.9836	0.9300	1.0700	0.9344	1.0328	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314412	3U CARBD	115.0	345	356	0.6385	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314413	6WAL285	230.0	345	356	0.7453	1.0107	0.9300	1.0700	0.9602	1.0613	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314414	3WARWICK	115.0	345	356	0.6329	0.9909	0.9300	1.0700	0.9413	1.0404	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314415	6WAL209	230.0	345	356	0.7643	1.0138	0.9300	1.0700	0.9631	1.0645	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314416	6WARWICK	230.0	345	356	0.6385	0.9958	0.9300	1.0700	0.9460	1.0456	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314417	3WHEALTN	115.0	345	356	0.6388	0.9956	0.9300	1.0700	0.9458	1.0453	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314418	6WHEALTN	230.0	345	356	0.6602	1.0140	0.9300	1.0700	0.9633	1.0647	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314420	3PENIN 1	115.0	345	356	0.6399	0.9962	0.9300	1.0700	0.9464	1.0460	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.6603	1.0137	0.9300	1.0700	0.9630	1.0644	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.8448	0.9949	0.9300	1.0700	0.9452	1.0447	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURRY -6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
3144423	6YORKTWN	230.0	345	356	0.6958	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314424	3YKWS 58	115.0	345	356	0.6267	0.9832	0.9300	1.0700	0.9340	1.0324	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314425	3YORK PS	115.0	345	356	0.6854	0.9952	0.9300	1.0700	0.9454	1.0449	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314440	6LANEX 1	230.0	345	356	0.8760	1.0180	0.9300	1.0700	0.9671	1.0689	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314442	6NP NE 1	230.0	345	356	0.6506	1.0263	0.9300	1.0700	0.9750	1.0776	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314445	6WHEAT 1	230.0	345	356	0.6648	1.0160	0.9300	1.0700	0.9652	1.0668	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.6980	1.0260	0.9300	1.0700	0.9747	1.0773	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.6609	1.0093	0.9300	1.0700	0.9588	1.0597	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
315091	1YORKTWN2	18.0	345	356	0.6448	0.9949	0.9300	1.0700	0.9452	1.0474	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
315092	1YORKTWN3	25.0	345	356	0.6958	1.0226	0.9300	1.0700	0.9715	1.0737	LD	2792	D:6BENCHRC-6CHCKTUK1 +6SURY -6POOLSVL1
314176	6HARMONY	230.0	345	354	0.8644	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2890	D:3WHITEMA-3HARMONY1 +6PAPERMT-6CORRCTN1
314199	6PAPERMTL	230.0	345	354	0.8594	1.0171	0.9300	1.0700	0.9628	1.0679	LD	2890	D:3WHITEMA-3HARMONY1 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8437	1.0240	0.9300	1.0700	0.9728	1.0752	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314189	6PAPERMTL	230.0	345	354	0.8375	1.0171	0.9300	1.0700	0.9662	1.0679	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8372	1.0164	0.9300	1.0700	0.9656	1.0673	LD	2912	D:3WHITEMA-3HARMONY1 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8972	1.0240	0.9300	1.0700	0.9728	1.0752	LD	3202	D:3WHITEMA-3HAYES891 +6PAPERMT-6CORRCTN1
314189	6PAPERMTL	230.0	345	354	0.8923	1.0171	0.9300	1.0700	0.9628	1.0679	LD	3202	D:3WHITEMA-3HAYES891 +6PAPERMT-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8481	1.0240	0.9300	1.0700	0.9728	1.0752	LD	3224	D:3WHITEMA-3HAYES891 +6CORRCTN-6LANEXA 1
314189	6PAPERMTL	230.0	345	354	0.8420	1.0171	0.9300	1.0700	0.9628	1.0679	LD	3224	D:3WHITEMA-3HAYES891 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8932	1.0241	0.9300	1.0700	0.9729	1.0753	LD	3504	D:6GAROLDIS-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8931	1.0241	0.9300	1.0700	0.9729	1.0753	LD	3814	D:6B1RCHWD-6COMORN 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8933	1.0241	0.9300	1.0700	0.9729	1.0753	LD	4123	D:6B1RCHWD-1BRCHWD1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0753	LD	4431	D:6GAROLDIS-6WESTHOL1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8925	1.0241	0.9300	1.0700	0.9729	1.0753	LD	4738	D:6DUNNSVL-6NORNECK1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8936	1.0241	0.9300	1.0700	0.9729	1.0753	LD	5044	D:6DUNNSVL-6LANEXA 1 +6HAYES -6YORKTWN1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314189	6PAPERMI	230.0	345	354	0.8494	1.0171	0.9300	1.0700	0.9662	1.0679	LD	7189	D:3HARMONY-3HARMO 21 +6CORCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8491	1.0164	0.9300	1.0700	0.9656	1.0673	LD	7189	D:3HARMONY-3HARMO 21 +6CORCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8699	1.0240	0.9300	1.0700	0.9728	1.0752	LD	7751	D:6HARMONY-6PAPERMI 1 +6HAYES89-6HAYES 1
314176	6HARMONY	230.0	345	354	0.8697	1.0240	0.9300	1.0700	0.9728	1.0752	LD	7753	D:6HARMONY-6PAPERMI 1 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8591	1.0241	0.9300	1.0700	0.9729	1.0753	LD	7753	D:6HARMONY-6PAPERMI 1 +6HAYES -6YORKTWN1
313828	3WHITENAR	115.0	345	354	0.9074	0.9958	0.9300	1.0700	0.9460	1.0455	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.8137	1.0240	0.9300	1.0700	0.9728	1.0752	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314177	3HAYES89	115.0	345	354	0.9092	0.9958	0.9300	1.0700	0.9460	1.0456	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314187	3WAN 176	115.0	345	354	0.9062	0.9817	0.9300	1.0700	0.9326	1.0308	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI	230.0	345	354	0.8082	1.0171	0.9300	1.0700	0.9662	1.0679	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
314191	3WHITE S	115.0	345	354	0.8277	0.9920	0.9300	1.0700	0.9424	1.0416	LD	8058	D:3HAYES89-6HAYES 1 +6PAPERMI-6CORRCTN1
313828	3WHITENAR	115.0	345	354	0.8740	0.9947	0.9300	1.0700	0.9450	1.0444	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314174	3HARMONY	115.0	345	354	0.5740	0.9947	0.9300	1.0700	0.9450	1.0444	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.5694	1.0240	0.9300	1.0700	0.9728	1.0752	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314177	3HAYES89	115.0	345	354	0.5497	0.9958	0.9300	1.0700	0.9460	1.0456	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314184	3SHACKLE	115.0	345	354	0.6907	0.9943	0.9300	1.0700	0.9446	1.0440	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314187	3WAN 176	115.0	345	354	0.6906	0.9817	0.9300	1.0700	0.9326	1.0308	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314188	3WEST PT	115.0	345	354	0.7530	0.9935	0.9300	1.0700	0.9438	1.0432	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314189	6PAPERMI	230.0	345	354	0.5604	1.0171	0.9300	1.0700	0.9662	1.0679	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314191	3WHITE S	115.0	345	354	0.5666	0.9920	0.9300	1.0700	0.9424	1.0416	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8997	1.0164	0.9300	1.0700	0.9656	1.0673	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314377	3DOW 34	115.0	345	356	0.9015	0.9867	0.9300	1.0700	0.9374	1.0360	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314378	3FEUTS34	115.0	345	356	0.8993	0.9847	0.9300	1.0700	0.9354	1.0339	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314384	3KINGS M	115.0	345	356	0.6811	0.9683	0.9300	1.0700	0.9198	1.0167	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.5714	0.9954	0.9300	1.0700	0.9456	1.0451	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314387	3LANEXA	115.0	345	356	0.9118	0.9957	0.9300	1.0700	0.9459	1.0455	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.5713	0.9952	0.9300	1.0700	0.9454	1.0450	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314396	3NEWS58	115.0	345	356	0.8997	0.9851	0.9300	1.0700	0.9358	1.0343	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314411	3TONO58	115.0	345	356	0.8981	0.9836	0.9300	1.0700	0.9344	1.0328	LD	8080	D:3HAYES89-6HAYES 1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8344	D:3LANCAST-3LANCA 11 +6HAYES -6YORKTWN1
314180	6HAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8639	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK1
314180	6HAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8640	D:6HAYES -6YORKTWN1 +3NORNECK-6NORNECK2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8641	D:6HAYES -6YORKTWN1 +3NORNECK-1NORNECK1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8642	D:6HAYES -6YORKTWN1 +3NORNECK-1NORNECK2
314180	6HAYES	230.0	345	354	0.8901	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8643	D:6HAYES -6YORKTWN1 +6NORNECK-6SANDERS1
314180	6HAYES	230.0	345	354	0.8926	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8644	D:6HAYES -6YORKTWN1 +6SANDERS-6WESTPOT
314180	6HAYES	230.0	345	354	0.8931	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8645	D:6HAYES -6YORKTWN1 +3SHACKLE-3WEST PT
313828	3WHITENAR	115.0	345	354	0.9070	0.9958	0.9300	1.0700	0.9460	1.0455	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314176	6HARMONY	230.0	345	354	0.9134	1.0240	0.9300	1.0700	0.9728	1.0752	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314177	3HAYES89	115.0	345	354	0.9028	0.9958	0.9300	1.0700	0.9460	1.0456	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314180	6HAYES	230.0	345	354	0.8207	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314187	3WAN 176	115.0	345	354	0.9060	0.9817	0.9300	1.0700	0.9326	1.0308	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314189	6PAPERMI	230.0	345	354	0.8078	1.0171	0.9300	1.0700	0.9662	1.0679	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314191	3WHITE S	115.0	345	354	0.9173	0.9920	0.9300	1.0700	0.9424	1.0416	LD	8647	D:6HAYES -6YORKTWN1 +6PAPERMI-6CORRCTN1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8648	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3OAKRI 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8649	D:6HAYES -6YORKTWN1 +3OAKRIDGE-3KINGS F1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	UppLimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8650	D:6HAYES -6YORKTWN1 +30ARRIDG-30ARR12361
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8651	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8652	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8653	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8654	D:6HAYES -6YORKTWN1 +1GOSPORT-1GOSPORT1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8655	D:6HAYES -6YORKTWN1 +6B1RDNEC-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8656	D:6HAYES -6YORKTWN1 +6B1RDNEC-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8657	D:6HAYES -6YORKTWN1 +6PENNIMA-6KINGS M1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8658	D:6HAYES -6YORKTWN1 +6PENNIMA-6WALR2091
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8659	D:6HAYES -6YORKTWN1 +3S2T67A-3BURTN671
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8660	D:6HAYES -6YORKTWN1 +3S2T67B-3WPHB671
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8661	D:6HAYES -6YORKTWN1 +3S2T67B-3BURTN671
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8662	D:6HAYES -6YORKTWN1 +3S2T67B-30AKWOOD1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8663	D:6HAYES -6YORKTWN1 +3AMOCO Y-3YORKTWN1
314176	6HAYES	230.0	345	354	0.8896	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8664	D:6HAYES -6YORKTWN1 +3BLOXOMC-MERCURY1
314180	6HAYES	230.0	345	354	0.8907	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8665	D:6HAYES -6YORKTWN1 +3COLONY -3WARMICK1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8666	D:6HAYES -6YORKTWN1 +3COLONY -3YORKTWN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8667	D:6HAYES -6YORKTWN1 +3COFELAD-3NNWS751
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0455	LD	8668	D:6HAYES -6YORKTWN1 +3COFELAD-3WHEALTN1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0455	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0455	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314176	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314177	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0456	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0440	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0308	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0432	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0679	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314191	6HAYES	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0416	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314375	6CORRCTN	230.0	345	354	0.8929	1.0241	0.9300	1.0700	0.9729	1.0673	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314377	300W 34	115.0	345	356	0.8983	0.9867	0.9300	1.0700	0.9729	1.0360	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314378	3FTEUS34	115.0	345	356	0.8960	0.9847	0.9300	1.0700	0.9729	1.0339	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314384	3KINGS M	115.0	345	356	0.8978	0.9863	0.9300	1.0700	0.9729	1.0167	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314385	3HARMO 1	115.0	345	354	0.8943	0.9854	0.9300	1.0700	0.9729	1.0451	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314395	3HARMO 2	115.0	345	354	0.8943	0.9854	0.9300	1.0700	0.9729	1.0451	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314396	3NNWS58	115.0	345	356	0.8965	0.9851	0.9300	1.0700	0.9729	1.0343	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314411	3TOANOS58	115.0	345	356	0.8943	0.9836	0.9300	1.0700	0.9729	1.0328	LD	8669	D:6HAYES -6YORKTWN1 +6CORRCTN-6LANEXA 1
314180	6HAYES	230.0	345	354	0.8900	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8670	D:6HAYES -6YORKTWN1 +6DENBIGH-6WALR2851
314180	6HAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8671	D:6HAYES -6YORKTWN1 +6DENBIGH-6YORKTWN1
314180	6HAYES	230.0	345	354	0.8904	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8672	D:6HAYES -6YORKTWN1 +3DOW 34 -3FTEUS341
314180	6HAYES	230.0	345	354	0.8904	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8673	D:6HAYES -6YORKTWN1 +3DOW 34 -3LANEXA 1
314180	6HAYES	230.0	345	354	0.8893	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8674	D:6HAYES -6YORKTWN1 +3FTEUS58-3GRAFT581
314180	6HAYES	230.0	345	354	0.8893	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8675	D:6HAYES -6YORKTWN1 +3FTEUS58-3LEBAN581
314180	6HAYES	230.0	345	354	0.8915	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8676	D:6HAYES -6YORKTWN1 +3GRAFT34-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8893	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8677	D:6HAYES -6YORKTWN1 +3GRAFT58-3YORKTWN1
314180	6HAYES	230.0	345	354	0.8927	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8678	D:6HAYES -6YORKTWN1 +3KINGS M-3TOANOS581

