STATE AIR POLLUTION CONTROL BOARD
ENFORCEMENT ACTION – ORDER BY CONSENT
ISSUED TO
VIRGINIA ELECTRIC AND POWER COMPANY, D/B/A
DOMINION VIRGINIA POWER FOR THE
VIRGINIA CITY HYBRID ENERGY CENTER
Registration No. 11526

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code §§ 10.1 - 1309, and -
1316, between the State Air Pollution Control Board and Virginia Electric and Power Company,
regarding Virginia City Hybrid Energy Center, for the purpose of resolving certain violations of
the Virginia Air Pollution Control Law and the applicable permits and regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the
meanings assigned to them below:

1. “Board” means the State Air Pollution Control Board, a permanent citizens’ board
   of the Commonwealth of Virginia as described in Va. Code §§ 10.1-1184 and -
   1301.

2. “CEMS” means continuous emission monitoring systems.

3. “CFB” means circulating fluidized bed.


5. “CO” means carbon monoxide.


8. “Director” means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1 - 1185.


10. “Facility” means the Virginia City Hybrid Energy Center facility located at 3425 Russell Creek Road, in Wise County, Virginia.

11. “MACT Permit” means an Article 7 Case-by-Case MACT Permit to construct and operate two circulating fluidized bed boilers which was issued under the Air Pollution Control Law and the Regulations to Virginia City Hybrid Energy Center, approved June 30, 2008 (as amended September 2, 2009 and October 23, 2012).


13. “Order” means this document, also known as a “Consent Order” or “Order by Consent,” a type of Special Order under the Virginia Air Pollution Control Law.

14. “PCE” means a partial air compliance evaluation by DEQ staff.

15. “PM” means filterable particulate matter.

16. “PSD Permit” means a Prevention of Significant Deterioration (PSD) Permit to modify and operate an electric power generating facility which was issued to Virginia Electric and Power Company, Article 8 permit approved on June 30, 2008 (as amended January 29, 2009, May 24, 2011 and October 23, 2012) and Article 6 permit approved May 24, 2011 (as amended October 23, 2012).

17. “Regulations” or “Regulations for the Control and Abatement of Air Pollution” means 9 VAC 5 chapters 10 through 80.

18. “SO₂” means sulfur dioxide.

19. "SWRO" means the Southwest Regional Office of DEQ, located in Abingdon, Virginia.


23. "Virginia City Hybrid Energy Center" or "VCHEC" means Virginia City Hybrid Energy Center, owned by Virginia Electric and Power Company, a company authorized to do business in Virginia and its affiliates, partners and subsidiaries. Virginia City Hybrid Energy Center is a "person" within the meaning of Va. Code § 10.1 – 1300.

SECTION C: Findings of Facts and Conclusions of Law

Virginia Electric and Power Company owns and operates the Facility in Wise County, Virginia. The Facility is the subject of the PSD and MACT Permits which allow the company to operate the two circulating fluidized bed boilers and the electric power generating facility.

1. On February 1, 2013, VCHEC notified DEQ of CO exceedances for the 30-day rolling average variable permit limit for CFB Units 1 and 2. The information was detailed in the 4th Quarter 2012 Excess Emission Report (EER).

2. On April 8, 2013, Department staff conducted a PCE for compliance regarding the submitted revised 3rd quarter 2012 EER and 4th quarter 2012 EER with the requirements of the Virginia Air Pollution Control Law, the Permits, and the Regulations. Based on the evaluation and follow-up information, Department staff made the following observations:

The 4th Quarter 2012 EER stated 49.58% excess emissions during operating time for Unit 1 and 72.22% excess emissions during operating time for Unit 2. Two events are shown for Unit 1 and four events are shown for Unit 2 as follows in Table 1:

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Event</th>
<th>Date</th>
<th>Max. Value (lb/MMBtu)</th>
<th>Variable Limit (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>10/16/12 – 10/20/12</td>
<td>0.213</td>
<td>0.188</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>10/29/12 – 11/24/12</td>
<td>0.264</td>
<td>0.185</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>10/17/12 – 10/20/12</td>
<td>0.229</td>
<td>0.188</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>11/16/12 – 11/21/12</td>
<td>0.250</td>
<td>0.184</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>12/04/12 – 12/12/12</td>
<td>0.219</td>
<td>0.146</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>12/17/12 – 12/31/12</td>
<td>0.252</td>
<td>0.143</td>
</tr>
</tbody>
</table>

