



## Emergency Action Plan

*Virginia Electric and Power Company Possum Point Power Station Ash Pond D  
Dumfries, Virginia*

*Department of Conservation and Recreation (DCR)  
Inventory No. 153020*

Submitted to:



### **Dominion Energy**

600 East Canal Street  
Richmond, Virginia 23219

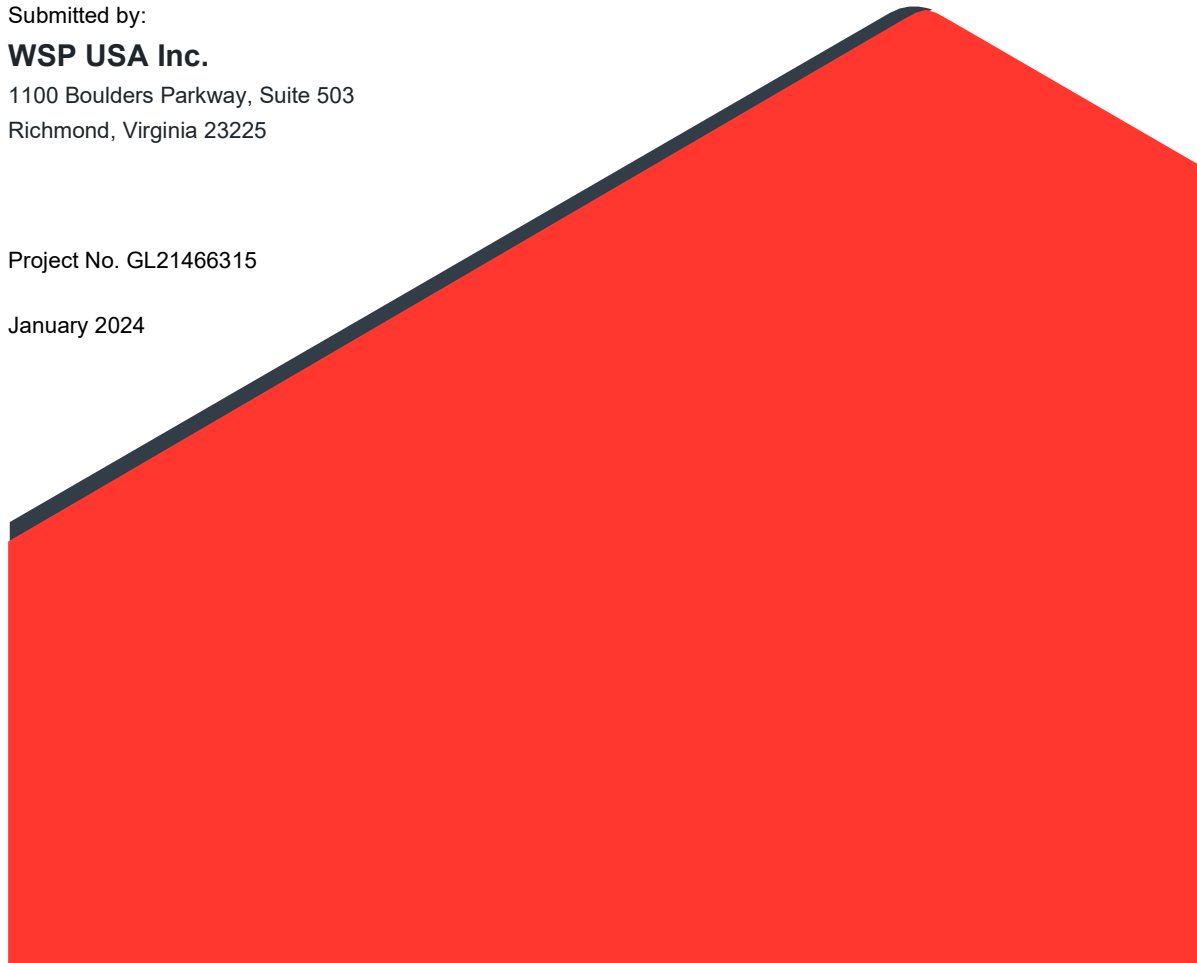
Submitted by:

### **WSP USA Inc.**

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Project No. GL21466315

January 2024



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## 1.0 BASIC INFORMATION

**Table 1: Possum Point Power Station Unit Hazard Potential Classification**

| Unit           | Inventory Number | Hazard Potential Classification |                     | Acreage |
|----------------|------------------|---------------------------------|---------------------|---------|
|                |                  | CCR Regulations                 | Virginia Dam Safety |         |
| Ash Pond D Dam | 153020           | Significant                     | High                | 70      |

Name of Owner/Operator: Virginia Electric and Power Company d.b.a. Dominion Energy, Attn: William Reed  
Address: Possum Point Power Station – 19000 Possum Point Road Dumfries, VA 22026  
Telephone: (Mobile) 804-638-0335

Name of EAP Coordinator: Jeffrey Marcell, Manager Environmental Compliance  
Address: Possum Point Power Station 19000 Possum Point Road Dumfries, VA 22026  
Telephone: (Business) 703-441-3813 (Mobile) 703-609-9015

Name of Alternate EAP Coordinator: Shelby Putnam, Environmental Compliance Coordinator  
Address: Possum Point Power Station 19000 Possum Point Road Dumfries, VA 22026  
Telephone: (Mobile) 571-208-8725

Name of Alternate EAP Coordinator: Meghan Bagley, Senior Environmental Compliance Coordinator  
Address: Possum Point Power Station 19000 Possum Point Road Dumfries, VA 22026  
Telephone: (Mobile) 804-972-2543

Name of Dam Engineer: Shaikh Rahman P.E.  
Address: 600 East Canal Street, Richmond, VA, 23219  
Telephone: (Mobile) 804-387-8263

Name of Alternate Dam Operator: Shift Supervisor  
Address: Possum Point Power Station – 19000 Possum Point Road Dumfries, VA 22026  
Telephone: (Business) 703-441-3828

Prince William County Emergency Management Coordinator: Brian Misner  
Telephone: (Mobile) 703-792-6813 or 703-792-5627

## 2.0 EMERGENCY ACTION PLAN OVERVIEW

Three emergency stages, ranked by severity, will be established for Ash Pond D.

### Emergency Stage Definitions

Stage 1: Non-Emergency – failure is unlikely, and storm development or operational malfunction is slow in advancing to a potential emergency. This stage indicates a situation is developing such that the dam is not in danger of failing, but if it continues failure may be possible.

Stage 2: Potential Failure – storm development or operational malfunction that could result in failure of the dam is quickly accelerating. This stage indicates that a situation is developing that could result in a dam failure. Declaration of Stage 2 represents a safety emergency and would be considered an activation of the EAP under the CCR rule.

Stage 3: Imminent Failure – storm development or operational malfunction has reached a point that the failure of the dam has started or is imminent. This stage indicates dam failure is expected or occurring and may result in flooding that will threaten life and/or property downstream of the dam. Declaration of Stage 3 represents a safety emergency and would be considered an activation of the EAP under the CCR rule.

Stage 2 conditions include Stage 1 conditions and responsibilities, and Stage 3 conditions include both Stage 1 and Stage 2 conditions and responsibilities.

The Dam Owner, Dam Operator, or Designee may use the following Table 2 to assess weather conditions and operational conditions at the dam to determine the appropriate actions for notifying emergency personnel during potential and actual emergencies.