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8679	D: GHAYES -6YORKTWN1 +6RINGS M-6YORKTWN1
314180	GHAYES	230.0	345	354	0.8927	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8680	D: GHAYES -6YORKTWN1 +3LANEXA -3NEWS581
314180	GHAYES	230.0	345	354	0.8928	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8681	D: GHAYES -6YORKTWN1 +3LANEXA -6LANEXA 1
314180	GHAYES	230.0	345	354	0.8948	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8682	D: GHAYES -6YORKTWN1 +3LANEXA -6LANEXA 2
314180	GHAYES	230.0	345	354	0.8994	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8683	D: GHAYES -6YORKTWN1 +6LANEXA -6LIGH2091
314180	GHAYES	230.0	345	354	0.8999	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8684	D: GHAYES -6YORKTWN1 +6LANEXA -6LANEX 11
314180	GHAYES	230.0	345	354	0.8914	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8685	D: GHAYES -6YORKTWN1 +3LEBAN58-3YNN5 581
314180	GHAYES	230.0	345	354	0.8953	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8686	D: GHAYES -6YORKTWN1 +6LIGH288-6WALR2851
314180	GHAYES	230.0	345	354	0.8921	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8687	D: GHAYES -6YORKTWN1 +6LIGH208-6WALR2091
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8688	D: GHAYES -6YORKTWN1 +3MAGRUDR-3PENINS11
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8689	D: GHAYES -6YORKTWN1 +3MAGRUDR-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8962	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8690	D: GHAYES -6YORKTWN1 +3MERCURY-3SHELBNK1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8691	D: GHAYES -6YORKTWN1 +3NADA -3PENINS11
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8692	D: GHAYES -6YORKTWN1 +3NADA -3PENINS12
314180	GHAYES	230.0	345	354	0.8928	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8693	D: GHAYES -6YORKTWN1 +3NEWS58-3TOANOS81
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8694	D: GHAYES -6YORKTWN1 +6NP NEWS-6MEMOR81
314180	GHAYES	230.0	345	354	0.8999	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8695	D: GHAYES -6YORKTWN1 +6NP NEWS-6NP NE 11
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8696	D: GHAYES -6YORKTWN1 +6MEMOR-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8697	D: GHAYES -6YORKTWN1 +6SEAFD761
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8698	D: GHAYES -6YORKTWN1 +3PENINS1-3SEAFD791
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8699	D: GHAYES -6YORKTWN1 +3PENINS1-3U CARBD1
314180	GHAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8700	D: GHAYES -6YORKTWN1 +3PENINS1-3PENIN 11
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8701	D: GHAYES -6YORKTWN1 +3PENINS1-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8999	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8702	D: GHAYES -6YORKTWN1 +6PENINS1-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8703	D: GHAYES -6YORKTWN1 +6PENINS1-6TABB 1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8704	D: GHAYES -6YORKTWN1 +3SEAFD76-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8705	D: GHAYES -6YORKTWN1 +3SEAFD79-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8706	D: GHAYES -6YORKTWN1 +3SHELBNK-3WHEALT1
314180	GHAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8707	D: GHAYES -6YORKTWN1 +3SHELBNK-6SHELBNK1
314180	GHAYES	230.0	345	354	0.8902	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8708	D: GHAYES -6YORKTWN1 +6TABB -6YORKTWN1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8709	D: GHAYES -6YORKTWN1 +3U CARBD-3WHEALT1
314180	GHAYES	230.0	345	354	0.8904	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8710	D: GHAYES -6YORKTWN1 +3WALWICK-3WHEALT1
314180	GHAYES	230.0	345	354	0.8902	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8711	D: GHAYES -6YORKTWN1 +6WALWICK-6WHEALT1
314180	GHAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8712	D: GHAYES -6YORKTWN1 +3WHEALT-6WHEALT1
314180	GHAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8713	D: GHAYES -6YORKTWN1 +3WHEALT-6WHEALT2
314180	GHAYES	230.0	345	354	0.8995	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8714	D: GHAYES -6YORKTWN1 +6WHEALT-6WHEALT1
314180	GHAYES	230.0	345	354	0.8993	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8715	D: GHAYES -6YORKTWN1 +6WHEALT-6WHEAL 11
314180	GHAYES	230.0	345	354	0.8925	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8716	D: GHAYES -6YORKTWN1 +6WHEALT-6WHEALT2
314180	GHAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8717	D: GHAYES -6YORKTWN1 +6WHEALT-6WHEALT3
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8718	D: GHAYES -6YORKTWN1 +3YORKTWN-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8719	D: GHAYES -6YORKTWN1 +3YORKTWN-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8720	D: GHAYES -6YORKTWN1 +3YORKTWN-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8721	D: GHAYES -6YORKTWN1 +3YORKTWN-3YORKTWN1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8722	D: GHAYES -6YORKTWN1 +3ALEX CR-3BOWERS 1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8723	D: GHAYES -6YORKTWN1 +3STORE -3LONGC271
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8724	D: GHAYES -6YORKTWN1 +3STORE -3WA BCH 1
314180	GHAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8725	D: GHAYES -6YORKTWN1 +3BAYSIDE-3BURN671