Notes: 1. Unit 2 offline from 12/13/12 – 12/17/12. Event 3 can be considered the same event as Event 4.
2. Unit 2, Event 4 carried over into 2013 and can include Unit 2, Event 1 for the 1st Qtr. 2013.
3. lb/MMBtu values are 30-day rolling average.
3. VCHEC reported additional CO exceedances for the 30 day rolling average variable permit limit during the 1st Quarter 2013 on March 6, 2013 as shown in Table 2. This report also notes that on January 29, 2013, January 30, 2013 and February 4, 2013 through February 7, 2013, the emission limits were equal to the emission rates and were incorrectly coded as exceedances.

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Event</th>
<th>Date</th>
<th>Max. Value (lb/MMBtu)</th>
<th>Variable Limit (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>01/21/13 – 01/28/13</td>
<td>0.18</td>
<td>0.17</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>01/01/13 – 01/06/13</td>
<td>0.16</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Table 2: CO Events from March 6, 2013 Report

Notes: 1. lb/MMBtu values are 30-day rolling average.

4. Condition No. 13 of the MACT Permit states in part, “Emissions from the operation of the CFB boilers shall not exceed the following limits:...

Carbon Monoxide 30-day rolling average 0.10 Each boiler (lb/MMBtu)...

Emission limits applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limits for loads equal to or greater than 75 percent is fixed at 0.10 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent. The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:…”

5. 9 VAC 5-80-1470 requires that, “A. No permit shall be granted pursuant to this article unless it is shown to the satisfaction of the board that the source will be designed, built and equipped to operate without causing a violation of the applicable provisions of the regulations of the board and that the following standards have been met: 1. The source shall be designed, built and equipped to comply with applicable emission standards and other requirements prescribed under 9VAC5 Chapter 60 (9VAC5-60-10 et seq.)…”

6. 9 VAC 5-50-280 requires that, “A. For major stationary sources located in prevention of significant deterioration areas, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any emissions in excess of that resultant from using best available control technology, as reflected in any condition that may be placed upon the permit approval for the facility…”

7. 9 VAC 5-50-410 requires that, “Designated standards of performance...Subpart D – Fossil Fuel-Fired Steam Generators. 40 CFR 60.40 through 40 CFR 60.46 (fossil fuel-fired steam generating units of more than 250 million Btu per hour heat input rate, and fossil fuel-fired and wood residue-fired steam generating units
8. 40 CFR 63.43(g) requires that, "Notice of MACT Approval. (1) The Notice of MACT Approval will contain a MACT emission limitation (or a MACT work practice standard if the permitting authority determines it is not feasible to prescribe or enforce an emission standard) to control the emissions of HAP. The MACT emission limitation or standard will be determined by the permitting authority and will conform to the principles set forth in paragraph (d) of this section."

9. Condition No. 32 of the PSD Permit states in part, "Emission limits from the operation of the CFB boilers shall not exceed the following limits:...

   Carbon Monoxide\(^d\) 30-day rolling average 0.15\(^d\) Each boiler (lb/MMBtu)...

\(^d\) Emission limit applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limits for loads equal to or greater than 75 percent is fixed at 0.15 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent. The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:...

\(^e\) The permittee shall comply with the most stringent emission rate limitation as may be contained in this permit of any 9 VAC 5-80 Article 7 permit in effect and applicable to this source."

10. 9 VAC 5-80-1180 requires that, "A. No minor NSR permit will be granted unless it is shown to the satisfaction of the board that the source will comply with the following standards:...2. For sources subject to the federal hazardous air pollutant new source review program, the source shall be designed, built, and equipped to comply with the applicable emission standard and other requirements prescribed in 40 CFR Part 61 or 63 or Article 3 (9VAC5-60-120 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources), as applicable;...”