**Table 2: Emergency Stage Table**

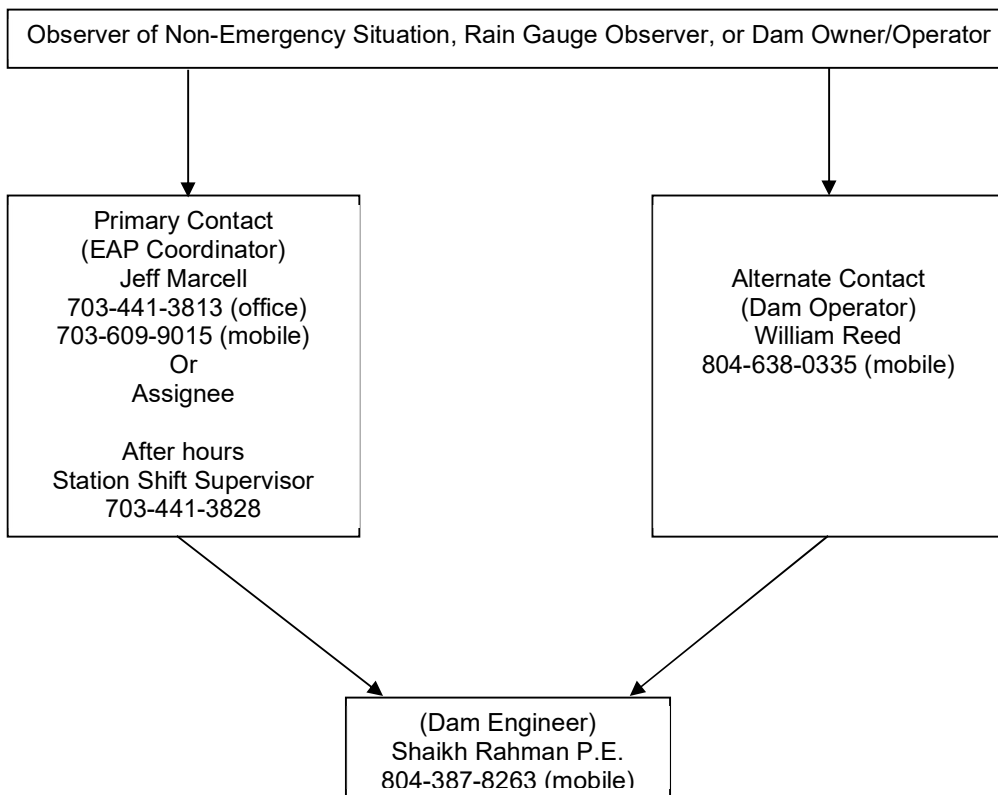
|   |   |  |   |
|---|---|--|---|
| <b>Step 1: Condition Detection</b>            | Event Detection: Assess the situation to determine the stage level using Section 6                    |  |   |
| <b>Step 2: Stage Level</b>                    | <b>Stage 1</b>  | <b>Stage 2</b>   | <b>Stage 3</b>  |
|   | Non-Emergency Situation   | Potential Emergency Situation                                    | Urgent Emergency Situation  |
|   | Slowly Developing Situation   | Quickly Developing Situation                                     | Dam Failure is Imminent or In Progress                              |
|   | See Definition  | See Definition   | See Definition  |
| <b>Step 3: Notification and Communication</b> | Notification List See Section 3.1   | Notification List See Section 3.2                                | Notification List See Section 3.3                                   |
| <b>Step 4: Expected Action</b>                | Inspect Dam, Spillway, Level Gauge, and Rain Gauge Every 6 hours                                      | Inspect Dam, Spillway, Level Gauge, and Rain Gauge Every 2 hours | Continuous Inspection of Dam, Spillway, Level Gauge, and Rain Gauge |
|   | Monitor and Listen to Weather Forecasts   | Notify Emergency Responders                                      | Continuous Contact with Emergency Responders                        |
| <b>Step 5: Termination and Follow Up</b>      | Termination of Monitoring Conditions at the Dam and Proceed to Evaluate Damages and Plans for Repairs |  |   |

Normal methods of detecting potential emergency situations at Ash Pond D Dam consists of surveillance monitoring and observing instrument readings. For conditions beyond the normal range of operations, contact the Prince William County Emergency Management Coordinator for assistance with evaluation of the conditions.

### 3.0 NOTIFICATION

#### 3.1 Stage 1 Notification

The following flow chart is to be utilized upon determination of Stage 1 Conditions at each dam:



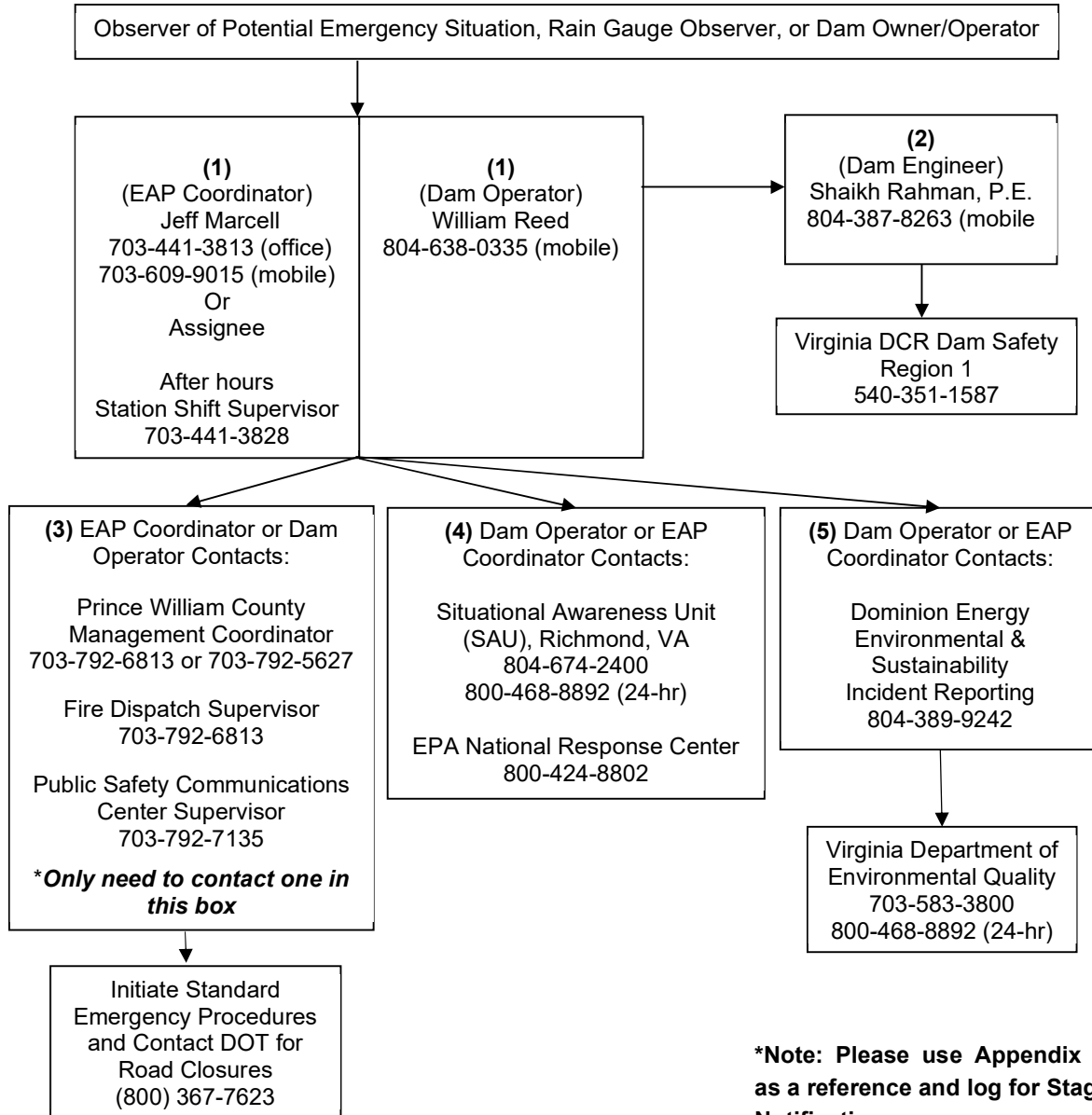
**\*Note: Please use Appendix B as a reference and log for Stage Notification.**

