

Puget Sound Energy P.O. Box 97034 Bellevue, WA 98009-9734 pse.com

December 17, 2024

#### **BY U.S. MAIL AND EMAIL**

Lynette Haller, P.E. Central Regional Air Quality Program Department of Ecology 1250 West Alder Street Union Gap, WA 98903-0009 (509) 575-2490

# **Re:** Goldendale Generating Station Notice of Construction Modification and Title V Revision

Dear Ms Haller,

Puget Sound Energy, Inc. (PSE) owns and operates the Goldendale Generating Station (Goldendale) in Goldendale, Washington. Goldendale is a combined cycle natural gas-fired electrical generating facility consisting of a combustion gas turbine-driven generator and a steam turbine-driven generator. Goldendale received a Notice of Construction (NOC) Approval Order (01AQCR-2037 Sixth Revision) on November 6, 2017 for full use of the uprate package installed on the existing turbine in 2016 and approved in Order No. 01AQCR-2037 Fifth Revision. The facility operates under the Washington State Department of Ecology (Ecology) Air Operating Permit (AOP) No. 19AQ-C232, issued on June 26, 2019.

This letter requests amendments to PSE's 01AQCR-2037 NOC Approval Order and AOP 19AQ-C232 to reflect new or updated applicable regulations under Title 40 of the Code of Federal Regulations (CFR).

#### Background

The facility is a nominal 297 megawatt (MW) combined-cycle electric generating facility which includes the emission units listed in the table below. NOC Approval Order 01AQCR-2037 was issued for installation of a combustion turbine uprate project to increase electrical generation through increased efficiency and fuel usage.

Emission Unit	Rating	Manufacturer	Model
Combustion Turbine	207 MW	General Electric	7FA.04
Duct Burner	278 MMBtu/hr	Coen	9540-13728-1
Emergency Generator	635 bhp	Detroit Diesel	6063KH35
Fire Pump	412 bhp	Detroit Diesel	DDFP-06FA

The subsequent Title V operating permit retained two 40 CFR Part 60 New Source Performance Standards (NSPS): Subpart GG (Standards of Performance for Stationary Gas Turbines) for the turbine and Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) for the duct burner. However, due to the increase in hourly emissions as a result of the uprate project, the turbine and duct burner are considered modified units, and Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) is applicable. Therefore, PSE is submitting this modification application to incorporate the applicable requirements of Subpart KKKK.

PSE would also like to take this opportunity to update the NOC Approval Order and AOP to reflect current regulations, current common practices, and improve consistency and clarity as follows:

- Update conditions related to the most recent adopted regulations under Title 40 CFR Part 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants [NESHAP] for Stationary Reciprocating Internal Combustion Engines) for the emergency generator and fire pump.
- Update sulfur monitoring conditions to match current common practices.
- Clarify the combined generating capacity calculation.
- Use consistent and appropriate terminology for the emission units throughout the permits.

Ecology is currently reviewing the Title V renewal application for the facility's AOP No. 19AQ-C232 and it is PSE's understanding that the requested modifications and associated conditions from the NOC will be incorporated into the facility's renewed Title V permit. Therefore, a separate Title V revision application will not be submitted.

#### **Requested Permit Revisions**

The revisions requested in this letter are limited to updated applicability to compliance, recordkeeping, and reporting requirements for NSPS Subpart KKKK and NESHAP Subpart ZZZZ. None of the requested changes affects the facility's emissions estimations, stack parameters, or air dispersion calculations. The current Approval Order permit condition, proposed revisions to the condition, and explanation for the requested revisions is provided in detail below and summarized as follows:

- Condition 1.0 Laws and Regulations
  - Replace references to NSPS Subpart Da and NSPS Subpart GG with NSPS Subpart KKKK
- Condition 4.1.1 and 7.4 Generating Capacity Limits
  - Clarify that generating capacity is based on a 12-month rolling average, not calendar-year basis.
- Condition 4.1.3 Standby Generation Limits
  - Revise to show 100 hours per calendar year for the backup generator and the firewater diesel pump for testing and maintenance activities per NESHAP Subpart ZZZZ.
  - Revise the oil and filter change frequency from 12-months to 12-months + 30 days.
- Condition 6.3 Sulfur monitoring
  - Replace the sulfur monitoring options with current practice consistent with NSPS and Part 75.
- Condition 7.11 and 7.14 Records
  - $\circ$   $\;$  Replace reference to Subpart Da and GG with Subpart KKKK.

- Global
  - Ensure the correct term is used in each condition for the applicable emission unit: combined-cycle, combustion turbine, and duct burner.

The corresponding conditions that need to be reviewed for AOP No. 19AQ-C232 are contained in Attachment A.

## Addition of Title 40 CFR Part 60 Subpart KKKK

PSE operates a combined cycle combustion turbine for power generation with a 278 million British thermal unit per hour (MMBtu/hr) duct burner. Both the turbine and duct burner exhaust out of the same stack equipped with a selective catalytic reduction device and an oxidation catalyst. PSE installed a combustion turbine uprate project to increase electrical generation through increased efficiency and fuel usage which completed construction in June 2016. The turbine uprate project resulted in an emission rate increase on an hourly basis for specific pollutants. An application was submitted for the turbine uprate project resulted in a short-term emission rate increase, which is considered a modification under NSPS (§60.14). Since the turbine has a heat input at peak load equal to or greater than 10 MMBtu/hr and was modified after February 18, 2005, the turbine is subject to Subpart KKKK. Note, the monitoring and performance testing requirements under Subpart GG and Subpart Da are identical to Subpart KKKK.

Pursuant to Subpart KKKK, the turbine must meet the nitrogen oxides (NO<sub>X</sub>) and sulfur dioxide (SO<sub>2</sub>) emission limits as described in §60.4320 and §60.4330 of the subpart, respectively. Specifically, PSE's turbine must meet 15 ppm NO<sub>X</sub> at 15 percent O<sub>2</sub> or 54 ng/J of useful output (0.43 lb/MWh) for modified turbines firing natural gas, 96 ppm NO<sub>X</sub> at 15 percent O<sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh) for turbines operating at less than 75 percent of peak load, and an SO<sub>2</sub> limit of 0.060 lb SO<sub>2</sub>/MMBtu heat input.

To monitor NO<sub>x</sub> concentrations, the stack is currently equipped with a NO<sub>x</sub> CEMS that was installed for the purpose of demonstrating compliance with Subpart Da, Subpart GG, 40 CFR Part 75 Acid Rain Program and Approval Order Condition 6.2. Therefore, PSE will use this existing NO<sub>x</sub> CEMS, which is already certified, operated, and maintained in accordance with the requirements of Subpart KKKK (§60.4345 and §60.4350) and 40 CFR Part 75 Acid Rain Program, to demonstrate compliance with the NO<sub>x</sub> emission limit. Using the CEMS data, PSE will calculate the hourly average NOx emission rates, in units of the emission standards (ppm for units complying with the concentration limit or the equation in §60.4350(f)(2) for complying with the output-based standard) and the 30-day rolling averaging methodology in §60.4380.

To comply with the  $SO_2$  standard, PSE will opt to provide a valid purchase contract or tariff sheet containing the fuel quality characteristics specifying that the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet (§60.4365).

PSE will be subject to submitting semi-annual reports of excess emissions and monitor downtime, in accordance with 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. In addition, PSE will monitor periods of missing data as described

in §60.4380(b)(2) and will report when missing data substitution procedures in Subpart D or Part 75 are applied, which are to be reported as monitor downtime in the semi-annual report. Similar requirements are already contained in the AOP for compliance with Subpart GG and Subpart Da.

Although Subpart KKKK was not addressed in PSE's AOP, PSE complied with all the requirements including initial notifications (both subparts refer to general notification requirements in §60.7), testing, and emission limits. A demonstration of the compliance status with Subpart KKKK is provided in the following list:

- PSE submitted all notifications required under Subpart A §60.7
  - Notice of modification due 60 days before change is commenced (60.7(a)(4)) submitted on March 22, 2016.
  - Notice of commencement of construction of the affected facility due 30 days after construction commenced (60.7(a)(1)) submitted on June 14, 2016.
  - Notice of startup within 15 days after such date (60.7(a)(3)) submitted on July 20, 2016.
  - Notification of intent to certify CEMS 30 days prior (60.7(a)(5)) submitted on June 15, 2016. Certification conducted July 19 and 20, 2016; second certification test conducted on September 8, 2016.
- Initial and subsequent performance tests
  - Initial performance tests (60 days after achieving max production rate, but no later than 180 days after initial startup) conducted July 19 and 20, 2016 and September 8, 2016.
  - Subsequent performance tests (annually but no later than 14 months from the previous test) have been done annually in accordance with the current permit.
  - Performance testing has been performed using Method 7E and other testing requirements under §60.4400.
- NO<sub>X</sub> emission limits
  - $\circ~$  PSE has installed, maintained and operated a NO\_X CEMS in compliance with applicable requirements of Subpart KKKK and 40 CRR Part 75 Acid Rain Program.
  - PSE has verified that the 30-day rolling average is below the Subpart KKKK NO<sub>X</sub> emission limit including startup and shutdown through analysis of the historical CEMS data and the calculations outlined in  $\S60.4380(b)(1)$  and (3).
- Fuel sulfur limits
  - PSE maintains a tariff sheet certifying the total sulfur content is less than 20 grains of sulfur per 100 standard cubic feet.

A proposed redline of the NOC conditions is provided in the following table. Added text is shown in <u>red</u>, and removed text is shown in <del>strikeout</del>. We have provided suggested permit language to add to the AOP in Attachment A of this letter.

#### **NOC Approval Order Redline**

Condition	Current Language	Proposed Revision
1.0	<ul> <li>Laws and Regulations</li> <li>In addition to state laws and regulations, the source shall comply with all applicable requirements, including those specified in Title 40 Code of Federal Regulations (CFR):</li> <li>Part 60, Subpart Da- Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</li> <li>Part 60, Subpart GG- Standards of Performance for Stationary Gas Turbines.</li> <li>Part 63, Subpart ZZZZ- National Emissions Standards for Hazardous Air</li> <li>Pollutants for Stationary Reciprocating Internal Combustion Engines</li> <li>Part 72 - (Acid Rain) Permits Regulation</li> <li>Part 73 - (Acid Rain) Sulfur Dioxide Allowance System</li> <li>Part 75 - (Acid Rain) Continuous Emission Reduction Program</li> </ul>	<ul> <li>Laws and Regulations</li> <li>In addition to state laws and regulations, the source shall comply with all applicable requirements, including those specified in Title 40 Code of Federal Regulations (CFR):</li> <li>Part 60, Subpart Da Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978</li> <li>Part 60, Subpart GG Standards of Performance for Stationary Gas Turbines-</li> <li>Part 60, Subpart KKKK - Standards of Performance for Stationary Gas Turbines-</li> <li>Part 60, Subpart KKKK - Standards of Performance for Stationary Gas Turbines-</li> <li>Part 63, Subpart ZZZZ- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</li> <li>Part 72 - (Acid Rain) Permits Regulation</li> <li>Part 73 - (Acid Rain) Sulfur Dioxide Allowance System</li> <li>Part 76 -Acid Rain Nitrogen Oxides Emission Reduction Program</li> </ul>
7.11	Records shall be kept as required under 40 CFR Part 60, Subparts Da and GG, and 40 CFR Parts 72, 73, 75, and 76.	Records shall be kept as required under 40 CFR Part 60, Subpart <del>s Da and GG <u>KKKK</u>, and 40 CFR Parts 72, 73, 75, and 76.</del>
7.14	Reporting required by 40 CFR Part 60, Subparts Da and GG; 40 CFR Parts 72, 73, 75, and 76, shall be submitted to Ecology and EPA.	Reporting required by 40 CFR Part 60, Subpart <del>s Da and GG <u>KKKK</u>; 40 CFR Parts 72, 73, 75, and 76, shall be submitted to Ecology and EPA.</del>

#### **Generation Capacity Limits**

NOC Condition 7.4 specifies that net power generation should be calculated and averaged "over the most recent 12 month period, monthly." Ecology has confirmed that the calculation should be based on a 12-month rolling average and Condition 4.1.1 should be amended to reflect this. A proposed redline of the NOC conditions is provided in the following table. Added text is shown in <u>red</u>, and removed text is shown in <u>strikeout</u>. Corresponding edits to AOP Condition 3.4.7 are provided in Attachment A.