11. 9 VAC 5-80-1705 B requires that, "A new major stationary source shall apply best available control technology for each regulated NSR pollutant that it would have the potential to emit in significant amounts.”

12. 9 VAC 5-170-160(A) - (Conditions on Approvals) of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution states in part: "The board may impose conditions upon permits and other approvals which may be necessary to carry out the policy
of the Virginia Air Pollution Control Law, and which are consistent with the regulations of the board. Except as otherwise specified, nothing in this chapter shall be understood to limit the power of the board in this regard. If the owner or other person fails to adhere to the conditions, the board may automatically cancel the permit or approvals. This section shall apply, but not be limited, to approval of variances, approval of control programs, and granting of permits.”

13. Va. Code § 10.1-1322(A) gives the Department the authority to issue, amend, revoke or terminate and reissue permits, and failure to comply with any condition of a permit is considered a violation of the Air Pollution Control Law.

14. On April 10, 2013, based on the review of the February 1, 2013 4th quarter 2012 EER and the April 8, 2013 PCE of the revised 3rd quarter 2012 EER, the 4th quarter 2012 EER and data submitted for CO exceedances during 1st quarter 2013, the Department issued a Notice of Violation No. ASWRO8665 to VCHEC for the violations described in paragraph C(2) through C(13), above.

15. On April 12, 2013, VCHEC submitted a telephone response to the NOV. On April 22, 2013, DEQ received written correspondence from VCHEC regarding the NOV issued April 10, 2013 and staff met with representatives of VCHEC representatives on April 30, 2013.

16. On April 30, 2013, DEQ received the VCHEC 1st quarter 2013 EER.

17. On May 6, 2013, VCHEC submitted a written request to U.S. Environmental Protection Agency (EPA) Region III to employ a CO₂ diluent cap of 5.0% for startup/shutdown in the calculation of all parameters reported in lb/MMBtu from the facility; make these calculations retroactive to September 1, 2012; and implement these changes through modification of the CEMS Quality Assurance/Quality Control Plan.


19. On May 28, 2013, Department staff submitted a memo to USEPA Region III regarding clarification of mercury sorbent tube breakthrough and PM CEMS compliance items for incorporation into VCHEC permit file.

20. On August 1, 2013, DEQ received the VCHEC 2nd quarter 2013 EER.

22. On August 20 and 22, 2013, Department staff spoke with EPA Region III by telephone at which time EPA staff stated the need to incorporate compliance items lined outlined in the May 28, 2013 memo into the next permit amendment modification for VCHEC.

23. On August 26, 2013, VCHEC submitted to DEQ staff an electronic correspondence (letter received by DEQ on September 3, 2013) regarding the 30-day CO limit excursion experienced on units VC01 and VC02 beginning August 12, 2013 (VC01) and August 11, 2013 (VC02).

24. On September 30, 2013, Department staff conducted a PCE for compliance with the requirements of the Virginia Air Pollution Control Law, the Permits, and the Regulations. Based on the evaluation and follow-up information, Department staff made the following observations:

During review of the as-built drawing for the fuel oil tank volume, DEQ staff noted that the capacity was larger than the 550,000 gallon capacity stated in the PSD Permit.

The 1st and 2nd Quarter 2013 EER noted CO exceedances for the 30 day rolling average permit limit for Units 1 and 2, PM exceedances for the 3 hour average limit for Unit 2, and SO2 exceedances for the 3 hour and 24 hour average limits for Units 1&2. CO exceedances for the 30 day rolling average variable limit were reported for the 3rd quarter 2013. The events are detailed in the following tables shown below:

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Event</th>
<th>Qtr</th>
<th>Date Range</th>
<th>Duration</th>
<th>Avg Period</th>
<th>Max Value (lb/MMBtu)</th>
<th>Variable Limit (lb/MMBtu)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1/21 - 1/22/13</td>
<td>48h 0m</td>
<td>30day</td>
<td>0.18</td>
<td>0.17</td>
<td>Startup</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1/26 - 1/28/13</td>
<td>72h 0m</td>
<td>30day</td>
<td>0.18</td>
<td>0.17</td>
<td>Startup</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2/2 - 2/3/13</td>
<td>48h 0m</td>
<td>30day</td>
<td>0.20</td>
<td>0.19</td>
<td>Startup</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1/1 - 1/6/13</td>
<td>144h 0m</td>
<td>30day</td>
<td>0.16</td>
<td>0.15</td>
<td>Startup</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3</td>
<td>8/12/13 - *</td>
<td>* 0m</td>
<td>30day</td>
<td>0.18</td>
<td>0.13</td>
<td>Startup</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
<td>8/11/13 - *</td>
<td>* 0m</td>
<td>30day</td>
<td>0.16</td>
<td>0.13</td>
<td>Startup</td>
</tr>
</tbody>
</table>

Notes: 1. The event for CFB 2 is a carry over from 4th quarter 2012.  
2. Events 1 & 2 for CFB 1 were also referenced in the NOV dated 4-10-13.  
3. *Events occurred during startup that followed an automatic turbine shutdown which tripped both units. The turbine was being tuned when a malfunction was sensed causing the automatic turbine shutdown.
Table 4: Filterable PM Events

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Event</th>
<th>Qtr</th>
<th>Date Range</th>
<th>Duration</th>
<th>Avg Period</th>
<th>Max Value (lb/MMBtu)</th>
<th>Limit (lb/MMBtu)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3/15 - 3/15/13</td>
<td>2h 0m</td>
<td>3h</td>
<td>0.012</td>
<td>0.010</td>
<td>Startup</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5/11 - 5/11/13</td>
<td>1h 0m</td>
<td>3h</td>
<td>0.018</td>
<td>0.010</td>
<td>Startup</td>
</tr>
</tbody>
</table>

Table 5: SO2 Events

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Event</th>
<th>Qtr</th>
<th>Date Range</th>
<th>Duration</th>
<th>Avg Period</th>
<th>Max Value (lb/MMBtu)</th>
<th>Limit (lb/MMBtu)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5/10 - 5/10/13</td>
<td>1h 0m</td>
<td>24h</td>
<td>0.051</td>
<td>0.029</td>
<td>Fuel Prob</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5/15 - 5/16/13</td>
<td>23h 0m</td>
<td>24h</td>
<td>0.051</td>
<td>0.029</td>
<td>Fuel Prob</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4/12 - 4/12/13</td>
<td>1h 0m</td>
<td>24h</td>
<td>0.055</td>
<td>0.035</td>
<td>Shut down</td>
</tr>
</tbody>
</table>

Notes:
1. The 24 hour average exceedance resulted from excess fuel feed during unit startup.
2. The 3 hour average event occurred during unit shutdown. The permit provides an exemption for startup and shutdown for the 3-hour average limit. However, Stack Vision flagged this as an exceedance due to heat input in hour 20 being 40.7% (rounded to 41%). Shutdown is defined as load decreasing from 40% heat input.

25. Condition No. 1 of the PSD Permit states in part, “Equipment at this facility consists of the following:…

PrePreviously Permitted Equipment

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Equipment Description</th>
<th>Rated Capacity</th>
<th>Federal Emission Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOM</td>
<td>Distillate oil storage tank</td>
<td>550,000 gallons</td>
<td></td>
</tr>
</tbody>
</table>

26. 9 VAC 5-80-1180 D 3 requires that, “Minor NSR permits will contain, but need not be limited to, any of the following elements as necessary to ensure that the permits are enforceable as a practical matter:… 3. Specifications for permitted equipment, identified as thoroughly as possible. The identification shall include, but not be limited to, type, rated capacity, and size. Specifications included in the permit under this subdivision are for informational purposes only and do not form enforceable terms or conditions of the permit unless the specifications are needed to form the basis for one or more of the other terms or conditions in the permit…”

27. Condition No. 17 of the PSD Permit states in part, “Volatile organic compound emissions from the 550,000 gallon capacity distillate oil storage tank…”

28. Condition No. 70 of the PSD Permit states in part, “The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit…”

i. Dimensions of the 550,000 gallon storage tank and an analysis showing the capacity of the storage vessel…”
29. 9 VAC 5-50-50 requires that, "...The owner of a stationary source shall keep records as necessary to determine its emissions..."

