PACIFICORP
A BERKSHIRE HATHAWAY ENERGY COMPANY

January 22, 2019

Mr. Bryce Bird, Director
Utah Department of Environmental Quality
Division of Air Quality
195 North 1950 West
P.O. Box 144820
Salt Lake City, UT 84114-4820

RE: **Semiannual Compliance Report 40 CFR 63 SubPart UUUUU, Huntington Power Plant (Title V Permit #1501001004)**

Dear Mr. Bird:

Huntington Power Plant's Title V Permit Conditions II.B.2.g.3 and II.B.3.f.3 require the Huntington Plant submit Compliance Reports according to the requirements of 40 CFR §63.10031(b). This submittal covers the period from July 1, 2018 to December 31, 2018 and is intended to satisfy those requirements.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information, or omitting statements and information, including the possibility of fine or imprisonment.

Should you have any questions regarding this information, please contact Russell Willson, Huntington Power Plant Environmental Analyst at (435) 687-4331 or me at (435) 687-4211.

Sincerely,

Darrell Cunningham
Managing Director Huntington Plant
Responsible Official

Enclosures: Mercury and Air Toxics Semiannual Compliance Report with attachments A thru C – Unit 1

cc: Sara Loiacono – USEPA Region VIII w/enclosure
Dave Barnhisel- NTO w/o enclosure

Mercury and Air Toxics Semi-Annual Compliance Report
Huntington Power Plant Unit 1
Reporting Period July 1, 2018 to December 31, 2018

**§63.100031(c)**

The compliance report must contain the information required in paragraphs (c)(1) through (5) of this section.

§63.10031(c)(1)

The information required by the summary report located in 63.10(e)(3)(vi).

I. See Attachment A Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance

§63.10031(c)(2)

The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

| Month | #2 Fuel Oil Burned (gallons) | Bituminous Coal Burned (tons) |
|---|---|---|
| July 2018 | 2,159 | 126,185.2 |
| August | 11,133 | 127,387.9 |
| Sept | 538 | 74,127.5 |
| Oct | 36,267 | 14,525.9 |
| Nov | 77,168 | 74,817.3 |
| Dec | 20,458 | 135,523.9 |
| **Total** | | |

Note: Fuel Oil burned is a product of refineries and the coal burned is a product of coal mines therefore all fuel burned was not a waste product.

§63.10031(c)(3)

Indicate whether you burned new types of fuel during the reporting period. If you did burn new types of fuel you must include the date of the performance test where that fuel was in use.

I. No new types of fuel were burned during the reporting period.

§63.10031(c)(4)

Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in § 63.10021(e)(6) and (7) were completed.

I. The most recent boiler tune up was completed on December 11, 2018 with the burner inspection occurring as part of the tune-up.

§63.10031(c)(5)

Should you choose to rely on paragraph (2) of the definition of "startup" in §63.10042 for your EGU, for each instance of startup or shutdown you shall:

I. The Unit relies on paragraph (1) of the definition of "startup." Therefore, no startups or shutdowns in the current semi-annual reporting period are subject to this requirement.

§63.10031(c)(6)

You must report emergency bypass information annually from EGUs with LEE status.

I. No emergency bypass occurred during the reporting period.

§63.10031(c)(7)

A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If you are conducting stack tests once every 3 years to maintain LEE status, consistent with § 63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison of emission level you achieved in each stack test conducted during the previous 3 years to the 50 percent emission limit threshold required in § 63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions.

I. Unit 1 Annual Mercury LEE tests – summary results (lbs Hg/Tbtu)

| Test Completion Date | Mercury LEE Threshold | Actual Test Result |
|---|---|---|
| 9/13/2016 | 0.12 | .01 |
| 9/12/2017 | 0.12 | .01 |
| 9/11/2018 | 0.12 | .01 |

II. The Huntington Plant recently completed a three (3) consecutive year, quarterly PM testing period to quality Unit 1 as a PM Low Emitting EGU. Reference Method 5 was performed in accordance with §63.10005(h)(1)(i) to demonstrate PM emissions were less than fifty (50) percent of the applicable emission limit, 0.030 lb/MMBtu. The corresponding threshold for a LEE unit (50% of the applicable emission limit) is 0.015 lb/MMBtu. The test results show an average PM emission rate over the 3-year period of 0.005 lb/MMBtu, which qualifies Unit 1 as a LEE.