#### **NOC Approval Order Redline**

Condition	Current Language	Proposed Revision
4.1.1	The combined-cycle unit shall be limited to a combined calendar-year average generating capacity of 297 MW, measured using maximum continuous electric generating capacity, less minimum auxiliary load, at average ambient temperature and pressure.	The combined-cycle unit shall be limited to a combined calendar-year <u>12-month</u> average generating capacity of 297 MW, measured using maximum continuous electric generating capacity, less minimum auxiliary load, at average ambient temperature and pressure.
7.4	A daily log shall be kept of the gross-power generation and of the auxiliary load. The net-power generation (gross-power generation, less the auxiliary load) shall be calculated and averaged monthly, over the most recent 12-month period, at average ambient temperature and pressure.	A daily log shall be kept of the gross-power generation and of the auxiliary load. The net-power generation (gross-power generation, less the auxiliary load) shall be calculated and averaged monthly, over the most recent 12-month period determined on a 12-month rolling average calculated on a monthly basis, at average ambient temperature and pressure.

#### **Sulfur Monitoring**

NOC Condition 6.3 specifies requirements to monitor the sulfur content of the fuel combusted in the combined cycle unit. PSE is currently complying with this condition through the second of the listed options (Condition 6.3.2) by conducting periodic on-site gas sampling and daily total sulfur values posted by Williams (the supplier of natural gas to the plant). While this sort of continuous monitoring was important when the permit was originally issued due to spikes in sulfur content, the natural gas supply consistently meets the definition of "pipeline quality natural gas" with a sulfur content less than 20 grains per 100 standard cubic feet (gr/100scf) which is specified in Williams' tariff sheet. Furthermore, PSE collects fuel sampling data as specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75. Both methods (tariff sheet or Part 75 sampling) are allowed for initial and continuous compliance demonstrations under NSPS Subpart KKKK per §60.4365 and §60.4415(a)(1). A proposed redline of the NOC conditions is provided in the following table. Added text is shown in red, and removed text is shown in strikeout. We have provided suggested permit language to add to the AOP in Attachment A of this letter.

#### **NOC Approval Order Redline**

Condition	Current Language	Proposed Revision
6.3	<ul> <li>6.3 The Permittee shall monitor the sulfur content of the fuel being fired in the combined-cycle unit. This requirement may be satisfied by employing either of the following conditions:</li> <li>6.3.1 Sulfur content shall be monitored daily with an on-site total-sulfur analyzer.</li> <li>6.3.2 Sulfur content shall be monitored by periodic on-site gas sampling and use of offsite daily total-sulfur analyzer monitoring of each potential gas source.</li> </ul>	<ul> <li>6.3 The Permittee shall monitor demonstrate the sulfur content of the fuel being fired in the combined-cycle unit has a total sulfur content of 20 grains or less per 100 standard cubic feet. This requirement may be satisfied by employing either of the following conditions:</li> <li>6.3.1 Sulfur content shall be monitored daily with an on site total sulfur analyzer. Use the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel.</li> </ul>
		6.3.2 Sulfur content shall be monitored by periodic on-site gas sampling and use of off- site daily total-sulfur analyzer monitoring of each potential gas source. Use representative fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75.

#### **Revisions to Title 40 CFR Part 63 Subpart ZZZZ**

PSE is subject to Subpart ZZZZ which is addressed in Conditions 3.5 and 3.6 of the AOP for PSE's backup generator and firewater pump engine, respectively. PSE's AOP contains conditions limiting the backup generator and firewater diesel pump to 500 hours per rolling 12-month period of operation, regardless of if the operation is for emergencies or non-emergencies. However, pursuant to §63.6640(f)(2), emergency stationary reciprocating internal combustion engines (RICE) are allowed a maximum of 100 hours per calendar year for maintenance and testing as described in (63.6640(f))(2). Additionally, per §63.6640(f)(4), emergency stationary RICE located at area sources of hazardous air pollutants (HAP) (Goldendale is an area source of HAP), may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operations in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided under §63.6640(f)(2). Except as provided in §63.6640(f)(4)(i) and §63.6640(f)(4)(ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility through connection to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Therefore, we recommend that Ecology change the 500hour limit for all operations and incorporate the requirement under Subpart ZZZZ to limit the backup generator and firewater pump engine each to 100 hours of non-emergency operations per calendar

year. A proposed redline of the NOC conditions is provided in the following table. Added text is shown in <u>red</u>, and removed text is shown in <del>strikeout</del>. We have provided suggested revisions to the AOP in Attachment A of this letter.

#### **NOC Approval Order Redline**

Condition	Current Language	Proposed Revision
4.1.3	The backup generator and firewater diesel pump shall each be limited to 500 hours per rolling 12-month period of operation. The Permittee shall operate the backup generator and firewater pump only as needed for maintenance and to provide emergency power or fire suppression water.	The backup generator and firewater diesel pump may operate without limit in response to emergency situations and shall each be limited to 500 100 hours per rolling 12 month period of operation calendar year for maintenance and testing. The Permittee shall otherwise only operate the backup generator and firewater pump only as needed for maintenance and to provide emergency power or fire suppression water. The permittee shall be limited to 50 hours of use towards non-emergency situations. This 50 hours cannot be used for peak shaving or demand response and is counted toward the 100 hours per calendar year for maintenance and testing.

\* \* \*

A redline edit of both the NOC and AOP are attached for your convenience. Please do not hesitate to contact me if you have any questions regarding this submittal.

Sincerely,

Deste Cribe Patter

Dustin Cornidez-Pittman

#### Attachments

Attachment A – Notice of Construction Redline Attachment B – Air Operating Permit Redline Attachment C – Notice of Construction Form

cc (by email): Eri Ottersburg, Ramboll

## Attachment A Notice of Construction Redline

State of Washington Department of Ecology Notice of Construction Approval Order

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In the matter of approving a new air contaminant source at Goldendale Generating Station Order No. 0IAQCR-2037 Sixth-Seventh Revision

## To: Goldendale Generating Station 600 Industrial Way Goldendale, WA 98620

## **Project Summary**

Puget Sound Energy's Goldendale Generating Station, herein referred to as the Permittee, is a nominal 297 megawatt (MW) combined-cycle electric generating facility which includes: a natural-gas fired combustion turbine; a steam turbine; a natural-gas fired duct burner; a heat recovery steam generator (HRSG); media for selective catalytic reduction (SCR); and an oxidation catalyst installed in the HRSG. Additional emission units include a diesel engine, to start automatically should a demand for water for fire suppression occur simultaneously with a loss of electric power, and a diesel backup generator, to supply critical electrical loads during emergency situations.

This revision approves the full utilization of a combustion turbine uprate package, including the physical-hardware update installed in 2016. The uprate package enables increased electrical generation, through increased efficiency and an increase in fuel usage.

Goldendale Generating Station is located within the City of Goldendale in Washington, within the SE 1/4 of the SW 1/4 and the SW 1/4 of the SE 1/4 of Section 20, Township 4 North, Range 16 East, Willamette Meridian, Klickitat County.

Legal Authority:

- The emission units installed at Goldendale Generating Station, originally permitted on February 23, 2001, qualified as new sources of air contaminants under WAC 173-400-110, November 22, 2000, and a new source of toxic air pollutants under WAC 173-460-040, July 21, 1998.
- An increase of the sulfur dioxide emission limits, permitted on August 22, 2003, qualified as a new source of air contaminants under WAC 173-400-110, July 11, 2002.
- Revision of conditions pertaining to generating capacity, monitoring of fuel nitrogen content, flow monitoring, addition of a shutdown exemption, operating load restrictions, and specification of the number of allowed startups was permitted on January 13, 2005. These changes qualified as revision of a source of air contaminants under WAC 173-400-110, July 11, 2002.

- Increases of the ammonia emission limits were permitted on May 10, 2011 and again on December 12, 2011. These changes qualified as new sources of toxic air pollutants under WAC 173-460-040, May 20, 2009.
- Increased combined-cycle generation emissions, associated with full use of an uprate package permitted on May 5, 2016 and installed that same year, qualified as a new source of air contaminants under WAC 173-400-110, November 28, 2012, and a new source of toxic air pollutants under WAC 173-460-040, May 20, 2009.

This Order supersedes Order No. 01AQCR-2037 Fifth-Sixth Revision; Order No. 01AQCR-2037 Fifth-Sixth Revision, is no longer in effect.

It is Ordered that the Permittee is subject to the following conditions:

## **Approval Conditions**

## 1.0 Laws and Regulations

In addition to state laws and regulations, the source shall comply with all applicable requirements, including those specified in Title 40 Code of Federal Regulations (CFR):

- Part 60, Subpart Da Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978
- Part 60, Subpart GG- Standards of Performance for Stationary Gas Turbines
- Part 60, Subpart KKKK Standards of Performance for Stationary Combustion <u>Turbines</u>
- Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- Part 72 (Acid Rain) Permits Regulation
- Part 73 (Acid Rain) Sulfur Dioxide Allowance System
- Part 75 (Acid Rain) Continuous Emission Monitoring
- Part 76 Acid Rain Nitrogen Oxides Emission Reduction Program

## 2.0 **Emission Units**

The following emissions units are approved in this Order:

<b>Emissions Unit</b>	Rating	Manufacturer	Model
Gas Combustion Turbine	207MW	General Electric	7FA.04
Duct Burner	278 MMBtu/hr	Coen	9540-13728-1
Emergency Generator	635 bhp	Detroit Diesel	6063HK35
Fire Pump	412 bhp	Detroit Diesel	DDFP-06FA

## Page 3 of 10

### 3.0 **Potential Emissions**

The units listed in Section 2 may produce up to the following combined emissions:

Pollutant	Combined	Emergency	Fire	Unit <sup>a</sup>
	Cycle	Generator	Pump	
	Turbine			
Carbon monoxide (CO)	82.3	0.90	0.50	tpy
Nitrogen oxides (NO <sub>X</sub> )	70.2	4.15	2.33	tpy
Particulate matter (PM <sub>10</sub> )	42.9	0.29	0.17	tpy
Sulfur dioxide (SO <sub>2</sub> )	30	0.27	0.15	tpy
Volatile organic compounds (VOC)	15.1	0.34	0.19	tpy
toxic air pollutants (TAPs) <sup>b</sup>				
1,3-Butadiene	7.89	0.027	0.015	lb/yr
Acetaldehyde	3,091	0.523	0.293	lb/yr
Acrolein	117	0.063	0.035	lb/yr
Ammonia (NH <sub>3</sub> )	115,010			lb/yr
Benzene	321.6	0.637	0.356	1b/yr
Ethylbenzene	587			
Formaldehyde	13,000	0.805	0.450	lb/yr
Naphthalene	23.8	0.058	0.032	lb/yr
Polycyclic aromatic hydrocarbons	40.3	0.115	0.065	lb/yr
Propylene oxide	532			lb/yr
Sulfuric acid	40,300			lb/yr

<sup>a</sup> tpy = tons per year, lb/yr = pounds per year

<sup>b</sup> TAPs with potential-to-emit in excess of their respective Small Quantity Emission Rate, as listed in WAC 173-460-150, May 20, 2009. NO<sub>X</sub> and SO<sub>2</sub> TAP emissions grouped with the criteria pollutants.

