SURFACE IMPOUNDMENT CLOSURE PLAN
Possum Point Power Station – Ponds ABC and E
Permit #617

Submitted to:

Dominion Energy

Possum Point Power Station
19000 Possum Point Road
Dumfries, VA 22026

Submitted by:

Golder Associates Inc.
2108 West Laburnum Ave, Suite 200,
Richmond, Virginia 23227
804 358-7900

Project # 166-2150
May 11, 2018
Revised September 2018
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1.0 PLAN CERTIFICATION

This Closure Plan for the Possum Point Power Station’s Ponds ABC and E was prepared by Golder Associates Inc. (Golder). The document and Certification/Statement of Professional Opinion are based on and limited to information that Golder has relied on from Dominion Energy and others, but not independently verified, as well as work products produced by Golder.

On the basis of and subject to the foregoing, it is my professional opinion as a Professional Engineer licensed in the Commonwealth of Virginia that this document has been prepared in accordance with good and accepted engineering practices as exercised by other engineers practicing in the same discipline(s), under similar circumstances, at the same time, and in the same locale. It is my professional opinion that the document was prepared consistent with the requirements in §257.102 of the United States Environmental Protection Agency’s “Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments,” published in the Federal Register on April 17, 2015, with an effective date of October 19, 2015 (40 CFR §257.102), as well as with the requirements in §257.100 resulting from the EPA’s “Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Extension of Compliance Deadlines for Certain Inactive Surface Impoundments; Response to Partial Vacatur” published in the Federal Register on August 5, 2016 with an effective date of October 4, 2016 (40 CFR §257.100).

The use of the word “certification” and/or “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion, and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Ron DiFrancesco, P. E.
Printed Name of Professional Engineer

025260
Commonwealth of Virginia License No.

Signature and Date
2.0 INTRODUCTION

This Closure Plan (Plan) was prepared for the Possum Point Power Station’s (Station) inactive Coal Combustion Residuals (CCR) surface impoundments, Ponds ABC and E. This Closure Plan was prepared in accordance with 40 CFR Part §257, Subpart D and is consistent with the requirements of 40 CFR §257.102 for closure of CCR surface impoundments, 40 CFR §257.100(e)(6)(i), and Virginia Solid Waste Management Regulations 9 VAC20-81-800. The Station, owned and operated by Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion), is located in Dumfries, Virginia at 19000 Possum Point Road, near the mouth of Quantico Creek.

Ponds ABC and E are being closed as CCR surface impoundments under the CCR rule provisions at 40 CFR §257. The ponds will be closed by removal of CCR pursuant to 40 CFR §257.102(c). All elevations noted in this document, unless stated otherwise, are in feet relative to the North American Vertical Datum of 1988 (NAVD-88).

2.1 General Impoundment Information

Ponds ABC are approximately 15.7-acres and were used for the storage of CCR from the Station. It was built as three ponds, A, B, and C; however, the ponds shared a common downstream embankment and decant outlet structure, so they are collectively known as Ponds ABC for convenience. The embankment top elevation is 20 feet. Ponds ABC contained approximately 155,000 cubic yards (CY) of CCR prior to the start of excavation activities.

Ponds ABC is currently regulated under the following permits:

- Virginia Department of Environmental Quality (DEQ) Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071
- Virginia Department of Conservation and Recreation (DCR) Operation and Maintenance Certificate, Inventory No. 153001 (Legacy No. 00788)

Pond E is an approximately 39.2-acre impoundment that was used for the storage of CCR from the Station. The embankment top elevation is 40 feet. Pond E contained approximately 730,000 CY of CCR prior to the start of excavation activities.

Pond E is currently regulated under the following permits:

- Virginia Department of Environmental Quality (DEQ) Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0002071
- Virginia Department of Conservation and Recreation (DCR) Operation and Maintenance Certificate, Inventory No. 153021 (Legacy No. 15321)
3.0 CLOSURE IMPLEMENTATION

3.1 Overview of Closure Approach

This plan provides for the closure of Ponds ABC and E by removal of the CCR material. Closure is considered complete under 40 CFR 257.102 and 9 VAC20-81-810 when:

1. A professional engineer licensed in Virginia certifies all CCR has been removed from the units followed by an over-excavation of approximately 6 inches of soil.

2. The unit’s downgradient groundwater monitoring wells do not exhibit levels in excess of a maximum contaminant limit (MCL) or established groundwater protection standard for any CCR Appendix IV constituent on or after a minimum of ten sampling events have occurred after CCR material has been verified as removed by a professional engineer licensed in Virginia.