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8726	D:6HAYES -6YORKTWN1 +3BAYSIDE-3JONGC271
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8727	D:6HAYES -6YORKTWN1 +3BARKL51-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8728	D:6HAYES -6YORKTWN1 +3BARKL51-3REYES 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8729	D:6HAYES -6YORKTWN1 +3BARKL51-3DEEPC871
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8730	D:6HAYES -6YORKTWN1 +3BARKL51-3HODGE F1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8731	D:6HAYES -6YORKTWN1 +3BARKL51-3CHRRHND1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8732	D:6HAYES -6YORKTWN1 +3BARKL51-3YADKIN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8733	D:6HAYES -6YORKTWN1 +3BARKL51-3DAVIS671
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8734	D:6HAYES -6YORKTWN1 +3BARKL51-3DAVIS271
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8735	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHN GAS1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8736	D:6HAYES -6YORKTWN1 +3CHESAPK-3CRADOCK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8737	D:6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC461
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8738	D:6HAYES -6YORKTWN1 +3CHESAPK-3DEEPC871
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8739	D:6HAYES -6YORKTWN1 +3CHESAPK-3DOZIER 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8740	D:6HAYES -6YORKTWN1 +3CHESAPK-3GOSPORT1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8741	D:6HAYES -6YORKTWN1 +3CHESAPK-3REYES 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8742	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8743	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK31
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8744	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8745	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8746	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPK41
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8747	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8748	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8749	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8750	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8751	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8752	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8753	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8754	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8755	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8756	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8757	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8758	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8759	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8760	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8761	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8762	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8763	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8764	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8765	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8766	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8767	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8768	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8769	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8770	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8771	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8772	D:6HAYES -6YORKTWN1 +3CHESAPK-3CHESPTK1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Noon	Contingency Description
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8773	D:6HAYES -6YORKTWN1 +6FENTRES-6HICKORY1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8774	D:6HAYES -6YORKTWN1 +6FENTRES-6FENTR 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8775	D:6HAYES -6YORKTWN1 +6FENTRES-8FENTRES1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8776	D:6HAYES -6YORKTWN1 +6FENTRES-8FENTRES2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8777	D:6HAYES -6YORKTWN1 +3GREATER-3HICKORY1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8778	D:6HAYES -6YORKTWN1 +3GREATER-3GREAT B1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8779	D:6HAYES -6YORKTWN1 +6GRN RUN-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8780	D:6HAYES -6YORKTWN1 +6GRN RUN-6LYNHAVN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8781	D:6HAYES -6YORKTWN1 +3GRENWCH-3THOLE S1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8782	D:6HAYES -6YORKTWN1 +3GRENWCH-3GRENW 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8783	D:6HAYES -6YORKTWN1 +3GRENWCH-6GRENWCH1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8784	D:6HAYES -6YORKTWN1 +3GRENWCH-6GRENWCH2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8785	D:6HAYES -6YORKTWN1 +6GRENWCH-6GRENWCH 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8786	D:6HAYES -6YORKTWN1 +6GRENWCH-6THALIA 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8787	D:6HAYES -6YORKTWN1 +6GRENWCH-6GRENW 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8788	D:6HAYES -6YORKTWN1 +6HARBOR-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8789	D:6HAYES -6YORKTWN1 +6HARBOR-6SMITFLD1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8790	D:6HAYES -6YORKTWN1 +3HICKORY-6HICKORY1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8791	D:6HAYES -6YORKTWN1 +3IND PRK-3REEVES 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8792	D:6HAYES -6YORKTWN1 +3IND PRK-3THOLE S1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8793	D:6HAYES -6YORKTWN1 +3LANDSTN-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8794	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8795	D:6HAYES -6YORKTWN1 +3LANDSTN-6LANDSTN2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8796	D:6HAYES -6YORKTWN1 +6HUNTSN-6THRS791
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8797	D:6HAYES -6YORKTWN1 +6HUNTSN-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8798	D:6HAYES -6YORKTWN1 +6LANDSTN-6LYNHAVN1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8799	D:6HAYES -6YORKTWN1 +6LANDSTN-6STUMPY 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8800	D:6HAYES -6YORKTWN1 +6LANDSTN-6W LAND 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8801	D:6HAYES -6YORKTWN1 +3LONDONB-3PENDLTH1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8802	D:6HAYES -6YORKTWN1 +3LONDONB-3P ANNE 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8803	D:6HAYES -6YORKTWN1 +6HARBOR-6CRITTON1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8804	D:6HAYES -6YORKTWN1 +6LJ KING-6LAKINGB1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8805	D:6HAYES -6YORKTWN1 +6LJ KING-6LAKINGB1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8806	D:6HAYES -6YORKTWN1 +6LYNHAVN-6VA BCH 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8807	D:6HAYES -6YORKTWN1 +6LYNHAVN-6THALIA 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8808	D:6HAYES -6YORKTWN1 +6LYNHAVN-6LYNHA 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8809	D:6HAYES -6YORKTWN1 +3MCLAUGH-3REEVES 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8810	D:6HAYES -6YORKTWN1 +3OAKWOOD-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8811	D:6HAYES -6YORKTWN1 +3OAKWOOD-3THOLE S1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8812	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8813	D:6HAYES -6YORKTWN1 +6VA BCH -3VA BCH 2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8814	D:6HAYES -6YORKTWN1 +3PENDLTHN-3VA BCH 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8815	D:6HAYES -6YORKTWN1 +3REEVES -3REEVE 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8816	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8817	D:6HAYES -6YORKTWN1 +3REEVES -6REEVES 2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8818	D:6HAYES -6YORKTWN1 +6GRENWCH-6GRUITANI
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8819	D:6HAYES -6YORKTWN1 +6GRENWCH-6GRENW 11

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8820	D:6HAYES -6YORKTWN1 +6URITAN-6SNORFLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8821	D:6HAYES -6YORKTWN1 +3SEWLSPT-3TAUSSIG1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8822	D:6HAYES -6YORKTWN1 +3SEWLSPT-3THOLE S1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8823	D:6HAYES -6YORKTWN1 +3SEWLSPT-6SEWLSPT1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8824	D:6HAYES -6YORKTWN1 +3SEWLSPT-6SEWLSPT2
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8825	D:6HAYES -6YORKTWN1 +6SEWLSPT-6NAVYS 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8826	D:6HAYES -6YORKTWN1 +6SEWLSPT-6NAVYS1 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8827	D:6HAYES -6YORKTWN1 +6SNORFLK-6THRS2791
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8828	D:6HAYES -6YORKTWN1 +6NAVYS -6NAVYN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8829	D:6HAYES -6YORKTWN1 +6NAVYS1 -6NAVYN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8830	D:6HAYES -6YORKTWN1 +6STUMPY -6THRS2791
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8831	D:6HAYES -6YORKTWN1 +3THOLE S-3THOLE 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8832	D:6HAYES -6YORKTWN1 +6THRS279-6YADKIN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8833	D:6HAYES -6YORKTWN1 +3VA BCH -3VA BC 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8834	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8835	D:6HAYES -6YORKTWN1 +6YADKIN -6YADK1 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8836	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8837	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 2
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8838	D:6HAYES -6YORKTWN1 +6CHCKTUK-6KINGSFO1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8839	D:6HAYES -6YORKTWN1 +6CHCKTUK-6SURRY 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8840	D:6HAYES -6YORKTWN1 +6CHCKTUK-6CHCKT 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8841	D:6HAYES -6YORKTWN1 +6CRITTON-6SURRY 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8842	D:6HAYES -6YORKTWN1 +3FRANKLN -3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8843	D:6HAYES -6YORKTWN1 +3FRANKLN -3JWATKINS1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8844	D:6HAYES -6YORKTWN1 +6KINGSFO-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8845	D:6HAYES -6YORKTWN1 +3HANDSOM-3S HAMPT1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8846	D:6HAYES -6YORKTWN1 +3HOLLAND-3SUFFOLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8847	D:6HAYES -6YORKTWN1 +3HOLLAND-3UNCAMP 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8848	D:6HAYES -6YORKTWN1 +3IVOR105-3OAKR1231
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8849	D:6HAYES -6YORKTWN1 +3MYRTLE -3JWINDSOR1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8850	D:6HAYES -6YORKTWN1 +3OAKR123-3SUFFCAP1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8851	D:6HAYES -6YORKTWN1 +6SMITFLD-6SURRY 1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8852	D:6HAYES -6YORKTWN1 +3S HAMPT-3JWATKINS1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8853	D:6HAYES -6YORKTWN1 +3S HAMPT-3JWATKINS1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8854	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFOLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8855	D:6HAYES -6YORKTWN1 +3SUFFCAP-3SUFFC 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8856	D:6HAYES -6YORKTWN1 +3SUFFOLK-3SUFFC 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8857	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8858	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK2
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8859	D:6HAYES -6YORKTWN1 +3SUFFOLK-6SUFFOLK3
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8860	D:6HAYES -6YORKTWN1 +6SUFFOLK-6SUFFOLK1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8861	D:6HAYES -6YORKTWN1 +6SUFFOLK-8SUFFOLK2
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8862	D:6HAYES -6YORKTWN1 +6SURRY -6POOLS111
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8863	D:6HAYES -6YORKTWN1 +6SURRY -6GRAVELA1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8864	D:6HAYES -6YORKTWN1 +6SURRY -6GRAVELA1
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8865	D:6HAYES -6YORKTWN1 +6SURRY -6SURRY 11
314180	6HAYES	230.0	345	354	0.8942	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8866	D:6HAYES -6YORKTWN1 +6SURRY -6GRAVELC1