### 4.0 **Operational Limitations**

#### 4.1 **Production Limits**

- 4.1.1 The combined-cycle unit shall be limited to a <u>12-monthcombined</u>calendar-year average generating capacity of 297 MW, measured using maximum continuous electric generating capacity, less minimum auxiliary load, at average ambient temperature and pressure.
- 4.1.2 Use of the duct burners, herein referred to as "peak-load" operations, shall be no more than 5,250 hours per rolling 12-month period. Combined-cycle unit operations without use of the duct burner are herein referred to as "base-load" operation.
- 4.1.3 The backup generator and firewater diesel pump may operate without limit in response to emergency situations and shall each be limited to 500-100 hours per calendar year for maintenance and testingrolling 12-month period of operation. The Permittee shall otherwise only operate the backup generator and firewater pump only as needed for-maintenance and to provide emergency power or fire suppression water. The permittee shall be limited to 50 hours of use towards non-emergency situations. Thisese 50 hours cannot be used for peak shaving or demand response and is counted toward the 100 hours per calendar year for maintenance and testing.

## 4.2 Equipment Restrictions

- 4.2.1 The <u>combined cycle unitcombustion turbine</u> shall operate at a load no less than the minimum load demonstrated, by prior Ecology approved source test(s), to meet all of the conditions of this Order.
- 4.2.2 No fuel other than natural gas shall be combusted in the combined-cycleunitcombustion turbine and duct burner.
- 4.2.3 The <u>combustion turbine and duct burner</u> <u>combined-cycle unit</u> shall operate only when the selective catalytic reduction (SCR) unit is operating in good order.
- 4.2.4 The <u>combustion turbine and duct burner combined cycle unit</u> shall operate only when the heat recovery steam generator (HRSG) oxidation catalyst is in good operating order.
- 4.2.5 Only a low-NO<sub>X</sub> duct burner shall be installed and operated for peak-load operation.
- 4.2.6 The <u>combustion turbine and duct burner combined cycle unit</u> shall be operated according to good combustion practices and design.
- 4.2.7 Odors from the source shall be controlled by preventing unnecessary release of ammonia, natural gas, and other substances producing obnoxious odors at ground level, and by minimizing such emissions from the exhaust stack.
- 4.2.8 In the event that the Washington State Parks and Recreation Commission reports in writing to Ecology that the project has interfered with viewing by the Goldendale Observatory, and Ecology notifies the Permittee of this fact:
  - 4.2.8.1 The Permittee shall implement remedial measures to ensure that no interference with viewing at the Goldendale Observatory occurs within 180 days following such notification.
  - 4.2.8.2 Following a notification and a remedial action period, in the event of another instance of interference with viewing at the Goldendale Observatory due to the project is reported in writing to Ecology by the Washington State Parks and Recreation Commission, Ecology may order the Permittee to take specific measures. These measures, subject to approval by regulatory agencies where appropriate, may include, but are not limited to, changes in cooling technology and fuel limitations. The basis for this condition is WAC 173-802-110.

## 4.3 **Emission Limits**

- 4.3.1 The <u>combustion turbine and duct burner combined eyele unit</u> shall not emit greater than 70.2 tons of nitrogen oxides per year, including startup and shutdown emissions.
- 4.3.2 The <u>combustion turbine and duct burner combined cycle unit</u> shall not emit greater than 82.3 tons of carbon monoxide per year, including startup and shutdown emissions.

- 4.3.3 Visible emissions from emission units shall not exceed 5 percent opacity.
- 4.3.4 There shall be no visible emissions from emission units at the property boundary.
- 4.3.5 The <u>combustion turbine and duct burner combined-cycle unit</u>-shall not exceed the following short-term emission limits:

Pollutant	<b>Emission Limits</b>		Unit & Period*	
	Base- Load	Peak- Load		
NO <sub>X</sub>	365.1	427.2	pounds per 24-hours, except during start-up or shut-down	
	2.0	2.0	$ppm_v d$ at 15% O <sub>2</sub> , 3-hour average, except during start-up or shut-down	
СО	8.0	9.1	pounds per hour, except during start-up or shut-down	
	2.0	2.0	$ppm_v d$ at 15% O <sub>2</sub> , 1-hour average, except during start-up or shut-down	
$SO_2$	22.2	22.2	pounds per hour	
	3.2	3.2	$ppm_v d$ at 15% O <sub>2</sub> , 1-hour average	
VOC	3.2	3.4	pounds per hour, except during start-up or shut-down	
	1.4	1.4	$ppm_v d$ at 15% O <sub>2</sub> , 1-hour average, except during start-up or shut-down	
PM <sub>10</sub>	8.9	10.4	pounds per hour	
Toxic Air Pollutants				
1,3-butadiene	0.0008	0.0010	pounds per hour	
acetaldehyde	0.3182	0.3756	pounds per hour	
acrolein	0.0122	0.0142	pounds per hour	
ammonia	12.20	13.75	pounds per hour	
	5.0	5.0	ppm <sub>v</sub> d at 15% O <sub>2</sub> , 3-hour average, except during start-up or shut-down	
benzene	0.0328	0.0388	pounds per hour	
ethyl benzene	0.0608	0.0711	pounds per hour	
formaldehyde	1.35	1.58	pounds per hour	
naphthalene	0.0025	0.0029	pounds per hour	
РАН	0.0042	0.0049	pounds per hour	
propylene oxide	0.0551	0.0645	pounds per hour	
sulfuric acid	4.6	4.6	pounds per hour	

\*  $ppm_vd = parts per million by volume, dry basis.$ 

\*\* Toxic air pollutants with estimated emissions greater than the Small Quantity Emission Rate listed in WAC 173-460-150.

## 5.0 **Testing**

5.1 Source testing shall be required annually for each pollutant not meeting its respective emission limits in Condition 4.3.5, for any of the previous three tests, and every five years for each other pollutant.

5.2 The <u>combustion turbine and duct burner combined-cycle unit</u> shall be source tested using the following methods, unless alternate methods are proposed by permittee in writing and approved by Ecology in advance of testing:

Pollutant	Test Method
NO <sub>X</sub>	Title 40 Code of Federal Regulations (40 CFR) Part 60, Appendix A, Method 19 and 20, $7/1/4721$
СО	40 CFR Part 60, Appendix A, Method 10, 7/1/4721
SO <sub>2</sub> & Sulfuric Acid	<u>40 CFR Part 60, Appendix A, Method 6, 7/1/4721</u> National Council for Air and Stream Improvement Method 8A, December 1996
VOC	40 CFR Part 60, Appendix A, Methods 18 or 25A, 7/1/ <del>17</del> 21
PM <sub>10</sub>	40 CFR Part 60, Appendix A, Methods 5 and 19, 7/1/ <del>1721</del> , and Title 40 CFR, Part 51, Appendix M, Method 202, 7/1/17 (all particulate matter shall be considered PM <sub>10</sub> )
NH <sub>3</sub>	Bay Area Air Quality Management District Source Test Procedure ST-1B, January 20, 1982
Opacity & Visible Emissions	40 CFR Part 60, Appendix A, Method 9, 7/1/ <del>1721</del>

- 5.3 Each testing event (calendar year basis) shall alternate between base-load and peak-load operations, as defined in Condition 4.1.2.
- 5.4 Testing shall be conducted at a net-power output of at least 225 MW, at ambient temperature and pressure.
- 5.5 Ecology shall be notified, and a test plan shall be submitted to Ecology for approval, at least 30 days prior to any required source testing.
- 5.6 Written results of all required source testing shall be submitted to Ecology within 60 days of occurrence.
- 5.7 Adequate sampling ports, safe sampling platforms and access to platforms, and utilities for sampling and testing shall be provided by the Permittee according to 40 CFR §60.8.
- 5.8 Each test shall consist of at least three runs.

## 6.0 **Monitoring**

- 6.1 Online monitors shall be referenced in the Operations and Maintenance Manual.
- 6.2 The Permittee shall install, calibrate, maintain, and operate Continuous Emission Monitors (CEMs) for NO<sub>X</sub>, CO, O<sub>2</sub>, and ammonia, with an automated data acquisition and handling system that complies with: 40 CFR Part 75 and the Performance Specifications of 40 CFR 60 Appendix B; and the Quality Assurance Procedures of 40 CFR 60 Appendix F.

- 6.3 The Permittee shall <u>demonstrate monitor</u> the sulfur content of the fuel being fired in the combined-cycle unit <u>has a total sulfur content of 20 grains or less</u> <u>per 100 standard cubic feet</u>. This requirement may be satisfied by employing either of the following conditions:
  - 6.3.1 Use the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuelSulfurcontent shall be monitored daily with an on-site total-sulfuranalyzer.
  - 6.3.2 Use representative fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75Sulfur content shall be monitored by periodic on site gas sampling and use of off-site daily total-sulfur analyzermonitoring of each potential gas source.
- 6.4 The fuel usage of the <u>combustion turbine and duct burner</u> <del>combined-cycle unit</del> shall be monitored on at least an hourly basis.

## 7.0 **Record Keeping and Reporting**

- 7.1 The actual NO<sub>X</sub> and CO emissions from the combined cycle unit, including emissions during startup and shutdown, shall be quantified monthly over the most recent 12-month period using CEMS data.
- 7.2 Records shall be kept of all periods of downtime of the monitors required by Condition 6.2.
- 7.3 A daily log shall be kept of the hours of operation in start-up, base-load, peakload, and shut-down modes.
- 7.4 A daily log shall be kept of the gross-power generation and of the auxiliary load. The net-power generation (gross-power generation, less the auxiliary load) shall be determined on a 12-month rolling average calculated on a monthly basisshallbe calculated and averaged monthly, over the most recent 12-month period, at average ambient temperature and pressure.
- 7.5 The average fuel usage of the combustion turbine and the duct burner shall be documented on a rolling 24-hour basis and a rolling 12-month basis, for each emissions unit.
- 7.6 Daily records shall be kept indicating the volume of ammonia maintained on site and the volume of ammonia used.
- 7.7 A log of actual backup-generator operation and firewater diesel pump operation shall be kept. The log shall identify the reason for operation, hours of operation, fuel type, fuel consumption, and fuel sulfur content.
- 7.8 The Permittee shall keep records of complaints as received from the public, Ecology, or any other entity. Any complaints shall be promptly addressed and assessed. A record shall be maintained of the Permittee's action to investigate the validity of the complaint and what, if any, corrective action was taken in response to the complaint. Ecology shall be notified within three days of receipt of any complaint.
- 7.9 In the event that odor from the project is detected beyond the property boundary of the project, Ecology or the Permittee shall promptly notify the other of this fact.

