



CITY OF RICHMOND

Department of Public Utilities

February 21, 2025

Mr. James Reynolds
Field Director
Virginia Department of Health
Richmond Field Office
109 Governor Street, 6th Floor
Richmond, Virginia 23219

RE: Notice of Alleged Violation
City of Richmond Waterworks, Public Water System Identification (PWSID) #4760100

Dear Mr. Reynolds:

This letter is in response to the Notice of Alleged Violation (NOAV) dated January 23, 2025, concerning the City of Richmond Waterworks, Public Water System Identification (PWSID) #4760100 and its compliance with Virginia Public Water Supplies Law, Va. Code § 32.1-167 *et seq.*, and the Waterworks Regulations, 12VAC5-590-10 *et seq.* Below, we address each specific request below.

Observations and Responses

1. **Request 1.a:** Confirm in writing that the City of Richmond has verified and trained all licensed and in-training operators and other staff on power outage response. Please ensure WTP employees are properly trained and understand standard procedures when responding to a power outage. Please describe how training was delivered, when that training was delivered, and the content of that training. The date of training must be later than January 6, 2025.

Response: The City of Richmond has conducted training with operators and maintenance staff regarding power outages, this training was conducted verbally after the loss of power on January 6, 2025 and again in a formal setting with specific SOPs with respect to loss of power. The SOPs and formal training sign-in sheets are provided as Attachment A. Additional SOPs and revision of existing SOPs are currently being developed to include all aspects of routine plant operations and emergency operations, expected completion of these items is scheduled for June 2025.

2. **Request 1.b:** Include the City of Richmond's standard operating procedures at the WTP for responding to a power outage, including roles and responsibilities of

employees.

Response: See Attachment A.

3. **Request 1.c:** Present documentation to show that all emergency back-up systems (such as secondary power feeds, generators, and UPS) have been tested and are functioning properly, including but not limited to allowing continued functioning of SCADA in an emergency; and if not, the plan to return those systems to normal function.

Response: The Bus Tie/ATS in SG6 that failed on January 6, 2025 was replaced on January 13, 2025. Subsequently that equipment was tested on January 13, 2023 by EPS (Electric Power Systems), see Attachment B for test results and findings. Preventative maintenance was conducted for the backup generators on October 19, 2024 and the generators were verified operational during a pre-storm check on January 4, 2025, see Attachment C. The 6KVA UPS was tested by the manufacturer on January 14, 2025 prior to installation, see Attachment D. The 30KVA UPS was tested as a part of the commissioning process on January 17, 2025, see Attachment D. The UPSs associated with effluent filter operations cannot be field tested until the actuators are replaced for the effluent filter valves. In addition, the facility is in the process of upgrading the UPSs to sustain operations for 1 hour, this upgrade is expected to be completed by March 31, 2025. Upon completion of the upgrade the UPSs for the effluent valve operations and SCADA will be field verified to function as designed.

4. **Request 1.d:** Describe the City of Richmond's plan to ensure that back-up power systems are routinely exercised and tested, especially before storm events, such that any future power outage does not cause flooding or other damage to the WTP or loss of water service. Please describe the frequency and procedures to test critical equipment and back-up power supplies before storm events. Please describe the frequency and procedures to practice transitioning the WTP from commercial power to emergency power and returning to commercial power.

Response: The City of Richmond is in the process of developing and revising SOPs for all routine and emergency operations, the expected completion schedule for this is June 2025. All operators and maintenance staff will conduct initial training on all SOPs and annually thereafter, this includes training on transitioning from commercial to emergency power. A task has been added to CMMS for Storm Preparations, See Attachment E.

The facility is currently in the process of upgrading the emergency generators to include an automatic transfer switch, this project is scheduled to be completed in November 2025. Upon completion, all SOPs and maintenance procedures will be updated. As part of the project, the generator will run a test cycle per the manufacturer's recommendations. All other maintenance items are incorporated into our planned maintenance schedule, this information was provided to VDH through Short Elliott Hendrickson Inc., please advise if you need another copy.

5. **Request 1.e:** Describe expected staffing level and role/responsibility of that staffing at the WTP during a significant storm event going forward.

Response: 12VAC5-590-461 establishes the Class of the waterworks and the minimum staffing requirements. The City of Richmond waterworks (PWSID #4760100) is a Class 1 waterworks. For the purpose of 12VAC5-590-461 and 12VAC5-590-570, all Class 1 waterworks shall maintain the minimum operator attendance as follows:

- **The waterworks shall have a minimum of two operating staff in attendance whenever the water treatment plant is in operation; at least one of the operating staff must be an operator.**

Increasing staffing attendance may be required by VDH on a case-by-case basis to protect public health.

The City of Richmond is in the process of evaluating changes to the current staffing structure. The current staffing structure meets the minimum requirements and has three operators assigned on each shift at the facility. Changes to staffing will be evaluated upon completion of the HNTB report. In the interim, the City of Richmond intends to augment operational staff with maintenance staff during storm events where a power outage is likely to occur while ongoing work is completed at the facility to enhance reliability. Once additional reliability is restored and field verification is completed, the City of Richmond will reevaluate the need for additional augmentation.

We appreciate the opportunity to address the concern noted above and would be happy to schedule a follow-up meeting with yourself and other VDH staff as needed to further discuss these matters. Our commitment to public health and compliance with state laws and regulations remains unwavering.

Please do not hesitate to contact me for any further information or clarification.

Sincerely,

Scott Morris

Scott Morris, DBA, P.E.
Interim Director of Public Utilities

cc: Eric Whitehurst, Senior Deputy Director
Doug Towne, Plant Manager
Emily Messer, Assistant City Attorney

Attachment A

**Standby Generator and Switchgear #6 SOP is being excluded under
§ 2.2-3705.2 (14)**

**Standby Generator Starting and Stopping SOP is being excluded under
§ 2.2-3705.2 (14)**



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2-11-25

Trainer(s): Matthew E. Brzendinge

Location: Water Treatment Plant

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and the process of transferring the plant to generator power. Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting

By signing below, I acknowledge that I have received training on the operation of the switchgear and the procedures for transferring the plant to generator power. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
Justin Perchem	<i>[Signature]</i>	2-12-25
ANDRE RODRIGUEZ	<i>[Signature]</i>	2-12-25

Trainer(s) Signature(s): *Matthew E. Brzendinge*

Additional Notes:



Supervisor Approval:
Name: Matthew E. Brizendine
Signature: [Handwritten Signature]
Date: 2-12-25

Comments or Follow-Up Required:

I went through a thorough explanation of how the electrical Switchgear operates, what to look for with a power outage and how to respond in that situation. We also went through an extensive training session using our S.O.P. for bringing our generators online.

This document serves as a record of training completion and must be kept on file for compliance and future reference.



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2-11-25

Trainer(s): Elzathar Brooks

Location: Water-Treatment Plant

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and the process of transferring the plant to generator power. Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting

By signing below, I acknowledge that I have received training on the operation of the switchgear and the procedures for transferring the plant to generator power. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
CHRIS BURNIS	<i>Chris Burnis</i>	2-11-25
Laura Harris	<i>Laura Harris</i>	2/11/25
NEEL SHAKOOR	<i>Neel Shako</i>	2/11/25
Ramona Bassiri	<i>Ramona Bassiri</i>	2/11/25

Trainer(s) Signature(s): *Elzathar Brooks*

Additional Notes:

Employees need more frequent training on equipment and switchgear system to properly familiarize themselves.



Supervisor Approval:
Name: Matthew E. Brignone
Signature: [Handwritten Signature]
Date: 2/11/25

Comments or Follow-Up Required:

This document serves as a record of training completion and must be kept on file for compliance and future reference.



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2-14-25

Trainer(s): Jermaine Murray

Location: 3920 Douglassdale Rd. (WTP)

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and operations staff role in the process of transferring the plant to generator power.

Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting
- Operations staff role in these procedures and processes

By signing below, I acknowledge that I have received training on the operation of the switchgear, the procedures for transferring the plant to generator power and operations staff role in these procedures. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
Jermaine Murray	<i>Jermaine Murray</i>	2-14-25
Thomas March	<i>Thomas March</i>	2-14-25
Victor S. Fischer	<i>Victor S. Fischer</i>	2-14-25

Trainer(s) Signature(s): *Jermaine Murray*



Supervisor Approval:

Name: LeRoy Reed
Signature: [Handwritten Signature]
Date: 2-14-25

Comments or Follow-Up Required:

This document serves as a record of training completion and must be kept on file for compliance and future reference.



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2-16-25

Trainer(s): Jermaine Murray

Location: 3920 Douglasdale Rd. (WTP)

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and operations staff role in the process of transferring the plant to generator power.

Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting
- Operations staff role in these procedures and processes

By signing below, I acknowledge that I have received training on the operation of the switchgear, the procedures for transferring the plant to generator power and operations staff role in these procedures. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
Jerry Whitiz		2-16-25
Calvin Dunn		2-16-25

Trainer(s) Signature(s): Jermaine Murray



Supervisor Approval:

Name: Doug Towns
Signature: [Handwritten Signature]
Date: 2-18-25

Comments or Follow-Up Required:

This document serves as a record of training completion and must be kept on file for compliance and future reference.



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2-16-25

Trainer(s): Charles WATT

Location: 3420 Doupladale rd.

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and operations staff role in the process of transferring the plant to generator power. Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting
- Operations staff role in these procedures and processes

By signing below, I acknowledge that I have received training on the operation of the switchgear, the procedures for transferring the plant to generator power and operations staff role in these procedures. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
Charles WATT	<i>Charles WATT</i>	2-16-25
Jamie Wallace	<i>Jamie Wallace</i>	2-16-25
Wygott Cotner	<i>Wygott Cotner</i>	2-16-25

Trainer(s) Signature(s): *Charles WATT*



Supervisor Approval:

Name: Don Towne
Signature: [Handwritten Signature]
Date: 2-18-25

Comments or Follow-Up Required:

This document serves as a record of training completion and must be kept on file for compliance and future reference.



Training Acknowledgment Sign-Off Sheet

Training Topic: Operation of Switchgear and Transitioning the Plant to Generator Power

Date of Training: 2/14/2025

Trainer(s): Shalita Smith

Location: WTP 3920 Douglasdale Rd

Description of Training:

This training session covers the proper procedures for operating the switchgear in the event of a power loss and operations staff role in the process of transferring the plant to generator power.

Topics include:

- Identifying power loss scenarios
- Safety precautions and PPE requirements
- Manual and automatic switchgear operations
- Initiating generator power transfer
- Monitoring generator function and system stability
- Restoring normal power when available
- Emergency procedures and troubleshooting
- Operations staff role in these procedures and processes

By signing below, I acknowledge that I have received training on the operation of the switchgear, the procedures for transferring the plant to generator power and operations staff role in these procedures. I understand the importance of following proper protocols and will adhere to safety guidelines during operations. I also acknowledge that I can seek further clarification if needed.

Employee Name (Print)	Signature	Date
Shalita Smith		2/14/2025
Mykel Loguano		2/15/2025
Devon Peltonen		2/15/2025

Trainer(s) Signature(s):  _____



Supervisor Approval:

Name: Doug Tamm

Signature: [Handwritten Signature]

Date: 2/20/25

Comments or Follow-Up Required:

This document serves as a record of training completion and must be kept on file for compliance and future reference.

Attachment B

Attachment B is being excluded under § 2.2-3705.2 (14)

Attachment C

Attachment C is being excluded under § 2.2-3705.2 (14)

Attachment D

Attachment D is being excluded under § 2.2-3705.2 (14)

Attachment E

Attachment E is being excluded under § 2.2-3705.2 (14)