30. 9 VAC 5-80-1985 E requires that, "...Permits issued under this article shall be subject to such terms and conditions set forth in the permit as the board may deem necessary to ensure compliance with all applicable requirements of the regulations of the board..."

31. Condition No. 13 of the MACT Permit states in part, "Emissions from the operation of the CFB boilers shall not exceed the following limits:....

| Filterable Particulate Matter (PM) | 3-hour average | 0.010 Each boiler (lb/MMBtu) |

32. Condition No. 32 of the PSD Permit states in part, "Emissions from the operation of the CFB boilers shall not exceed the following limits:....

| Filterable Particulate Matter (PM) | 3-hour average | 0.010 Each boiler (lb/MMBtu) |
| Sulfur Dioxide | 3-hour average | 0.035 Each boiler (lb/MMBtu) |
| Sulfur Dioxide | 24-hour average | 0.029 Each boiler (lb/MMBtu) |
| Carbon Monoxide | 30-day rolling avg | 0.15d Each boiler (lb/MMBtu) |

b Start-up is defined as the period beginning with initial firing of distillate oil and ending at 40 percent of maximum load. Maximum load for each CFB boilers is considered to be 3,132 MMBtu/hr heat input. Shutdown is defined as the period beginning with the load decreasing from 40 percent and ending when the bed material fluidizing air has been discontinued. Emissions occurring during start-up and shutdown shall be monitored, recorded, reported and included in the calculation of the 24-hour rolling average, 30-day rolling average, and annual emissions rates, but not the 3-hour rolling average.

d Emission limit applies at loads equal to or greater than 75 percent of maximum load. Maximum load for each CFB boiler is considered to be 3,132 MMBtu/hr heat input. The emission limit for loads less than 75 percent is the 30-day load-weighted average expressed by the formula below. The emission limit loads equal to or greater than 75 percent is fixed at 0.15 lb/MMBtu, however, this limit is factored into the 30-day load-weighted average for loads less than 75 percent. The permittee shall calculate the 30-day weighted average emission limit for loads less than 75 percent using the following formula:....

e The permittee shall comply with the most stringent emission rate limitations as may be contained in this permit or any 9VAC 5-80 Article 7 permit in effect and applicable to this source."
33. On September 30, 2013, based on the review of the April 30, 2013 and August 1, 2013 reports submitted and the September 30, 2013 PCE, the Department issued a Notice of Violation No. ASWRO8795 to VCHEC for the violations described in paragraph C(24) through C(32), above.

34. On October 1, 2013, VCHEC submitted a telephone response to the NOV.

35. On November 7, 2013, Department staff met with representatives of VCHEC to discuss the violations.

36. On December 26, 2013, VCHEC submitted an application for a minor amendment to the permit and submitted a written response to the NOV.

37. On January 28, 2014, U.S. EPA Region 3 submitted a written response to VCHEC regarding review of the May 6, 2013 letter and approved the use of default value of 5% for CO$_2$ during periods of boiler startup and shutdown per guidance from the EPA Office of Air Quality Planning and Standards (OAQPS) memo dated December 16, 2013; additionally OAQPS approved the determination be retroactive to the startup of the facility (September 2012) and changes to the facility’s CEMS Quality Assurance/Quality Control plan with these modifications.

38. On May 2, 2014, DEQ issued a minor amendment to the permit which corrected the fuel oil storage tank capacity, revised the mercury monitoring specifications to reference current regulations and revised the CEMS operational requirements to reference the approved CEMS Quality Assurance/Quality Control plan.

39. On May 5, 2014, DEQ received revisions to the quarterly EERs for application of the 5% diluent cap for CO$_2$ – including 3$^{rd}$ Quarter 2012 through 4$^{th}$ Quarter 2013. These revisions were documented in the December 26, 2013 response to the NOV which detailed the incorporation of the 5% diluent cap for CO$_2$ in calculating continuously monitored pollutants and the resulting decrease in magnitude of the exceedances for CO and SO$_2$; and the decrease and subsequent elimination of the PM exceedances.