- 7.9.1 The Permittee shall determine what remedial measures will be taken to control odor within 30 days following such detection.
- 7.9.2 The Permittee shall implement the remedial measures, unless installation of new equipment is required, within 60 days following such detection.
- 7.9.3 If the remedial measure includes the installation of new equipment, such measure shall be taken within 180 days following such detection.
- 7.9.4 The Permittee shall report in writing to Ecology on remedial measures effectiveness.
- 7.9.5 In the event that odor from the project is detected beyond the property boundary of the project following notification and the remedial action period, Ecology may order the Permittee to take specific measures (subject to approval by regulatory agencies) to control odor. These measures may include, but are not limited to, an increase in exhaust stack height and installation of capture-and-treatment systems at locations at which ammonia and other odor-causing substances are used.
- 7.10 The Permittee shall report, in writing, to Ecology on remedial measure effectiveness for actions taken due to reported interferences with viewing at the Goldendale Observatory.
- 7.11 Records shall be kept as required under 40 CFR Part 60, Subparts Da and GGKKKK, and 40 CFR Parts 72, 73, 75, and 76.
- 7.12 CEMS reports shall be submitted at least monthly, within 30 days of the end of each calendar month, and in a format approved by the department which shall include, but not be limited to, the following:
  - 7.12.1 Process or control equipment operating parameters.
  - 7.12.2 The daily maximum and average concentration, in the units of the standards, for each pollutant monitored.
  - 7.12.3 The duration and nature of any monitor down-time.
  - 7.12.4 Results of any monitor audits or accuracy checks.
  - 7.12.5 Results of any required stack tests.
- 7.13 For each occurrence of monitored emissions in excess of the standard (by CEMS or approved alternative methodology), the CEMS report shall include:
  - 7.13.1 The time of occurrence.
  - 7.13.2 Magnitude of the emission or process parameters excess.
  - 7.13.3 The duration of the excess.
  - 7.13.4 The probable cause.
  - 7.13.5 Any corrective actions taken or planned.
  - 7.13.6 Any other agency contacted.

- 7.14 Reporting required by 40 CFR Part 60, Subparts Da and GGKKKK; 40 CFR Parts 72, 73, 75, and 76, shall be submitted to Ecology and EPA.
- 7.15 Notification under 40 CFR Part 77 and WAC 173-400-107 shall be submitted to Ecology and EPA.
- 7.16 Records of all data shall be maintained in a readily retrievable manner for a period of five years and be made available on site to authorized representatives of Ecology upon request.

## 8.0 **Operations & Maintenance**

Emission unit specific operating and maintenance (O&M) manuals shall be developed and followed; manufacturer's instructions may be referenced. O&M manual development shall be completed within 30 days of installation of each emission unit. The O&M manual shall be updated to reflect any modifications to emission units or operating procedures. The emission units shall be operated and maintained in accordance with the O&M manual. Failure to follow the O&M manual and the adequacy of the O&M manual will be two of the factors considered by Ecology in determining whether the emission units are properly operated and maintained. Regular O&M records shall be kept at the source. These O&M records shall be available for inspection by Ecology, organized in a readily accessible manner, and retained for at least 5 years. The O&M manual shall, at a minimum, include:

- 8.1 Normal operating parameters for the emissions units.
- 8.2 A maintenance schedule for the emissions units.
- 8.3 Monitoring and record keeping requirements.
- 8.4 A description of the monitoring procedures.
- 8.5 Actions for abnormal control system operation.

## 9.0 General Conditions

- 9.1 **Availability of Order** Legible copies of this Order and the O&M Manual shall be on site in a location known by and available to employees in direct operation of the described equipment and available to Ecology upon request.
- 9.2 **Equipment Operation** Operation of the facility shall be conducted in compliance with all data and specifications submitted as part of the NOC application and in accordance with the O&M manual, unless otherwise approved in writing by Ecology.
- 9.3 Activities Inconsistent with this Order Any activity undertaken by the Permittee, or others, in a manner which is inconsistent with the application of this Order, shall be subject to Ecology enforcement under applicable regulations.
- 9.4 **Compliance Assurance Access** Access to the source by the United States Environmental Protection Agency or the Department of Ecology shall be

permitted upon request for the purposes of compliance assurance inspections. Failure to allow access is grounds for revocation of this Order.

- 9.5 **Recordkeeping** Records of all data shall be maintained in a readily retrievable manner for a period of five years and be made available at the plant site to authorized representatives of Ecology upon request.
- 9.6 **Discontinuing Operation** It shall be grounds for rescission of this approval if physical operation is discontinued for a period of 18 months or more. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.
- 9.7 **Testing** When complaint investigation, visible emissions observations or other information obtained by Ecology indicates the need to measure emissions, Ecology may require the Permittee to conduct material analysis or air emission testing. This testing requirement is in addition to any testing required by Ecology under WAC 173-400-105.
- 9.8 **Odor** Odor from the project shall not be detectable beyond the facility property line. Such violations shall be subject to any or all of the remedies provided in RCW 70.94 for violations of an Ecology Order. In the event odor from the project is detected beyond the property line a second time, Ecology may order the Permittee to take specific measures to control odor.
- 9.9 **Outdoor Burning** No outdoor burning shall be performed on site.
- 9.10 **Obligations Under Other Laws or Regulations** Nothing in this Order shall be construed so as to relieve the permitted of its obligations sunder any state, local, or federal laws or regulations.
- 9.11 **Maintaining Compliance** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.

Authorization may be modified, suspended or revoked in whole or part for cause, including, but not limited to, the following:

- I. Violation of any terms or conditions of this authorization.
- II. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.

The provisions of this authorization are severable and, if any provision of this authorization or application of any provision to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this authorization, shall not be affected thereby.

## Attachment B Air Operating Permit Redline

#### **3.2** Process #1, Combustion Turbine. The following applicable requirements apply to the COMBUSTION TURBINE.

3.2	Process #1, Compusition		owing applicable requirements apply to the		7
	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perf
3.2.1	40 CFR Part 60 Subpart GG, §60.8(d), §60.332(a)(1), §60.332(b), §60.334(j) , §60.335(b)(3), 2/24/06 WAC 173-400- 115(1)(a), 11/26/18 NOC No. 01AQCR- 2037 Sixth Revision, 11/6/17, Condition 7.14	F F F	Permittee shall, at all times, including startup shutdown, and malfunction, not cause to be discharged into the atmosphere gases containing NOX >: STD=0.0075(14.4/YY)+F where: STD = allowable NOX emissions (percent by volume at 15% O2, dry basis). Y = manufacturer's rated heat rate at manufacturer's rated load (kJ/Whr) or, actual measured heat rate based upon lower heating value of fuel measured at actual peak load for the facility. Y $\leq$ 14.4. F = NOX emission allowance for fuel bound nitrogen as defined in 40 CFR 60.332(a)(4).	As specified in applicable requirements 3.4a.1 and 3.4b.1. [40 CFR Part 60 Subpart GG, §60.335(b)(3), 2/24/06; WAC 173-400-115(1)(a), 11/26/18]	Comply with 3.4a.1 and 3.4b.1. [40 CFR Part 60 Subj §60.335(b)(3), 2/24/06; WAC 173 400 115(1)(a), 11/ Permittee shall submit reports of excess emissions, ab downtime in accordance with 40 CFR §60.7(c). Excest including startup, shutdown and malfunction. [40 CFI 11/26/18]
3.2.2	40 CFR Part 60 Subpart GG, §60.333(a), §60.334(i)(3), 2/24/06 WAC 173-400- 115(1)(a), 11/26/18 NOC No. 01AQCR- 2037 Sixth Revision, 11/6/17, Conditions 7.11, 7.14	F S F	Permittee shall not cause to be discharged into the atmosphere gases containing SO2 > 0.015vd% @ 15% O2.	EPA RM 19, 40 CFR Part 60, Appendix A, 7/1/10. [WAC 173 401 615(1), 8/16/18 (S)]	Comply with 3.2.3. [40 CFR Part 60 Subpart GG, §6 2/24/06; WAC 173 400 115(1)(a), 11/26/18; Letter R Subpart GG Alternative Monitoring and Testing Appr Goldendale Energy Center]
<del>3.2.3a</del>	40 CFR Part 60           Subpart GG,           \$60.333(b),         \$60.333(b),           \$60.333(h)(1),         \$60.334(i)(3),           \$60.335(b)(10),         \$2/24/06           WAC 173 400-         115(1)(a), 11/26/18           NOC No. 01AQCR-         2037 Sixth Revision,           11/6/17, Conditions         6.3, 7.11, 7.14	F S F	Permittee shall not burn fuel containing S ≥ 0.8w%.	Analyze fuel for total sulfur content using: • ASTM D1072 80, 90 (Reapproved 1994); • ASTM D3246 81, 92, 96; ASTM D4468 85 (Reapproved 2000); or • ASTM D6667 01. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), the following methods may be used:	Semi annual sampling & analysis. If there is a substar samples must be collected and analyzed on a weekly to 173-400-115(1)(a), 11/26/18; Letter Re: NSPS Subpart GG Alternative M Region 10 to Steve Royall, Goldendale Energy Center
3.2.3b	NOC No. 01AQCR- 2037 Sixth Revision, 11/6/17, Condition 6.3	F	Sulfur content shall be monitored daily with an on-site sulfur analyzer, OR monitored by periodic gas sampling AND use of daily total sulfur analyzers monitoring each potential gas source.	<ul> <li>ASTM D4084–82, 94;</li> <li>ASTM D5504–01;</li> <li>ASTM D6228–98; or</li> <li>Gas Processors Association Standard 2377–86. The applicable ranges of these ASTM methods may require sample dilution before analysis, subject to prior EPA approval. A minimum of three fuel samples shall be collected during performance tests [40 CFR Part 60 Subpart GG, §60.334(h)(1), §60.335(b)(10), 2/24/06; WAC 173-400-115(1)(a), 11/26/18]</li> </ul>	

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<del>1/26/18] I/26/18</del>

above and beyond those reports required in Section 3.7, and monitor cess emissions shall be reported for all periods of unit operation, FR Part 60 Subpart GG, §60.334(j), 2/24/06; WAC 173-400-115(1)(a),

<del>§60.334(i)(3), Re: NSPS</del> proval, dated June 16, 2004, from EPA Region 10 to Steve Royall,

tantial change in fuel quality or any analyses indicate noncompliance, y basis. [40 CFR Part 60 Subpart GG, §60.334(i)(3), 2/24/06; WAC

Monitoring and Testing Approval, dated June 16, 2004, from EPA ter]