Message from the Dam Operator or the EAP Coordinator to Dam Engineer:

*I am [or have been in contact with the observer at] the Possum Point Power Station, and conditions at Pond D warrant observation as recommended in the Emergency Action Plan. We are currently at Stage 1. If conditions change, we may move to Stage 2 and perform more frequent evaluations. Otherwise, we will visit and make observations every 6 hours.*

### 3.2 Stage 2 Notification

The following flow chart is to be utilized upon determination of Stage 2 Conditions at each dam:



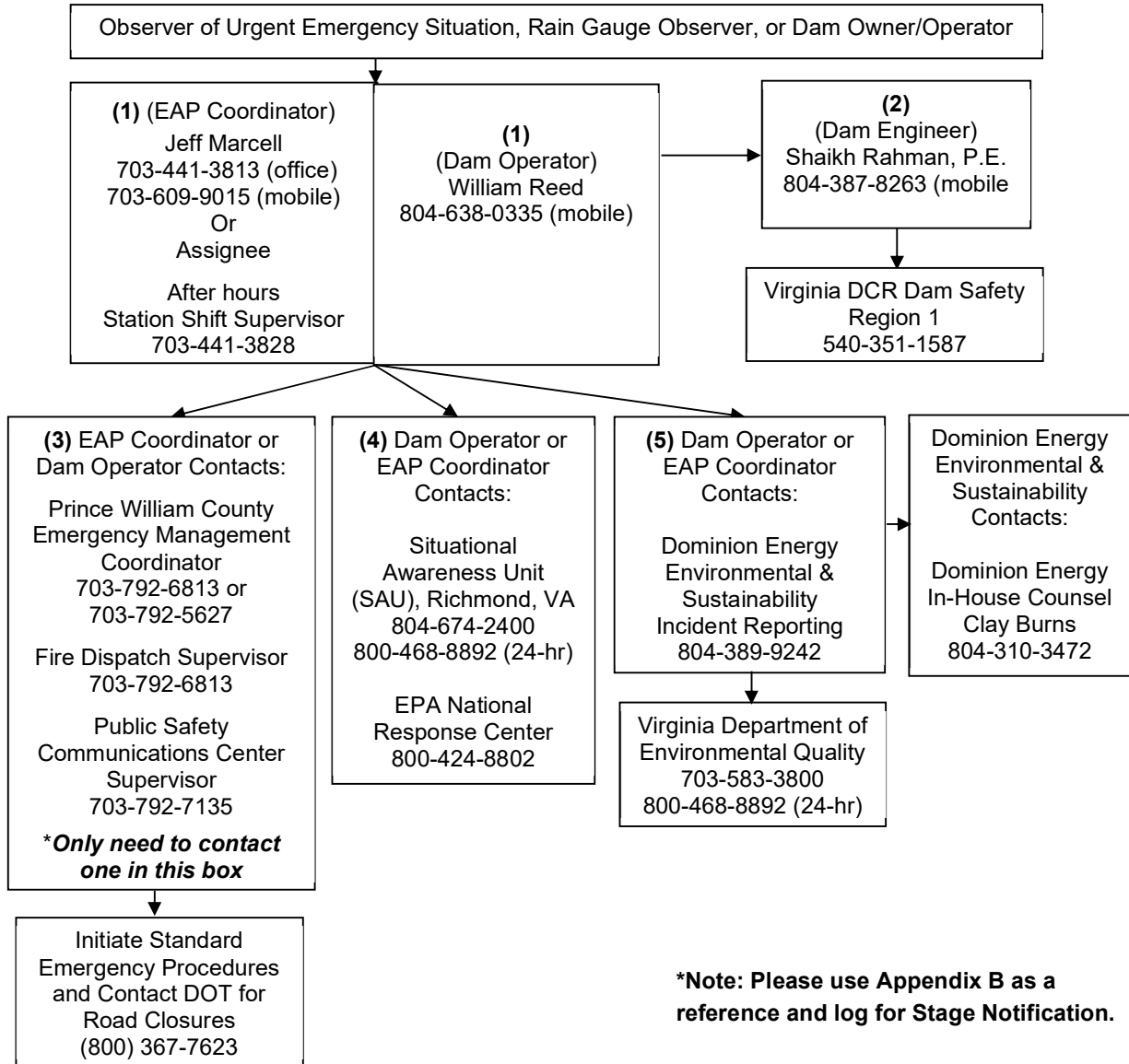
Message from the Dam Operator to the EAP Coordinator:

*I am at [or I have been in contact with the observer at] the Possum Point Power Station, and conditions at Pond D have reached the threshold established in the Emergency Action Plan at which to move to the Stage 2 Emergency Level. Please prepare your personnel in case of an emergency and continue to initiate your standard operating procedures. Someone will be observing the dam every 2 hours.*



### 3.3 Stage 3 Notification

The following flow chart is to be utilized upon determination of Stage 3 Conditions at each dam:



Message from the Dam Operator to the EAP Coordinator:

*I am at [or I have been in contact with the observer at] the Possum Point Power Station, and conditions at Pond D have reached the threshold established in the Emergency Action Plan to move to the Stage 3 Emergency level. Please proceed with the Standard Emergency Procedures. Someone will remain at the dam to monitor continuously until the dam breaks or the water level recedes to safe levels and the Emergency Services Coordinator directs us to terminate our responsibilities.*

Note: Standard Emergency Procedures (SEPs) shall include notification of the evacuation team, contacting the National Weather Service (NWS) for rainfall projections, and contacting the Virginia Department of Emergency Management.

## 4.0 STATEMENT OF PURPOSE

Ash Pond D is designed and operated pursuant to Virginia Department of Conservation and Recreation Dam Safety and U.S. Environmental Protection Agency Disposal of Coal Combustion Residuals from Electric Utilities regulations and generally accepted engineering practices. The purpose of this Emergency Action Plan (EAP) is to provide critical information and a plan of action in the event of an emergency situation at the Possum Point Power Station Ash Pond D. The plan addresses the following:

- Delineation of inundation areas downstream of the dam;
- Procedures for determining when to initiate various emergency response levels;
- Provisions for notification of emergency responders and owners of potentially affected downstream residences and structures;
- Emergency preparedness and exercises; and
- Documentation of evacuation routes.