A summary report of the test results for the tree (3) year period is listed below:

| Huntington 1 PM LEE Test Summary | | | |
|---|---|---|---|
| Test ID | Test Date | Average PM (lb/mmBtu) | LEE Threshold |
| Q2 2015 | 5/12/2015 | 0.010 | 0.015 lb/mmBtu |
| Q3 2015 | 8/11/2015 | 0.007 | |
| Q4 2015 | 12/15/2015 | 0.004 | |
| Q1 2016 | 2/09/2016 | 0.005 | |
| Q2 2016 | 6/28/2016 | 0.006 | |
| Q3 2016 | 8/23/2016 | 0.004 | |
| Q4 2016 | 11/08/2016 | 0.005 | |
| Q1 2017 | 2/07/2017 | 0.006 | |
| Q2 2017 | 5/10/2017 | 0.003 | |
| Q3 2017 | 8/08/2017 | 0.004 | |

| | | | |
|---|---|---|---|
| Q4 2017 | 12/05/2017 | 0.011 | |
| Q1 2018 | 2/6/2018 | 0.004 | |
| 36 month Average | | 0.006 | |

§63.10031(c)(8)

A certification.

I. A signed certification by a Responsible Official is included in the cover letter of this submittal.

§63.10031(c)(9)

If you have a deviation from any emission limit, work practice standard, or operating limit, you must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation.

I. No deviations occurred during the reporting period.

§63.10031(d)

For each excess emissions occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in §63.10(e)(3)(v) in the compliance report specified in section (c).

§63.10(e)(3)(v)

All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §63.8(c)(7) and §63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

§63.10(c)(5)

The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

I. CEMS monitor unavailability can be found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(6)

The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

I. CEMS out of control periods can be found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(7)

The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

I. Excess emissions and monitor exceedances that occurred during startups, shutdowns, and malfunctions can be found in Attachment D Excess Emissions Report.

§63.10(c)(8)

The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

I. Excess emissions and monitor exceedances that occurred during period other than startups, shutdowns, and malfunctions can be found in Attachment C Excess Emissions Report.

§63.10(c)(10)

The nature and cause of any malfunction (if known);

I. Malfunctions nature and causes can be found in the Attachment C Excess Emission Report.

§63.10(c)(11)

The corrective action taken or preventive measures adopted;

I. The corrective actions taken or preventive measures adopted as a result of malfunctions can be found in Attachment C Excess Emission Report.

§63.10(c)(12)

The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

I. The nature of repairs or adjustments to CMS is found in Attachment B CEMS Monitor Outage Report.

§63.10(c)(13)

The total process operating time during the reporting period;

I. Total process operating time during reporting period can be found in section (H) of Attachment A Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance.

§63.10031(e)

Each affected source that has obtained a Title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to this subpart along with, or as part of, the

semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

I. Any Deviations to emissions limits are identified in Attachment C Excess Emission Report
II. There are no operating limits associated with compliance to the Mercury and Air Toxics Standards for this Unit.
III. There were no deviations related to the Work Practice Standard related to Boiler Tune Up requirements.
IV. CMS were in service during all phases of operation including startup according to the required Work Practice Standard except for periods identified in Attachment B CEMS Monitor Outage Report.
V. Clean fuel was burned during each startup as required by the Work Practice Standard.

§63.10031(g)

If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded.

I. Malfunctions during the reporting period are identified in Attachment C Excess Emissions Report

# Attachment A

## Summary Report—Gaseous Excess Emission and Continuous Monitoring System Performance

**§63.10(e) (3) (vi) Summary Report**

(A) The company name and address of the affected source;

I. Huntington Power Plant, 6 miles west of Huntington Utah on Hwy 31
P.O. Box 680
Huntington, Utah 84528

(B) An identification of each hazardous air pollutant monitored at the affected source;