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Date Range</th>
<th>Pollutant</th>
<th>Duration</th>
<th>Avg Period</th>
<th>Max Value (lb/MMBtu)</th>
<th>Limit (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>10/20/12–10/20/12</td>
<td>CO</td>
<td>24 hours</td>
<td>36d limit</td>
<td>0.20</td>
<td>0.19</td>
</tr>
<tr>
<td>2</td>
<td>11/16/12–11/20/12</td>
<td>CO</td>
<td>120 hours</td>
<td>30d limit</td>
<td>0.20</td>
<td>0.18</td>
</tr>
<tr>
<td>2</td>
<td>4/12/13–4/12/13</td>
<td>SO$_2$</td>
<td>1 hour</td>
<td>3h limit</td>
<td>0.055</td>
<td>0.035</td>
</tr>
<tr>
<td>1</td>
<td>5/10/13–5/10/13</td>
<td>SO$_2$</td>
<td>1 hour</td>
<td>24h limit</td>
<td>0.049</td>
<td>0.029</td>
</tr>
<tr>
<td>1</td>
<td>5/15/13–5/16/13</td>
<td>SO$_2$</td>
<td>23 hours</td>
<td>24h limit</td>
<td>0.050</td>
<td>0.029</td>
</tr>
<tr>
<td>2</td>
<td>8/12/13–9/9/13</td>
<td>CO</td>
<td>696 hours</td>
<td>30d limit</td>
<td>0.20</td>
<td>0.13</td>
</tr>
</tbody>
</table>
On September 23, 2014, DEQ received revisions to the quarterly EERs — including 3rd Quarter 2012 through 2nd Quarter 2014. These revisions addressed erroneous data used by VCHEC in calculating the 30-day rolling average CO and NOx lbs/mmBtu emissions and the 30-day variable CO and NOx lbs/mmBtu limit which eliminated the CO exceedances.

Table 7: Amended Excess Emission Events per 9-23-14 EER reports

<table>
<thead>
<tr>
<th>CFB Unit</th>
<th>Date Range</th>
<th>Pollutant</th>
<th>Duration</th>
<th>Avg Period</th>
<th>Max Value (lb/MMBtu)</th>
<th>Limit (lb/MMBtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4/12/13–4/12/13</td>
<td>SO2</td>
<td>1 hour</td>
<td>3h limit</td>
<td>0.055</td>
<td>0.035</td>
</tr>
<tr>
<td>1</td>
<td>5/10/13–5/10/13</td>
<td>SO2</td>
<td>1 hour</td>
<td>24h limit</td>
<td>0.051</td>
<td>0.029</td>
</tr>
<tr>
<td>1</td>
<td>5/15/13–5/16/13</td>
<td>SO2</td>
<td>23 hours</td>
<td>24h limit</td>
<td>0.051</td>
<td>0.029</td>
</tr>
</tbody>
</table>

Condition No. 70e of the PSD Permit and Condition No. 29d of the MACT Permit state in part: “The permittee shall maintain records of emission data and operation parameters as necessary to demonstrate compliance with this permit...These records shall include, but are not limited to:

e. Emissions calculations, based on data from fuel analyses, stack tests and CEMS, for each CFB boiler and the auxiliary boilers using calculation methods approved by the Director, Southwest Regional Office, to verify compliance with the applicable emission limits in this permit...”

On October 7, 2014, Department staff met with representatives of VCHEC to discuss the violations.

On November 17, 2014, Department staff conducted a PCE for compliance regarding the submitted revised EERs for the period beginning September 1, 2012 and ending June 30, 2014 (3rd quarter 2012 EER through 2nd quarter 2014) with the requirements of the Virginia Air Pollution Control Law, the Permits, and the Regulations.

On November 21, 2014, Department staff conducted a PCE documenting failure of VCHEC to complete Visible Emission Evaluations for material handling equipment within 12 months following initial Visible Emission Evaluations performed July 2, 2012.