Bus #	Bus Name	KV	Area	Zone	ContVlt	BaseVlt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8921	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8867	D: 6HAYES -6YORKTWN1 +3UNCAMP -3UNCAM 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8868	D: 6HAYES -6YORKTWN1 +3WATKINS-3WATKI 11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8869	D: 6HAYES -6YORKTWN1 +3WATKINS-3WATKI 21
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8870	D: 6HAYES -6YORKTWN1 +6GRAVELLA-IGRAVEL31
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8871	D: 6HAYES -6YORKTWN1 +6GRAVELLA-IGRAVEL41
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8872	D: 6HAYES -6YORKTWN1 +6GRAVELLA-IGRAVEL51
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8873	D: 6HAYES -6YORKTWN1 +6GRAVELLA-IGRAVEL61
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8874	D: 6HAYES -6YORKTWN1 +8LOUDD 1-8LOUDD1N1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8875	D: 6HAYES -6YORKTWN1 +8MORRIS 1-8MORRISVLL1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8876	D: 6HAYES -6YORKTWN1 +8MT ST 1-8MT STM 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8877	D: 6HAYES -6YORKTWN1 +8MT ST 2-8MT STM 1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8878	D: 6HAYES -6YORKTWN1 +8BRISTLER-8CHANCE 1
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8879	D: 6HAYES -6YORKTWN1 +8BRISTLER-8MORRISVLL1
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8880	D: 6HAYES -6YORKTWN1 +8BRISTLER-8BOX 1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8881	D: 6HAYES -6YORKTWN1 +8BATH CO-8VALLEY 1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8882	D: 6HAYES -6YORKTWN1 +8BATH CO-8VALLEY 1
314180	6HAYES	230.0	345	354	0.8915	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8883	D: 6HAYES -6YORKTWN1 + B50461 BATH 3W1 1
314180	6HAYES	230.0	345	354	0.8915	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8884	D: 6HAYES -6YORKTWN1 + B50462 BATH 3W5 1
314180	6HAYES	230.0	345	354	0.8915	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8885	D: 6HAYES -6YORKTWN1 + B50463 BATH 3W5 1
314180	6HAYES	230.0	345	354	0.8907	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8886	D: 6HAYES -6YORKTWN1 +8CARSON -8CLOVER 1
314180	6HAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8887	D: 6HAYES -6YORKTWN1 +8CARSON -8MDLTN1
314180	6HAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8888	D: 6HAYES -6YORKTWN1 +8CARSON -8ETUFRNK1
314180	6HAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8889	D: 6HAYES -6YORKTWN1 +8CARSON -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8901	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8890	D: 6HAYES -6YORKTWN1 +8CHICAHN-BELMONT 1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8891	D: 6HAYES -6YORKTWN1 +8CHICAHN-8SUNRY 1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8892	D: 6HAYES -6YORKTWN1 +8CLIFTON-8LOUDD1N1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8893	D: 6HAYES -6YORKTWN1 +8CLIFTON-8BOX 1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8894	D: 6HAYES -6YORKTWN1 +8CHANCE -8LDYSMTN1
314180	6HAYES	230.0	345	354	0.8905	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8895	D: 6HAYES -6YORKTWN1 +8DOOMS -8CUNNING1
314180	6HAYES	230.0	345	354	0.8914	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8896	D: 6HAYES -6YORKTWN1 +8DOOMS -8LENGTNI
314180	6HAYES	230.0	345	354	0.8914	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8897	D: 6HAYES -6YORKTWN1 +8DOOMS -8VALLEY 1
314180	6HAYES	230.0	345	354	0.8920	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8898	D: 6HAYES -6YORKTWN1 +8BELMONT -8CUNNING1
314180	6HAYES	230.0	345	354	0.8904	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8899	D: 6HAYES -6YORKTWN1 +8BELMONT -8LDYSMTN1
314180	6HAYES	230.0	345	354	0.8909	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8900	D: 6HAYES -6YORKTWN1 +8FENTRES-8YADKIN 1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8901	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGAI
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8902	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGBI
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8903	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGCI
314180	6HAYES	230.0	345	354	0.8914	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8904	D: 6HAYES -6YORKTWN1 +8CUNNING-8CUNINGDI
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8905	D: 6HAYES -6YORKTWN1 +8LDYSMTN-8NO ANNAL
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8906	D: 6HAYES -6YORKTWN1 +8LDYSMTN-8POSSUM 1
314180	6HAYES	230.0	345	354	0.8910	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8907	D: 6HAYES -6YORKTWN1 +8LOUDD1N-8MORRISVLL1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8908	D: 6HAYES -6YORKTWN1 +8LOUDD1N-8BRABELE1
314180	6HAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8909	D: 6HAYES -6YORKTWN1 +8MDLTN-8NO ANNAL
314180	6HAYES	230.0	345	354	0.8906	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8910	D: 6HAYES -6YORKTWN1 +8ETUFRNK-8SEPTA 1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8911	D: 6HAYES -6YORKTWN1 +8MORRISVLL-8NO ANNAL
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8912	D: 6HAYES -6YORKTWN1 +8MORRISVLL-8FRONT RL
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8913	D: 6HAYES -6YORKTWN1 +8MT STM -8VALLEY 1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8914	D:6HAYES -6YORKTWN1 +8MT STM -3M STORM1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8915	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8916	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM21
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8917	D:6HAYES -6YORKTWN1 +8MT STM -1MT STM31
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8918	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNA11
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8919	D:6HAYES -6YORKTWN1 +8NO ANNA-IN ANNA21
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8920	D:6HAYES -6YORKTWN1 +8OX -8FOSSUM 1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8921	D:6HAYES -6YORKTWN1 +3M STORM-3M BRNCH1
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8922	D:6HAYES -6YORKTWN1 +8SEPTA -8SURREY 1
314180	6HAYES	230.0	345	354	0.8902	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8923	D:6HAYES -6YORKTWN1 +8YADKIN 1
314180	6HAYES	230.0	345	354	0.8907	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8924	D:6HAYES -6YORKTWN1 +8SURREY -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8928	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8925	D:6HAYES -6YORKTWN1 +8SURREY 2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8926	D:6HAYES -6YORKTWN1 +8PL VIEW-8BRAMBLE1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8927	D:6HAYES -6YORKTWN1 +8YADKIN -8SULFOLK1
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8928	D:6HAYES -6YORKTWN1 +8FRONT R-FRNT RY1
314180	6HAYES	230.0	345	354	0.8911	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8929	D:6HAYES -6YORKTWN1 +6YADKIN -8YADKIN 3
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8930	D:6HAYES -6YORKTWN1 +3YADKIN -6YADKIN 2
314180	6HAYES	230.0	345	354	0.8912	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8931	D:6HAYES -6YORKTWN1 +3CHESAPEK-6CHESAPEK2
314180	6HAYES	230.0	345	354	0.8913	1.0241	0.9300	1.0700	0.9729	1.0753	LD	8932	D:6HAYES -6YADKIN -6SUFFOLK1
314176	6HARMONY	230.0	345	354	0.8468	1.0240	0.9300	1.0700	0.9728	1.0752	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTN-6LANEXA 1
314189	6PAPERMILL	230.0	345	354	0.8405	1.0171	0.9300	1.0700	0.9662	1.0679	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTN-6LANEXA 1
314375	6CORCTN	230.0	345	354	0.8403	1.0164	0.9300	1.0700	0.9656	1.0673	LD	10699	D:3SHACKLE-3WEST PT1 +6CORRECTN-6LANEXA 1
314176	6HARMONY	230.0	345	354	0.8509	1.0240	0.9300	1.0700	0.9728	1.0752	LD	10963	D:3WEST PT-3LANEXA 1 +6PAPEM1-6CORRECTN1
314189	6PAPERMILL	230.0	345	354	0.8437	1.0171	0.9300	1.0700	0.9662	1.0679	LD	10963	D:3WEST PT-3LANEXA 1 +6PAPEM1-6CORRECTN1
314176	6HARMONY	230.0	345	354	0.8428	1.0240	0.9300	1.0700	0.9728	1.0752	LD	10985	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314189	6PAPERMILL	230.0	345	354	0.8425	1.0171	0.9300	1.0700	0.9662	1.0679	LD	10985	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314375	6CORCTN	230.0	345	354	0.8232	1.0164	0.9300	1.0700	0.9656	1.0673	LD	10985	D:3WEST PT-3LANEXA 1 +6CORRECTN-6LANEXA 1
314384	3KINGS M	115.0	345	356	0.9123	0.9683	0.9300	1.0700	0.9198	1.0167	LD	20378	D:3LANEXA -6LANEXA 1 +3LANEXA -6LANEXA 2
314399	6PEMBROK	230.0	345	356	0.8714	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23570	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314407	6SHELBNK	230.0	345	356	0.8714	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23570	D:6NP NEWS-6PEMBROK1 +6PENINSL-6SHELBNK1
314399	6PEMBROK	230.0	345	356	0.8713	1.0218	0.9300	1.0700	0.9684	1.0703	LD	23571	D:6NP NEWS-6PEMBROK1 +6PENINSL-6TABB 1
314402	6PENINSL	230.0	345	356	0.8607	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23571	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314407	6SHELBNK	230.0	345	356	0.8606	1.0194	0.9300	1.0700	0.9685	1.0704	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8591	1.0198	0.9300	1.0700	0.9688	1.0708	LD	23576	D:6NP NEWS-6PEMBROK1 +6TABB -6YORKTWN1
314399	6PEMBROK	230.0	345	356	0.9120	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23582	D:6NP NEWS-6PEMBROK1 +6HEALTH-6WINCHST1
314402	6PENINSL	230.0	345	356	0.9134	1.0194	0.9300	1.0700	0.9685	1.0704	LD	23582	D:6NP NEWS-6PEMBROK1 +6HEALTH-6WINCHST1
314407	6SHELBNK	230.0	345	356	0.9130	1.0193	0.9300	1.0700	0.9684	1.0703	LD	23582	D:6NP NEWS-6PEMBROK1 +6HEALTH-6WINCHST1
313812	6ROCKLAND	230.0	345	356	0.8623	1.0158	0.9300	1.0700	0.9650	1.0666	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314180	6HAYES	230.0	345	354	0.8928	1.0241	0.9300	1.0700	0.9729	1.0753	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314396	6PENINSL	230.0	345	356	0.9005	1.0159	0.9300	1.0700	0.9651	1.0666	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314371	3AMOCO Y	115.0	345	356	0.9094	0.9948	0.9300	1.0700	0.9451	1.0446	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314372	3BLOXOMC	115.0	345	356	0.9174	0.9867	0.9300	1.0700	0.9374	1.0361	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314373	3COLONY	115.0	345	356	0.9113	0.9892	0.9300	1.0700	0.9397	1.0386	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL
314376	6DENBIGH	230.0	345	356	0.8859	1.0178	0.9300	1.0700	0.9649	1.0687	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVELL

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	Voltrise	Viol	Noon	Contingency Description
314379	3FTU558	115.0	345	356	0.8995	0.9851	0.9300	1.0700	0.9358	1.0343	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.8994	0.9939	0.9300	1.0700	0.9442	1.0436	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.8944	0.9894	0.9300	1.0700	0.9400	1.0389	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8969	1.0169	0.9300	1.0700	0.9660	1.0677	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314389	31RRAN58	115.0	345	356	0.8877	0.9835	0.9300	1.0700	0.9443	1.0326	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314390	611GH285	230.0	345	356	0.9063	1.0104	0.9300	1.0700	0.9599	1.0609	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314391	611GH209	230.0	345	356	0.9163	1.0136	0.9300	1.0700	0.9629	1.0642	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314399	6PEMBROK	230.0	345	356	0.8489	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314402	6PENINSL	230.0	345	356	0.8552	1.0194	0.9300	1.0700	0.9685	1.0704	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.9059	0.9944	0.9300	1.0700	0.9447	1.0441	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.9054	0.9940	0.9300	1.0700	0.9443	1.0437	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314407	6SHSLANK	230.0	345	356	0.8459	1.0193	0.9300	1.0700	0.9684	1.0703	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314409	6TABB	230.0	345	356	0.8621	1.0198	0.9300	1.0700	0.9688	1.0708	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314413	6WALR285	230.0	345	356	0.8992	1.0107	0.9300	1.0700	0.9602	1.0613	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314415	6WALR209	230.0	345	356	0.9082	1.0138	0.9300	1.0700	0.9631	1.0645	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314416	6WALRICK	230.0	345	356	0.8639	1.0153	0.9300	1.0700	0.9645	1.0660	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314418	6WALRIN	230.0	345	356	0.8597	1.0140	0.9300	1.0700	0.9633	1.0647	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8595	1.0137	0.9300	1.0700	0.9630	1.0644	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.9065	0.9949	0.9300	1.0700	0.9452	1.0447	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314423	6YORKTWN	230.0	345	356	0.8974	1.0226	0.9300	1.0700	0.9715	1.0737	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314424	3YORKS 58	115.0	345	356	0.8944	0.9832	0.9300	1.0700	0.9340	1.0324	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314425	3YORK PS	115.0	345	356	0.8966	0.9952	0.9300	1.0700	0.9454	1.0449	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314445	6WALRICK	230.0	345	356	0.8644	1.0160	0.9300	1.0700	0.9652	1.0668	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
314450	6YORKTWN	230.0	345	356	0.8839	1.0260	0.9300	1.0700	0.9747	1.0773	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
315091	1YORKTWN	18.0	345	356	0.9005	0.9949	0.9300	1.0700	0.9452	1.0447	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
315092	1YORKTWN	25.0	345	356	0.8810	1.0226	0.9300	1.0700	0.9715	1.0737	LD	23584	D:6NP NEWS-6PEMBROK1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.8622	1.0158	0.9300	1.0700	0.9650	1.0666	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314180	6HAYES	230.0	345	354	0.8944	1.0241	0.9300	1.0700	0.9729	1.0753	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314296	6PENINSUL	230.0	345	356	0.8980	1.0159	0.9300	1.0700	0.9651	1.0666	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8939	0.9948	0.9300	1.0700	0.9451	1.0446	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314372	3BLOXOMC	115.0	345	356	0.9148	0.9867	0.9300	1.0700	0.9374	1.0361	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314373	3COLONY	115.0	345	356	0.9058	0.9992	0.9300	1.0700	0.9397	1.0386	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314376	6DENBIGH	230.0	345	356	0.8954	1.0178	0.9300	1.0700	0.9669	1.0687	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314379	3FTU558	115.0	345	356	0.8870	0.9851	0.9300	1.0700	0.9358	1.0343	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314381	3GRAFT34	115.0	345	356	0.8969	0.9939	0.9300	1.0700	0.9442	1.0436	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314382	3GRAFT58	115.0	345	356	0.8939	0.9894	0.9300	1.0700	0.9400	1.0389	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314386	6KINGS M	230.0	345	356	0.8943	1.0169	0.9300	1.0700	0.9660	1.0677	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314389	31RRAN58	115.0	345	356	0.8852	0.9835	0.9300	1.0700	0.9343	1.0326	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314390	611GH285	230.0	345	356	0.9039	1.0104	0.9300	1.0700	0.9599	1.0609	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314391	611GH209	230.0	345	356	0.9260	1.0136	0.9300	1.0700	0.9629	1.0642	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314399	6PEMBROK	230.0	345	356	0.8454	1.0218	0.9300	1.0700	0.9707	1.0729	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314402	6PENINSL	230.0	345	356	0.8527	1.0194	0.9300	1.0700	0.9685	1.0704	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314403	3SEAFD76	115.0	345	356	0.9044	0.9944	0.9300	1.0700	0.9447	1.0441	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314404	3SEAFD79	115.0	345	356	0.9039	0.9940	0.9300	1.0700	0.9443	1.0437	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314407	6SHSLANK	230.0	345	356	0.8464	1.0193	0.9300	1.0700	0.9684	1.0703	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314409	6TABB	230.0	345	356	0.8606	1.0198	0.9300	1.0700	0.9688	1.0708	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1
314413	6WALR285	230.0	345	356	0.8965	1.0107	0.9300	1.0700	0.9602	1.0613	LD	23730	D:6NP NEWS-6PEMBROK1 +6SURRY --6POOLSVL1