## 3.3 Process #2, Duct Burner. The following applicable requirements apply to the DUCT BURNER.

3.3	Trocess #2, Duct Durner.	<del>i ne ionowing ap</del>	pheable requirements apply to the DUC 1-1	BURNER,	
	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perfo
<del>3.3.1</del>	40 CFR Part 60 Subpart Da, §60.42Da(a), §60.48Da(a), §60.50Da(b)(1), 1/20/11 WAC 173 400- 115(1)(a), 11/26/18 NOC No. 01AQCR 2037 Sixth Revision, 11/6/17, Conditions 7.11, 7.14	F S F	PM ≤ 13 ng/J (0.03 lb/MMBtu) heat input, except during startup, shutdown, or malfunction.	EPA RM 19, 40 CFR Part 60, Appendix A, 7/1/10. [40 CFR Part 60 Subpart Da, §60.50Da(b)(1), 1/20/11; WAC 173 400 115(1)(a), 11/26/18]	Comply with applicable requirements for 3.4a.4 and 3.
3.3.2	40 CFR Part 60 Subpart Da, §60.11(b), 60.11(c), §60.42Da(b), §60.48Da(a), 1/20/11 WAC 173 400- 115(1)(a), 11/26/18 NOC No. 01AQCR 2037 Sixth Revision, 11/6/17, Conditions 7.11, 7.14	F S F	Opacity ≤ 20%, except for one 6 minute period per hour of not more than 27%, except during periods of startup, shutdown, or malfunction.	EPA RM 9, 40 CFR Part 60, Appendix A, 7/1/10. [40 CFR Part 60 Subpart Da, §60.50Da(b)(3), 1/20/11; WAC 173 400 115(1)(a), 11/26/18]	Comply with applicable requirement for 3.1.4. [WAC For the purposes of the reports required under §60.7, p which the average opacity exceeds the applicable opac applicable opacity standard and the date of such excess [40 CFR Part 60 Subpart Da, §60.51Da(i), 1/20/11]
3.3.5	40 CFR Part 60, \$60.7(b), 7/1/10 WAC 173-400- 115(1)(a), 11/26/18 NOC No. 01AQCR- 2037 Sixth Revision, 11/6/17, Conditions 7.11, 7.14	F S F	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the Duct Burner, any malfunction of the air pollution control equipment; or any periods during which a CEMS or monitoring device is inoperative.	None specified.	No additional monitoring required.
3.3.6	40 CFR Part 60, §60.7(f), §60.11(d), 1/20/11 WAC 173-400- 115(1)(a), 11/26/18 11/6/17, Conditions 7.11, 7.14 NOC No. 01AQCR- 2037 Sixth Revision,	F S F	Maintain and operate Duct Burner and pollution control equipment at all times, including startup and shutdown, in a manner consistent with good air pollution control practice for minimizing emissions.	None specified.	Maintain a file of all measurements, including continu measurements; all continuous monitoring system perfor device calibration checks; adjustments and maintenance required by NSPS Subpart Da recorded in a permanen WAC 173 400 115(1)(a), 1/20/11]

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1 3.4b.4. [WAC 173 401 615(1), 8/16/18 (S)]

AC 173 401 615(1), 8/16/18 (S)]

7, periods of excess emissions are defined as all 6 minute periods during pacity standards under §60.42Da(b). Opacity levels in excess of the cesses are to be submitted to Ecology and the EPA each calendar quarter.

inuous monitoring system, monitoring device, and performance testing performance evaluations; all continuous monitoring system or monitoring ance performed on these systems or devices; and all other information tent form suitable for inspection. [40 CFR Part 60, §60.7(f), 1/20/11;

## 3.4 Process #3, Combined Cycle Unit. The following requirements apply to the COMBINED CYCLE UNIT made up of the Gas Combustion Turbine, Heat Recovery Steam Generator, Duct Burner, Selective Catalytic Reduction unit, and the Steam Generator, sharing a single emission exhaust stack.

sharing a	i single emission exhaust sta	ck.			
	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Per
3.2.4	40 CFR Part 60, §60.7(b), 2/24/06 WAC 173-400-115(1)(a), <del>11/26/18</del> 1/19/23 NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 7.11, 7.14	F S F	Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the combustion turbine <u>and duct burner</u> , any malfunction of the air pollution control equipment; or any periods during which a CEMS or monitoring device is inoperative.	None specified.	No additional monitoring required.
3.2.5	40 CFR Part 60, §60.7(f), §60.11(d), 2/24/06; Subpart KKKK §60.4333, 7/6/06 WAC 173-400-115(1)(a), 11/26/18 1/19/23 NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 7.11, 7.14	F S F	Maintain and operate <u>the combustion</u> <u>turbine, duct burner</u> , and pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions <u>at all times</u> <u>including during startup, shutdown, and</u> <u>malfunction</u> .	None specified.	Maintain a file of all measurements, including contir measurements; all continuous monitoring system per monitoring device calibration checks; adjustments ar information required by 40 CFR Part 60 recorded in 2/24/06; WAC 173-400-115(1)(a), <del>11/26/18</del> 1/19/23
3.4.3	NOC No. 01AQCR- 2037 Sixth Revision, 11/6/17, Conditions 4.2.6	F	The combined cycle unit shall be operated according to good combustion practices and design.	None specified.	No additional monitoring required.
3.4.1	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.2.2, 6.4, 7.5	F	No fuel other than natural gas shall be combusted in the <del>combined cycle unit</del> <u>combustion turbine and duct burner</u> .	Fuel usage of the combined cycle unit combustion turbine and duct burner shall be monitored on at least an hourly basis. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Condition 6.4]	Fuel usage shall be documented on a rolling 24-hour and the duct burner. [NOC No. 01AQCR-2037 Sixt
3.4.2	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.2.4	F	The combined cycle unit combustion turbine and duct burner shall operate only when the HRSG oxidation catalyst in operating in good order.	None specified.	No additional monitoring required.
3.2.7	NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Condition 4.2.3	F	Combustion turbine <u>and duct burner</u> shall operate only when the selective catalytic reduction unit is operating in good order.	None specified.	No additional monitoring required.
<del>6<u>3</u>.4b.7</del>	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.2.5	F	Only a low- $NO_X$ duct burner shall be installed and operated for peak-load operation.	None specified.	No additional monitoring required.
3.3.7	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.1.2, 7.3	F	Use of the Duct Burner (operation at peak load) shall be no more than 5,250 hours per rolling 12-month period.	None specified.	A daily log shall be kept of the hours of operation in No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17
3.2.6	NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Condition 4.2.1	F	Combustion turbine shall operate at a load no less than 55 MW.	None specified.	No additional monitoring required.
3.4.7	NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Condition 4.1.1, 7.4	F	Source <u>The combined-cycle unit</u> shall be limited to a <del>combined calendar year<u>12-</u> month rolling</del> average generating capacity of less than 297 MW <sub>e</sub> , measured using maximum continuous electric generating capacity, less minimum auxiliary load, at average ambient temperature and pressure.	None specified.	A daily log shall be kept of the gross power generation generation less the auxiliary load) shall be calculated most recent 12 month period, monthly-on a 12-month 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Con

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tinuous monitoring system, monitoring device, and performance testing performance evaluations; all continuous monitoring system or and maintenance performed on these systems or devices; and all other in a permanent form suitable for inspection. [40 CFR Part 60, §60.7(f), 23]

bur basis and a rolling 12-month basis, for both the combustion turbine ixth Seventh Revision, 11/6/17, Condition 7.5]

in base load, operation in peak load, shut-down, and start-up. [NOC 17, Condition 7.3]

ation and auxiliary load. The net power generation (gross power ted and averaged, at average ambient temperature and pressure, over the onth rolling average basis calculated on a monthly basis. [NOC No. Condition 7.4]

3.3.3	40 CFR Part 60 Subpart           Da, §60.43Da(b)(2) ,           §60.43Da(c),           §60.48Da(c),           §60.50Da(c)(4), 1/20/11           40 CFR Part 60 Subpart           KKKK,§60.4330(a)(2),           §60.4365, §60.4415(a)(1),           7/6/06           WAC 173-400-115(1)(a),           11/26/18 1/19/23           NOC No. 01AQCR-2037           Sixth Seventh Revision,           11/6/17, Conditions 3.7.7,           3.7.9, 6.3, 7.11, 7.14	F S F	$SO_2 \leq \frac{86}{26} \text{ ng/J} (0.20 0.060 \text{ lb/MMBtu})$ heat input, on a rolling arithmetic average of all hourly emissions for 30 successive duct burner operating days, except during periods of startup, or shutdown.	None SpecifiedEPA RM 19, 40 CFR Part 60, Appendix A, 7/1/10. [40 CFR Part 60 Subpart Da, §60.50Da(c)(4), 1/20/11; WAC 173-400-115(1)(a), 11/26/18]	Use the fuel quality characteristics in a current, valid specifying that the total sulfur content is 20 grains of representative fuel sampling data specified in section applicable requirement for 3.4.5. [40 CFR Part 60 S 615(1), 8/16/18 (S)]
3.3.4	40 CFR Part 60 Subpart Da, §60.7(c), §60.13(a), §60.13(d)(1), §60.13(e)(2), §60.13(h)( <del>2</del> ), §60.44Da(a), §60.44Da(a), §60.48Da(c), §60.48Da(g)(1), §60.48Da(g)(1), §60.49Da(e), §60.49Da(e), §60.49Da(e), §60.49Da(f)(1), §60.50Da(d)(1), §60.50Da(d)(2), §60.51Da(h), §60.51Da(h), §60.51Da(h), §60.51Da(h), §60.51Da(k), 1/20/11 40 CFR Part 60 Subpart KKKK, §60.4320, Table 1, §60.4350, §60.4400(b), §60.4350, §60.4400(b), §60.4350, §60.4400(b), §60.4350, §60.4400(b), §60.4350, §60.4400(b), §60.4380(b), 7/6/06 WAC 173-400-115(1)(a), 11/26/18 1/19/23 NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions-3.5.2, 3.7.7, 3.7.95.6, 7.11, 7.14	FSF	NOX ≤ 86 ng/J (0.20 lb/MMBtu) heat input, on a rolling arithmetic average of all hourly emissions for 30 successive duct burner operating days, except during startup, shutdown, or malfunction. NO <sub>X</sub> emissions from the combustion turbine and duct burner must not exceed: • 15 ppm @ 15% O <sub>2</sub> or 0.43 lb/MW-hr while operating at more than 75% peak load, or • 96 ppm at 15 percent O <sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh) while operating at less than 75 percent of peak load	<b>EPA RM 7E or 20 and 19, 40 CFR Part 60, Appendix A</b> , 7/1/10. Install, calibrate, maintain, and operate a CEMS, and record measured NO <sub>X</sub> , and O <sub>2</sub> or CO <sub>2</sub> emissions. CEMS shall be operated and data recorded during all periods of operation, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, and shall complete a minimum of one cycle of operation for each successive 15-minute period. 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period <del>, except as provided as specified</del> in 40 CFR Part 60 Subpart <del>Da</del> <u>A</u> , §60.13(h)( <del>2)</del> . Only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. Periods where the missing data substitution procedures in subpart D of part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under §60.7(c). CEMS data shall be obtained for at least 18 hours in at least 22 out of 30 successive duet burner operating days. CEMS shall comply with 40 CFR 60 Appendix B, Performance Specification <u>2</u> (except the 7-day calibration drift is based on unit operating days. not calendar days), and 40 CFR 60, <u>Appendix F Procedure 1</u> , Quality Assurance Procedures. <u>A NO<sub>X</sub> diluent CEMS that is</u> installed and certified according to Appendix A of Part 75 of this chapter is acceptable for use under this subpart. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis. Fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to Part 75 of this chapter are acceptable for use under this subpart. [40 CFR Part 60 Subpart- <u>Da</u> <u>A</u> , §60.13(a), §60.30Da(d)(2), 1/20/11 Subpart KKKK, §60.43Da(c), §60.49Da(f)(1), §60.49Da(g), §60.49Da(i)(1), §60.50Da(d)(1), §60.49Da(g), §60.49Da(i)(1), §60.50Da(d)(1), §60.49Da(g), §60.49Da(i)(1), §60.49Da(e), §60.49Da(f), 115(1)(a), 115(1)(a), 11/26/18 1/19	<ul> <li>Source testing shall be conducted at least once every limit was exceeded during any of the previous three to 5.1.]</li> <li>Compliance must be determined based on a 30 unit of and malfunction as specified in 40 CFR Part 60 Subpremissions standards apply, the applicable standard is with multiple emissions standards, the applicable limit corresponded to the highest emissions standard. At least once daily, check the CEMS zero and span care whenever either the 24 hour zero drift or the 24 hour specification in Appendix B. [40 CFR Part 60 Subpremissions with written reports for each calendar quarter. All other end of each calendar quarter. For each 24 hour pressons for non-compliance with the emission of each calendar quarter. For each 30 successive quarter; reasons for non-compliance with the emission at least 18 hours of operation of the facility; justificat actions taken;</li> <li>Identification of the times when emissions data hav because of startup, shutdown, or other reasons, and jushutdown;</li> <li>Identification of the emission control system durindicating whether the:</li> <li>Required CEMS calibration, span, and drift checks</li> <li>Data used to show compliance was or was not obtaid Da and is representative of plant performance;</li> <li>Minimum data requirements have or have not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or has not been that were unavoidable;</li> <li>Compliance with the standards has or</li></ul>

id purchase contract, tariff sheet or transportation contract for the fuel, of sulfur or less per 100 standard cubic feet. Alternatively, use on 2.3.1.4 or 2.3.2.4 of 40 CFR Part 75 Appendix D. Comply with Subpart KKKK §60.4365, §60.4415(a)(1), 7/6/06; WAC 173-401-

y five years, except that source testing shall be required annually if the etests. [NOC No. 01AQCR 2037 Sixth Revision, 11/6/17, Condition

operating day rolling average including periods of startup, shutdown bpart KKKK §60.4380(b). For operating periods during which multiple is the average of the applicable standards during each hour. For hours mit for that hour is determined based on the condition that

calibration drifts. The zero and span must, as a minimum, be adjusted ur span drift exceeds two times the limit of the applicable performance part Da, §60.13(d)(1), 1/20/11; WAC 173-400-115(1)(a), 11/26/18] Il quarterly reports shall be submitted no later than 30 days following period, report to EPA & Ecology:

re duct burner operating days, ending with last 30 day period in the ion standards; and, description of corrective actions taken; rr which pollutant or diluent data have not been obtained, by CEMS, for cation for not obtaining sufficient data; and description of corrective

we been excluded from the calculation of average emission rates justification for excluding data for reasons other than startup or

ration exceeded full span of the CEMS; tich could affect the ability of the CEMS to comply with Performance

not available, submit a signed statement indicating if any changes were uring the period of data unavailability. Submit a signed statement

is or other periodic audits have been performed as specified; tained in accordance with approved methods and procedures of Subpart

n met; or, the minimum data requirements have not been met for errors

n achieved during the reporting period. Da(f), §60.51Da(h), §60.51Da(j), §60.51Da(k), 1/20/11; WAC 173-400-

berformance reports (above and beyond those reports required in PA semiannually. All reports shall be postmarked by the 30th day on reports of excess emissions and summary report forms shall conform t 60, §60.7(c), 7/1/10; Subpart KKKK, §60.4345, §60.4380(b), 7/6/06;

3.4.4	NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 4.3.1, 4.3.2, 6.2, 7.1, 7.2	F	The combined cycle unit combustion turbine and duct burner emissions shall not exceed 70.2 tpy NO <sub>X</sub> and 82.3 tpy CO, including startups and shutdowns	Install, calibrate, maintain, and operate, CEMs for $NO_X$ and CO, with an automated data acquisition and handling system, that complies with 40 CFR Part 75 and 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60, Appendix F, Quality Assurance Procedures. Records shall be kept of all periods of downtime of the monitors. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 6.2, 7.2]	The actual NO <sub>X</sub> and CO emissions, including startup monthly, using CEMS data, over each rolling 12-mo 11/6/17, Condition 7.1]
3.4.5	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.3.5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8	F	SO <sub>2</sub> emissions shall be limited to 22.2 lbs/hr and 3.2 ppm <sub>v</sub> d at 15% O <sub>2</sub> , 1-hour average.	EPA RM 6, 40 CFR Part 60, Appendix A, 7/1/10. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8]	Source testing shall be conducted at least once every limit was exceeded during any of the previous three Condition 5.1]
3.4.6	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.3.5, 4.5.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2, 7.2, 7.6, 7.12, 7.13	S	NH <sub>3</sub> emissions shall be limited to 5 ppm <sub>v</sub> d at 15% O <sub>2</sub> , 3-hour average, except during start-up or shut- down.	<ul> <li>Bay Area Air Quality Management District Source Test Procedure ST-1B, January 20, 1982. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure.</li> <li>Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence. Install, calibrate, maintain, and operate, CEMs for NH3, with an automated data acquisition and handling system, that complies with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60, Appendix F, Quality Assurance Procedures. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2]</li> </ul>	Source testing shall be conducted at least once every limit was exceeded during any of the previous three to Condition 5.1] CEMS reports shall be submitted at least monthly wi 1. Process or control equipment operating parameter 2. Daily maximum and average concentration, in the 3. Duration and nature of any monitor down-time. 4. Results of any monitor audits or accuracy checks. 5. Results of any required stack tests. For each occurrence of monitored emissions in exces 6. Time of occurrence. 7. Magnitude of the emission or process parameters 8. Duration of the excess. 9. Probable cause. 10. Any corrective actions taken or planned. 11. Any other agency contacted. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 1 Daily records shall be kept indicating the volume of a [NOC No. 01AQCR-2037 Sixth Seventh Revision, 1]
3.4.8	NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 4.3.5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8	S	Sulfuric acid mist shall not exceed 4.6 lbs/hr.	Measured as SO <sub>X</sub> less SO <sub>2</sub> . SO <sub>X</sub> measured by modified ASTM Method D-5504. SO <sub>2</sub> measured by EPA RM 6, July 1, 1999, 40 CFR Part 60, Appendix A, 7/1/10. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence. [NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8]	Source testing shall be conducted at least once every limit was exceeded during any of the previous three Condition 5.1]

tup and shutdown, from the combined cycle unit, shall be quantified nonth period. [NOC No. 01AQCR-2037 Sixth Seventh Revision,

ery five years, except that source testing shall be required annually if the et ests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

ery five years, except that source testing shall be required annually if the ee tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

within 30-days of the end of each calendar month, and shall include: ters.

the units of the standard(s), for each pollutant monitored.

ks.

cess of the standard, the report shall include:

ers excess.

1, 11/6/17, Conditions 7.2, 7.12, 7.13] of ammonia maintained on-site and the volume of ammonia used. 1, 11/6/17, Condition 7.6]

ery five years, except that source testing shall be required annually if the ee tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perf
3.4a.1	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2, 7.2, 7.12, 7.13	F	$NO_X \le 365.1 lbs/24$ -hrs and $\le 2.0 ppm_v d$ at 15% O <sub>2</sub> , 3- hour average, except during start-up or shut-down.	<ul> <li>EPA RM 19 and 20, 40 CFR Part 60, Appendix A, 7/1/10.</li> <li>Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence.</li> <li>Install, calibrate, maintain, and operate, CEMs for NO<sub>X</sub> and O<sub>2</sub>, with an automated data acquisition and handling system, that complies with 40 CFR Part 75 and 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60, Appendix F, Quality Assurance Procedures. Records shall be kept of all periods of downtime of the monitors. [NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2, 7.2]</li> </ul>	Source testing shall be conducted at least once every filimit was exceeded during any of the previous three to Condition 5.1] CEMS reports shall be submitted at least monthly wit 1. Process or control equipment operating parameters 2. Daily maximum and average concentration, in the 3. Duration and nature of any monitor down-time. 4. Results of any monitor audits or accuracy checks. 5. Results of any required stack tests. For each occurrence of monitored emissions in excess 6. Time of occurrence. 7. Magnitude of the emission or process parameters et 8. Duration of the excess. 9. Probable cause. 10. Any corrective actions taken or planned. 11. Any other agency contacted. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11]
3.4a.2	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2, 7.2, 7.12, 7.13	F	CO ≤ 8.0 lbs/hr and ≤ 2.0 ppm <sub>v</sub> d at 15% O <sub>2</sub> , 1-hour average, except during start-up or shut-down.	<ul> <li>EPA RM 10, 40 CFR Part 60, Appendix A, 7/1/10. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence.</li> <li>Install, calibrate, maintain, and operate, CEMs for CO &amp; O<sub>2</sub>, with an automated data acquisition and handling system, that complies with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60, Appendix F, Quality Assurance Procedures. Records shall be kept of all periods of downtime of the monitors. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 6.2, 7.2]</li> </ul>	Source testing shall be conducted at least once every i limit was exceeded during any of the previous three to Condition 5.1] CEMS reports shall be submitted at least monthly wit 1. Process or control equipment operating parameters 2. Daily maximum and average concentration, in the 3. Duration and nature of any monitor down-time. 4. Results of any monitor audits or accuracy checks. 5. Results of any required stack tests. For each occurrence of monitored emissions in excess 6. Time of occurrence. 7. Magnitude of the emission or process parameters e 8. Duration of the excess. 9. Probable cause. 10. Any corrective actions taken or planned. 11. Any other agency contacted. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11]
3.4a.3	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8	F	$VOC \le 3.2 \text{ lbs/hr} \text{ and } \le 1.4 \text{ ppm}_v \text{d at } 15\%$ O <sub>2</sub> , 1-hour average, except during start-up or shut-down.	EPA RM 25A, 40 CFR Part 60, Appendix A, 7/1/10. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8]	Source testing shall be conducted at least once every i limit was exceeded during any of the previous three to Condition 5.1]

## 3.4a Process #3, at Base Load. The following requirements apply to the COMBINED CYCLE UNIT WHEN OPERATING AT BASE LOAD (i.e., Duct Burner NOT in use) made up of the Gas Combustion Turbine, Heat Recovery Steam Generator, Selective Catalytic Reduction unit, and the Steam Generator, sharing a single emission exhaust stack.

erformed by Permittee

y five years, except that source testing shall be required annually if the tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

within 30-days of the end of each calendar month, and shall include: ers.

he units of the standard(s), for each pollutant monitored.

cess of the standard, the report shall include:

s excess.

11/6/17, Conditions 7.2, 7.12, 7.13]

y five years, except that source testing shall be required annually if the tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

within 30-days of the end of each calendar month, and shall include: ers.

he units of the standard(s), for each pollutant monitored.

ess of the standard, the report shall include:

s excess.