I. Non-Mercury HAPS metal using a quarterly Filterable particulate matter (PM) stack test as a surrogate to demonstrate compliance. On April 3, 2018, the Utah Division of Air Quality agreed that Huntington Unit 1 met the requirements to qualify as a PM Low Emitting EGU (LEE) unit. The Huntington Plant had submitted a summary table showing three years' worth of quarterly test data. Each particulate matter (PM) testing result was below one-half of the 0.030 lb/MMBtu limit or 0.015 lb/MMBtu as required by the subpart.
II. Acid Gases using Sulfur dioxide ($SO_2$) as a surrogate to demonstrate compliance by an $SO_2$ continuous emission monitor system (CEMS)
III. Mercury (Hg), compliance demonstrated by an annual EPA Method 30 B, sorbent trap test to re-confirm Low Emitting Electrical Generating Unit (LEE) status

(C) The beginning and ending dates of the reporting period;

I. This report covers the reporting period from July 1, 2018 to December 31, 2018.

(D) A brief description of the process units;

I. Unit 1 is an Electric Utility Steam Generating Unit, designed as a bottom tangentially-fired boiler, designed by Babcock & Wilcox.
II. Rated Heat Input Capacity (mmBtu/hr) of 4,960 MMBtu/hr.
III. The unit is equipped with the following add-on controls
    a. Pulse Jet Fabric Filter (baghouse)
    b. Wet Flue Gas Desulfurization (wet scrubber)
    c. LowNOx burner technology, w/Separated overfire air
IV. Fuels used are bituminous coal and #2 fuel oil for startup fuel when needed.

(E) The emission and operating parameter limitations specified in the relevant standard(s);

I. Taken from Table 2 to Subpart UUUUU of Part 63 – Emission Limits

Unit 1 is an existing unit in the coal-fired not low rank virgin coal subcategory demonstrating compliance with the following emission limits:

i. Filterable particulate matter (PM) quarterly stack testing demonstrating compliance with 3.0E-2 lb/MMBtu (0.030 lb/MMBtu) emission limit. April 3, 2018, the Utah Division of Air Quality agreed that Huntington Unit 1 met the requirements to qualify as a PM Low Emitting EGU (LEE) unit. The Huntington Plant had submitted a summary table showing three years' worth of quarterly test data. Each particulate matter (PM) testing result was below one-half of the 0.030 lb/MMBtu limit or 0.015 lb/MMBtu as required by the subpart.

ii. Sulfur dioxide ($SO_2$) continuous emission monitor system (CEMS) reporting hourly averages in units of lb/mmBtu, as a surrogate for acid gases demonstrating compliance with a 30 boiler operating day average of 2.0E-1 lb./MMBtu (0.20 lb./mmBtu).

iii. Mercury (Hg) – Annual EPA Method 30B sorbent trap test reporting hourly averages in units of lb/Tbtu demonstrating compliance with a 30 boiler operating day average of 1.2E0 lb/Tbtu (1.2 lb./Tbtu).

(F) The monitoring equipment manufacturer(s) and model number(s);

| Pollutant | Manufacture | Model Number |
|---|---|---|
| Sulfur Dioxide ($SO_2$) | Thermo | 43i |
| Carbon Dioxide ($CO_2$) | Thermo | 410i |

Note: CO2 analyzer used as a diluent monitor for calculating Heat Input Based Emission Limits

(G) The date of the latest CMS certification or audit;

| CEMS Analyzer | Latest RATA Date | Latest Linearity Date |
|---|---|---|
| Sulfur Dioxide ($SO_2$) | 11/8/2018 | 11/14/2018 |
| Carbon Dioxide ($CO_2$) | 11/8/2018 | 10/31/2018 |

Note: The SO2 and $CO_2$ analyzers were certified for reporting under the Acid Rain Program prior to the initial compliance date of April 16, 2015.

(H) The total operating time of the affected source during the reporting period;

| Operating Period | Hours of Unit Operation |
|---|---|
| 7/1/2018 to 9/30/2018 3rd Quarter | 1951.06 |
| 10/1/2018 to 12/31/2018 4th Quarter | 1301.36 |
| **Total Operating time from 7/1/2018 to 12/31/2018** | **3252.42** |

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess

emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

| Excess Emissions Summary | PM | $SO_2$ | Hg |
|---|---|---|---|
| Total Hours of Exceedance | 0 | 0 | 0 |
| Exceedance percent of total operating hours | 0.0 | 0.0 | 0.0 |
| Hours during startup and shutdown | 0 | 0 | 0 |
| Hours during control equipment problems | 0 | 0 | 0 |
| Hours during process hours | 0 | 0 | 0 |
| Hours during other know problems | 0 | 0 | 0 |
| Hours during unknown causes | 0 | 0 | 0 |
| Emission Limit | 0.030 | 0.20 | 1.2 |
| Emission Limitation Unit | lb/MMBtu | lb/MMBtu | Lb/TBtu |
| Emission limitation averaging period | Quarterly Stack Testing | 30 boiler operating day | 30 boiler operating day |

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

| CMS Performance Summary | $SO_2$ |
|---|---|
| Downtime percent of total operating hours | 0.47% |
| Total hour of CMS downtime | 8.0 |
| Hours due to monitoring equipment malfunctions | 0 |
| Hours due to non-monitoring equipment malfunctions | 0 |
| Hours due to quality assurance/quality control calibrations | 0 |
| Hours due to other known causes | 8.0 |
| Hours due to other unknown causes | 0 |

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

U1 gas umbilical line was replaced. RATA and re-certification was sent to UDEQ on 12/19/2018.

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

Darrell J Cunningham
Responsible Official
Managing Director – Huntington Power Plant

(M) The date of the report.

Date: 1/23/19

Attachment B CEMS Monitor Outage Report

**Sulfur Dioxide ($SO_2$) System Monitor Outage (lb/MMBtu)**

| Monitor Outage Incident Number | Date | Time Beginning | Time Ending | Hours Involved | Out of Control (Y / N) | Cause* | Corrective * Action |
|---|---|---|---|---|---|---|---|
| 1 | 7/12/2018 | 17:00 | 18:59 | 2 | N | 724 | b |
| 2 | 10/27/2018 | 16:00 | 20:59 | 5 | N | 724 | t |
| 3 | 11/26/2018 | 10:00 | 10:59 | 1 | Y | 724 | m |

Total duration of monitor downtime ___8_____ hours

Description of Causes/Corrective Actions.

| | |
|---|---|
| *Cause: 724 | Hours due to other known causes |
| *Corrective Action: b | Maintenance of another monitor required normal sampling to be interrupted. The system was returned to service following the maintenance. |
| *Cause: 724 | Hours due to other known causes |
| *Corrective Action: t | Monitor was unavailable due to the change out of the umbilical line. Monitor became available after the completion of the first qualifying calibration. |
| *Cause: 724 | Hours due to other known causes |
| *Corrective Action: m | Monitor was not calibrated timely after startup of unit after outage. Calibration followed and system restored. |

# Attachment C

## Excess Emissions Report

**PM Excess Emissions**
0.030 lb/MMBtu (Quarterly Stack Testing)

| Excess Emission Incident Number | Magnitude of Excess Emissions lb/MMBtu | Date | Time Beginning | Time Ending | Hours Involved | Malfunction Y/N | Cause | Corrective Action |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**Total time for all excess emissions _0.0_ hours**
**Total time for excess emissions occurring during startup/shutdown or malfunction _0.0_ hours**

**Malfunction reason and corrective /preventive action taken)**

No PM Excess Emissions occurred during the reporting period
No PM Malfunction occurred during the reporting period

**$SO_2$ Excess Emissions**
0.20 lb/MMBtu (30 Boiler Operating Day Average)

| Excess Emission Incident Number | Magnitude of Excess Emissions lb/MMBtu | Date | Time Beginning | Time Ending | Hours Involved | Malfunction Y/N | Cause | Corrective Action |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**Total time for all excess emissions _0.0_ hours**
**Total time for excess emissions occurring during startup/shutdown or malfunction _0.0_ hours**

**Malfunction reason and corrective /preventive action taken)**

No $SO_2$ Excess Emissions occurred during the reporting period
No $SO_2$ Malfunction occurred during the reporting period

**Hg Excess Emissions**
1.2 lb/TBtu (30 Boiler Operating Day Average)

| Excess Emission Incident Number | Magnitude of Excess Emissions lb/MMBtu | Date | Time Beginning | Time Ending | Hours Involved | Malfunction Y/N | Cause | Corrective Action |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**Total time for all excess emissions _0.0_ hours**
**Total time for excess emissions occurring during startup/shutdown or malfunction _0.0_ hours**

**Malfunction reason and corrective /preventive action taken)**

No Hg Excess Emissions occurred during the reporting period
No Hg Malfunction occurred during the reporting period