At the time of writing, the vast majority of CCR in the ponds had been removed to Pond D. Final CCR removal will either be consolidated in the Pond D CCR impoundment or disposed of in an off-site designated facility. After CCR removal and certification, the former pond subgrade will be shaped to drain through opening(s) in the embankment. Due to the breach of the embankment, the former ponds will not retain water and will no longer be regulated as impounding structures by DCR. During and after closure, the existing network of groundwater monitoring wells will be sampled and tested to determine the monitored constituent concentrations (40 CFR §257 Appendix IV).

CCRs identified in what appears to be a former laydown area west of Pond C will be removed and disposed of at an authorized disposal facility. This area is separate from the surface impoundments and will have dedicated erosion and sediment controls installed. After removal of these materials, a Virginia-licensed professional engineer will visually inspect the area to verify that all CCR is effectively removed.

4.0 CLOSURE TIMEFRAMES

Table 1 below outlines the estimated sequence of scheduled closure activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Tentative Date</th>
</tr>
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<tbody>
<tr>
<td>Completion of CCR Removal</td>
<td>By October 2018</td>
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<tr>
<td>Completion of Closure Construction</td>
<td>By January 2019</td>
</tr>
<tr>
<td>Certification of Construction Completion</td>
<td>By April 2019</td>
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Closure is considered complete when the elements of this Closure Plan specified above have been performed as certified by a Professional Engineer licensed in the Commonwealth of Virginia. This certification will be included as part of a closure certification report. In accordance with 40 CFR §257.102(h), Dominion will prepare a notification of closure of the CCR unit within 30 days of completion of closure, and place the notification in the operating record.
5.0 INVENTORY REMOVAL AND DISPOSAL

5.1 Waste Removal, Decontamination and Disposal

The protocol for closure by removal of Ponds ABC and E will involve removing accumulated CCR such that no residual materials remain visible, followed by over-excavating the removal footprint by approximately 6 inches. Removed CCR and CCR-mixed soil will either be consolidated in the Pond D CCR impoundment or taken to an off-site disposal facility. To facilitate stormwater management, construction, and/or structural stabilization of embankments or excavations, closure by removal of areas within the ponds may be achieved in phases. Phased closures may be sequenced as necessary to support traffic patterns, stormwater controls, etc.

Material removal against embankments may involve excavation of the upstream embankment face to near-vertical condition. Immediately after excavation and inspection of these areas for certification, fill soil will be placed and compacted against the embankment to re-establish stable slopes of no steeper than 2 horizontal to 1 vertical (2H:1V). For rock, existing concrete designated to remain, or other similar hard surfaces (e.g. pipes or foundation supports to remain), the surface will be cleaned to a visually-clean condition through mechanical means such as pressure washing. The soils surrounding said hard areas will be removed to the 6-inch over-excavation criterion.

In environmentally-sensitive areas outside of the defined CCR unit boundary, such as Resource Protection Areas (RPAs), stream channels, groundwater monitoring wells, or wetlands, a modified excavation protocol will be followed for removal of identified CCR. The CCR will be removed to a visually clean condition using methods that minimize impact to surrounding soils (e.g. hand-digging around wells). The 6-inch over-excavation will not be performed in these areas in order to limit the impact to subgrade soils. Following CCR removal, the area will be stabilized to prevent erosion with material suitable for the area.

There may be instances when, during excavation near the CCR unit boundary, the CCR material is found to extend horizontally beyond the defined unit boundary and excavation cannot continue due to other permit conditions, future construction, or property access constraints. When these conditions occur, the horizontal and vertical extents of the CCR will be identified on a sketch map and photographed. Most likely, these areas will then be covered with soil to prevent commingling with cleaned areas. Once the constraining issue is resolved, Dominion will evaluate the area for management of the remaining CCR.

After CCR removal and certification, the former pond subgrade will be shaped to drain and openings will be made in the embankments to preclude water storage in the former pond areas. Vegetative stabilization will be established to prevent erosion. The final configuration of the design grades and
embankment breach geometry will be developed through the Prince William County and DCR permitting processes. Final grades shown in the plan drawings are conceptual.

5.2 Sampling and Testing Program

After removal of the 6-inch over-excavation material from within the ponds, these areas will be visually inspected to verify the CCR and over excavation has been achieved. The ponds will be further inspected by targeted soil cores for visual inspection to a depth of at least 6 inches at a frequency of at least one core per acre. The soil cores will be dug by hand using a hand auger or similar tool and be a minimum of 6-inches deep.