This plan is intended to meet the requirements of 4VAC50-20-10 et seq. of the Virginia Department of Conservation and Recreation Impounding Structure regulations and 40 CFR §257.73(a)(3) of the Federal Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (CCR rule). Under the Virginia Dam Safety regulations Ash Pond D is classified as a “high hazard”. Under the CCR Rule, Ash Pond D is classified as a “significant” hazard due to the potential environmental impacts of a failure based on the requirements of 40 CFR §257.73(a)(2) of the CCR Rule.

## 5.0 PROJECT DESCRIPTION

### 5.1 General Vicinity

The Possum Point Power Station, owned and operated by Virginia Electric and Power Company d/b/a Dominion Energy (Dominion), is located in Prince William County at 19000 Possum Point Road, located east of Route 1 (Jefferson Davis Highway) and overlooking the Potomac River and Quantico Creek, as shown on Figure 1. The Station contains one generating unit, a dual fired combined cycle unit. There are six small combustion turbines also on property. Two gas-fired units were converted from coal-fired units to natural gas-fired units in 2003 and were retired in March 2019, and one oil-fired unit was retired in December 2020. CCR from past operations was originally stored in the three on-site CCR surface impoundments (Ash Pond ABC, D, and E). CCR removal activities for within the limits of Ponds ABC and E were completed March 18, 2019. Activities included the removal of all CCR material from Ponds ABC and E and the placement of CCR material in Pond D. No CCR has been placed in Pond D since November 2018.

### 5.2 General Description of Dam

The Possum Point Ash Pond D Dam is located approximately 0.85 miles northwest of the Possum Point Power Station and is located approximately 1,000 feet northeast of Quantico Creek and 2,000 feet from the Potomac River. The ash pond impounds CCR from past operations at the Possum Point Power Station, as well as CCR excavated from Ponds ABC and E, under DCR Inventory Number 153020. The approximately 64-acre Ash Pond D was reconstructed in 1988 in the same location as the pre-existing impoundment. The dam is an earthen embankment. Excavated ash from Ponds ABC and E have been relocated to Pond D. Table 3 provides details of the dam:

**Table 3: Ash Pond D Berm Details**

|                                    |   |
|------------------------------------|---|
| Year Constructed                   | 1989  |
| Dam Height                         | 140 feet  |
| Crest Length and Width             | 1,700 feet x 20 feet  |
| Top of Dam Elevation               | 150   |
| Normal Pool Elevation              | 123   |
| Principal Spillway Elevation       | 142   |
| Emergency Spillway Crest Elevation | 144   |
| Principal Spillway Capacity        | 154.6 cubic feet per second (CFS), water surface at EI 148 feet |
| Normal Reservoir Capacity          | 730 Acre-ft at EI 140 feet                                      |
| Maximum Reservoir Capacity         | 2,250 Acre-ft   |
| Current SDF Capacity               | 100% PMF  |

## 6.0 EMERGENCY DETECTION, EVALUATION, AND CLASSIFICATION

The dam owner and/or operator is responsible for operation and maintenance of dam. The dam operator and the field observer are responsible for monitoring conditions at the dam, spillway, and staff gauge and notifying the Prince William County Emergency Management Coordinator when emergency stage conditions are activated.

The dam owner/operator will initiate this EAP based on rainfall depth in a 24-hour period, or if conditions at the dam indicate that water levels in the impoundment will rise to the point where there is flow through the principal or emergency spillways. Embankment erosion, appurtenant structure malfunction, or any of the other conditions described in this section may also dictate initiation of the emergency action. While it is the dam owner's responsibility to initiate this process, the Prince William County Emergency Management Coordinator may contact the dam owner to inform the team that an event is imminent and team members would initiate their duties as outlined in this EAP.

Depth of flow through the principal and emergency spillways is the best indication of flood conditions and should be used as an indicator of the potential impacts downstream. In the absence of actual flow depth data through the spillways, measured rainfall depths in inches monitored in the contributing watershed may be used to determine the emergency level. Visual observations should be made by a team member so that accurate and up to date information can be provided to the EAP Coordinator.

### 6.1 Reservoir Pool Level

Reservoir pool level, associated with the flow depth in the principal or emergency spillways, is the prime indicator of flooding conditions at the Possum Point Power Station.

**Initiate a Stage 1 Condition when the reservoir pool level is at elevation 139 feet.** This is five (5) feet below the level of the emergency spillway and would provide for increased monitoring as pool levels begin approaching the emergency spillway elevation.

**Initiate a Stage 2 Condition when the reservoir pool level is at elevation 144 feet.** This is two (2) feet above the principal spillway and is the crest elevation of the emergency spillway. The emergency spillway would be on the verge of discharging.

**Initiate a Stage 3 Condition when the reservoir pool level is at elevation 145.5 feet, or depth in emergency spillway is 1.5 feet.** This would occur when the pool level would be 4.5 feet below the dam crest and would indicate that overtopping of the dam embankment could soon occur.

## 6.2 Rainfall Depths

Rainfall depths for various storm durations are another indicator of potential flooding conditions. Rainfall depth will be measured using an on-site rain gauge or projected using the National Weather Service (NWS) or other reputable weather source.

**Initiate a Stage 1 condition for the following rainfall depth:**  
8.32 inches in 24 hours (100-yr, 24-hr event).

**Initiate a Stage 2 condition for the following rainfall depth:**  
13.6 inches in 24 hours (1,000-year, 24-hr event).

**Initiate a Stage 3 condition for the following rainfall depth:**  
37 inches in 24 hours (PMP, 24-hr event).

## 6.3 Observation Frequency

Dam, spillway, and staff gauge observations shall occur at frequencies determined by the Emergency Stage condition:

- Stage 1 conditions – observations shall occur at six-hour intervals (Every six (6) hours)
- Stage 2 conditions – observations shall occur at two-hour intervals (Every two (2) hours)
- Stage 3 conditions – continuous observation

An observer can be any person assigned by Dominion personnel who has the ability to monitor and report observations of the dam at the time of a stage triggering event. Observers should use caution and be aware of the potential for flooded roads along the route to each dam. Monitoring and surveillance of conditions at each dam will continue under emergency conditions as long as safety is not in question. An inspection form is included in Appendix B.

Note: In the event that conditions are considered unsafe (i.e., wind speed greater than 40 mph, lightning, tornado etc.) conditions will be documented and dam observations will be postponed until conditions improve.

## 6.4 Public Roads Downstream of the Dam

The downstream area of the dam consists of the haul road for the Ash Pond Closure project and Possum Point Road. Possum Point Road is a public road and is approximately 1,000 feet from the top of the dam. Per VDOT, Possum Point Road has an average annual daily trip count of 500. There are no occupied structures downstream of the dam or in the anticipated inundation zone resulting from an embankment failure.

## 6.5 Additional Emergency Conditions

The following table is to be used to initiate emergency conditions during events other than those related to precipitation and reservoir pool levels. If any of these conditions are observed, Dominion's Power Generation Engineering group, applicable Dominion department, or qualified consultant, should be contacted for further discussion, observation, and/or technical direction.