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314414	3MARWICK	115.0	345	356	0.9129	0.9909	0.9300	1.0700	0.9413	1.0404	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314415	6MARW209	230.0	345	356	0.9058	1.0138	0.9300	1.0700	0.9631	1.0645	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314416	6MARWICK	230.0	345	356	0.9619	1.0153	0.9300	1.0700	0.9645	1.0645	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314418	6WHEALTIN	230.0	345	356	0.8579	1.0140	0.9300	1.0700	0.9633	1.0647	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314421	6WINCHST	230.0	345	356	0.8578	1.0137	0.9300	1.0700	0.9630	1.0644	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314422	3YORKTWN	115.0	345	356	0.8981	0.9949	0.9300	1.0700	0.9452	1.0447	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314423	3YORKTWN	230.0	345	356	0.8783	1.0226	0.9300	1.0700	0.9715	1.0737	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314424	3YOWS 58	115.0	345	356	0.8849	0.9832	0.9300	1.0700	0.9340	1.0324	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314425	3YORR PS	115.0	345	356	0.8971	0.9952	0.9300	1.0700	0.9454	1.0449	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
31445	6WHEAL 1	230.0	345	356	0.8597	1.0160	0.9300	1.0700	0.9452	1.0668	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314450	6YORKT 1	230.0	345	356	0.8813	1.0260	0.9300	1.0700	0.9747	1.0773	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314540	6POOLSVL	230.0	345	360	0.9584	1.0093	0.9300	1.0700	0.9588	1.0597	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
315091	1YORKTN2	18.0	345	356	0.8981	0.9949	0.9300	1.0700	0.9452	1.0447	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
315092	1YORKTN3	25.0	345	356	0.8785	1.0226	0.9300	1.0700	0.9715	1.0737	LD	23730	D:6NP NEWS-6PMBROK1 +6SURY -6POOLSVL1
314407	6SHELBNK	230.0	345	356	0.8720	1.0193	0.9300	1.0700	0.9684	1.0703	LD	24043	D:6PEMBROK-6SHELBNK1 +6PENINSI-6SHELBNK1
314402	6PENINSI	230.0	345	356	0.8718	1.0194	0.9300	1.0700	0.9685	1.0704	LD	24044	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314407	6SHELBNK	230.0	345	356	0.8708	1.0193	0.9300	1.0700	0.9684	1.0703	LD	24044	D:6PEMBROK-6SHELBNK1 +6PENINSI-6TABB 1
314402	6PENINSI	230.0	345	356	0.8602	1.0194	0.9300	1.0700	0.9685	1.0704	LD	24049	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314409	6TABB	230.0	345	356	0.8602	1.0193	0.9300	1.0700	0.9684	1.0703	LD	24049	D:6PEMBROK-6SHELBNK1 +6TABB -6YORKTWN1
314402	6PENINSI	230.0	345	356	0.8599	1.0194	0.9300	1.0700	0.9685	1.0704	LD	24053	D:6PEMBROK-6SHELBNK1 +6WHEALTIN-6WINCHST1
314407	6SHELBNK	230.0	345	356	0.8523	1.0193	0.9300	1.0700	0.9684	1.0703	LD	24053	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
313812	6ROCKLAND	230.0	345	356	0.8648	1.0158	0.9300	1.0700	0.9650	1.0666	LD	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314190	6HAYES	230.0	345	354	0.8823	1.0241	0.9300	1.0700	0.9729	1.0753	LD	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314296	6PENINIMAN	230.0	345	356	0.9001	1.0159	0.9300	1.0700	0.9651	1.0666	LD	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLSVL1
314371	3AMOCO Y	115.0	345	356	0.8999	0.9948	0.9300	1.0700	0.9451	1.0446	LD	24057	D:6PEMBROK-6SHELBNK1 +6WINCHST-6POOLS

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314422	3YORKTWN	115.0	345	356	0.9000	0.9949	0.9300	1.0700	0.9452	1.0447	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
314423	6YORKTWN	230.0	345	356	0.8869	1.0226	0.9300	1.0700	0.9715	1.0737	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
314424	3YNNIS 58	115.0	345	356	0.8869	0.9932	0.9300	1.0700	0.9430	1.0342	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
314425	3YORK PS	115.0	345	356	0.8990	0.9952	0.9300	1.0700	0.9454	1.0449	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
314445	6WHEAL 1	230.0	345	356	0.8609	1.0160	0.9300	1.0700	0.9652	1.0668	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
314450	6YORKT 1	230.0	345	356	0.8834	1.0260	0.9300	1.0700	0.9747	1.0773	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
315091	1YORKT2	18.0	345	356	0.9000	0.9949	0.9300	1.0700	0.9452	1.0447	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
315092	1YORKT3	25.0	345	356	0.8805	1.0226	0.9300	1.0700	0.9715	1.0737	LD	24057	D:6PMBROK-6SHELBNK1 +6WINCHST-6POOLSVLI
313812	6BROCKLAND	230.0	345	356	0.8628	1.0158	0.9300	1.0700	0.9650	1.0666	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314180	6HAYES	230.0	345	354	0.8798	1.0241	0.9300	1.0700	0.9729	1.0753	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314296	6PENNTMAN	230.0	345	356	0.8976	1.0159	0.9300	1.0700	0.9651	1.0666	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314371	3AMOCO Y	115.0	345	356	0.8973	0.9948	0.9300	1.0700	0.9451	1.0446	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314372	3BLOXOMC	115.0	345	356	0.8741	0.9867	0.9300	1.0700	0.9374	1.0361	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314373	3COLONY	115.0	345	356	0.8682	0.9892	0.9300	1.0700	0.9397	1.0386	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314376	6DENBIGH	230.0	345	356	0.8808	1.0178	0.9300	1.0700	0.9669	1.0687	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314379	3FTEUS8	115.0	345	356	0.8864	0.9851	0.9300	1.0700	0.9358	1.0343	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314381	3GRAFT34	115.0	345	356	0.8963	0.9939	0.9300	1.0700	0.9442	1.0436	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314382	3GRAFT36	115.0	345	356	0.8912	0.9894	0.9300	1.0700	0.9400	1.0389	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314386	6KINGS M	230.0	345	356	0.8939	1.0169	0.9300	1.0700	0.9660	1.0677	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314390	3LEBNN8	115.0	345	356	0.8845	0.9935	0.9300	1.0700	0.9343	1.0326	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314390	6LIGH205	230.0	345	356	0.8635	1.0104	0.9300	1.0700	0.9399	1.0609	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314391	6LIGH209	230.0	345	356	0.9257	1.0136	0.9300	1.0700	0.9629	1.0642	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314402	6PENINS	230.0	345	356	0.8520	1.0194	0.9300	1.0700	0.9685	1.0741	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314403	3SEAPD76	115.0	345	356	0.8637	0.9944	0.9300	1.0700	0.9447	1.0441	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314404	3SEAPD79	115.0	345	356	0.8657	0.9940	0.9300	1.0700	0.9443	1.0437	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314407	6SHELBNK	230.0	345	356	0.8457	1.0193	0.9300	1.0700	0.9684	1.0703	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314409	6TABB	230.0	345	356	0.8600	1.0198	0.9300	1.0700	0.9688	1.0708	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314413	6WALR285	230.0	345	356	0.8572	1.0107	0.9300	1.0700	0.9602	1.0613	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314414	3WALRICK	115.0	345	356	0.8713	0.9909	0.9300	1.0700	0.9413	1.0404	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314415	6WALR209	230.0	345	356	0.8654	1.0138	0.9300	1.0700	0.9631	1.0645	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314416	6WALRICK	230.0	345	356	0.8643	1.0153	0.9300	1.0700	0.9645	1.0660	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314418	6WHEALTN	230.0	345	356	0.8573	1.0140	0.9300	1.0700	0.9633	1.0647	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314421	6WINCHST	230.0	345	356	0.8572	1.0137	0.9300	1.0700	0.9630	1.0644	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314422	3YORKTWN	115.0	345	356	0.8978	0.9949	0.9300	1.0700	0.9452	1.0447	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314423	6YORKTWN	230.0	345	356	0.8779	1.0226	0.9300	1.0700	0.9715	1.0737	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314425	3YNNIS 58	115.0	345	356	0.8965	0.9952	0.9300	1.0700	0.9454	1.0449	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314445	6WHEAL 1	230.0	345	356	0.8591	1.0160	0.9300	1.0700	0.9652	1.0668	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314450	6YORKT 1	230.0	345	356	0.8808	1.0260	0.9300	1.0700	0.9747	1.0773	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314540	6POOLSVL	230.0	345	360	0.8578	1.0093	0.9300	1.0700	0.9588	1.0597	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
315091	1YORKT2	18.0	345	356	0.8974	0.9949	0.9300	1.0700	0.9452	1.0447	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
315092	1YORKT3	25.0	345	356	0.8779	1.0226	0.9300	1.0700	0.9715	1.0737	LD	24203	D:6PMBROK-6SHELBNK1 +6SURY -6POOLSVLI
314497	6SEWLSPT	230.0	345	359	0.8749	1.0064	0.9300	1.0700	0.9561	1.0567	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314501	6NAVYS	230.0	345	359	0.8749	1.0064	0.9300	1.0700	0.9561	1.0567	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314505	6NAVYN	230.0	345	359	0.8750	1.0065	0.9300	1.0700	0.9561	1.0568	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2
314510	6NAVYN1	230.0	345	359	0.8747	1.0062	0.9300	1.0700	0.9559	1.0565	LD	36251	D:6CHRLND-6SEWLSPT1 +6CHRLND-6SEWLSPT2

Bus #	Bus Name	kV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314348	ZGRGTN 1	69.0	345	358	0.8453	1.0169	0.9300	1.0700	0.9661	1.0678	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314354	ZALTVS 1	69.0	345	358	0.8698	1.0327	0.9300	1.0700	0.9810	1.0843	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314515	ZALTVS 1	115.0	345	358	0.8604	1.0005	0.9300	1.0700	0.9505	1.0506	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314666	ZALTVSTA	115.0	345	358	0.8500	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314667	ZALTVSTA	138.0	345	358	0.8484	0.9984	0.9300	1.0700	0.9485	1.0483	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314668	ZBARSN	138.0	345	358	0.8076	0.9946	0.9300	1.0700	0.9449	1.0444	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314670	ZALTVSTA	69.0	345	358	0.8695	1.0324	0.9300	1.0700	0.9808	1.0843	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314671	ZBARSN	138.0	345	358	0.8889	0.9966	0.9300	1.0700	0.9467	1.0464	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314680	ZCHATHAM	69.0	345	358	0.8322	1.0047	0.9300	1.0700	0.9545	1.0550	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314685	ZCHTM TP	69.0	345	358	0.8329	1.0053	0.9300	1.0700	0.9551	1.0556	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314689	ZDOMINTO	115.0	345	358	0.8404	0.9927	0.9300	1.0700	0.9431	1.0424	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314694	ZGRIT	115.0	345	358	0.8762	1.0021	0.9300	1.0700	0.9520	1.0522	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314700	ZHALL BR	115.0	345	358	0.8620	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314705	ZHURT	115.0	345	358	0.8654	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314712	ZOTTIER R	115.0	345	358	0.8624	0.9999	0.9300	1.0700	0.9499	1.0499	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314727	ZCLAX DP	69.0	345	358	0.8294	1.0022	0.9300	1.0700	0.9521	1.0523	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314728	ZCLAX TP	69.0	345	358	0.8432	1.0029	0.9300	1.0700	0.9527	1.0530	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314729	ZGLADYS	69.0	345	358	0.8456	1.0111	0.9300	1.0700	0.9606	1.0617	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314730	ZGLDY TP	69.0	345	358	0.8658	1.0297	0.9300	1.0700	0.9783	1.0812	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314731	ZGRNTA	69.0	345	358	0.8451	1.0167	0.9300	1.0700	0.9658	1.0675	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314732	ZGRNA FB	69.0	345	358	0.8451	1.0167	0.9300	1.0700	0.9658	1.0675	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314733	ZGRNA DP	69.0	345	358	0.8432	1.0149	0.9300	1.0700	0.9641	1.0656	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314734	ZKLOP DP	69.0	345	358	0.8606	1.0261	0.9300	1.0700	0.9748	1.0774	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314735	ZKLOP TP	69.0	345	358	0.8606	1.0261	0.9300	1.0700	0.9748	1.0774	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314736	ZSHKO DP	69.0	345	358	0.8927	1.0052	0.9300	1.0700	0.9549	1.0554	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314737	ZSWJST57	69.0	345	358	0.8516	1.0203	0.9300	1.0700	0.9693	1.0713	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314738	ZMT AIRY	69.0	345	358	0.8456	1.0148	0.9300	1.0700	0.9641	1.0656	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314739	ZMT A TP	69.0	345	358	0.8516	1.0203	0.9300	1.0700	0.9693	1.0714	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314740	ZALTVS35	69.0	345	358	0.8695	1.0324	0.9300	1.0700	0.9808	1.0840	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314789	ZBARSN	69.0	345	358	0.8889	0.9966	0.9300	1.0700	0.9467	1.0464	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314836	ZBACFLS	115.0	345	365	0.8768	0.9962	0.9300	1.0700	0.9463	1.0460	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314837	ZBUENA V	115.0	345	365	0.8756	0.9952	0.9300	1.0700	0.9455	1.0450	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314838	ZBUSTLER	115.0	345	365	0.8811	0.9985	0.9300	1.0700	0.9485	1.0484	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314839	ZBUSTL T	115.0	345	365	0.8823	0.9986	0.9300	1.0700	0.9487	1.0485	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314840	ZCLFTN F	230.0	345	365	0.8427	0.9802	0.9300	1.0700	0.9312	1.0292	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314841	ZCLFTN F	138.0	345	365	0.8648	1.0359	0.9300	1.0700	0.9841	1.0877	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314842	ZCOVNGT2	138.0	345	365	0.8482	1.0255	0.9300	1.0700	0.9742	1.0768	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314843	ZCOVNGT1	138.0	345	365	0.8482	1.0238	0.9300	1.0700	0.9726	1.0750	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314844	ZCRAIGSV	115.0	345	365	0.8759	0.9955	0.9300	1.0700	0.9457	1.0452	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314845	ZJEFFINGR	115.0	345	365	0.8804	0.9986	0.9300	1.0700	0.9487	1.0486	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314846	ZFAIRFLD	115.0	345	365	0.8709	0.9977	0.9300	1.0700	0.9478	1.0476	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314847	ZFUDGE H	138.0	345	365	0.8427	1.0217	0.9300	1.0700	0.9706	1.0728	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314848	ZGLASGOW	115.0	345	365	0.8784	0.9972	0.9300	1.0700	0.9473	1.0471	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314849	ZGOSHEN	115.0	345	365	0.8774	0.9964	0.9300	1.0700	0.9466	1.0463	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314851	ZJAMES L	115.0	345	365	0.8754	0.9952	0.9300	1.0700	0.9455	1.0450	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314852	ZJMS L T	115.0	345	365	0.8780	0.9956	0.9300	1.0700	0.9459	1.0454	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI
314853	ZLEXNGTN	115.0	345	365	0.8825	0.9993	0.9300	1.0700	0.9494	1.0493	LD	50742 D:8BATH CO-SVALLEY 1 +8DOOMS	-8LEXNGTNI

Bus #	Bus Name	KV	Area	Zone	ContVolt	BaseVolt	LowLimit	Upplimit	VoltDrop	VoltRise	Viol	Ncon	Contingency Description
314854	6LEXNGT1	230.0	345	365	0.3867	0.9921	0.9300	1.0700	0.9425	1.0417	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314855	6LOWMOOR	230.0	345	365	0.3587	0.9798	0.9300	1.0700	0.9308	1.0288	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314856	6LEXNGT2	230.0	345	365	0.3867	0.9921	0.9300	1.0700	0.9425	1.0417	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314857	4LOWMOOR	138.0	345	365	0.3592	1.0334	0.9300	1.0700	0.9817	1.0850	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314858	3ROCKB T	115.0	345	365	0.3770	0.9959	0.9300	1.0700	0.9461	1.0437	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314859	4NSTVACO	138.0	345	365	0.3393	1.0192	0.9300	1.0700	0.9682	1.0701	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314860	4E MILL	138.0	345	365	0.3401	1.0198	0.9300	1.0700	0.9688	1.0708	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314861	3SKIMMER	115.0	345	365	0.7823	0.9747	0.9300	1.0700	0.9260	1.0235	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314894	4LOWMO I	138.0	345	365	0.2593	1.0339	0.9300	1.0700	0.9822	1.0856	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314901	8BATH CO	500.0	345	366	0.4239	1.0500	0.9300	1.0700	0.9975	1.1025	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
314912	8LEXNGT1	500.0	345	366	0.4237	1.0468	0.9300	1.0700	0.9944	1.0991	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315156	1BALLBRI	13.8	345	358	0.8620	1.0000	0.9300	1.0700	0.9500	1.0500	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315165	1HURT 1	13.8	345	358	0.8979	0.9934	0.9300	1.0700	0.9437	1.0431	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315166	1HURT 2	13.8	345	358	0.8979	0.9934	0.9300	1.0700	0.9437	1.0431	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315201	1BATH 1A	20.5	345	366	0.4298	1.0283	0.9300	1.0700	0.9769	1.0797	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315202	1BATH 2B	20.5	345	366	0.4269	1.0283	0.9300	1.0700	0.9769	1.0798	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315203	1BATH 3C	20.5	345	366	0.4271	1.0278	0.9300	1.0700	0.9764	1.0792	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315204	1BATH 4D	20.5	345	366	0.4293	1.0278	0.9300	1.0700	0.9765	1.0792	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315205	1BATH 5E	20.5	345	366	0.4295	1.0281	0.9300	1.0700	0.9767	1.0795	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
315206	1BATH 6F	20.5	345	366	0.4287	1.0281	0.9300	1.0700	0.9767	1.0795	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
B50461	BATH 3W1	1.0	345	366	0.4029	1.0249	0.9300	1.0700	0.9737	1.0762	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
B50462	BATH 3W3	1.0	345	366	0.3992	1.0224	0.9300	1.0700	0.9713	1.0735	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
B50463	BATH 3W5	1.0	345	366	0.3992	1.0228	0.9300	1.0700	0.9716	1.0739	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1
B51032	HURT 3WD	1.0	345	358	0.8668	0.9995	0.9300	1.0700	0.9495	1.0495	LD	50742	D:8BATH CO-8VALLEY 1 +8DOOMS -8LEXNGT1

CATEGORY D

AC Branch Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 9:04 <BRV003.0>
 2015 SUMMER BASE CASE (LTSG15S11) REV. 04/02/2012
 2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
 Case.File X:\S2015\sum_2015(2013LF)_base_wpre_230kV AltC_open3458.sav
 Subsys.File X:\S2015\drv.sub
 Monit.File X:\S2015\vapsys.mon
 Contin.File X:\S2015\2015 Category D.con
 Exclud.File none

***** Report on violations *****

Branches with MVA flow more than 99.0 % of nominal rating

**	From bus	**	To bus	**	CKT	Type	ContMVA	BaseFlo w	Rating	Loading %	Ncon	Contingency Description
314391	6LIGH209	230	314415	6WALR209	230	LN	676.4	264.8	541.0	125.0	5	ROW 568
314278	6BERMUDA	230	314286	6CHSTF A	230	LN	653.7	4.1	541.0	120.8	4	ROW 567
314278	6BERMUDA	230	314303	6HOPEWLL	230	LN	653.9	3.7	549.0	119.1	4	ROW 567
314418	6WHEALTN	230	314421	6WINCHST	230	LN	778.6	399.9	671.0	116.0	1	ROW 436
314418	6WHEALTN	230	314421	6WINCHST	230	LN	743.4	399.9	671.0	110.8	6	Chickahominy
314296	6FENNIMAN	230	314415	6WALR209	230	LN	597.0	196.9	541.0	110.3	5	ROW 568
314296	6FENNIMAN	230	314386	6KINGS M	230	LN	580.1	181.0	541.0	107.2	5	ROW 568
314177	3HAYES89	115	314180	6HAYES	230	TR	279.6	34.3	268.6	104.1	5	ROW 568
314174	3HARMONY	115	314176	6HARMONY	230	TR	229.5	87.5	223.2	102.8	7	Lanexa
314386	6KINGS M	230	314423	6YORKTWN	230	LN	554.2	157.6	541.0	102.4	5	ROW 568
314406	3SHELBNK	115	314407	6SHELBNK	230	TR	275.0	91.5	268.6	102.4	5	ROW 568
314287	6CHSTF B	230	314303	6HOPEWLL	230	LN	561.0	38.1	549.0	102.2	4	ROW 567
314682	3BUGGS I	115	315151	1BUGGS 2	13.8	TR	69.9	69.9	70.0	99.8	**	Base Case **

AC Bus Voltage Violations

PSS(R)MUST 10.2 -- Managing and Utilizing System Transmission -- TUE, FEB 19 2013 9:05 <VOV003.0>
2015 SUMMER BASE CASE (LTS615S11) REV. 04/02/2012
2013 LF WPREPROJECT ALT C GEN RET OPEN 3458
Case.File X:\S2015\sum (2013)F_base_wpre_230kv AltC_open3458.sav
Subsys.File X:\S2015\drv.sub
Monit.File X:\S2015\vapssys.mon
Contn.File X:\S2015\2015 Category D.con
Exclud.File none

***** Report on violations *****

Buses with voltage violations

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	LowLim t	Upplimi t	Voltdro P	Voltrisk e	Viol	Ncon	Contingency Description *** Base Case
315218	ICUNINGC	18.0	345	366	1.0725	1.0725	0.9300	1.0700	1.0189	1.1261	H	4	ROW 567
315062	ICHESTST7	13.8	345	357	1.0447	0.9943	0.9300	1.0700	0.9445	1.0440	R	4	ROW 567
315064	ICHESTST8	13.8	345	357	1.0519	0.9935	0.9300	1.0700	0.9439	1.0432	R	4	ROW 567
313812	BROCKLANE	230.0	345	356	0.9345	1.0167	0.9300	1.0700	0.9659	1.0676	D	5	ROW 568
314180	GHAYES	230.0	345	354	0.9417	1.0257	0.9300	1.0700	0.9744	1.0770	D	5	ROW 568
314296	EPENNIMAN	230.0	345	356	0.9403	1.0170	0.9300	1.0700	0.9661	1.0678	D	5	ROW 568
314376	6PENBIGH	230.0	345	356	0.9357	1.0191	0.9300	1.0700	0.9682	1.0701	D	5	ROW 568
314386	6KINGS M	230.0	345	356	0.9395	1.0181	0.9300	1.0700	0.9672	1.0690	D	5	ROW 568
314390	6LIGH285	230.0	345	356	0.9390	1.0113	0.9300	1.0700	0.9607	1.0619	D	5	ROW 568
314391	6LIGH209	230.0	345	356	0.9477	1.0145	0.9300	1.0700	0.9638	1.0652	D	5	ROW 568
314398	6MP NEWS	230.0	345	356	0.9052	1.0120	0.9300	1.0700	0.9614	1.0626	D	5	ROW 568
314399	6PEMBROK	230.0	345	356	0.9065	1.0130	0.9300	1.0700	0.9624	1.0637	D	5	ROW 568
314402	6PENINSL	230.0	345	356	0.9238	1.0223	0.9300	1.0700	0.9712	1.0734	D	5	ROW 568
314407	6SHELEWK	230.0	345	356	0.9078	1.0140	0.9300	1.0700	0.9633	1.0647	D	5	ROW 568
314409	6TABA8	230.0	345	356	0.9283	1.0222	0.9300	1.0700	0.9711	1.0733	D	5	ROW 568
314413	6WALR285	230.0	345	356	0.9357	1.0117	0.9300	1.0700	0.9611	1.0623	D	5	ROW 568
314415	6WALR209	230.0	345	356	0.9426	1.0148	0.9300	1.0700	0.9641	1.0656	D	5	ROW 568
314416	6WARWICK	230.0	345	356	0.9343	1.0161	0.9300	1.0700	0.9653	1.0669	D	5	ROW 568
314418	6WHEALTN	230.0	345	356	0.9346	1.0145	0.9300	1.0700	0.9638	1.0653	D	5	ROW 568
314421	6WINCHST	230.0	345	356	0.9344	1.0142	0.9300	1.0700	0.9635	1.0650	D	5	ROW 568
314423	6YORKTWN	230.0	345	356	0.9400	1.0241	0.9300	1.0700	0.9729	1.0754	D	5	ROW 568
314445	6WHEAL I	230.0	345	356	0.9365	1.0166	0.9300	1.0700	0.9658	1.0674	D	5	ROW 568
314450	6YORKT I	230.0	345	356	0.9431	1.0275	0.9300	1.0700	0.9761	1.0789	D	5	ROW 568
315062	ICHESTST7	13.8	345	357	1.0448	0.9943	0.9300	1.0700	0.9445	1.0440	R	5	ROW 568
315064	ICHESTST8	13.8	345	357	1.0519	0.9935	0.9300	1.0700	0.9439	1.0432	R	5	ROW 568
315092	LYORKTWN3	25.0	345	356	0.9400	1.0241	0.9300	1.0700	0.9729	1.0754	D	5	ROW 568

Bus #	Bus Name	KV	Area	Zone	ContVol t	BaseVol t	Lowlimi t	Upplimi t	VoltDro p	VoltRis e	Viol	Ncon	Contingency Description
314176	6HARMONY	230.0	345	354	0.8873	1.0265	0.9300	1.0700	0.9752	1.0778	LD	7	Lanexa
314188	3WEST PT	115.0	345	354	0.9372	0.9943	0.9300	1.0700	0.9446	1.0440	D	7	Lanexa
314189	6PAPERMIL	230.0	345	354	0.8815	1.0183	0.9300	1.0700	0.9674	1.0693	LD	7	Lanexa
314243	3PROV 92	115.0	345	355	0.9263	0.9964	0.9300	1.0700	0.9466	1.0462	LD	7	Lanexa
314375	6CORRCTN	230.0	345	354	0.8813	1.0174	0.9300	1.0700	0.9665	1.0683	LD	7	Lanexa
314377	3DOW 34	115.0	345	356	0.9013	0.9873	0.9300	1.0700	0.9379	1.0367	LD	7	Lanexa
314378	3FTEUS34	115.0	345	356	0.8990	0.9853	0.9300	1.0700	0.9360	1.0345	LD	7	Lanexa
314384	3KINGS M	115.0	345	356	0.8808	0.9689	0.9300	1.0700	0.9204	1.0173	LD	7	Lanexa
314387	3LANEXA	115.0	345	356	0.9114	0.9963	0.9300	1.0700	0.9465	1.0461	LD	7	Lanexa
314396	3NNWWS58	115.0	345	356	0.8995	0.9857	0.9300	1.0700	0.9364	1.0350	LD	7	Lanexa
314411	3TOAND58	115.0	345	356	0.8979	0.9842	0.9300	1.0700	0.9350	1.0334	LD	7	Lanexa
314180	6HAYES	230.0	345	354	0.9520	1.0257	0.9300	1.0700	0.9744	1.0770	D	9	Yorktown