Verification surveys of the pond closure will be prepared by a Virginia-Licensed Land Surveyor and will consist of a survey of the “visually clean” surface and a survey of the “overexcavation” surface to verify the minimum 6-inch removal. Certification of the closure by removal will be provided by a Virginia-licensed Professional Engineer.

Groundwater monitoring will be conducted in accordance with the approved Groundwater Monitoring Plan to meet the closure by removal standard set forth in 40 CFR 257.102(c) and the Virginia Solid Waste Management Regulations.

5.3 Other Areas

CCRs identified in what appears to be a former laydown area west of Pond C will be removed, materials screened, and the inert materials such as concrete, asphalt, and CCR moved to Pond D or taken offsite to an authorized disposal facility. Any remaining materials from the screening process will be disposed offsite in an authorized disposal facility. This area is separate from the surface impoundments and will have dedicated erosion and sediment controls installed. After removal of these materials, a Virginia-licensed professional engineer will visually inspect the area to verify that all CCR is effectively removed.

6.0 CLOSURE OF SUPPORT PONDS AND BASINS

There are no supporting ponds or basins associated with Ponds ABC and E.

7.0 CLOSURE IMPLEMENTATION

7.1 Posting

One sign will be posted at the site entrance to each pond notifying all persons of the final closure and prohibition against further receipt of CCR. Unauthorized access to the site will be controlled by natural barriers or lockable gates across the access roads.
7.2 Certification

Upon completion of closure construction, a certification statement signed by a licensed professional engineer will be placed in the operating record and submitted to the DEQ along with the documentation from the Sampling and Testing Program. The certification statement shall read as follows:

I certify that closure has been completed in accordance with the Closure Plan dated [DATE] for solid waste permit number 617 issued to Dominion, with the exception of the following discrepancies: [To Be Determined]

In addition, a sign(s) was (were) posted on [DATE] at the site entrance notifying all persons of the closing [and state other notification procedures if applicable] and barriers [indicate type] were installed at [location] to prevent new waste from being deposited.

[Signature, date and stamp of Professional Engineer]

7.3 Post-Closure Uses

No post-closure use of the area is proposed. The former pond areas will be allowed to revegetate and return to a natural habitat area.

8.0 CLOSURE COST ESTIMATE

The closure cost estimate for Ponds ABC and E is $5,629,735. This estimated amount covers the remaining excavation, inspection, testing, and certification as proposed in this Plan.
DOMINION ENERGY
POSSUM POINT POWER STATION
CLOSURE BY REMOVAL PLAN
POND ABC & POND E
SOLID WASTE PERMIT No. 617
PRINCE WILLIAM COUNTY, VIRGINIA
SEPTEMBER 2018

DRAWING INDEX

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<th>DRAWING No.</th>
<th>DRAWING TITLE</th>
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<tr>
<td>CBR-1</td>
<td>COVER SHEET</td>
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<tr>
<td>CBR-2</td>
<td>POND ABC PRE-CLOSURE TOPOGRAPHY (APPROXIMATE BOTTOM OF POND)</td>
</tr>
<tr>
<td>CBR-3</td>
<td>POND ABC CLOSURE BY REMOVAL PLAN</td>
</tr>
<tr>
<td>CBR-4</td>
<td>POND ABC CONCEPTUAL FINAL GRADING PLAN</td>
</tr>
<tr>
<td>CBR-5</td>
<td>POND ABC CROSS-SECTIONS</td>
</tr>
<tr>
<td>CBR-6</td>
<td>POND E PRE-CLOSURE TOPOGRAPHY (APPROXIMATE BOTTOM OF POND)</td>
</tr>
<tr>
<td>CBR-7</td>
<td>POND E CLOSURE BY REMOVAL PLAN</td>
</tr>
<tr>
<td>CBR-8</td>
<td>POND E CONCEPTUAL FINAL GRADING PLAN</td>
</tr>
<tr>
<td>CBR-9</td>
<td>POND E CROSS-SECTIONS</td>
</tr>
</tbody>
</table>

GOLDER ASSOCIATES, INC.
MAIN CONTACT: DANIEL McGRATH, P.E.
2108 W. LABURNUM AVE., SUITE 200
RICHMOND, VIRGINIA 23227
PHONE: (804) 358-7900
EMAIL: DANIEL_McGRATH@GOLDER.COM

DOMINION ENERGY
MAIN CONTACT: MIKE GLAGOLA
5000 DOMINION BOULEVARD
GLENN ALLEN, VIRGINIA 23060
PHONE: (804) 273-4547
EMAIL: MICHAEL.A.GLAGOLA@DOMINIONENERGY.COM
GENERAL NOTES

1. EXISTING CONDITIONS COMPILED FROM AERIAL TOPOGRAPHIC SURVEY PREPARED BY McKENZIE SNYDER, INC., DATE OF AERIAL PHOTOGRAPH: 4/28/17.
2. SITE DATUM: NAD83/NAVD88
3. WETLANDS, RESOURCE PROTECTION AREA BOUNDARY, AND 100-YEAR FLOOD PLAN TAKEN FROM DRAWING TITLED, "EXISTING CONDITIONS PLAN," DATED 10/6/16, BY GAI CONSULTANTS, INC.
4. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION AND TAKE MEASURES TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.
5. THE MAJORITY OF WATER AND ASH HAS BEEN REMOVED FROM POND ABC, AND ONLY MANAGED CONTACT STORMWATER IS PRESENT.
EXCAVATED CCR AND SOIL-CCR MIXTURES SHALL BE CONSOLIDATED IN THE SHORTEST TIME POSSIBLE. BACKFILL SLOPES WITH CLEAN SOIL FILL THAT THE SLOPES CAN BE EXCAVATED, INSPECTED, AND BACKFILLED IN 100-YEAR FLOODPLAIN EXCAVATION OF SLOPES STEEPER THAN 2:1 SHALL BE SEQUENCED SUCH THAT NO CCR REMAINS VISIBLE.

TARGETED SAMPLING TO CONSIST OF HAND-DUG HOLES AT LEAST SIX INCHES DEEP.

FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST 6 INCHES.

VISUAL INSPECTIONS AND TARGETED SUBGRACE VISUAL INSPECTIONS TO BE CONDUCTED BY OWNER'S ENGINEER REPRESENTATIVE. SAMPLES TO BE TAKEN TO A DEPTH OF 18 INCHES 2.5 FEET FROM THE EDGE OF THE POND. SUBGRACE SHOULDN'T BE IMPORTED OR APPLIED TO POND 2.5 FEET FROM THE EDGE OF THE POND.

SUB-PHASES MAY BE REQUIRED TO ADDRESS ISSUES RELATED TO ACCESS AND SLOPE STABILITY, AND TO ADVANCE OF CONSTRUCTION AND TAKE MEASURES TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.
CONCEPTUAL FINAL GRADING PLAN

POND ABC
2108 WEST LABURNUM AVENUE
RICHMOND, VA 23227
(804) 358-0500
www.golder.com

PROJECT CLIENT
DOMINION ENERGY
POND ABC AND POND E POSSUM POINT POWER STATION
SOLID WASTE PERMIT No. 617 PRINCE WILLIAM COUNTY, VIRGINIA

GOLDER ASSOCIATES INC.

PROJECT NO.
16-62150

LEGEND
DOMINION PROPERTY BOUNDARY
CRC UNIT BOUNDARY
EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)
CONCEPTUAL FINAL GRADE CONTOURS
EXISTING PAVED ROADS
EXISTING UNPAVED ROADS
WETLANDS
RESOURCE PROTECTION AREA BOUNDARY
APPROXIMATE EDGE OF SURFACE WATER
EXISTING TREE LINE
EXISTING OVERHEAD UTILITY LINE
EXISTING WATER LINE
EXISTING FORCEMAIN
EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
EXISTING PIEZOMETER LOCATION AND IDENTIFICATION
RELOCATED FORCEMAIN
PROPOSED MONITORING WELL LOCATION AND IDENTIFICATION

GENERAL NOTES
1. ROUGHING CONCEPTUAL COMPILED FROM AERIAL TOPOGRAPHIC SURVEY PREPARED BY THIBADEAU RESEARCH INC., DATE OF AERIAL PHOTOGRAPH: 4/28/17.
2. SITE DATUM: NAD83/NAVD88
3. WETLANDS AND RESOURCE PROTECTION AREA BOUNDARY TAKEN FROM DRAWINGS TITLED, "EXISTING CONDITIONS PLAN," DATED 10/6/16, BY GAI CONSULTANTS, INC.
4. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION AND TAKE MEASURES TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.

CONCEPTUAL FINAL GRADING NOTE
1. CONCEPTUAL FINAL GRADING IS SHOWN FOR REFERENCE ONLY. THIS PLAN SHALL NOT BE IMPLEMENTED PRIOR TO PRINCE WILLIAM COUNTY SITE PLAN APPROVAL.
1. Existing conditions compiled from aerial topographic survey prepared by McKenzie Snyder, Inc. Date of aerial photograph: 4/28/17.
2. Site datum: NAD83/NAVD88
4. Locations of underground utilities are approximate. Contractor shall field locate all underground utilities in advance of construction and take measures to protect them from damage during construction.
5. The majority of water and ash has been removed from Pond E, and only managed contact stormwater is present.
GENERAL NOTES

1. EXISTING CONDITIONS COMPILED FROM AERIAL TOPOGRAPHIC SURVEY PREPARED BY SHAWERS SKYRIS, INC. ON DECEMBER 19TH, 1990.

2. SITE SURVEY METHODS.

3. EXISTING RESOURCES PROTECTION AREA (RPA) BOUNDARY, AND 100-YEAR FLOODPLAINS PANS FROM DRAWING TITLE "EXISTING CONDITIONS PLAN" DATED 10/6/16, BY GAIL CONSULTANTS, INC. PREPARED FOR GOLDER ASSOCIATES, INC.

4. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL UNDERGROUND UTILITIES IN THE WORK AREA PRIOR TO COMMENCING DREDGING TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.

5. CONTRACTOR SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES IN THE WORK AREA PRIOR TO COMMENCING DREDGING TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION.

6. EXISTING SURFACE WATER FLOW DIRECTION AND IDENTIFICATION OF SUBURBAN ROAD.

7. EXISTING MONITORING WELL LOCATION AND IDENTIFICATION OF SUBURBAN ROAD.

8. EXISTING WATER LINE IDENTIFICATION.

9. CCR UNIT BOUNDARY.

10. EXISTING UNPAVED ROAD IDENTIFICATION.

11. EXISTING PAVED ROAD IDENTIFICATION.

12. EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS).

13. APPROXIMATE EDGE OF SURFACE WATER RESOURCE PROTECTION AREA BOUNDARY.

14. APPROXIMATE CLEAN CLOSURE PHASE LIMITS.

15. APPROXIMATE EDGE OF SURFACE WATER.

16. APPROXIMATE EDGE OF SURFACE WATER (LOW DIRECTEN). POST EXCAVATION SURVEY GRID.

17. ALTERNATE MONITORING WELL LOCATION AND IDENTIFICATION OF SUBURBAN ROAD.

18. APPROXIMATE LIMITS OF 100-YEAR FLOODPLAIN.

19. APPROXIMATE LIMITS OF Critical AREAS SUBJECT TO BACKFILL FOR ACCESS AND STABILITY.

20. APPROXIMATE LIMITS OF 100-YEAR FLOODPLAIN.

21. APPROXIMATE LIMITS OF 100-YEAR FLOODPLAIN.

22. APPROXIMATE LIMITS OF 100-YEAR FLOODPLAIN.

23. APPROXIMATE LIMITS OF 100-YEAR FLOODPLAIN.

CLOSURE BY REMOVAL NOTES

1. CONSTRUCTION WORKER RESPONSIBILITIES OF THE PROJECT REPRESENTED BY THE SHEET IS BASED ON AERIAL SURVEY BY SHAWERS SKYRIS, INC. ON DECEMBER 19TH, 1990. ALTERNATE CONDITIONS MAY APPLY.

2. BASE PLANS. DESCRIPTION OF THE POND MAY BE REQUIRED AS NEEDED TO ADDRESS SPECIFIC ISSUES RELATED TO ACCESS AND STABILITY. However, BASE PLANS MAY BE REQUIRED FOR REGULATORY APPROVAL.

3. POND AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM DREDGING OR CONSTRUCTION ACTIVITIES. ALL CORNER POINTS OF POND LIMITS MUST BE MARKED PRIOR TO COMMENCING DREDGING.

4. ACCUMULATED CCR SHALL BE REMOVED FROM SURFACE WITHIN THE POND LIMITS SO THAT IT Does NOT REMAIN VISIBLE.

5. FOLLOWING VISUAL CLEAN CONDITIONS, OWNER CONFIRMS THE REMOVAL FOOTPRINT AT LEAST SIX INCHES.

6. VISUAL INSPECTION AND TARGETED SURVEY VISUAL DISPLAYS TO BE COMPARED BY CONTRACTS EMBOSSER REPRESENTATIVE. SAMPLES TO BE PERFORMED AT A FREQUENCY OF AT LEAST ONE FIVE HUNDRED FIVE HOURS.

7. RESTORATION OF SURFACE INFERRED TO SUBURBAN ROAD PRIOR TO COMMENCING DREDGING, THE BINDING CCR CLOSURE INSPECTED, AND APPROVED AS THE SHORTEST TIME POSSIBLE. ACCORDINGLY WITH LEFSETZ RULES AT NO DEPT: NO LESS THAN T4:

8. RESTORATION CCR AND SOIL COMBINED SHALL BE CONSIDERED IN PONDS OR FARM TO AN OFF-SITE DISPOSAL FACILITY AS DIRECTED BY DOMINION.
### Facility Name:
Possum Point Power Station CCR Impoundments

### Permit No.:
SWP 617

### Address:
19000 Possum Point Road

### City:
Dumfries

### State:
VA

### Zip:
22026

### FA Holder:
Dominion Energy Virginia

### Estimate Prepared By:
Golder Associates Inc.

### Indicate the plan versions for which this cost estimate was prepared, identifying the following information for each plan:

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<th>Closure Plan</th>
<th>Post-Closure Care Plan</th>
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<tr>
<td>Title: Surface Impoundment Closure Plan</td>
<td>Title: n/a</td>
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<tr>
<td>Plan Date: August 2018</td>
<td>Plan Date:</td>
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<tr>
<td>Consultant: Golder Associates Inc.</td>
<td>Consultant:</td>
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<th>Corrective Action Monitoring Plan</th>
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<td>Plan Date: Approved:</td>
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<td>Consultant:</td>
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### Cost Estimate Summary

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<tr>
<td>Total Closure Cost</td>
<td>$5,629,735</td>
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<tr>
<td>Total Post-Closure Cost</td>
<td>$0</td>
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<tr>
<td>Total Corrective Action Cost</td>
<td>$0</td>
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<td><strong>TOTAL:</strong></td>
<td><strong>$5,629,735</strong></td>
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### References

Please indicate references used to develop this cost estimate: Unit costs were developed from 2016 closure construction bid estimates for Dominion's CCR impoundment facilities, estimates of soil prices in the coastal Virginia area, and other landfill closure bid packages in the consultant's local area.

### Certification by Preparer:

This is to certify that the cost estimates pertaining to the engineering features and monitoring requirements of this solid waste management facility have been prepared by me and are representative of the design specified in the facility’s approved Closure, Post-Closure and Corrective Action Plans. The estimate is based on the cost of hiring a third party and does not incorporate any salvage value that may be realized by the sale of wastes, facility structures, or equipment, land or other facility assets at the time of partial or final closure. In my professional judgment, the cost estimates are a true, correct, and complete representation of the financial liabilities for closure, post-closure care, and corrective action of the facility and comply with the requirements of 9 VAC 20-70 and all other DEQ rules and statutes of the Commonwealth of Virginia.

Name: Ron DiFrancesco, P.E.  
Title: Principal and Practice Leader  
Date: 09-14-18

### Acknowledgement by Owner/Operator:

Name: David Craymer  
Title: Vice President, Power Generation Systems Operations  
Date: 09/07/18
## Pond ABC CCR Impoundment Closure by Removal Cost Estimate

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit of Measure</th>
<th>Quantity</th>
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<th>Total</th>
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<td>Construction Engineering / Surveying / Permitting</td>
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<td>$120,000</td>
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<td>$32,292</td>
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**Total** $2,235,244

**Notes:**
1. Estimate based on starting with current condition as of September 14, 2018 to achieve clean closure condition
## Pond E CCR Impoundment Closure by Removal Cost Estimate

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Unit of Measure</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Total</th>
<th>Notes/Assumptions</th>
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<td><strong>$3,394,491</strong></td>
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</tbody>
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**Notes:**
1. Estimate based on starting with current condition as of September 14, 2018 to achieve clean closure condition.
Established in 1960, Golder Associates is a global, employee-owned organization that helps clients find sustainable solutions to the challenges of finite resources, energy and water supply and management, waste management, urbanization, and climate change. We provide a wide range of independent consulting, design, and construction services in our specialist areas of earth, environment, and energy. By building strong relationships and meeting the needs of clients, our people have created one of the most trusted professional services organizations in the world.