, 11/6/17, Conditions 7.2, 7.12, 7.13]

y five years, except that source testing shall be required annually if the e tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

3.4a.4	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	F	PM ≤ 8.9 lbs/hr.	EPA RM 5 or 17, and 19, 40 CFR Part 60, Appendix A, 7/1/10 and EPA RM 202, 40 CFR, Part 51, Appendix M, 1/1/11. Each testing event (year) shall alternate between base-load and peak-load operating conditions. Each test shall consist of at least three runs. Testing shall be conducted at a net power output of at least 225 MW, at ambient temperature and pressure. Adequate sampling ports, safe sampling platforms and access to platforms, and utilities, for sampling and testing shall be provided per 40 CFR 60.8. Test plans shall be submitted 30 days prior and written results shall be submitted to Ecology within 60 days of occurrence. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17, Conditions 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8]	Source testing shall be conducted at least once every f limit was exceeded during any of the previous three te Condition 5.1]
3.4a.5	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	S	$NH_3 \le 12.20$ lbs/hr and $\le 5$ ppm <sub>v</sub> d at 15% O <sub>2</sub> , 3-hour average.	As specified in applicable requirement 3.4.6. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4.6. [WAG
3.4a.6	NOC No. 01AQCR- 2037 <del>Sixth <u>Seventh</u> Revision, 11/6/17, Condition 4.3.5</del>	S	Individual TAP emissions shall not exceed(lb/hr):1,3-Butadiene0.0008Acetaldehyde0.3182Acrolein0.0122Benzene0.0328Ethylbenzene0.0608Formaldehyde1.35Naphthalene0.0025PAH0.0042Propylene Oxide0.0551	None specified.	No additional monitoring required.

ry five years, except that source testing shall be required annually if the e tests. [NOC No. 01AQCR-2037 Sixth Seventh Revision, 11/6/17,

/AC 173-401-615(1), 8/16/18 (S)]

3.4b Process #3, at Peak Load. The following requirements apply to the COMBINED CYCLE UNIT WHEN OPERATING AT PEAK LOAD (i.e., Duct Burner in use) made up of the Gas-Combustion T	Furb
Catalytic Reduction unit, and the Steam Generator, sharing a single emission exhaust stack.	

	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perfo
3.4b.1	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	F	$NO_X \le 427.2 \ lbs/24$ -hrs and $\le 2.0 \ ppm_v d$ at 15% $O_2$ , 3- hour average, except during start-up or shut-down.	As specified in applicable requirement 3.4a.1. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4a.1. [WA
3.4b.2	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	F	$CO \le 9.1$ lbs/hr and $\le 2.0$ ppm <sub>v</sub> d at 15% O <sub>2</sub> , 1-hour average, except during start-up or shut-down.	As specified in applicable requirement 3.4a.2. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4a.2. [WA
3.4b.3	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	F	$VOC \le 3.4 \text{ lbs/hr}$ and $\le 1.4 \text{ ppm}_v d$ at 15% $O_2$ , 1-hour average, except during start-up or shut-down.	As specified in applicable requirement 3.4.4. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4.4. [WAC
3.4b.4	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	F	$PM \le 10.4 \text{ lbs/hr.}$	As specified in applicable requirement 3.4.6. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4.6. [WAC
3.4b.5	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	S	$NH_3 \le 13.75$ lbs/hr and $\le 5$ ppm <sub>v</sub> d at 15% $O_2$ , 3-hour average.	As specified in applicable requirement 3.4.8. [WAC 173-401-615(1), 8/16/18 (S)]	Comply with applicable requirement for 3.4.8. [WAC
3.4b.6	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Condition 4.3.5	S	Individual TAP emissions shall not exceed(lb/hr):1,3-Butadiene0.0010Acetaldehyde0.3756Acrolein0.0142Benzene0.0388Ethylbenzene0.0711Formaldehyde1.58Naphthalene0.0029PAH0.0049Propylene Oxide0.0645	None specified.	No additional monitoring required.

## urbine, Heat Recovery Steam Generator, Duct Burner, Selective

erformed by Permittee WAC 173-401-615(1), 8/16/18 (S)] WAC 173-401-615(1), 8/16/18 (S)] WAC 173-401-615(1), 8/16/18 (S)] WAC 173-401-615(1), 8/16/18 (S)]

#### 3.5 Process #4, Backup Generator. The following requirements apply to BACKUP GENERATOR.

	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perfo
3.5.1	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.1.3, 7.7 WAC 173-400- 115(1)(a), <del>11/26/18</del> 1/19/23 40 CFR Part 63 Subpart ZZZZ, §63.6625(ef), §63.6655(f), <del>8/20/10</del> 8/30/24	F S F	The backup generator and firewater diesel pump <u>may operate without limit in response</u> to emergency situations and shall each be limited to 500 100 hours per rolling 12- month period of operation <u>calendar year for</u> <u>maintenance and testing</u> . The Permittee shall <u>otherwise only</u> operate the backup generator and firewater pump <del>only</del> as needed for maintenance and to provide emergency power or fire suppression water. The permittee shall be limited to 50 hours of use towards non-emergency situations. These 50 hours cannot be used for peak shaving or demand response and is counted toward the 100 hours per calendar year for maintenance and testing.	Permittee shall maintain a non-resettable hour meter for the generator by no later than <del>October 19 May 3</del> , 2013. [40 CFR Part 63 Subpart ZZZZ, §63.6625 <del>(e) and (f)</del> , Table 2d, <del>8/20/10</del> 8/30/24; WAC 173- 400-115(1)(a), <del>11/26/18</del> 1/19/23]	Keep a log of actual backup generator and firewater di for operation, hours of operation, fuel type, fuel consu Seventh Revision, 11/6/17, Condition 7.7; 40 CFR Par §63.6655(f), <del>8/20/10</del> 8/30/24; WAC 173-400-115(1)(a
3.5.2	40 CFR Part 63 Subpart ZZZZ, §63.6595, §63.6605(b), §63.6625(e), §63.6640(b), Table 2d, Table 6, 3/9/11 WAC 173-400- 115(1)(a), <del>11/26/18</del> 1/19/23	FS	Operate and maintain the generator in a manner consistent with safety and good air pollution control practices for minimizing emissions. The generator's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. Permittee shall comply with [federal] operating limitations no later than October 19 May 3, 2013. [40 CFR Part 63 Subpart ZZZZ, §63.6605(b), §63.6625(h)]	<ul> <li>Operate and maintain the generator and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Ongoing maintenance shall include at least:</li> <li>Change oil and filter every 500 hours of operation or annually within 1 year + 30 days of the previous change, whichever comes first. Permittee may implement an oil analysis program as described in 40 CFR §63.6625(i) to extend this oil change interval.</li> <li>Inspect air cleaner every 1,000 hours of operation or annually within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.</li> <li>Inspect all hoses and belts every 500 hours of operation or annually within 1 year + 30 days of the previous first and replace as necessary.</li> <li>[40 CFR Part 63 Subpart ZZZZ, §63.6625(e), Table 2d, Table 6, 8/20/10 8/30/24; WAC 173-400-115(1)(a), 3/9/111/19/23]</li> </ul>	Determination of whether such operation and mainten- which may include, but is not limited to, monitoring re- operation and maintenance records, and inspection of 8/30/24; WAC 173-400-115(1)(a), 3/9/111/19/23] Report each instance in which you did not meet each of limitations and must be reported according to the requ §63.6640(b), 8/20/10 8/30/24; WAC 173-400-115(1)(a) If an emergency engine is operating during an emerger the management practice requirements on the schedule schedule would otherwise pose an unacceptable risk u delayed until the emergency is over or the unacceptabl practice should be performed as soon as practicable af State, or local law has abated. Sources must report any and the Federal, State or local law under which the risl 2d, 8/20/10 8/30/24; WAC 173-400-115(1)(a), 3/9/11

rformed by Permittee

diesel pump operation shall be kept. The log shall identify the reason asumption, and fuel sulfur content. [NOC No. 01AQCR-2037-Sixth Part 63 Subpart ZZZZ, )(a), 11/26/18 1/19/23]

enance procedures are being used will be based on information available gresults, review of operation and maintenance procedures, review of of the source. [40 CFR Part 63 Subpart ZZZZ, §63.6605(b), <del>8/20/10</del>

h operating limitation. These instances are deviations from the operating quirements in 40 CFR §63.6650. [40 CFR Part 63 Subpart ZZZZ, l)(a), <del>3/9/11</del>/19/23]

gency and it is not possible to shut down the engine in order to perform ule required, or if performing the management practice on the required a under Federal, State, or local law, the management practice can be able risk under Federal, State, or local law has abated. The management after the emergency has ended or the unacceptable risk under Federal, any failure to perform the management practice on the schedule required risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table H1/19/23]

#### 3.6 Process #5, Firewater Pump Engine. The following requirements apply to FIREWATER PUMP.

	Applicable Requirement	Enforceability (Federal = F, State = S)	Description	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Perfo
3.6.1	NOC No. 01AQCR- 2037 Sixth Seventh Revision, 11/6/17, Conditions 4.1.3, 7.7 WAC 173-400- 115(1)(a), <del>11/26/18</del> 1/19/23 40 CFR Part 63 Subpart ZZZZ, §63.6625(e), §63.6655(f), <del>8/20/10</del> 8/30/24	F S F	The backup generator and firewater diesel pump <u>may operate without limit in response</u> to emergency situations and shall each be limited to 500 100 hours per rolling 12- month period of operation calendar year for maintenance and testing. The Permittee shall otherwise only operate the backup generator and firewater pump only as needed for maintenance and to provide emergency power or fire suppression water. The permittee shall be limited to 50 hours of use towards non-emergency situations. These 50 hours cannot be used for peak shaving or demand response and is counted toward the 100 hours per calendar year for maintenance and testing.	Permittee shall maintain a non-resettable hour meter for the generator by no later than October 19 May 3, 2013. [40 CFR Part 63 Subpart ZZZZ, §63.6625(e) and (f), Table 2d, 8/20/10 8/30/24; WAC 173- 400-115(1)(a), 11/26/18 1/19/23]	Keep a log of actual backup generator and firewater di for operation, hours of operation, fuel type, fuel consu Seventh Revision, 11/6/17, Condition 7.7; 40 CFR Par 115(1)(a), <del>3/9/11</del> 1/19/23]
3.6.2	40 CFR Part 63 Subpart ZZZZ, §63.6595, §63.6605(b), §63.6625(e), §63.6640(b), Table 2d, Table 6, 3/9/11 WAC 173-400- 115(1)(a), <del>11/26/18</del> 1/19/23	FS	Operate and maintain the generator in a manner consistent with safety and good air pollution control practices for minimizing emissions. The generator's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. Permittee shall comply with [federal] operating limitations no later than October 19 May 3, 2013. [40 CFR Part 63 Subpart ZZZZ, §63.6605(b), §63.6625(h)]	<ul> <li>Operate and maintain the generator and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. Ongoing maintenance shall include at least:</li> <li>Change oil and filter every 500 hours of operation or annually within 1 year + 30 days of the previous change, whichever comes first. Permittee may implement an oil analysis program as described in 40 CFR §63.6625(i) to extend this oil change interval.</li> <li>Inspect air cleaner every 1,000 hours of operation or annually within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.</li> <li>Inspect all hoses and belts every 500 hours of operation or annually within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.</li> <li>[40 CFR Part 63 Subpart ZZZZ, §63.6625(e), Table 2d, Table 6, <del>8/20/10</del> 8/30/24; WAC 173-400-115(1)(a), <del>3/9/11</del>1/19/23]</li> </ul>	Determination of whether such operation and maintena which may include, but is not limited to, monitoring re operation and maintenance records, and inspection of 8/30/24; WAC 173-400-115(1)(a), <del>3/9/11</del> 1/19/23] Report each instance in which you did not meet each of limitations and must be reported according to the requ §63.6640(b), <del>8/20/10</del> 8/30/24; WAC 173-400-115(1)(a) If an emergency engine is operating during an emergen the management practice requirements on the schedule schedule would otherwise pose an unacceptable risk un delayed until the emergency is over or the unacceptabl practice should be performed as soon as practicable af State, or local law has abated. Sources must report any and the Federal, State or local law under which the risl 2d, <del>8/20/10</del> 8/30/24; WAC 173-400-115(1)(a), <del>3/9/11</del> 1

diesel pump operation shall be kept. The log shall identify the reason sumption, and fuel sulfur content. [NOC No. 01AQCR-2037 Sixth Part 63 Subpart ZZZZ, §63.6655(f), <del>8/20/10</del> 8/30/24; WAC 173-400-

enance procedures are being used will be based on information available gresults, review of operation and maintenance procedures, review of of the source. [40 CFR Part 63 Subpart ZZZZ, §63.6605(b), <del>8/20/10</del>

h operating limitation. These instances are deviations from the operating quirements in 40 CFR §63.6650. [40 CFR Part 63 Subpart ZZZZ, l)(a), <del>3/9/11</del>/19/23]

gency and it is not possible to shut down the engine in order to perform ule required, or if performing the management practice on the required a under Federal, State, or local law, the management practice can be able risk under Federal, State, or local law has abated. The management after the emergency has ended or the unacceptable risk under Federal, any failure to perform the management practice on the schedule required risk was deemed unacceptable. [40 CFR Part 63 Subpart ZZZZ, Table H1/19/23]

## Attachment C Notice of Construction Form



## **Notice of Construction Application**

A notice of construction permit is required before installing a new source of air pollution or modifying an existing source of air pollution. This application applies to facilities in Ecology's jurisdiction. Submit this application for review of your project. For general information about completing the application, refer to Ecology Forms ECY 070-410a-g, "Instructions for Ecology's Notice of Construction Application."

Ecology offers up to two hours of free pre-application assistance. We encourage you to schedule a preapplication meeting with the contact person specified for the location of your proposal, below. If you use up your two hours of free pre-application assistance, we will continue to assist you after you submit Part 1 of the application and the application fee. You may schedule a meeting with us at any point in the process.

Upon completion of the application, please enclose a check for the initial fee and mail to:

Department of Ecology Cashiering Unit PO Box 47611 Olympia, WA 98504-7611 For Fiscal Office Use Only: 0299-3030404-B00-216--001--000404

Check the box for the location of your proposal. For assistance, call the appropriate office listed below:

Check box	Ecology Permitting Office	Contact
$\checkmark$	Chelan, Douglas, Kittitas, Klickitat, or Okanogan County Ecology Central Regional Office (509) 575-2490	Lynnette Haller (509) 457-7126
		lynnette.haller@ecy.wa.gov
	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, or Whitman County	Karin Baldwin (509) 329-3452
	Ecology Eastern Regional Office (509) 329-3400	karin.baldwin@ecy.wa.gov
	San Juan County Ecology Northwest Regional Office (206) 594-0000	David Adler (425) 649-7267
		david.adler@ecy.wa.gov
	For actions taken at Kraft and Sulfite Paper Mills and Aluminum Smelters Only	James DeMay (360) 407-6868
	Ecology Industrial Section (360) 407-6900	james.demay@ecy.wa.gov
	For actions taken on the US Department of Energy Hanford Reservation Only	Lilyann Murphy (509) 372-7951
•	Ecology Nuclear Waste Program (509) 372-7950	lilyann.murphy@ecy.wa.gov

Check the box below for the fee that applies to your application.

#### New project or equipment:

\$1,904: Basic project initial fee covers up to 16 hours of review.

\$12,614: Complex project initial fee covers up to 106 hours of review.

#### Change to an existing permit or equipment:

**\$357: Administrative or simple change** initial fee covers up to 3 hours of review. Ecology may determine your change is complex during the completeness review of your application. If you project is complex, you must pay the additional xxx before we will continue working on your application

\$1,190: Complex change initial fee covers up to 10 hours of review

**\$350flat fee**: Replace or alter control technology equipment under WAC 173-400-114. Ecology will contact you if we determine your change belongs in another fee category. You must pay the fee associated with that category before we will continue working on your application.

#### Read each statement below, then check the box next to it to acknowledge that you agree.

 $\checkmark$ 

The initial fee you submitted may not cover the cost of processing your application. Ecology will track the number of hours spent on your project. If the number of hours Ecology spends exceeds the hours included in your initial fee, Ecology will bill you \$119 per hour for the extra time.

 $\checkmark$ 

You must include all information requested by this application. Ecology may not process your application if it does not include all the information requested.

Submittal of this application allows Ecology staff to visit and inspect your facility.

## Part 1: General Information

#### I. Project, Facility, and Company Information

- 1. Project Name: Modification to NOC 01AQCR-2037 Sixth Revision
- 2. Facility Name: Goldendale Generating Station
- 3. Facility Street Address:

600 Industrial Way, Goldendale, WA 98620

- 4. Facility Legal Description: <u>Combined-cycle electric generating facility</u>
- 5. Company Legal Name (if different from Facility Name): Puget Sound Energy
- 6. Company Mailing Address (street, city, state, zip)

P.O. Box 190, Goldendale, WA 98620

#### II. Contact Information and Certification

- 1. Facility Contact Name (who will be onsite): Ruth Juris
- 2. Facility Contact Mailing Address (if different than Company Mailing Address: same

- 3. Facility Contact Phone Number: 509-773-7919
- 4. Facility Contact E-mail: ruth.juris@pse.com
- 5. Billing Contact Name (who should receive billing information): Stacy Lynch
- 6. Billing Contact Mailing Address (if different Company Mailing Address):

P.O. Box 190, 600 Industrial Way, Goldendale, WA 98620

- 7. Billing contact Phone Number: Office: 509-773-7909; Cell:509-250-6482
- 8. Billing Contact E-mail: stacy.lynch@pse.com
- Consultant Name (optional if 3<sup>rd</sup> party hired to complete application elements): Eri Ottersburg
- 10. Consultant Organization/Company: Ramboll Americas Engineering Solutions, Inc.
- 11. Consultant Mailing Address (street, city, state, zip):
- 12. Consultant Phone Number: 206-336-1677
- 13. Consultant E-mail: eottersburg@ramboll.com
- 14. Responsible Official Name and Title (who is responsible for project policy or decision making): Fred Best, Plant Manager
- 15. Responsible Official Phone: 509-773-7902
- 16. Responsible Official E-mail: Fred.best@pse.com
- 17. Responsible Official Certification and Signature:

I certify that the information on this application is accurate and complete.

Date: 12/17/2024 Signature: \_

## Part 2: Technical Information

The Technical Information may be sent with this application form to the Cashiering Unit, or may be sent directly to the Ecology regional office with jurisdiction along with a copy of this application form.

For all sections, check the box next to each item as you complete it.

III. Pro	ject Description	As stated in our written narrative, this application is for
$\checkmark$	Written narrative describing your proposed project	modifying DSE's existing and approved NOC to incorporate
N/A	Projected construction start and completion dates.	are no physical changes to any equipment nor is the facility
	Operating schedule and production rates.	requesting changes to emissions. As a result, all questions relevant for new source review are unchecked in this form
N/A	List of all major process equipment and manufactu	as they should not apply. rer and maximum rated capacity.
	Process flow diagram with all emission points ident	ified.
N/A	Plan view site map.	
N/A	Manufacturer specification sheets for major proces	s equipment components
N/A 🗍	Manufacturer specification sheets for pollution con	trol equipment.
N/A	Fuel specifications, including type, consumption (pe	er hour and per year) and percent sulfur.
IV. Sta	te Environmental Policy Act (SEPA) Compliance	
Check	the appropriate box below.	
N/A	SEPA review is complete. Include a copy of the fina DNS, MDNS, and EIS) with your application.	SEPA checklist and SEPA determination (e.g.,
N/A	SEPA review has not been conducted:	
Ν	J/A If review will be conducted by another agen the final SEPA checklist and SEPA determina Agency reviewing SEPA:	cy, list the agency. You must provide a copy of ation before Ecology will issue your permit.
٢		fill out a SEPA checklist and submit it with your nline at <u>https://ecology.wa.gov/Regulations-</u> document-templates
V. Emi	ssions Estimations of Criteria Pollutants	
Does y	our project generate criteria air pollutant emission	ıs? 🖌 Yes ──No
lf yes,	please proved the following information regarding y	our criteria emissions in the application.
N/A	The names of the criteria air pollutants emitted (i.e	., NO <sub>X</sub> , SO <sub>2</sub> , CO, PM <sub>2.5</sub> , PM <sub>10</sub> , TSP, VOC, and Pb)
N/A	Potential emissions of criteria air pollutants in tons (include calculations)	per hour, tons per day, and tons per year
N/A	If there will be any fugitive criteria pollutant emissi	ons, clearly identify the pollutant and quantity
VI. Em	issions Estimations of Toxic Air Pollutants	
Does y	our project generate toxic air pollutant emissions?	<b>√</b> Yes No
lf yes, applica	please provide the following information regarding ation.	your toxic air pollutant emissions in your

N/A	The names of the toxic air pollutants emitted (specified in <u>WAC 173-460-150</u> 1)
N/A	Potential emissions of toxic air pollutants in pounds per hour, pounds per day, and pounds per year (include calculations)
N/A	If there will be any fugitive toxic air pollutant emissions, clearly identify the pollutant and quantity
VII. En	nission Standard Compliance
$\checkmark$	Provide a list of all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, and emission standards adopted under Chapter 70A.15 RCW.
	Does your project comply with all applicable standards identified? 🖌 Yes 🗌 No
VIII. Be	est Available Control Technology N/A
N/A	Provide a complete evaluation of Best Available Control Technology (BACT) for your proposal.
IX. Am	bient Air Impacts Analyses
Please	provide the following:
N/A	Ambient air impacts analyses for Criteria Air Pollutants (including fugitive emissions)
N/A	Ambient air impacts analyses for Toxic Air Pollutants (including fugitive emissions)
N/A	Discharge point data for each point included in air impacts analyses (include only if modeling is required)
Ν	J/A Exhaust height
١	V/A Exhaust inside dimensions (ex. diameter or length and width)
Ν	J/A Exhaust gas velocity or volumetric flow rate
N	I/A Exhaust gas exit temperature
Ν	J/A The volumetric flow rate
Ν	J/A Description of the discharges (i.e., vertically or horizontally) and whether there are any obstructions (ex., raincap)
١	V/A Identification of the emission unit(s) discharging from the point
Ν	J/A The distance from the stack to the nearest property line
١	N/A Emission unit building height, width, and length
٦	N/A Height of tallest building on-site or in the vicinity and the nearest distance of that building to the exhaust
٩	N/A Whether the facility is in an urban or rural location
Does	your project cause or contribute to a violation of any ambient air quality standard or accentable

Does your project cause or contribute to a violation of any ambient air quality standard or acceptable source impact level?

To request ADA accommodation, call Ecology at (360) 407-6800, 711 (relay service), or (877) 833-6341 (TTY)

<sup>&</sup>lt;sup>1</sup> <u>http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460-150</u>