**Table 4: Emergency Conditions**

| Event                                    | Situation   |
|--|---|
| Emergency Spillway and Channel           | Visual displacement or movement of the spillway channel with no flow                |
|  | Spillway is flowing and erosion/head cutting is observed                            |
| Seepage                                  | New seepage areas on or near the dam  |
|  | New seepage areas with cloudy discharge or increasing flow rate                     |
| Sinkholes                                | Observation of new sinkhole on embankment   |
|  | Rapidly enlarging sinkhole  |
| Embankment Cracking                      | New cracks in embankment greater than ¼ inch wide without seepage                   |
|  | Cracks in embankment with seepage   |
|  | Cracks in embankment with rapidly increasing seepage                                |
| Embankment Movement                      | Visual movement of the embankment slope   |
|  | Sudden or rapidly progressing slides of the slopes                                  |
| Vortex in Pond                           | Whirlpool with discharge downstream   |
| Earthquake                               | Measurable earthquake with a magnitude of 3.5 or greater within 50 miles of the dam |
|  | Earthquake resulting in visible damage to the dam                                   |
|  | Earthquake resulting in potential uncontrolled release of water from the dam        |
| Security Threat, Sabotage, and Vandalism | Verified bomb threat that, if carried out, could result in damage to the dam        |
|  | Detonated bomb that has resulted in damages to the dam or its appurtenances         |
|  | Damage to the dam or appurtenances with no impacts to the functioning of the dam    |
|  | Damage to the dam or appurtenances that has resulted in seepage flow                |

In the event of a measurable earthquake with a magnitude of 3.5 or greater within 50 miles of the dam, overtopping of the dam, evacuation of inundation areas, or other serious problems resulting in a triggering of stage conditions, the dam must be inspected by a professional engineer knowledgeable with the dam site. This inspection may be postponed due to unsafe conditions or lack of accessibility to the site.

## 6.6 De-Escalation of Stage Conditions

Stage conditions can be stepped down when the following events occur:

### Stage 3 to Stage 2

- After heavy rains have ended, the water level in the impoundment is below:
  - El 145.5 or flow depth in the emergency spillway of 1.5 ft and the water level is receding

### Stage 2 to Stage 1

- After heavy rains have ended, the water level in the impoundment is below:
  - El 144 and the water level is receding

### Stage 1 to Termination

- Other emergency conditions have been evaluated by Dominion personnel and determined to not present a hazard to the dam going forward.
- After heavy rains have ended, the water level in the impoundment is below:
  - El 139 and the water level is receding

Termination of stage conditions occurs when all entities notified of the emergency condition have been communicated with and informed of current non-emergency conditions.

## 7.0 RESPONSIBILITY UNDER THE EAP

This section is intended to clearly outline the responsibilities of parties involved in all EAP procedures, including notification, surveillance, classification, evacuation, and termination.

### 7.1 Dam Owner/Operator Responsibilities

- 1) The Dam Owner/Operator/EAP Coordinator/Assignee IS RESPONSIBLE for notifying the Prince William County Emergency Management Coordinator of any problem or potential problem at the dam site.
- 2) The Dam Owner/Operator/EAP Coordinator/Assignee WILL DETERMINE when Stage 1 conditions are met at the dam and WILL INITIATE dam surveillance accordingly.
- 3) The Dam Owner/Operator/EAP Coordinator/Assignee WILL DETERMINE when Stage 2 conditions are met at the dam.
- 4) The Dam Owner/Operator/EAP Coordinator/Assignee WILL DETERMINE when Stage 3 conditions are met at the dam.
- 5) The Dam Owner/Operator/EAP Coordinator/Assignee WILL BE RESPONSIBLE for operating pumps as needed for the dam to function effectively.
- 6) The Dam Owner/Operator/EAP Coordinator/Assignee WILL BE RESPONSIBLE for coordinating with local emergency response personnel to restrict traffic access to Possum Point Road under Stage 2 and Stage 3 conditions.
- 7) The Dam Owner/Operator/EAP Coordinator/Assignee WILL BE RESPONSIBLE for notifying local emergency response personnel of changes in emergency conditions include stage escalation and de-escalation and termination of the EAP under non-emergency conditions.

### 7.2 Responsibility for Notification

- 1) The observer of the emergency situation WILL NOTIFY the dam owner/operator/EAP Coordinator before beginning dam surveillance under Stage 1 conditions.
- 2) The Dam Owner/Operator/EAP Coordinator/Assignee WILL NOTIFY the 24-hour dispatch center and the Prince William County Emergency Management Coordinator when Stage 2 conditions are met, in order to alert them to perform actions required for Stage 2 conditions and to review actions that may be required for the safety and protection of people and property. The dam owner/operator WILL NOTIFY the Regional Dam Safety Engineer and Dominion Power Generation Engineering that Stage 2 conditions have been implemented.
- 3) The Dam Owner/Operator/EAP Coordinator/Assignee WILL NOTIFY the 24-hour dispatch center and the Prince William County Emergency Management Coordinator to initiate warning of residents when Stage 3 conditions or imminent dam failure are probable. The dam owner/operator WILL NOTIFY the Regional Dam Safety Engineer and Dominion Power Generation Engineering that Stage 3 conditions have been implemented.
- 4) The Dam Owner/Operator/EAP Coordinator/Assignee WILL NOTIFY local emergency response personnel of changes in emergency conditions include stage escalation and de-escalation and termination of the EAP under non-emergency conditions.

Once stage conditions have been activated, the dam owner/operator/EAP Coordinator will continue to provide the EAP Coordinator with information concerning water level rise, erosion in the emergency spillway, and/or dam overtopping, as provided by the dam/spillway/staff gauge observer. It is particularly important for the EAP

Coordinator to know when a breach is occurring to evacuate their rescue personnel. During stage 3 conditions the staff gauge observer will remain at the dam until released from duty by the EAP Coordinator or Assignee.

### 7.3 Responsibility for Evacuation

- 1) The Prince William County Emergency Management Coordinator should implement the Prince William County Emergency Operations Plan in the event that dam failure is possible or occurring.
- 2) The Prince William County Emergency Management Coordinator WILL CONTACT the VDOT or other authorized personnel to set up barricades to close roads at locations described in Section 6.4 in the event that Stage 2 and/or Stage 3 conditions are met.

### 7.4 Responsibility for Termination

Stage conditions can be rescinded when the following events occur:

- 1) Stage conditions have de-escalated to non-emergency conditions, reference Section 6.6, the EAP Coordinator may terminate or rescind the activation of the EAP.
- 2) All entities notified of the emergency condition have been communicated with and informed of current non-emergency conditions.

Regional flooding may occur prior to an incident at this dam and could continue for long periods of time. The staff gauge observer needs to have plans for staying or returning to the dam as conditions worsen. The termination responsibility should be handled by the EAP Coordinator or Assignee.

### 7.5 Responsibility for Stage Follow-Up

- 1) Post-EAP activation event, discussions should be used to determine strengths and weaknesses in the EAP in order to improve the document for future events.
- 2) The EAP Coordinator or designee should prepare documents recording the activation of the EAP event, reference Appendix C. Per 257.73(a)(3)(v) and 257.105(f)(8) of the CCR Rule, Stage 2 and 3 activation documentation will be posted to the Public CCR website (see Section 2.0).

### 7.6 EAP Coordinator Responsibility

The EAP coordinator will be responsible for EAP-related activities, including (but not limited to) preparing revisions to the EAP, establishing training seminars, and coordinating annual face-to-face EAP exercises between representatives of the owner/operator, Prince William County emergency responders, and additional federal and state agencies. This person will be the EAP contact if any involved parties have questions about the plan.

### 7.7 Methods for Notification and Warning

Prince William County has the authority and responsibility for Mass Notification, Alert, and Warning, and Population Protective Actions for all offsite Facilities.

During an emergency condition, the EAP Coordinator will communicate timely information about conditions at the dam to the Prince William County Emergency Managements Coordinator, who will initiate their own emergency notifications and action.

## 8.0 PREPAREDNESS

This section is intended to clearly outline the responsibilities of parties involved in all EAP procedures, including notification, surveillance, classification, evacuation, and termination.

## 8.1 Surveillance

The dam is attended and monitored under normal operating conditions for the duration of closure activities.

The Possum Point Power Station management and staff should monitor the status of weather fronts through the NWS. The NWS maintains a hurricane center that reports on hurricanes, tropical storms & tropical depressions as they travel and affect coastal and inland areas. The web site address is: <http://www.nhc.noaa.gov/>.

The station is staffed 24 hours per day by the Operations Department. An operator should be dispatched from the on-shift crew to observe the ponds during an emergency situation. The emergency situation observer should never put themselves in harm's way. In the event a hurricane or tropical depression occurs with high winds, the observer shall use extreme caution while monitoring conditions.

Preplanned access routes should be utilized, given that small streams crossing under state and local roads may flood, preventing safe access. The observers and Dam Safety Region staff should never attempt to cross a road that has flood water crossing it at a depth greater than one-foot unless the vehicle is specially designed for that purpose.

Alternative routes should be chosen for access by foot in the event that a car is unsafe for use. Other alternative means of transportation may be considered.

## 8.2 Routine Inspections

Ash Pond D Dam is inspected every seven (7) days in accordance with the CCR regulations. If any findings trigger an action level, the EAP will be put into place immediately. Any findings in question will be discussed with a Dominion Power Generation Engineer and a resolution determined by the next seven (7) day inspection. Any maintenance needs will be relayed to the grounds contractor or closure construction contractor within one calendar week.

## 8.3 Alternative Systems of Communication

Communications during a major rainfall event may be problematic. Telephone land lines may be used as the first means of communication. Cellular telephones can be used to supplement the land lines. Unfortunately, telephone lines, like electrical lines, are subject to damage by falling trees, so radio communication during these events is normally required.

## 8.4 Emergency Supplies

Stockpiling of Materials and Equipment: The location of necessary supplies and materials, such as barricades, sand, sandbags, etc. are either stored onsite or readily available through our emergency response contractors.

Emergency access to supplies and equipment should be planned before any emergency is called. Appendix C lists sources and locations of supplies and equipment that may be required during an emergency along with addresses and telephone numbers of the sources/suppliers.

## 9.0 INUNDATION ZONE PROPERTY OWNERS AND RESIDENTS

Inundation Maps are presented in Appendix D.



## 10.0 CERTIFICATION BY DAM OWNER/OPERATOR

I certify that procedures for implementation of this Emergency Action Plan (EAP) have been developed pursuant to 40 CFR §257.73(a)(3) of the CCR rule and coordinated with and a copy given to the Prince William County Emergency Management Coordinator serving the areas potentially impacted by the dam. Also, that a copy of this EAP has been filed with the Virginia Department of Emergency Management in Richmond and a copy of the Dam Break Inundation Map has been provided to the Prince William County Emergency Management Coordinator with plat and plan approval authority or zoning responsibilities as designated by the locality for each locality in which the dam break inundation zone resides; that this plan shall be adhered to during the life of the project; and that the information contained herein is current and correct to the best of my knowledge.

*William F. Reed*

(Signature of Dam Owner/Operator)

This 11th day of January, 2024

William Reed, Station Director III  
(Printed Name)

## 11.0 CERTIFICATION BY PREPARER

By means of this certification the undersigned Licensed Professional Engineer attests that he/she is familiar with the requirements of 40 CFR §257.73(a)(3) and the Department of Conservation and Recreation (DCR) regulations. This certification also demonstrates that the Plan is prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of 40 CFR §257.73; that procedures for required inspections and testing have been established; and the Plan is adequate for the Site.

This certification in no way relieves the owner or operator of a facility/Site of his duty to prepare and fully implement the Plan in accordance with the requirements of 40 CFR §257.73.

(Signature of Preparer)

This 10<sup>th</sup> day of January, 2024

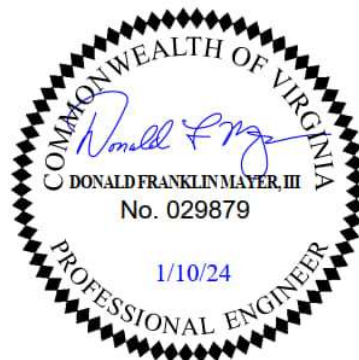
Printed Name: Donald Mayer, P.E.

Title: Vice President

Address: 1100 Boulders Parkway, Suite 503

Richmond, VA 23225

Telephone: 804-521-1782



**APPENDIX A**

# Analyses of Impounding Structure Failure Floods

**APPENDIX A**  
**Analyses of Impounding Structure Failure Flood**

The structure failure (controlling) flood for Possum Point Power Station Ash Pond D is the Probable Maximum Flood event. A design analysis was prepared by Golder Associates, Inc., dated December 2012.

**APPENDIX B**

Plans for Training, Exercising,  
Updating, and Posting the  
Emergency Action Plan; Revision  
Sheet; and Supplemental  
Documents

**APPENDIX B**  
**Plans for Training, Exercising, Updating, and Posting the Emergency Action Plan**

**1. Training**

Emergency action planning, generally, will be held once a year for responsible staff personnel.

**2. Exercises**

- a. Table Top Exercises - Table top exercises will be held, at a minimum, once every five years. This exercise will occur in the year that certification is required.
- b. Drills - A drill will be conducted each year by the owner except when a table top exercise is required.
- c. Annual drills will be conducted to verify lines of communication, phone numbers, personnel roles, and responsibilities. All parties on the Stage II/III notification flowchart are invited and encouraged to attend; however, attendance from station personnel is mandatory. Record the invitation of the drill to emergency response representatives and the drill attendance and details in the Training Record.

**3. Updating**

This EAP will be checked yearly during the drill exercise to determine if names, addresses, and telephone numbers of the people shown in Section 1 are accurate. The document will be updated at any time when a major change is determined to have occurred and noted in the plan's revision log.

If an annual review of the EAP indicates that no amendments are necessary, a note shall be placed in the revision log noting that no changes were made during the annual review.

**4. Posting**

This document will be on file with:

- Dominion Energy (Dam Owner)
- Prince William County Emergency Operations Center
- VA Department of Conservation and Recreation (DCR), Division of Dam Safety
- VA Department of Emergency Management



**EAP Revision Record**  
**Poosum Point Power Station Ash Pond D**  
**Inventory #: 153020**

| <b>Revision No.</b> | <b>Date Entered</b> | <b>Changed By</b> | <b>Description of Change</b>                    |
|---------------------|---------------------|-------------------|---|
| Original            | May 2015            |                   |   |
| 1                   | April 2017          | Dominion          | Incorporation of CCR Regulations                |
| 2                   | November 2017       | Dominion          | Incorporation of changes per Tabletop Meeting   |
| 3                   | August 2018         | Dominion          | Addition of Inactive Ponds per CCR Regulations  |
| 4                   | October 2019        | Dominion          | Annual Update                                   |
| 5                   | November 2020       | Golder Associates | Removal of Low Hazard Ponds per CCR Regulations |
| 6                   | November 2021       | Golder Associates | Annual Update                                   |
| 7                   | December 2022       | WSP Golder        | Annual Update                                   |
| 8                   | January 2024        | WSP USA, Inc.     | Annual Update                                   |
| 9                   |                     |                   |   |
| 10                  |                     |                   |   |
| 11                  |                     |                   |   |
| 12                  |                     |                   |   |
| 13                  |                     |                   |   |
| 14                  |                     |                   |   |
| 15                  |                     |                   |   |

**Possum Point Power Station - Ash Pond D Emergency Action Plan  
Notification Log**

| <b>Contact Name/Agency</b>   | <b>Phone Number</b>                            | <b>Person Notified</b> | <b>Time Notified</b> |
|--|--|------------------------|----------------------|
| <b>Refer to Notification Process in the Emergency Action Plan</b>    |  |                        |                      |
| <b>Stage 1 Notifications</b>   |  |                        |                      |
| (EAP Coordinator) Jeff Marcell/Dominion Energy                       | 703-441-3813 (office)<br>703-609-9015 (mobile) |                        |                      |
| (Alternate EAP Coordinator) Shelby Putnam/Dominion Energy            | 571-208-8725                                   |                        |                      |
| (Alternate EAP Coordinator) Meghan Bagley/Dominion Energy            | 804-972-2543                                   |                        |                      |
| (Dam Operator) William Reed/Dominion Energy                          | 434-842-4100 (office)<br>804-638-0335 (mobile) |                        |                      |
| (Alternate Dam Operator Afterhours) Shift Supervisor/Dominion Energy | 703-441-3828                                   |                        |                      |
| (Dam Engineer) Shaikh Rahman/Dominion Energy                         | 804-387-8263                                   |                        |                      |
| <b>Stage 2 Notifications</b>   |  |                        |                      |
| (EAP Coordinator) Jeff Marcell/Dominion Energy                       | 703-441-3813 (office)<br>703-609-9015 (mobile) |                        |                      |
| (Alternate EAP Coordinator) Shelby Putnam/Dominion Energy            | 571-208-8725                                   |                        |                      |
| (Alternate EAP Coordinator) Meghan Bagley/Dominion Energy            | 804-972-2543                                   |                        |                      |
| (Dam Operator) William Reed/Dominion Energy                          | 434-842-4100 (office)<br>804-638-0335 (mobile) |                        |                      |
| (Alternate Dam Operator Afterhours) Shift Supervisor/Dominion Energy | 703-441-3828                                   |                        |                      |
| (Dam Engineer) Shaikh Rahman/Dominion Energy                         | 804-387-8263                                   |                        |                      |
| Emergency Management Coordinator/Prince William County               | 703-792-6813<br>or 703-792-5627                |                        |                      |
| Fire Dispatch Supervisor/Prince William County                       | 703-792-6813                                   |                        |                      |
| Public Safety Communications Center/Prince William County            | 703-792-7135                                   |                        |                      |
| Situational Awareness Unit   | 804-674-2400<br>800-468-8892 (24hr)            |                        |                      |
| EPA National Response Center   | 800-424-8802                                   |                        |                      |
| Virginia DCR Dam Safety Region 1                                     | 540-351-1587                                   |                        |                      |
| Environmental & Sustainability Incident Reporting/Dominion Energy    | 804-389-9242                                   |                        |                      |
| Virginia Department of Environmental Quality                         | 703-583-3800<br>800-468-8892 (24hr)            |                        |                      |
| Additional Contacts:   |  |                        |                      |
| Cockpit Point Road Asphalt Terminal                                  | 703-221-1171                                   |                        |                      |
| <b>Stage 3 Notifications</b>   |  |                        |                      |
| (EAP Coordinator) Jeff Marcell/Dominion Energy                       | 703-441-3813 (office)<br>703-609-9015 (mobile) |                        |                      |
| (Alternate EAP Coordinator) Shelby Putnam/Dominion Energy            | 571-208-8725                                   |                        |                      |
| (Alternate EAP Coordinator) Meghan Bagley/Dominion Energy            | 804-972-2543                                   |                        |                      |
| (Dam Operator) William Reed/Dominion Energy                          | 434-842-4100 (office)<br>804-638-0335 (mobile) |                        |                      |
| (Alternate Dam Operator Afterhours) Shift Supervisor/Dominion Energy | 703-441-3828                                   |                        |                      |
| (Dam Engineer) Shaikh Rahman/Dominion Energy                         | 804-387-8263                                   |                        |                      |
| Emergency Management Coordinator/Prince William County               | 703-792-6813<br>or 703-792-5627                |                        |                      |
| Fire Dispatch Supervisor/Prince William County                       | 703-792-6813                                   |                        |                      |
| Public Safety Communications Center/Prince William County            | 703-792-7135                                   |                        |                      |
| Situational Awareness Unit   | 804-674-2400<br>800-468-8892 (24hr)            |                        |                      |
| EPA National Response Center   | 800-424-8802                                   |                        |                      |
| Virginia DCR Dam Safety Region 1                                     | 540-351-1587                                   |                        |                      |
| Environmental & Sustainability Incident Reporting/Dominion Energy    | 804-389-9242                                   |                        |                      |
| Virginia Department of Environmental Quality                         | 703-583-3800<br>800-468-8892 (24hr)            |                        |                      |
| In-House Counsel: Clay Burns/Dominion Energy                         | 804-310-3472                                   |                        |                      |
| Additional Contacts:   |  |                        |                      |
| Cockpit Point Road Asphalt Terminal                                  | 703-221-1171                                   |                        |                      |





POSSUM POINT POWER STATION EMERGENCY ACTION PLAN

ACTION LOG

|                     |                  |
|---------------------|------------------|
| Impoundment Name:   | Inspected By:    |
| Date of Inspection: | EAP Coordinator: |

WEATHER CONDITIONS:

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| One Action Log Per Event  | Time of Stage Implementation | Time of Stage Termination |
|---|------------------------------|---------------------------|
| <b>Stage 1 Condition:</b><br>(Observation Required every 6 hours) |                              |                           |
| <b>Stage 2 Condition:</b><br>(Observation Required every 2 hours) |                              |                           |
| <b>Stage 3 Condition:</b><br>(Continuous observation required)    |                              |                           |

| Time | Observer Name | Observations/Condition of Dam/Description of Concern/Failure<br><br>*Note adverse conditions/inability to observe |
|------|---------------|---|
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APPENDIX C

## Additional Resources

**APPENDIX C**  
**Additional Resources**

**Directory of Additional Personnel with Dam Safety Expertise**

In addition to personnel shown elsewhere in this plan, the following list identifies other individuals with expertise in dam safety, design, and construction that may be consulted about taking specific actions at the dam when there is an emergency situation:

| <b>Name</b>                         | <b>Telephone</b>    | <b>Responsibility</b>        |
|-------------------------------------|---------------------|------------------------------|
| DCR, Division of Dam Safety         | 540-351-1587        | Dam Safety Regional Engineer |
| WSP USA, Inc.<br>Donald Mayer, P.E. | 804-301-5244 (cell) | Consulting Design Engineer   |

**Supplies and Resources**

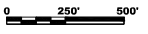
| <b>Equipment Available</b> | <b>Location</b>            | <b>Phone Number</b>                  |
|----------------------------|----------------------------|--------------------------------------|
| Sand/Sand Bags             | USA Civil                  | 804-762-4845 (o)                     |
|                            | Brandon Oakes              | 804-928-0438 (m)                     |
| Rock/Gravel                | USA Civil                  | 804-762-4845 (o)                     |
|                            | Brandon Oakes              | 804-928-0438 (m)                     |
| Pumps/Generators/Lights    | Available at Station       |                                      |
|                            | Godwin Pumps               | 804-798-6600                         |
|                            | Rain for Rent              | 804-732-6914                         |
| Heavy Equipment            | Available at Station       |                                      |
|                            | USA Civil<br>Brandon Oakes | 804-762-4845 (o)<br>804-928-0438 (m) |

**Personnel Resources/Labor**

| <b>Company</b>   | <b>Contact</b>                              | <b>Phone Number</b>                  |
|------------------|---|--------------------------------------|
| Dominion Energy  | Control Room<br>Lead Maintenance Operator   | 703-441-3828                         |
| Brand            | Erik Espinoza                               | 804-330-0682 (office)                |
| Civil Contractor | Bruce Howard Contracting, INC.<br>CJ O'Dell | 804-337-6538 (o)<br>410-213-4833 (m) |

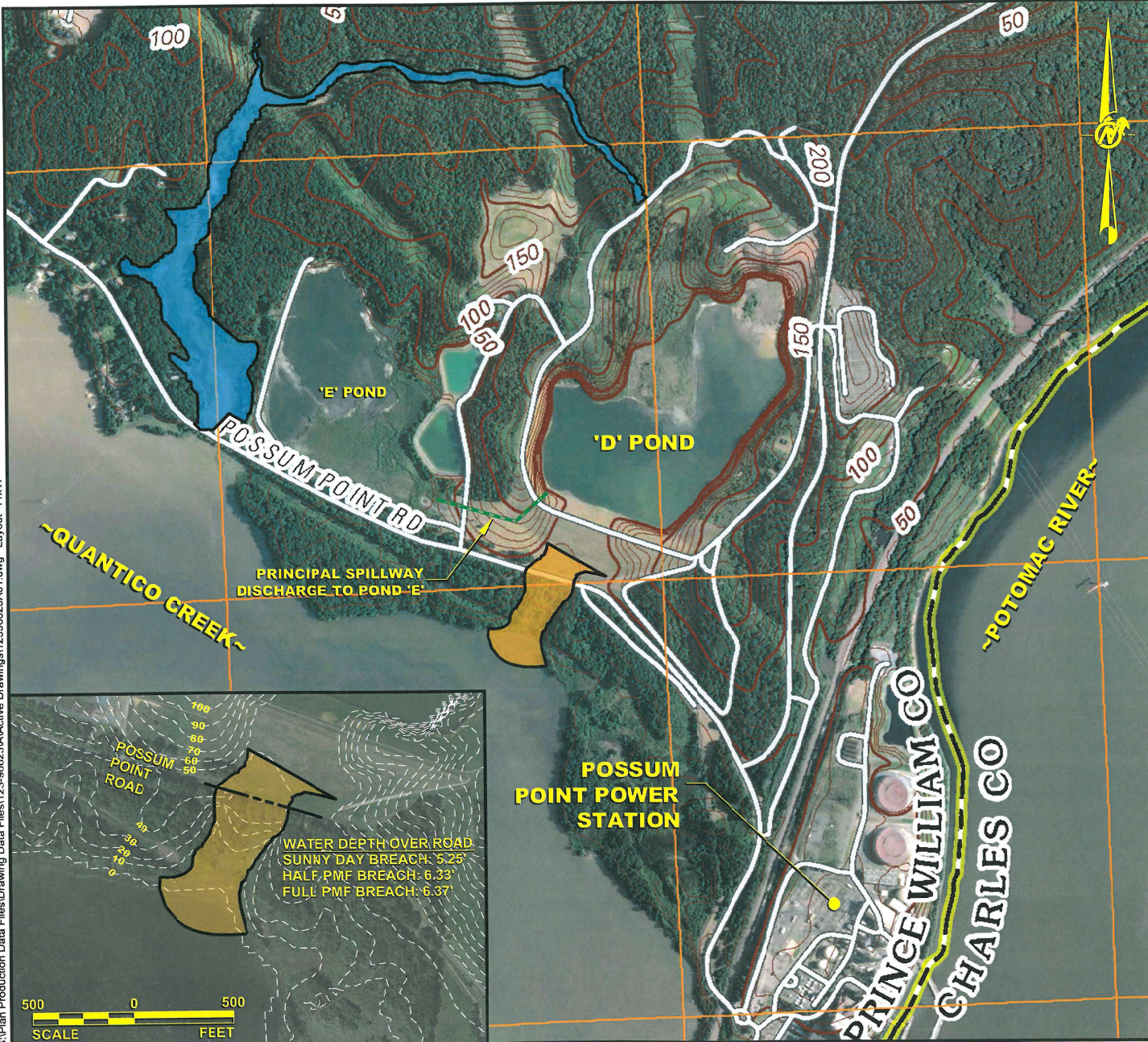
APPENDIX D

## Figures



DATE OF PHOTOGRAPH: MAY 21, 2019

# POSSUM POINT POWER STATION



### LEGEND

- 100 — EXISTING TOPOGRAPHIC CONTOUR (50' INTERVAL)
- 70 — EXISTING TOPOGRAPHIC CONTOUR (10' INTERVAL)

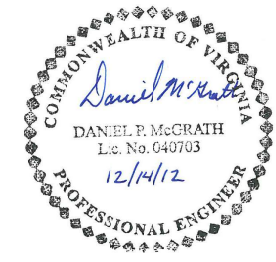
**PEAK WATER SURFACE ELEVATION WITH THE:**


- WATER SURFACE ELEVATIONS (WSE) DURING SUNNY DAY BREACH, HALF PMF, AND FULL PMF BREACH
- EMERGENCY SPILLWAY WSE DURING PMF EVENT

750 0 750  
 SCALE: 1" = 750' FEET

### NOTES

- MAPPING OF FLOODED AREAS AND FLOOD WAVE TRAVEL TIMES ARE APPROXIMATE. TIMING AND EXTENT OF ACTUAL INUNDATION MAY DIFFER FROM INFORMATION PRESENTED ON THIS MAP.
- AERIAL IMAGE SOURCE: USGS 7.5-MINUTE QUADRANGLE MAP TITLED "QUANTICO, VA-MD" DATED 2011.
- TOPOGRAPHY SOURCE: DEM FILE FOR USGS QUADRANGLE "QUANTICO, VA-MD" DATED 9/19/01. (10 METER GROUND RESOLUTION)





**Golder Associates**  
 Richmond, Virginia

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**DOMINION**

POSSUM POINT POWER STATION  
 ASH POND 'D' DCR INVENTORY #15320  
 PRINCE WILLIAM COUNTY, VIRGINIA

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**POND FAILURE**

**DURING FULL PMF, ON A SUNNY DAY, AND SPILLWAY DESIGN FLOOD**

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|                       |       |
|-----------------------|-------|
| PROJECT No. 123-96623 | TITLE |
| FILE No. 123-96623A01 |       |
| REV. 0 SCALE AS SHOWN |       |
| DESIGN DPM 12/14/12   |       |
| CADD ATN 12/14/12     |       |
| CHECK DPM 12/14/12    |       |
| REVIEW JRO 12/14/12   |       |

**DRAWING 1**



[wsp.com](http://wsp.com)