40 CFR 60.255(b)(2) requires that, “For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section...”

Based on the results of the April 8, 2013 PCE, the April 12, 2013 telephone response, the April 30, 2013 meeting, the May 6, 2013 correspondence to EPA, the August 20 & 23, 2013 telephone correspondence between DEQ and EPA, the September 30, 2013 PCE, the October 1, 2013 telephone response, and the
Virginia Electric and Power Company has violated Conditions 1, 17, 32 and 70 of the PSD Permit and Condition 13 and 29 of the MACT Permit, 9 VAC 5-50-50, 9 VAC 5-50-280, 9 VAC 5-50-410, 9 VAC 5-80-1180, 9 VAC 5-80-1470, 9 VAC 5-80-1705 B, and 9 VAC 5-80-1985E and 40 CFR 63.43(g) and 40 CFR 60.255(b)(2) as described in paragraphs C(2) through C(13), C(24) through C(32), C(40) through C(41) and C(43) through C(45), above.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1309 and -1316, the Board orders Virginia Electric and Power Company, and Virginia Electric and Power Company agrees to:

1. Pay a civil charge of $47,651 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier’s check payable to the “Treasurer of Virginia”, delivered to:

Receipts Control  
Department of Environmental Quality  
Post Office Box 1104  
Richmond, Virginia 23218

Virginia Electric and Power Company shall include its Federal Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF). If the Department has to refer collection of moneys due under this Order to the Department of Law, Virginia Electric and Power Company shall be liable for attorneys’ fees of 30% of the amount outstanding.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of Virginia Electric and Power Company for good cause shown by Virginia Power and Electric Company, or on its own motion pursuant to the Administrative Process Act Va. Code § 2.2-4000 et seq., after notice and opportunity to be heard.
2. This Order addresses only those violations specifically identified in Section C of this Order, NOV No. ASWRO8665 dated April 10, 2013 and NOV No. ASWRO8795 dated September 30, 2013. This Order shall not preclude the Board or Director from taking any action authorized by law, including, but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.

3. For purposes of this Order and subsequent actions with respect to this Order only, Virginia Power and Electric Company admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.

4. Virginia Power and Electric Company consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

5. Virginia Power and Electric Company declares it has received fair and due process under the Administrative Process Act and the Virginia Air Pollution Control Law, and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board or Director to modify, rewrite, amend, or enforce this Order.

6. Failure by Virginia Power and Electric Company to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.

8. Virginia Power and Electric Company shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond its control and not due to a lack of good faith or diligence on its part. Virginia Power and Electric Company shall demonstrate that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Virginia Power and Electric Company shall notify DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:
a. the reasons for the delay or noncompliance;
b. the projected duration of such delay or noncompliance;
c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition listed above, which the parties intends to assert will result in the impossibility of compliance, shall constitute waiver of any claim of inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees, and assigns, jointly and severally.

10. This Order shall become effective upon execution by both the Director or his designee and Virginia Power and Electric Company. Nevertheless, Virginia Power and Electric Company agrees to be bound by any compliance date, which precedes the effective date of this Order.

11. This Order shall continue in effect until:

a. The Director or his designee terminates the Order after Virginia Power and Electric Company has completed all of the requirements of the Order.

b. Virginia Power and Electric Company petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order, or

c. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to Virginia Power and Electric Company.

Termination of this Order, or of any obligation imposed in this Order, shall not operate to relieve Virginia Power and Electric Company from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by Virginia Power and Electric Company and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
13. The undersigned representative of Virginia Power and Electric Company certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind Virginia Power and Electric Company to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of Virginia Power and Electric Company.

14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.

15. By its signature below, Virginia Power and Electric Company, voluntarily agrees to the issuance of this Order.

And it is ORDERED this 4th day of April, 2015

[Signature]

Allen J. Newman, P.E., Regional Director
Department of Environmental Quality
Virginia Power and Electric Company voluntarily agrees to the issuance of this Order.

Date: 3/24/15 By: Edward H. Baine, Vice President Power Gen System Ops

Virginia Electric and Power Company

Commonwealth of Virginia
City/County of Henrico

The foregoing document was signed and acknowledged before me this 26th day of March, 2015 by Edward H. Baine who is Vice President of Virginia Electric and Power Company, on behalf of the corporation.

Amy Leigh Bowers
Notary Public

729 640 60
Registration No.
07/31/2017
My commission expires:

Notary Seal: