



State of Oregon
Department of
Environmental
Quality

Permit Number: 18-0003-TV-01

Expiration Date: 6/1/2022

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OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY OREGON TITLE V OPERATING PERMIT

Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
Telephone: 541-388-6146

Issued in accordance with provisions of ORS 468A.040
and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Klamath Energy LLC
1125 NW Couch Street, Suite 700
Portland, OR 97209

INFORMATION RELIED UPON:

Application Number: 28626
Received: 04/29/2016

PLANT SITE LOCATION:

Klamath Cogeneration Project (KCP) and
Klamath Generation Peakers (KGP)
4940 Hwy. 97 South
Klamath Falls, OR 97603

LAND USE COMPATIBILITY STATEMENT:

Pursuant to ORS 469, Oregon Department of Energy's
Energy Facility Siting Council, in their orders,
determined that the proposed land use complies with
state wide planning goals.

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY


Mark W. Bailey, Eastern Region Air Quality Manager

JUN 12 2017

Date

Nature of Business

Electric power generation, natural gas fired, 25 MW or more

SIC

4911

NAICS

221112

Acid Rain Program Information:

Plant Name

Klamath Cogeneration Project
Klamath Generation Peakers

State

OR
OR

ORIS Code

55103
55544

NADB#

CT-1, CT-2
CT-3, CT-4, CT-5, CT-6

RESPONSIBLE OFFICIAL and
Acid Rain Designated Representative

Title: Managing Director

FACILITY CONTACT PERSON

Name: Jay Schindler
Title: EH & S
Phone: 541-850-6131

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LIST OF ABBREVIATIONS THAT MAY BE USED IN THIS PERMIT

ACDP	Air Contaminant Discharge Permit	I&M	Inspection and Maintenance
Act	Federal Clean Air Act	NA	Not Applicable
ASTM	American Society of Testing and Materials	NO _x	Nitrogen Oxides
Btu	British thermal unit	O ₂	Oxygen
CEMS	Continuous Emissions Monitoring System	OAR	Oregon Administrative Rules
CFR	Code of Federal Regulations	ODEQ	Oregon Department of Environmental Quality
CO	Carbon Monoxide	ORS	Oregon Revised Statutes
CO ₂ e	Carbon Dioxide Equivalent	O&M	Operation and Maintenance
CPMS	Continuous Parameter Monitoring System	Pb	Lead
DEQ	Department of Environmental Quality	PCD	Pollution Control Device
dscf	dry standard cubic feet	PM	Particulate Matter
EF	Emission Factor	PM ₁₀	Particulate Matter less than 10 microns in size
EPA	US Environmental Protection Agency	PM _{2.5}	Particulate Matter less than 2.5 microns in size
EU	Emissions Unit	ppm	parts per million
FCAA	Federal Clean Air Act	PSEL	Plant Site Emission Limit
FSA	Fuel Sampling and Analysis	psia	pounds per square inch, actual
GHG	Greenhouse Gases	SERP	Source Emissions Reduction Plan
gr/dscf	grain per dry standard cubic feet (1 pound = 7000 grains)	SO ₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	ST	Source Test
HCFC	Halogenated Chloro-Fluoro-Carbons	VE	Visible Emissions
ID	Identification Number or Label	VMT	Vehicle Miles Traveled
		VOC	Volatile Organic Compounds

PERMITTED ACTIVITIES

1. Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air contaminants from those processes and activities directly related to or associated with air contaminant source(s) in accordance with the requirements, limitations and conditions of this permit. [OAR 340-218-0010 and 340-218-0120(2)]
2. All conditions in this permit are federally enforceable, meaning that they are enforceable by DEQ, EPA and citizens under the Clean Air Act, except Conditions 6, 7, 38, G5 and G9 (OAR 340-248-0005 through 340-248-0180) are only enforceable by the state. [OAR 340-218-0060]

EMISSIONS UNIT (EU) AND POLLUTION CONTROL DEVICE (PCD) IDENTIFICATION

3. The emissions units regulated by this permit are the following: [OAR 340-218-0040(3)]

Table 1: Emission Units and Pollution Control Device Identification

Emission Unit (EU) Description	EU ID	Pollution Control Device (PCD)	PCD ID
Turbine/duct burners/heat recovery steam generator (HRSG)	CT-1	Selective catalytic reduction (SCR)	SCR-1
Turbine/duct burners/HRSG	CT-2	SCR	SCR-2
Pratt & Whitney combustion turbine #3	CT-3	Water injection, SCR, CO catalyst	WI#3, SCR#3, CO#3
Pratt & Whitney combustion turbine #4	CT-4	Water injection, SCR, CO catalyst	WI#4, SCR#4, CO#4
Pratt & Whitney combustion turbine #5	CT-5	Water injection, SCR, CO catalyst	WI#5, SCR#5, CO#5
Pratt & Whitney combustion turbine #6	CT-6	Water injection, SCR, CO catalyst	WI#6, SCR#6, CO#6
Auxiliary boiler – natural gas/oil fired	BR	None	NA
Aggregate insignificant activities – dust emissions from vehicle traffic on paved and unpaved roads	AI	None	NA

EMISSION LIMITS AND STANDARDS

The following tables and conditions contain the applicable requirements along with testing, monitoring and recordkeeping requirements for the emissions units to which those requirements apply.

Table 2: Facility-Wide Requirements

Applicable Requirement	Condition Number	Pollutant/ Parameter	Limit/Standard	Monitoring Condition
40 CFR 60.11(d)	4	Operation and Maintenance	Good Pollution Control Practices	None
340-208-0210(2)	5	Fugitive emissions	Minimize	38
340-208-0300	6	Air contaminants	Not cause a nuisance	38
340-208-0450	7	PM >250μ	No observable deposition off site	38
40 CFR Part 68	8	Risk management	Risk management plan	8

4. At all times, including periods of startup, shutdown and malfunction, the permittee must, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 60.11(d), 60.12, and 60.4333(a)]
5. Applicable Requirement: The permittee must not allow or permit any materials to be handled, transported or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions must include, but not be limited to the following: [OAR 340-208-0210(1)]
 - 5.a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - 5.b. Application of water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - 5.c. Full or partial enclosure of materials stockpiles in cases where application of water or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - 5.d. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials;
 - 5.e. Adequate containment during sandblasting or other similar operations;
 - 5.f. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
 - 5.g. Prompt removal from paved streets of earth or other material that does or may become airborne.

Nuisance Conditions

6. Applicable Requirement: The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by DEQ personnel. [OAR 340-208-0300] This condition is enforceable only by the State.
7. Applicable Requirement: The permittee must not cause or permit the deposition of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. [OAR 340-208-0450] This condition is enforceable only by the State.

Accidental Release Prevention

8. The permittee must comply with the risk management plan (RMP) and all other applicable Part 68 requirements. [40 CFR Part 68]

Acid Rain Program

9. The permittee must comply with the Acid Rain Permits attached to this permit.

Emissions Unit Specific Emission Limits and Standards**Table 3: Emission Units Combustion Turbines CT-1 through CT-6 and Auxiliary Boiler BR**

EU ID	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	
					Method	Condition
CT-1, CT-2	340-208-0110(4)	10	Visible Emissions	20% Opacity, 6-minute block average	VE Observations	39
	340-226-0210(2)(b)	11	PM	0.10 gr/dscf		45
	ACDP 18-0003, Condition 12	13	Operating Modes	Fuel Restrictions	Fuel Records	39
	ACDP 18-0003, Condition 14 PSD/BACT Limit	14	PM	6.8 lbs/hr	Fuel Records	39 & 45
	ACDP 18-0003, Condition 15 PSD/BACT Limit	15	NO _x	4.5 ppm @ 15% O ₂ and 33.1 lbs/hr	CEMS	54
	Subpart KKKK 40 CFR 60.4320(a)	16.a		15 ppm or 0.43 lb/MWh		
	Subpart KKKK 40 CFR 60.4330(a)(2)	16.b	SO ₂	0.060 lb/MMBtu Heat Input	Fuel Records	40, 41, & 42
	ACDP 18-0003, Condition 16 PSD/BACT Limit	17	CO	15 ppm @ 15% O ₂ and 71.3 lbs/hr	CEMS	55
	ACDP 18-0003 Condition 21	18	Operating Modes	Fuel Restrictions	Fuel Records	39.a
BR	340-208-0110(4)	10	Visible Emissions	20% Opacity, 6-minute block average	VE Observations	46, 47 & 48
	340-228-0210(2)(b)	12	PM	0.10 gr/dscf		
	ACDP 18-0003 Condition 9	19	Operating Modes	Fuel Oil Restrictions	Fuel Records	39.b
	Subpart Db 40 CFR 60.44b(a)(1)(ii)	20	NO _x	0.20 lb/MMBtu	CEMS	50
	ACDP 18-0003 PSD/BACT Limit	21		60 ppm@3% O ₂ – natural gas; 80 ppm @3% O ₂ – distillate oil		
	Subpart Db 40 CFR 60.43b(b)	12	PM	0.10 lb/MMBtu	VE Observations	46, 47 & 48
	Subpart Db 40 CFR 60.43.b(f)	22	Visible Emissions	20% Opacity		
	Subpart Db 40 CFR 60.42b(a)	23	SO ₂	0.20 lb/MMBtu, very low sulfur oil	Fuel Records	43

EU ID	Applicable Requirement	Condition Number	Pollutant/Parameter	Limit/Standard	Monitoring Requirement	
					Method	Condition
CT-3, CT-4, CT-5, CT-6.	340-208-0110(4)	10	Visible Emissions	20% Opacity, 6-minute block average	VE Observations	46 & 49
	340-226-0210(2)(b)	11	PM	0.14 gr/dscf		
	ACDP 18-0032, Condition 1.6	24	Operating Modes	Fuel Restrictions	Fuel Records	39.c
	ACDP 18-0032, Condition 1.7	25	Fuel Oil Sulfur	0.05% by Weight	Fuel Records	41, 42, & 43
	ACDP 18-0032, Condition 2.1, Emission Action Levels OAR-340-226-0120(2)	26.a.i	NO _x	5.0 ppm @15% O ₂ – Natural Gas;	CEMS	54
		26.a.ii		8.4 ppm @15% O ₂ – Distillate Oil		
		26.b	CO	16 ppm @15% O ₂		55
		26.e	Oil	16 Hours per Day	Fuel Records	39
	Subpart GG 40 CFR 60.332(a)(2)	27.a	NO _x	111 ppm @15% O ₂ – Natural gas	CEMS	54
		27.b		109 ppm @15% O ₂ – Distillate Oil		
	Subpart GG 40 CFR 60.333(b)	28	Fuel Sulfur Content	0.8% by Weight	Fuel Records	41, 42, & 43

Common Requirements

10. Visible emissions from the auxiliary boiler BR and the combustion turbines CT-1 through CT-6 must not equal or exceed an average of 20 percent opacity for any six minute block average using EPA Method 9. [OAR 340-208-0110(2) & (4)]
11. The permittee must not cause or allow the emission of particulate matter from the combustion turbines CT-1 & CT-2 in excess of 0.10 gr/dscf [OAR 340-226-0210(2)(b)(A)]. The permittee must not cause or allow the emission of particulate matter from the combustion turbines CT-3 through CT-6 in excess of 0.14 gr/dscf. [OAR 340-226-0210(2)(b)(B)]
12. The permittee must not cause or allow the emission of particulate matter from the Auxiliary Boiler (BR) in excess of 0.10 gr/dscf. [OAR 340-228-0210(2)(b)(A)]

Cogeneration Turbine (CT-1 and CT-2) Requirements

13. The combustion turbines and duct burners (CT-1 and CT-2) must burn only pipeline quality natural gas. [ACDP 18-0003, Condition 12]
14. Emissions of total suspended particulate matter (assumed as PM_{2.5}) from each combustion turbine stack (CT-1 and CT-2) must not exceed 6.8 lbs/hr. [ACDP 18-0003, Condition 14]

15. Emissions of nitrogen oxides (NO_x) from each combustion turbine stack (CT-1 and CT-2) must not exceed: [ACDP 18-0003, Condition 15]
- 15.a. 4.5 ppm corrected to 15% O₂, on a dry basis for a 24-hour rolling average, and
 - 15.b. 33.1 lbs/hr on a 24-hour rolling average.
 - 15.c. These limits do not apply during startup and shutdown. Startups and shutdowns are limited to 6 hours each. After 6 hours, emissions will be counted toward performance based standards.
16. New Source Performance Standards for the combustion turbines CT-1 and CT-2 are as follows:
- 16.a. The permittee must not cause to be discharged into the atmosphere from the combustion turbines any gases that contain nitrogen oxides (expressed as NO₂) in excess of 15 ppm corrected to 15% oxygen or 0.43lbs/MWh in accordance with 40 CFR 60.4320(a). Emissions in excess of 15 ppm during periods of startup, shutdown and malfunction shall not be considered a violation in accordance with 40 CFR 60.8(c). However, for purposes of excess emission reports required by 40 CFR 60.7(c), an excess emission is any unit operating period in which the 30 day rolling average NO_x emissions rate exceeds the applicable limit. Emissions calculations shall include all periods of unit operation, including start-up, shutdown and malfunction in accordance with 40 CFR 60.4350(h) and 60.4375(a). Nitrogen oxides emissions must be measured in accordance with Condition 54. [40 CFR 60.4320(a)]
 - 16.b. The permittee must not cause to be discharged into the atmosphere from the combustion turbines any gases that contain sulfur dioxide in excess of 0.060 lb/MMBtu-heat input in accordance with 40 CFR 60.4330(a)(2). The sulfur content of the fuels must be measured in accordance with Conditions 40 through 42 for natural gas. [40 CFR 60.4330(a)(2)]
17. Emissions of carbon monoxide (CO) from each combustion turbine stack (CT-1 and CT-2) within the normal operating range (60-100%) must not exceed: [ACDP 18-0003, Condition 16]
- 17.a. 15 ppm corrected to 15% O₂, on a dry basis while at base load for an 8-hour rolling average, and
 - 17.b. 71.3 lbs/hr on an 8-hour rolling average at any load in the normal operating range.
 - 17.c. These limits do not apply during startup and shutdown. Startups and shutdowns are limited to 6 hours each. After 6 hours, emissions will be counted toward performance based standards.
18. The combustion turbines (CT-1 and CT-2) may operate at loads less than the normal operating range. Operations below 50% load, other than during periods of startup and shutdown, are not permitted unless the permittee demonstrates through additional analysis, and approved by DEQ, that such operations will not cause an exceedence of the applicable air quality standards. During operation at loads lower than the normal operating range the maximum emissions are as follows: [ACDP 18-0003, Condition 21]
- 18.a. The combustion turbines may operate in the partial load range (50-60%) for brief periods of time, but no lower than 50% load, and for no more than 200 hrs/yr per CT, excluding periods of startup and shutdown. The emission limits for each CT during these periods are 227 lbs/hr CO and 76 lbs/hr VOC per CT. The emission limits of NO_x, SO₂ and PM₁₀ are the same as for operation within the normal operating range.
 - 18.b. The duct burners may not operate when the associated combustion turbine is operating in the partial load range (50-60%).

Auxiliary Boiler (BR) Requirements

19. The Auxiliary Boiler (BR) distillate oil operation of the boiler is limited to no greater than 400 hours per year and only when the combustion turbines are not operating or are in a shutdown mode except for one (1) week prior to and during testing events. [ACDP 18-0003, Condition 9]

- 19.a. Distillate oil may only be burned in the auxiliary boiler during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. [Definition of “gas-fired boiler” in 40 CFR Part 63, Subpart JJJJJ]
- 19.b. Periodic testing of the boiler on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [Definition of “gas-fired boiler” in 40 CFR Part 63, Subpart JJJJJ]
- 20. Nitrogen oxide emissions from the Auxiliary Boiler (BR) must not exceed 0.20 lb/MMBtu heat input as a 30-day rolling average while burning natural gas or distillate oil. [40 CFR 60.44b(a)(1)(ii) and (h)]
- 21. Nitrogen oxide emissions from the Auxiliary Boiler (BR) must not exceed 60 ppmv at 3% oxygen (24-hour rolling average) while combusting natural gas, and 80 ppmv at 3% oxygen (24-hour rolling average) while combusting distillate oil with the exception of startup and shutdown periods. [ACDP 18-0003, Condition 10]
- 22. The exhaust gases of the Auxiliary Boiler (BR) must not have an opacity greater than 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent, notwithstanding the limits of Condition 10. [40 CFR 60.43b(f) and (g)]
- 23. The permittee must not cause to be discharged into the atmosphere from the auxiliary boiler any gases that contain SO₂ in excess of 0.20 lb/MMBtu and combust only very low sulfur oil (≤0.5 weight percent sulfur). [40 CFR 60.42b(a), (g), and (j)]

Peaker Turbines (CT-3, CT-4, CT-5, CT-6) Requirements

- 24. Only natural gas and distillate oil may be burned in combustion turbines CT-3, CT-4, CT-5 and CT-6. [ACDP 18-0032, Condition 1.6]
- 25. Fuel oils must not contain more than 0.05% sulfur by weight. [ACDP 18-0032, Condition 1.7]
- 26. The permittee must take corrective action as expeditiously as practical if emission action levels (EAL) from the stacks of combustion turbines CT-3, CT-4, CT-5 and CT-6 exceed any of the following: [ACDP 18-0032, Condition 2.1]
 - 26.a. Emissions of oxides of nitrogen (NO_x):
 - 26.a.i. 5.0 ppmv NO_x corrected to 15% O₂ and averaged over a rolling 4-hour period when operating on natural gas.
 - 26.a.ii. 8.4 ppmv NO_x corrected to 15% O₂ and averaged over a rolling 4-hour period when operating on oil.
 - 26.b. Emissions of carbon monoxide (CO): 16 ppmv CO corrected to 15% O₂ and averaged over a rolling 4-hour period.
 - 26.c. The EALs do not apply during startup and shutdown.
 - 26.d. A deviation from the NO_x and/or CO EALs in Conditions 26.a and 26.b shall not by itself be considered a violation of the NO_x or CO standards in this permit.
 - 26.e. To assure compliance with the 24-hour PM₁₀ NAAQS the permittee may only burn oil in each combustion turbine for a total of 16 hours out of each calendar day.
- 27. Emissions of NO_x from combustion turbines CT-3, CT-4, CT-5 and CT-6 must not exceed: [40 CFR Part 60.332 (a)(2)]
 - 27.a. 111 ppmv NO_x corrected to 15% O₂ when operating on natural gas.
 - 27.b. 109 ppmv NO_x corrected to 15% O₂ when operating on oil.
 - 27.c. For the purposes of submitting the reports required by 40 CFR 60.7(c) (Condition 69 of this permit), an hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO_x concentration exceeds the applicable emission limit. A 4-hour rolling average NO_x

concentration is the arithmetic average of the average NO_x concentration measured by the CEMS for a given hour (corrected to 15% O₂) and the three unit operating hour average NO_x concentrations immediately preceding that unit operating hour. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluents (or both). [40 CFR 60.334(j)(1)(iii)]

28. The permittee must not use any fuel containing more than 0.8% sulfur by weight in combustion turbines CT-3, CT-4, CT-5 and CT-6. The sulfur content must be measured in accordance with Conditions 41 through 43. [40 CFR 60.333(b)]

Insignificant Activities Requirements

29. DEQ acknowledges that insignificant emissions units (IEUs) identified by rule as either categorically insignificant activities or aggregate insignificant emissions as defined in OAR 340-200-0020 exist at facilities required to obtain an Oregon Title V Operating Permit. IEUs must comply with all applicable requirements. In general, the requirements that could apply to IEUs are incorporated as follows:
- 29.a. OAR 340-208-0110 (20% opacity)
 - 29.b. OAR 340-228-0210 (0.10 gr/dscf corrected to 12% CO₂ or 50% excess air for fuel burning equipment)
 - 29.c. OAR 340-226-0210 (0.10 gr/dscf for non-fugitive, non-fuel burning equipment)
 - 29.d. OAR 340-226-0310 (process weight limit for non-fugitive, non-fuel burning process equipment)
 - 29.e. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to the following: [40 CFR 63.11116(a), (b), (d) and OAR 340-244-0240, federally enforceable]
 - 29.e.i. Minimize gasoline spills;
 - 29.e.ii. Clean up spills as expeditiously as practicable;
 - 29.e.iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - 29.e.iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 - 29.e.v. The permittee is not required to submit the notifications or reports as specified in 40 CFR 63.11124 and 63.11126, or Subpart A, but the permittee must have records available within 24 hours of a request by DEQ to document gasoline throughput.
 - 29.e.vi. Portable gasoline containers that meet the requirements of 40 CFR Part 59, Subpart F, are considered acceptable for compliance with Condition 29.e.iii.
 - 29.f. In addition to the measures specified in Condition 29.e, the permittee must take the following measures to minimize vapor releases: [OAR 340-244-0240, state only enforceable]
 - 29.f.i. Do not top off or overfill vehicle tanks. If a person can confirm that a vehicle tank is not full after the nozzle clicks off (such as by checking the vehicle's fuel tank gauge), the person may continue to dispense fuel using best judgment and caution to prevent a spill;
 - 29.f.ii. Post a sign at the gasoline dispensing facility (GDF) instructing a person filling up a motor vehicle to not top off the vehicle tank;
 - 29.f.iii. Ensure that cargo tanks unloading at the GDF comply with Conditions 29.e.i through 29.e.iii, 29.f.i and 29.f.ii.
 - 29.f.iv. The permittee must only load gasoline into storage tanks at the facility by utilizing submerged filling, as defined in OAR 340-244-0030. The submerged fill pipe must be no more than 12 inches from the bottom of the storage tank.

- 29.g. Emergency stationary reciprocating internal combustion engines (RICE) are subject to the following requirements: [40 CFR 63.6640(f)]
- 29.g.i. For each emergency stationary RICE, the permittee must:
- 29.g.i.A. Change oil and filter every 500 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a), Table 2d(4)(a)]
- 29.g.i.B. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a), Table 2d(4)(b)]
- 29.g.i.C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and, [40 CFR 63.6603(a), Table 2d(4)(c)]
- 29.g.i.D. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; [40 CFR 63.6603(a), Table 2d]
- 29.g.ii. The permittee must install a non-resettable hour meter on each emergency stationary RICE, if one is not already installed. [40 CFR 63.6625(f)]
- 29.g.iii. The permittee must operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions. [40 CFR 63.6640(a), Table 6(9)]
- 29.g.iv. Operating conditions: [40 CFR 63.6640(f)(2)]
- 29.g.iv.A. There is no time limit on the use of emergency stationary RICE in emergency situations.
- 29.g.iv.B. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance.
- 29.g.iv.C. Emergency stationary RICE may be operated for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another utility.
- 29.g.v. The permittee must keep records of the hours of operation of each emergency stationary RICE that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)]
- 29.h. Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing, monitoring, recordkeeping or reporting for the applicable emissions limits and standards that apply to IEUs. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in and perform the testing in accordance with DEQ's Source Sampling Manual.

PLANT SITE EMISSION LIMITS

30. The permittee must not cause or allow plant site emissions to exceed the following limits for any 12 consecutive calendar month period: [OAR 340-222-0035 through OAR 340-222-0041]

Table 4: Plant Site Emission Limits

Pollutant	Plant Site Emission Limit (tons/yr)
PM	48
PM ₁₀	48
PM _{2.5}	46
SO ₂	39
NO _x	314
CO	623
VOC	39
GHG (CO ₂ e)	2,102,411

EMISSION FEES

31. Emission fees will be based on the Plant Site Emissions Limits, unless permittee elects to report actual emissions for one or more permitted processes/pollutants. [OAR 340-220-0090]

GENERAL TESTING REQUIREMENTS

32. Unless otherwise specified in this permit, the permittee must conduct all testing in accordance with DEQ's Source Sampling Manual and 40 CFR 60.8, if applicable. [OAR 340-212-0120]
- 32.a. Unless otherwise specified by a state or federal regulation, the permittee must submit a source test plan to DEQ at least 30 days prior to the date of the test. The test plan must be prepared in accordance with the Source Sampling Manual and address any planned variations or alternatives to prescribed test methods. Permittee should be aware, if significant variations are requested, it may require more than 30 days for DEQ to grant approval and may require EPA approval in addition to approval by DEQ.
- 32.b. Only regular operating staff may adjust the processes or emission control device parameters during a compliance source test and within two (2) hours prior to the tests. Any operating adjustments made during a compliance source test, which are a result of consultation during the tests with source testing personnel, equipment vendors or consultants, may render the source test invalid.
- 32.c. Unless otherwise specified by permit condition or DEQ approved source test plan, all compliance source tests must be performed as follows:
- 32.c.i. At least 90% of the design capacity for new or modified equipment;
 - 32.c.ii. At least 90% of the maximum operating rate for existing equipment; or
 - 32.c.iii. At 90 to 110% of the normal maximum operating rate for existing equipment. For purposes of this permit, the normal maximum operating rate is defined as the 90th percentile of the average hourly operating rates during a 12 month period immediately preceding the source test. Data supporting the normal maximum operating rate must be included with the source test report.

- 32.d. Each source test must consist of at least three (3) test runs and the emissions results must be reported as the arithmetic average of all valid test runs. If for reasons beyond the control of the permittee a test run is invalid, DEQ may accept two (2) test runs for demonstrating compliance with the emission limit or standard.
- 32.e. Source test reports prepared in accordance with DEQ's Source Sampling Manual must be submitted to DEQ within 60 days of completing any required source test, unless a different time period is approved in the source test plan submitted prior to the source test.
- 33. Unless otherwise specified in this permit or an applicable requirement, DEQ is not requiring any testing for the particulate matter and visible emissions limits that apply to insignificant emission units and the turbines and the boiler while burning natural gas. However, if testing were performed for compliance purposes, the permittee would be required to use the test methods identified in the definitions of "opacity" and "particulate matter" in OAR 340-200-0020 and perform the testing in accordance with DEQ's Source Sampling Manual.
- 34. Within 90 days after any one of the combustion turbines CT-3, CT-4, CT-5, CT-6 first exceeds 210 hours of operation in any calendar year on oil, the permittee must conduct a source test on a representative unit for volatile organic compound (VOC) emissions, using EPA Method 25A, unless alternate test methods and/or procedures are approved by the regional source test coordinator. [ACDP 18-0032, Condition 4.3]
 - 34.a. Three 1-hour tests must be performed.
 - 34.b. During the source test the permittee must record the following information for the unit being tested:
 - 34.b.i. Combustor inlet pressure (psia);
 - 34.b.ii. Turbine oil flow (1,000 gallons/hr);
 - 34.b.iii. Turbine load (MW);
 - 34.b.iv. Heat input (MMBtu/hr);
 - 34.b.v. Ammonia injection rate (lbs/hr); and
 - 34.b.vi. Combustion shell temperature (°F).
 - 34.c. VOC emissions should be reported as follows:
 - 34.c.i. ppm_{dv};
 - 34.c.ii. ppm_{dv} @ 15% O₂;
 - 34.c.iii. lbs/hr; and
 - 34.c.iv. lbs/MMBtu

MONITORING REQUIREMENTS

The monitoring conditions in this section are based on OAR 340-218-0050(3)(a); unless otherwise specified.

General Monitoring Requirements:

- 35. The permittee must not knowingly render inaccurate any required monitoring device or method. [OAR 340-218-0050(3)(a)(E)]
- 36. The permittee must use the same methods to determine compliance as those used to determine actual emissions for fee purposes and can be no less rigorous than the requirements of OAR 340-218-0080. [OAR 340-218-0050(3)(a)(F)]
- 37. The permittee must comply with the monitoring requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(a)(G)]

Facility-Wide Monitoring

38. Monitoring Requirement: The permittee must maintain a log of each nuisance complaint received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance condition, description of nuisance condition, location of receptor, status of plant operation during the observed period, and time of response to complainant. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and a plant representative must provide a response to the complainant within 24 hours, if possible. The permittee shall make the log available to DEQ upon request. This condition is only enforceable by the state. [OAR 340-218-0050(3)(a)]

Fuel Monitoring

39. The permittee must monitor and record the type of fuel and amount burned in each turbine, duct burner and boiler. [OAR 340-218-0050(3)(a)]
- 39.a. The permittee must also record the hours of operation of CT-1 and CT-2 during startups, at <50% load, 50 to 60% load, 60% to baseload, and baseload.
- 39.b. The permittee must also record the number of hours each calendar year that distillate oil is burned in the auxiliary boiler.
- 39.c. For CT-3, CT-4, CT-5 and CT-6, the permittee must record the number of hours each day that distillate oil is burned in each turbine.
40. The permittee must monitor natural gas fuel sulfur content in accordance with the August 31, 2000 custom fuel compliance monitoring schedule approved by EPA Region X, except as provided in Condition 42. This monitoring is contingent upon the use of pipeline quality natural gas, as delivered to the project. [ACDP 18-0003, Condition 32]
41. The permittee must monitor the total sulfur content of the fuel being fired in the turbines, except as provided in Condition 42. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10) and 60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half of the applicable limit or 0.4 weight percent (4000 ppmw), ASTM D4084-82, D4810, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference), which measure the major sulfur compounds may be used. [40 CFR 60.334(h)(1) and 60.4360]
42. Notwithstanding the provisions in Conditions 40 and 41, the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbines, if the gaseous fuel is demonstrated not to exceed potential emissions of 0.060 lb SO₂/MMBtu heat input for CT1 and CT2 or demonstrated to meet the definition of natural gas in 40 CFR 60.331(u) for CT3, CT4, CT5 and CT6, regardless of whether an existing custom schedule approved by the administrator requires such monitoring. The permittee must use one of the following sources of information to make the required fuel sulfur demonstration: [40 CFR 60.334(h)(3) and 60.4365]
- 42.a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- 42.b. Representative fuel sampling data which shows that the fuel sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 is required.

43. For fuel oil, the permittee must use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2 and 2.2.4.3 of Appendix D to 40 CFR Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil must be determined and recorded once per unit operating day. [40 CFR 60.334(i)(1) and 60.4370(a)]
44. The permittee shall obtain and maintain at the affected facility, fuel receipts from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the limit in Condition 23. [40 CFR 60.42(j) and 60.49b(r)(1)]
45. When the permittee burns only natural gas in the auxiliary boiler BR and the combustion turbines CT-1 through CT-6, the permittee is not required to conduct monitoring for Conditions 11, 14, 12 and 22. The permittee must maintain daily and annual records of natural gas usage. [OAR 340-218-0050(3)(a)]

Visible Emissions

46. At any time that the permittee is burning natural gas in the auxiliary boiler BR and the combustion turbines CT-1 through CT-6, the permittee is not required to conduct visible emissions or particulate matter monitoring because it is extremely unlikely that these standards could be violated while burning natural gas. The permittee must maintain records of the type of fuels being burned on an hourly basis. If visible emissions are to be measured for any reason, the visible emissions must be measured in accordance with Condition 10. [OAR 340-218-0050(3)(a)]
47. Except as provided in Condition 48, the permittee must conduct Method 9 of Appendix A-4 of 40 CFR Part 60 (EPA Method 9) performance tests in the auxiliary boiler exhaust during times when burning oil, using the procedures in 40 CFR 60.44b(a)¹ according to the applicable schedule in Conditions 47.a through 47.d as determined by the most recent EPA Method 9 performance test results. [40 CFR 60.48b(a)(1)]
 - 47.a. If no visible emissions are observed, a subsequent EPA Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
 - 47.b. If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent EPA Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;
 - 47.c. If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent EPA Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
 - 47.d. If the maximum 6-minute average opacity is greater than 10 percent, a subsequent EPA Method 9 performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.
48. If the maximum 6-minute average opacity is less than 10 percent during the most recent EPA Method 9 performance test, the permittee may, as an alternative to performing subsequent EPA Method 9 performance tests, elect to perform subsequent monitoring using Method 22 of Appendix A-7 of 40 CFR Part 60 (EPA Method 22) according to the procedures specified in Conditions 48.a and 48.b. [40 CFR 60.48b(a)(2)]

¹ 40 CFR 60.48b(a) requires three hour performance tests in accordance with 40 CFR 60.11. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.

- 48.a. The permittee must conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using EPA Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.*, 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.*, 90 seconds per 30 minute period) the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.*, 90 seconds) or conduct a new EPA Method 9 performance test using the procedures in 40 CFR 60.48b(a) within 30 calendar days.
 - 48.b. If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.
49. Except when burning natural gas, the permittee must monitor visible emissions from the Pratt & Whitney combustion turbines (CT-3, CT-4, CT-5, CT-6) by conducting an EPA Method 22 test for a minimum period of six minutes. If, during the EPA Method 22, test visible emissions are detected for more than 5% of the observation period, the permittee must conduct an EPA Method 9 test within 24 hours. The EPA Method 9 test must be a minimum of 6 minutes long unless any one reading is greater than 20% opacity, then the observation period must be 60 minutes or until a violation of the applicable standard in Condition 10 is documented, whichever period is shorter. Each EPA Method 9 observation must represent 15 seconds for the purpose of determining the average opacity for any six minute block in a 60 minute period that the visible emissions are greater than 20% opacity. [OAR 340-218-0050(3)(a)]
- 49.a. The EPA Method 22 or EPA Method 9 tests must be conducted daily while burning oil but not while the plant is in startup mode.
 - 49.b. If 7 consecutive days of EPA Method 22 tests show no visible emissions or the EPA Method 9 test results are less than the applicable standard in Condition 10, the test frequency may be weekly.
 - 49.c. If 4 consecutive weeks of EPA Method 22 tests show no visible emissions or the EPA Method 9 test results are less than the applicable standard in Condition 10, the test frequency may be monthly.
 - 49.d. If 3 consecutive months of EPA Method 22 tests show no visible emissions or the EPA Method 9 test results are less than the applicable standard in Condition 10, the test frequency may be quarterly.
 - 49.e. If 4 consecutive quarters of EPA Method 22 tests show no visible emissions or the EPA Method 9 test results are less than the applicable standard in Condition 10, the test frequency may be once every six months.
 - 49.f. If any test result exceeds the standard in Condition 10, the permittee must take corrective action and the test frequency must be daily for 5 consecutive days following the exceedance. If the results of the daily tests are all less than the standard in Condition 10, the test frequency must be the same as before the exceedance occurred.
 - 49.g. If, on a regularly scheduled test day, it is not possible to conduct an EPA Method 22 or EPA Method 9 test due to inclement weather conditions or interference from other fugitive sources, the permittee must make three attempts during the day at approximately 10 a.m., noon and 2 p.m. If it is still not possible to conduct the test, the permittee must perform the test the following day. The permittee must record in a log the reason for not conducting the test on a regularly scheduled test day.

Continuous Emissions Monitoring

Auxiliary Boiler

50. The permittee must calibrate, maintain and operate CEMS for measuring NO_x and O₂ emissions discharged to the atmosphere from the auxiliary boiler, and must record the emissions according to the units and averaging times below. [40 CFR 60.48b(b)]

Table : Auxiliary Boiler Continuous Emissions Monitoring System Requirements

Pollutant	Units	Averaging Time, Data Frequency
Oxygen	Percent	1 hour average, continuous w/15 minute averaging points
Nitrogen Oxides	ppmdv at 3% O ₂	24 hours rolling, continuous, with 15 minute averaging points
	lb/MMBtu	30 day rolling average

- 50.a. The CEMS must be operated and data recorded during all periods of operation of the auxiliary boiler except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]
- 50.b. The 1-hour average NO_x emission rates measured by the continuous NO_x monitor must be expressed in lb/MMBtu heat input and ppm corrected to 3% oxygen and must be used to calculate the average emission rates under Conditions 20 and 21. The 1-hour averages must be calculated using the data points required under 40 CFR 60.13(h)(2). [40 CFR 60.48b(d)]
- 50.c. The procedures under 40 CFR 60.13 must be followed for installation, evaluation and operation of the continuous monitoring systems. [40 CFR 60.48b(e)]
- 50.c.i. The span value for NO_x is 500 ppm; or
- 50.c.ii. The permittee may elect to use the NO_x span values determined according to Section 2.1.2 in Appendix A to 40 CFR Part 75
- 50.d. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, EPA Method 7, EPA Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR 60.48b(f)]
- 50.e. The permittee must calculate the corrected NO_x concentration from the Auxiliary Boiler using the following equation: [OAR 340-218-0050(3)(a)]

$$CC_{NO_x} = C_{NO_x} \times 17.9 / (20.9 - \%O_2)$$

Where:

$$\begin{aligned} CC_{NO_x} &= \text{Hourly average NO}_x \text{ concentration, ppm (corrected)} \\ C_{NO_x} &= \text{Hourly average NO}_x \text{ concentration, ppm (uncorrected)} \\ \%O_2 &= \text{Hourly average \%O}_2 \text{ by volume in flue gas} \end{aligned}$$

Combustion Turbines CT-1 through CT-6

51. The permittee must determine and record the heat input (million Btu/hr) to the combustion turbines for every hour or part of an hour any fuel is combusted following the procedures in Appendix F to 40 CFR Part 75. [40 CFR 75.10(c)]
52. In accordance with 40 CFR 75.11(d)(2), and Appendix D of Part 75, the permittee must install, certify, operate, maintain and record the output of fuel flow meters for each type of fuel (natural gas for all turbines and ASTM #2 oil for CT-3 through CT-6) and calculate the sulfur dioxide emissions for each hour of operation as follows:

- 52.a. While burning distillate oil, convert the volumetric flow to mass flow using the density of the oil samples and calculate the SO₂ emissions using the following equation:

$$M_{SO_2} = 2.0 \times M_{oil} \times \%S_{oil}/100$$

Where:

M_{SO_2}	=	Hourly mass of SO ₂ emitted from combustion of oil, lb/hr.
M_{oil}	=	Mass of oil consumed per hour, lb/hr.
$\%S_{oil}$	=	Percentage of sulfur by weight measured in the sample in accordance with Condition 43
2.0	=	Ratio of lb SO ₂ /lb S.

- 52.b. While burning natural gas, convert the volumetric flow to heat input using the heating value of the natural gas and calculate the SO₂ emissions using the following equation:

$$M_{SO_2g} = ER \times H_{ig}$$

Where:

M_{SO_2g}	=	Hourly mass of SO ₂ emissions from the combustion of pipeline natural gas, lb/hr.
ER	=	SO ₂ emission rate of 0.0006 lb/MMBtu for pipeline natural gas
H_{ig}	=	Hourly heat input as determined in accordance with Condition 51 and equation D-15a in Appendix D to 40 CFR Part 75

53. In accordance with 40 CFR 75.10(a)(3)(ii), 75.13(b), and Appendix G of Part 75, the permittee must install, certify, operate, maintain and record the output of fuel flow meters for each type of fuel and calculate the carbon dioxide emissions for each day of operation as follows:

$$W_{CO_2} = (F_c \times H \times U_f \times MW_{co2})/2000$$

Where:

W_{CO_2}	=	Daily mass of CO ₂ emitted from combustion, tons/day
F_c	=	Carbon based F-factor = 1040 scf/MMBtu for natural gas; 1,420 scf/MMBtu for oil
H	=	Daily heat input in MMBtu, as reported in company records
U_f	=	1/385 scf CO ₂ /lb-mole at 14.7 psia and 68°F
MW_{co2}	=	Molecular weight of carbon dioxide (44 lb/lb-mole)

54. The permittee must install, certify, operate, maintain and record the output of a NO_x CEMS (consisting of a NO_x pollutant concentration monitor and an O₂ diluent monitor) with automated DAHS for measuring and recording NO_x concentration (ppm), emissions rate lb/million Btu (and lb/MWh for CT-1 and CT-2), and mass emission rate (lb/hr) discharged to the atmosphere in accordance with 40 CFR 75.10(a)(2) and 75.12. In case of a conflict between the conditions in this permit and 40 CFR Part 75, the requirements of 40 CFR Part 75 must be followed. [ACDP 18-0003 Condition 31, ACDP 18-0032 Condition 4.5, 4.6 & 4.10, 40 CFR 60.334(b)(3)(iii), and 60.4345(a)]

Table 6: Combustion Turbines Continuous Emissions Monitoring System Requirements

Turbines	Pollutant	Units	Averaging Time
All Turbines	Oxygen	Percent	1 Hour Average
CT-1 and CT-2	Nitrogen Oxides (NO _x)	ppmdv at 15% O ₂ , lb/MMBtu, lb/MWh, and lb/hr	24 Hours Rolling*
CT-3 through CT-6	Nitrogen Oxides (NO _x)	ppmdv at 15% O ₂ , lb/MMBtu, and lb/hr	4 Hours Rolling*

Note*: The rolling averages do not apply during periods of startup and shutdown.

- 54.a. The NO_x concentration corrected to 15% oxygen must be calculated for all turbines as follows:

$$CC_{NOx} = C_{NOx} \times 5.9 / (20.9 - \%O_2)$$

Where:

$$\begin{aligned} CC_{NOx} &= \text{Hourly average NO}_x \text{ concentration, ppm (corrected)} \\ C_{NOx} &= \text{Hourly average NO}_x \text{ concentration, ppm (uncorrected)} \\ \%O_2 &= \text{Hourly average \%O}_2 \text{ by volume in flue gas} \end{aligned}$$

- 54.b. The mass emissions rate in pounds per hour must be calculated for all turbines as follows:

$$M_{NOx} = ER_{NOx} \times HI_g$$

Where:

$$\begin{aligned} M_{NOx} &= \text{Hourly mass of NO}_x \text{ emissions, lb/hr.} \\ ER_{NOx} &= \text{NO}_x \text{ emission rate in lb/MMBtu as measured by the CEMS} \\ HI_g &= \text{Hourly heat input as determined in accordance with Condition 51 and equation D-15a in Appendix D of 40 CFR Part 75} \end{aligned}$$

- 54.c. The emission rate in pounds per megawatt-hour must be calculated for turbines CT1 and CT2 if complying with the output based standard, as follows: [40 CFR 60 4350(f)]

$$E = (NO_x)_h * (HI)_h / P$$

Where:

$$\begin{aligned} E &= \text{Hourly NO}_x \text{ emission rate, in lb/MWh} \\ (NO_x)_h &= \text{Hourly NO}_x \text{ emission rate, in lb/MMBtu} \\ (HI)_h &= \text{Hourly heat input as determined in accordance with Condition 51 and equation D-15a in Appendix D of 40 CFR Part 75, and} \\ P &= (Pe)_t + (Pe)_c + P_s + P_o \end{aligned}$$

Where:

$$\begin{aligned} P &= \text{Gross energy output of the stationary combustion turbine system in MW} \\ (Pe)_t &= \text{Electrical or mechanical energy output of the combustion turbine in MW} \\ (Pe)_c &= \text{Electrical or mechanical energy output (if any) of the steam turbine in MW, and} \\ P_s &= Q * H / 3.413 \times 10^6 \text{ Btu/MWh} \end{aligned}$$

Where:

$$\begin{aligned} P_s &= \text{Useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MW} \\ Q &= \text{Measured steam flow rate in lb/h} \\ H &= \text{Enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb, and } 3.413 \times 10^6 = \text{conversion from Btu/h to MW} \\ P_o &= \text{Other useful heat recovery, measured relative to ISO conditions, not used for steam generation or performance enhancement of the combustion turbine} \end{aligned}$$

- 54.d. The permittee must ensure that all NO_x CEMS meet the equipment, installation and performance specifications in 40 CFR Part 75 Appendix A. [40 CFR 75.10(b)]

- 54.e. The permittee must ensure that all NO_x CEMS are in operation at all times that the combustion turbines combust any fuel and that the following requirements are met: [40 CFR 75.10(d)]
- 54.e.i. The permittee must ensure that each NO_x CEMS and component thereof is capable of completing a minimum of one cycle of operation (sampling, analyzing and data recording) for each successive 15-minute interval. The permittee must reduce all NO_x concentration and NO_x emissions rate data to 1-hour averages. The permittee must compute these averages from four or more data points collected in each of four successive 15-minute periods (minimum of 4 data points per hour), except during periods when calibration, quality assurance, or maintenance activities pursuant to 40 CFR 75.21 and Appendix B of 40 CFR Part 75 are being performed. During these periods, a valid hour consists of at least two data points separated by a minimum of 15 minutes. For combined monitoring systems (NO_x - diluent), the hourly average emission rate is valid only if the hourly average concentration from each of the component monitors is valid.
- 54.e.ii. Failure of a NO_x CEMS to acquire the minimum number of data points comprising a valid hour, as specified in this condition, will result in the loss of such component data for the entire hour. The permittee must estimate and record emission or flow data for the missing hour by means of the automated DAHS, in accordance with 40 CFR Part 75, Subpart D.
- 54.f. The concentration of NO_x in parts per million, corrected to 15% oxygen, emission rate in pounds per hour, emission rate in pounds per megawatt-hour (if applicable) must be recorded each clock hour that the combustion turbines are operating as an hourly average.
- 54.f.i. For CT-1 and CT-2, the NO_x concentration in parts per million, corrected to 15% oxygen and emission rate (lb/hr) must also be recorded as a 24-hour rolling average. At the end of each clock hour, a new 24-hour average is calculated and recorded using all available hourly averages during the previous 24-hour period, excluding periods of startup and shutdown. [ACDP 18-0003 Condition 31]
- 54.f.ii. For CT-1 and CT-2, the NO_x concentration in parts per million, corrected to 15% oxygen and emission rate in pounds per megawatt-hour (if applicable) must also be recorded as a 30-day rolling average. A 30-day rolling average NO_x emission rate is the arithmetic average of all hourly NO_x emission data in ppm or lb/MWh measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO_x emissions rates for the preceding 30 unit operating days if a valid NO_x emission rate is obtained for at least 75 percent of all operating hours. [40 CFR 60.4380(b)]
- 54.f.iii. For CT-3 through CT-6, the NO_x concentration in parts per million, corrected to 15% oxygen must also be recorded as a 4-hour rolling average. At the end of each clock hour, a new 4-hour average is calculated and recorded using all available hourly averages during the previous 4-hour period, excluding periods of startup and shutdown. [ACDP 18-0032 Condition 4.5] The rolling 4-hour unit operating hour average must also be recorded in accordance with Condition 27.c.
- 54.g. The permittee must ensure that each NO_x CEMS and component thereof is capable of accurately measuring, recording and reporting data, and must not incur a full scale exceedance. [40 CFR 75.10(f)]
- 54.h. Whenever the permittee makes a replacement, modification or change in the certified NO_x CEMS, including the automated DAHS, that significantly affects the ability of the system to measure or record the NO_x emission rate, the permittee must recertify the NO_x CEMS or component in accordance with 40 CFR 75.20(b).
- 54.i. The permittee must operate, calibrate and maintain each NO_x CEMS used under the Acid Rain Program according to the quality assurance and quality control procedures in Appendix B of 40 CFR Part 75, including but not limited to the following activities: [40 CFR 75.10(b) and 75.21(a)]
- 54.i.i. Daily zero and span calibration checks;
- 54.i.ii. Weekly inspection and maintenance of the CEMS;

- 54.i.iii. Quarterly linearity checks; and
 54.i.iv. Annual relative accuracy test audits.
- 54.j. The permittee must ensure that all calibration gases used to quality assure the operation of the instrumentation required by this permit must meet the definition in 40 CFR 72.2. [40 CFR 75.21(c)]
- 54.k. If an out-of-control period occurs to a monitor or NO_x CEMS, the permittee must take corrective action and repeat the tests applicable to the “out-of-control parameter” in accordance with 40 CFR 75.24.
- 54.l. Whenever a valid hour of NO_x emissions rate data have not been measured and recorded, the permittee must provide substitute data in accordance with 40 CFR 75.30 through 75.33, except:
- 54.l.i. The missing data substitution methodology provided for at 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions for emission limits in Conditions 15, 16.a, 26.a and 27. [40 CFR 60.334(b)(3)(iii) and 60.4350(d)]
- 54.l.ii. Periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c). [40 CFR 60.334(b)(3)(iii) and 60.4380(b)(2)]
55. The permittee must calibrate, maintain and operate continuous emissions monitors in the turbine systems for CO and O₂, and record the associated emissions according to the units and averaging times below. The continuous monitoring systems must, at a minimum, conform with DEQ’s Continuous Monitoring Manual (Jan. 1992). The main elements of the Continuous Monitoring Manual include the development and submittal of Standard Operating Procedures, a Quality Assurance Plan, and conducting Relative Accuracy Test Audits. [ACDP 18-0003 Condition 31 and ACDP 18-0032 Condition 4.5]

Table 7: Combustion Turbines Relative Accuracy Test Audit Requirements

Turbines	Pollutant	Units	Averaging Time
All Turbines	Oxygen	Percent	1 Hour Average
CT-1 and CT-2	Carbon Monoxide	ppmdv at 15% O ₂ and lb/hr	8 Hours Rolling*
CT-3 through CT-6	Carbon Monoxide	ppmdv at 15% O _x and lb/hr	4 Hours Rolling*

Note* The rolling averages do not apply during periods of startup and shutdown.

- 55.a. The permittee must calculate the CO emissions from the combustion turbines/duct burners corrected to 15% oxygen using the following equation: [ACDP 18-0003 Condition 31]

$$CC_{CO} = C_{CO} \times (20.9 - 15) / (20.9 - \%O_2)$$

Where:

$$\begin{aligned} CC_{CO} &= \text{Hourly average CO concentration, ppm (corrected to 15\% O}_2\text{)} \\ C_{CO} &= \text{Hourly average CO concentration, ppm (uncorrected)} \\ 15 &= \text{Oxygen correction level (\%)} \\ \%O_2 &= \text{Actual stack gas oxygen concentration (\%) measured by the oxygen CEMS} \end{aligned}$$

- 55.b. Mass emissions of carbon monoxide must be recorded each clock hour that the combustion turbines are operating using the following equation:

$$M_{CO} = C_{CO} / 10^6 \times MW_{CO} / 385 \times F_d \times 20.9 / (20.9 - \%O_2) \times HI$$

Where:

$$\begin{aligned} M_{CO} &= \text{Hourly mass of CO emissions, lb/hr} \\ C_{CO} &= \text{Hourly average CO concentration, ppm (uncorrected)} \\ 1/10^6 &= \text{Conversion from ppm to a fraction} \\ MW_{CO} &= \text{Molecular weight of CO = 28 lb/lb-mole} \\ 385 &= \text{Dry standard cubic feet per lb-mole at 14.7 psia and 68°F} \end{aligned}$$

- F_d = Dry fuel factor = 8710 dscf/MMBtu for natural gas, 9190 dscf/MMBtu for oil [EPA Method 19]
- $\%O_2$ = Actual stack gas oxygen concentration (%) measured by the oxygen CEMS
- HI = Hourly heat input = cubic feet of natural gas burned times the most recent heating value. (HI is in units of MMBtu/hr)

Plant Site Emissions Monitoring [OAR 340-222-0080]

56. The permittee must determine compliance with the Plant Site Emission Limits established in Condition 30 of this permit by conducting monitoring and calculations for each 12-month period in accordance with the following procedures, test methods and frequencies:

- 56.a. The permittee must calculate the rolling 12-month NO_x emissions by summing all of the hourly mass emissions during the 12-calendar month period from each turbine measured in accordance with Condition 54.b and the emissions from the auxiliary boiler determined as follows:

$$M_{NO_x} = ER \times F \times GCV_g$$

Where:

- M_{NO_x} = Hourly mass of NO_x emitted from the auxiliary boiler, lb/hr
- ER = NO_x emission rate in lb/MMBtu, as measured in accordance with Condition 50
- F = Hourly fuel usage (cubic feet of natural gas or gallons of distillate oil)
- GCV_g = Gross calorific value of the natural gas or distillate oil

- 56.b. The permittee must calculate the rolling 12-month CO emissions by summing all of the hourly mass emissions during the 12- calendar month period from each turbine measured in accordance with Condition 55 and the emissions from the auxiliary boiler as determined in accordance with Condition 56.c
- 56.c. The permittee must calculate the rolling 12-month PM, PM_{10} , $PM_{2.5}$, SO_2 , CO (auxiliary boiler), and VOC emissions by summing the emissions calculated from the turbines and auxiliary boiler using the following formula, process parameters and emission factors:

$$E = P_{eu} \times EF_{eu} \times K$$

Where:

- E = Pollutant emissions in lbs/month and tons/yr.
- P_{eu} = Process parameter identified in the table below
- EF_{eu} = Emission factor identified for each emissions unit and pollutant in the table below
- K = Conversion constant: 1 lb/lb for daily and monthly emissions calculations; 1 ton/2,000 lbs for annual emissions calculations

Criteria Pollutants

Table 8: Emission Units Emission Factors

Emission Source Description	Throughput Type (Units)	Emission Factors (lb/throughput unit)				
		PM/ PM_{10}	$PM_{2.5}$	SO_2	CO	VOC
CT-1 & CT-2	Natural Gas (million Btu)	0.0018	0.0018	0.0006	CEMS	0.0009
CT-3, CT-4, CT-5, CT-6	Natural Gas (million Btu)	0.0072	0.0072	0.0006	CEMS	0.0056
	Distillate Oil (million Btu)	0.024	0.016	MB	CEMS	0.0049
Aux. Boiler	Natural Gas (million Btu)	0.0053	0.0053	0.0006	0.043	0.005
	Distillate Oil (million Btu)	0.015	0.0098	MB	0.031	0.0049

Note: Nitrogen Oxide emissions are measured by Continuous Emission Monitoring Systems (CEMS) for each emission unit.

RECORDKEEPING REQUIREMENTS

General Recordkeeping Requirements

57. The permittee must maintain the following general records of testing and monitoring required by this permit: [OAR 340-218-0050(3)(b)(A)]
- 57.a. The date, place as defined in the permit, and time of sampling or measurements;
 - 57.b. The date(s) analyses were performed;
 - 57.c. The company or entity that performed the analyses;
 - 57.d. The analytical techniques or methods used;
 - 57.e. The results of such analyses;
 - 57.f. The operating conditions as existing at the time of sampling or measurement; and
 - 57.g. The records of quality assurance for continuous monitoring systems (including but not limited to quality control activities, audits, calibration drift checks).
58. Unless otherwise specified by permit condition, the permittee must make every effort to maintain 100 percent of the records required by the permit. If information is not obtained or recorded for legitimate reasons (e.g., the monitor or data acquisition system malfunctions due to a power outage), the missing record(s) will not be considered a permit deviation provided the amount of data lost does not exceed 10% of the averaging periods in a reporting period or 10% of the total operating hours in a reporting period, if no averaging time is specified. Upon discovering a required record is missing, the permittee must document the reason for the missing record. In addition, any missing record that can be recovered from other available information will not be considered a missing record. [OAR 340-214-0110, 340-214-0114, and 340-218-0050(3)(b)]
59. The permittee must comply with the recordkeeping requirements on the date of permit issuance unless otherwise specified in the permit or an applicable requirement. [OAR 340-218-0050(3)(b)(C)]
60. Unless otherwise specified, the permittee must retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings (or other original data) for continuous monitoring instrumentation, and copies of all reports required by the permit. All existing records required by the previous Air Contaminant Discharge Permit or Oregon Title V Operating Permit must also be retained for five (5) years from the date of the monitoring sample, measurement, report or application. [OAR 340-218-0050(b)(B)]

Source Specific Recordkeeping Requirements

61. Source specific recordkeeping requirements:
- 61.a. Monthly total plant production (electricity, by unit);
 - 61.b. Hourly and 12-month total auxiliary boiler steam production;
 - 61.c. Operating time of each turbine, duct burner and auxiliary boiler;
 - 61.d. Hourly and 12-month rolling total amount of natural gas burned in each combustion turbine, duct burner and auxiliary boiler;
 - 61.e. Hourly and 12-month rolling total amount of oil burned in the auxiliary boiler, CT-3, CT-4, CT-5 and CT-6 (gallons);
 - 61.f. Number of hours each day and calendar month that oil is burned in the Auxiliary Boiler, CT-3, CT-4, CT-5 and CT-6;
 - 61.g. Hourly and 12-month rolling total heat input for each combustion turbine, duct burner and auxiliary boiler (MMBtu/hr, MMBtu/yr);
 - 61.h. HHV of natural gas as measured by the permittee;

- 61.i. Oil sulfur content records, HHV and certifications from the oil supplier;
- 61.j. Valid purchase contract, tariff sheet or transportation contract for the gaseous fuel and/or sulfur content of the natural gas fuel;
- 61.k. Amount of time CT-1, CT-2, the duct burners and auxiliary boiler are operated simultaneously;
- 61.l. Total operating time that CT-1 or CT-2 operated below full load, broken down to periods below full load, and periods below the normal operating range;
- 61.m. Number of CT-1 and CT-2 start-up and shut-downs and duration of each start-up and shut-down;
- 61.n. CT-1 and CT-2 hourly NO_x emissions data (ppmdv corrected to 15% O₂, lb/MMBtu, lb/hr, and lb/MWh, if complying with the lb/MWh limit);
- 61.o. CT-1 and CT-2, 30 unit operating day rolling average NO_x emissions data (ppmdv corrected to 15% O₂ and lb/MWh, if complying with the lb/MWh limit);
- 61.p. CT-1 and CT-2, 24-hour rolling average NO_x concentration (ppmdv, corrected to 15% O₂);
- 61.q. CT-1 and CT-2 hourly CO emissions data (ppmdv corrected to 15% O₂ and lb/hr);
- 61.r. CT-1 and CT-2, 8-hour rolling average CO concentration (ppmdv, corrected to 15% O₂);
- 61.s. CT-1 and CT-2 CO and VOC emissions during less than full load operation (lbs/hr);
- 61.t. Auxiliary boiler hourly NO_x emissions data (ppmdv corrected to 15% O₂, lb/MMBtu, and lb/hr);
- 61.u. Auxiliary boiler 30 unit operating day rolling average NO_x emissions data (lb/MMBtu);
- 61.v. Auxiliary boiler 24-hour rolling average NO_x concentration (ppmdv corrected to 3% O₂);
- 61.w. CT-3, CT-4, CT-5 and CT-6 hourly NO_x emissions data (ppmdv, corrected to 15% O₂ and lb/hr);
- 61.x. CT-3, CT-4, CT-5 and CT-6, 4-hour rolling average NO_x data (ppmdv, corrected to 15% O₂);
- 61.y. CT-3, CT-4, CT-5 and CT-6 hourly CO emissions data (ppmdv, corrected to 15% O₂ and lb/hr);
- 61.z. CT-3, CT-4, CT-5 and CT-6, 4-hour rolling average CO data (ppmdv, corrected to 15% O₂);
- 61.aa. Dates the Aux Boiler burned distillate oil and the amount of distillate oil burned and hours the boiler operated on oil (date, gal/yr, hr/yr);
- 61.bb. Auxiliary boiler visible emission observations while burning oil;
- 61.cc. Number of hours each calendar day oil is burned in CT-3, CT-4, CT-5 and CT-6;
- 61.dd. CT-3, CT-4, CT-5, CT-6 visible emission observations while burning oil;
- 61.ee. CEMS quality assurance/quality control records (including, but not limited to daily zero and span calibration checks, weekly inspection and maintenance activities, quarterly linearity and cylinder gas audits, annual relative test accuracy audits);
- 61.ff. Occurrence and length of downtime for all pollution control devices;
- 61.gg. Permit deviations;
- 61.hh. Excess emissions;
- 61.ii. 12-month rolling total pollutant emissions;
- 61.jj. Auxiliary boiler visible emissions observations according to 40 CFR 60.49b(f);
- 61.kk. Auxiliary boiler NO_x CEMS data according to 40 CFR 60.49b(g)
- 61.ll. Fuel receipts according to 40 CFR 60.49b(r)(1); and
- 61.mm. NSPS records in accordance with 40 CFR 60.7(b), including:
 - 61.mm.i. Occurrence and duration of any startup, shutdown or malfunction in operation;
 - 61.mm.ii. Any malfunction of the air pollution control equipment; or
 - 61.mm.iii. Any periods during which a continuous monitoring system or monitoring device is inoperative.

REPORTING REQUIREMENTS

The reporting conditions in this section are based on OAR 340-218-0050(3)(c); unless otherwise specified.

General Reporting Requirements

62. Excess Emissions Reporting: The permittee must report all excess emissions as follows: [OAR 340-214-0300 through 340-214-0360]
- 62.a. Immediately (within 1 hour of the event) notify DEQ of an excess emission event by phone, email or facsimile;
 - 62.b. Within 15 days of the excess emissions event, submit a written report that contains the following information: [OAR 340-214-0340(1)]
 - 62.b.i. The date and time of the beginning of the excess emissions event and the duration or best estimate of the time until return to normal operation;
 - 62.b.ii. The date and time the permittee notified DEQ of the event;
 - 62.b.iii. The equipment involved;
 - 62.b.iv. Whether the event occurred during planned startup, planned shutdown, scheduled maintenance, or as a result of a breakdown, malfunction or emergency;
 - 62.b.v. Steps taken to mitigate emissions and corrective action taken, including whether the approved procedures for a planned startup, shutdown or maintenance activity were followed;
 - 62.b.vi. The magnitude and duration of each occurrence of excess emissions during the course of an event and the increase over normal rates or concentrations as determined by continuous monitoring or best estimate (supported by operating data and calculations);
 - 62.b.vii. The final resolution of the cause of the excess emissions; and
 - 62.b.viii. Where applicable, evidence supporting any claim that emissions in excess of technology-based limits were due to any emergency pursuant to OAR 340-214-0360.
 - 62.c. In the event of any excess emissions which are of a nature that could endanger public health and occur during non-business hours, weekends or holidays, the permittee must immediately notify DEQ by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
 - 62.d. If startups, shutdowns or scheduled maintenance may result in excess emissions, the permittee must submit startup, shutdown or scheduled maintenance procedures used to minimize excess emissions to DEQ for prior authorization, as required in OAR 340-214-0310 and 340-214-0320. New or modified procedures must be received by DEQ in writing at least 72 hours prior to the first occurrence of the excess emission event. The permittee must abide by the approved procedures and have a copy available at all times.
 - 62.e. The permittee must notify DEQ of planned startup/shutdown or scheduled maintenance events. For these events that do not cause excess emissions, a monthly log that contains the date and time of each startup/shutdown or scheduled maintenance event takes place shall be submitted to DEQ by the 7th business day of the following month instead of the immediate notification required in Condition 62.a. If a startup/shutdown or scheduled maintenance event causes an excess emission, the permittee must notify DEQ of the excess emission in accordance with Condition 62.a.
 - 62.f. The permittee must continue to maintain a log of all excess emissions in accordance with OAR 340-214-0340(3). However, the permittee is not required to submit the detailed log with the semi-annual and annual monitoring reports. The permittee is only required to submit a brief summary listing the date, time and the affected emissions units for each excess emission that occurred during the reporting period. [OAR 340-218-0050(3)(c)]

63. Permit Deviations Reporting: The permittee must promptly report deviations from permit requirements that do not cause excess emissions, including those attributable to upset conditions, as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. "Prompt" means within 15 days of the deviation. Deviations that cause excess emissions, as specified in OAR 340-214-0300 through 340-214-0360 must be reported in accordance with Condition 62.
64. All required reports must be certified by a responsible official consistent with OAR 340-218-0040(5): [OAR 340-218-0050(3)(c)(D)]
65. Reporting requirements must commence on the date of permit issuance unless otherwise specified in the permit. [OAR 340-218-0050(3)(c)(E)]

Addresses of regulatory agencies are the following, unless otherwise instructed:

DEQ – Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
541-388-6146

DEQ – Air Quality Division
700 NE Multnomah St., Suite 600
Portland, OR 97232
503-229-5359

Clean Air Act Compliance Manager
US EPA Region 10, MS: OCE-101
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Semi-Annual and Annual Reports

66. The permittee must submit three (3) copies of reports of any required monitoring at least every 6 months, completed on forms approved by DEQ. Six month periods are January 1 to June 30, and July 1 to December 31. One copy of the report must be submitted to the EPA and two copies to the DEQ regional office. All instances of deviations from permit requirements must be clearly identified in such reports: [OAR 340-218-0050(3)(c)(A) and 340-218-0080(6)(d)]
- 66.a. The first semi-annual report is due on **July 30** and must include the semi-annual compliance certification, OAR 340-218-0080.
- 66.b. The annual report is due on **February 15** and must consist of the following:
- 66.b.i. The emission fee report; [OAR 340-220-0100]
 - 66.b.ii. A summary of the excess emissions upset log; [OAR 340-214-0340]
 - 66.b.iii. The second semi-annual compliance certification; [OAR 340-218-0080]
 - 66.b.iv. Annual greenhouse gas emissions in accordance with OAR 340, Division 215;
 - 66.b.v. The annual certification that the risk management plan is being properly implemented; OAR 340-244-0230: [OAR 340-218-0080(7)]
 - 66.b.vi. Calendar year operating time for each unit;
 - 66.b.vii. Calendar year production (electricity) for each unit;
 - 66.b.viii. Calendar year steam production from the auxiliary boiler;
 - 66.b.ix. Calendar year natural gas burned in each unit;
 - 66.b.x. Calendar year distillate oil burned in each unit; and
 - 66.b.xi. 12-month rolling total emissions.
67. The semi-annual compliance certification must include the following (provided that the identification of applicable information may cross-reference the permit or previous reports, as applicable): [OAR 340-218-0080(6)(c)]
- 67.a. The identification of each term or condition of the permit that is the basis of the certification;
 - 67.b. The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such methods and other means must include, at a minimum, the methods and means required under OAR 340-218-0050(3). *Note: Certification of compliance with the monitoring conditions in the permit is sufficient to meet this requirement, except when the permittee must certify compliance with new applicable requirements*

that are incorporated by reference into the permit. When certifying compliance with new applicable requirements that are not yet in the permit, the permittee must provide the information required by this condition. If necessary, the permittee must identify any other material

- information that must be included in the certification to comply with Section 113(c)(2) of the FCAA, which prohibits knowingly making a false certification or omitting material information;
- 67.c. The status of compliance with terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification must be based on the method or means designated in Condition 67.b of this rule. The certification must identify each deviation and take it into account in the compliance certification. The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance, as defined under OAR 340-200-0020, occurred; and
- 67.d. Such other facts as DEQ may require to determine the compliance status of the source.
- 67.e. Notwithstanding any other provision contained in any applicable requirement, the permittee may use monitoring as required under OAR 340-218-0050(3) and incorporated into the permit, in addition to any specified compliance methods, for the purpose of submitting compliance certifications. [OAR 340-218-0080(6)(e)]
68. Greenhouse Gas Registration and Reporting: If the calendar year emission rate of greenhouse gases (CO₂e) is greater than or equal to 2,756 tons (2,500 metric tons), the permittee must register and report its greenhouse gas emissions with DEQ in accordance with OAR 340-215. The greenhouse gas report must be certified by the responsible official consistent with OAR 340-218-0040(5).
69. The permittee must submit for each pollutant subject to NSPS and continuously monitored excess emissions and monitoring systems performance report and/or summary report form (see Condition 69.b) to the DEQ semiannually. All reports must be postmarked by the 30th day following the end of each six month period. [40 CFR 60.7(c), 60.49b(w), 60.334(j), 60.334(j)(1)(iii), 60.4375, and 60.4395]
 - 69.a. Written reports of excess emissions must include the following information:
 - 69.a.i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.
 - 69.a.ii. The process operating time during the reporting period.
 - 69.a.iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns and malfunctions of the affected facility.
 - 69.a.iv. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - 69.a.v. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - 69.a.vi. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired or adjusted, such information shall be stated in the report.
 - 69.b. The summary report form must contain the information and be in the format shown in figure 1 unless otherwise specified by the DEQ. One summary report form shall be submitted for each pollutant monitored at each affected facility. [40 CFR 60.7(d)]
 - 69.b.i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 69.a need not be submitted unless requested by the DEQ.
 - 69.b.ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS

downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 69.a shall both be submitted.

Figure 1: Summary Report – Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant:	NO _x		
Reporting period dates:	From:	to:	
Company:			
Emission limitation:			
Address:			
Monitor manufacturer and model No.:			
Date of latest CMS certification or audit:			
Process unit(s) description:			
Total source operating time in reporting period ¹ :			
Emission Data Summary¹		CMS Performance Summary¹	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS downtime	
3. [Total duration of excess emissions] x 100/[Total source operating time]	% ²	3. [Total CMS downtime] x □(100)/[Total source operating time]	% ²

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in Condition 69.a shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate and complete.

Name
Signature
Title
Date

- 69.c. The permittee must maintain a file of all measurements, including continuous monitoring system, monitoring device and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file must be retained for at least two years following the date of such measurements, maintenance, reports and records. [40 CFR 60.7(f)]

NON-APPLICABLE REQUIREMENTS

70. Non-applicable requirements:
- 70.a. The NESHAP for stationary combustion turbines (40 CFR Part 63, Subpart YYYYY) is not applicable to this facility because it is not a major source of hazardous air pollutant emissions. [OAR 340-218-0110]
 - 70.b. The NESHAP for industrial, commercial and institution boilers for area sources (40 CFR Part 63, Subpart JJJJJ) is not applicable because the auxiliary boiler is a gas-fired boiler that may burn liquid fuel only during periods of gas curtailment as defined in 40 CFR 63.11237). [40 CFR 63.11195(e)]
 - 70.c. New source performance standards, 40 CFR Part 60, Subparts Db and Gg do not apply to combustion turbines CT-1 and CT-2 because they were modified and are now subject to 40 CFR Part 60, Subpart KKKK. [40 CFR 60.4305(b)]

GENERAL CONDITIONS

G1. General Provision

Terms not otherwise defined in this permit have the meaning assigned to such terms in the referenced regulation.

G2. Reference materials

Where referenced in this permit, the versions of the following materials are effective as of the dates noted unless otherwise specified in this permit:

- a. Source Sampling Manual; April 16, 2015 - State Implementation Plan Volume 3, Appendix A4;
- b. Continuous Monitoring Manual; April 16, 2015 - State Implementation Plan Volume 3, Appendix A6; and
- c. All state and federal regulations as in effect on the date of issuance of this permit.

G3. Applicable Requirements [OAR 340-218-0010(3)(b)]

Oregon Title V Operating Permits do not replace requirements in Air Contaminant Discharge Permits (ACDP) issued to the source even if the ACDP(s) have expired. For a source operating under a Title V permit, requirements established in an earlier ACDP remain in effect notwithstanding expiration of the ACDP or Title V permit, unless a provision expires by its terms or unless a provision is modified or terminated following the procedures used to establish the requirement initially. Source specific requirements, including, but not limited to TACT, RACT, BACT, and LAER requirements, established in an ACDP must be incorporated into the Oregon Title V Operating Permit and any revisions to those requirements must follow the procedures used to establish the requirement initially.

G4. Compliance [OAR 340-218-0040(3)(n)(C), 340-218-0050(6), and 340-218-0080(4)]

- a. The permittee must comply with all conditions of this permit. Any permit condition noncompliance constitutes a violation of the Federal Clean Air Act and/or state rules and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. Any noncompliance with a permit condition specifically designated as enforceable only by the state constitutes a violation of state rules only and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

- b. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of permit issuance is supplemental to, and does not sanction noncompliance with the applicable requirements on which it is based.
- c. For applicable requirements that will become effective during the permit term, the source must meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.

G5. Masking Emissions

The permittee must not install or use any device or other means designed to mask the emission of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement. [OAR 340-208-0400] This condition is enforceable only by the State.

G6. Credible Evidence

Notwithstanding any other provisions contained in any applicable requirement, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any such applicable requirements. [OAR 340-214-0120]

G7. Certification [OAR 340-214-0110, 340-218-0040(5), 340-218-0050(3)(c)(D), and 340-218-0080(2)]

Any document submitted to DEQ or EPA pursuant to this permit must contain certification by a responsible official of truth, accuracy and completeness. All certifications must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and, complete. The permittee must promptly, upon discovery, report to DEQ a material error or omission in these records, reports, plans, or other documents.

G8. Open Burning [OAR Chapter 340, Division 264]

The permittee is prohibited from conducting open burning, except as may be allowed by OAR 340-264-0020 through 340-264-0200.

G9. Asbestos [40 CFR Part 61, Subpart M (federally enforceable), OAR Chapter 340-248-0005 through 340-248-0180 (state-only enforceable) and 340-248-0205 through 340-248-0280]

The permittee must comply with OAR Chapter 340, Division 248, and 40 CFR Part 61, Subpart M when conducting any renovation or demolition activities at the facility.

G10. Stratospheric Ozone and Climate Protection [40 CFR 82 Subpart F, OAR 340-260-0040]

The permittee must comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

G11. Permit Shield [OAR 340-218-0110]

- a. Compliance with the conditions of the permit is deemed compliance with any applicable requirements as of the date of permit issuance provided that:
 - i. Such applicable requirements are included and are specifically identified in the permit, or
 - ii. DEQ, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

- b. Nothing in this rule or in any federal operating permit alters or affects the following:
 - i. The provisions of ORS 468.115 (enforcement in cases of emergency) and ORS 468.035 (function of department);
 - ii. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - iii. The applicable requirements of the national acid rain program, consistent with section 408(a) of the FCAA; or
 - iv. The ability of DEQ to obtain information from a source pursuant to ORS 468.095 (investigatory authority, entry on premises, status of records).
- c. Sources are not shielded from applicable requirements that are enacted during the permit term, unless such applicable requirements are incorporated into the permit by administrative amendment, as provided in OAR 340-218-0150(1)(h), significant permit modification, or reopening for cause by DEQ.

G12. Inspection and Entry [OAR 340-218-0080(3)]

Upon presentation of credentials and other documents as may be required by law, the permittee must allow DEQ, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), to perform the following:

- a. Enter upon the permittee's premises where an Oregon Title V Operating Permit program source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. As authorized by the FCAA or state rules, sample or monitor, at reasonable times, substances or parameters, for the purposes of assuring compliance with the permit or applicable requirements.

G13. Fee Payment [OAR 340-220-0010, and 340-220-0030 through 340-220-0190]

The permittee must pay an annual base fee and an annual emission fee for particulates, sulfur dioxide, nitrogen oxides, and volatile organic compounds. The permittee must submit payment to DEQ of Environmental Quality, Financial Services, 811 SW 6th Ave., Portland, OR 97204, within 30 days of date DEQ mails the fee invoice or August 1 of the year following the calendar year for which emission fees are paid, whichever is later. Disputes must be submitted in writing to DEQ. Payment must be made regardless of the dispute. User-based fees will be charged for specific activities (e.g., computer modeling review, ambient monitoring review, etc.) requested by the permittee.

G14. Off-Permit Changes to the Source [OAR 340-218-0140(2)]

- a. The permittee must monitor for, and record, any off-permit change to the source that:
 - i. Is not addressed or prohibited by the permit;
 - ii. Is not a Title I modification;
 - iii. Is not subject to any requirements under Title IV of the FCAA;
 - iv. Meets all applicable requirements;
 - v. Does not violate any existing permit term or condition; and
 - vi. May result in emissions of regulated air pollutants subject to an applicable requirement but not otherwise regulated under this permit or may result in insignificant changes as defined in OAR 340-200-0020.

- b. A contemporaneous notification, if required under OAR 340-218-0140(2)(b), must be submitted to DEQ and the EPA.
- c. The permittee must keep a record describing off-permit changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those off-permit changes.
- d. The permit shield of Condition G11 does not extend to off-permit changes.

G15. Section 502(b)(10) Changes to the Source [OAR 340-218-0140(3)]

- a. The permittee must monitor for, and record, any section 502(b)(10) change to the source, which is defined as a change that would contravene an express permit term but would not:
 - i. Violate an applicable requirement;
 - ii. Contravene a federally enforceable permit term or condition that is a monitoring, recordkeeping, reporting, or compliance certification requirement; or
 - iii. Be a Title I modification.
- b. A minimum 7-day advance notification must be submitted to DEQ and the EPA in accordance with OAR 340-218-0140(3)(b).
- c. The permit shield of Condition G11 does not extend to section 502(b)(10) changes.

G16. Administrative Amendment [OAR 340-218-0150]

Administrative amendments to this permit must be requested and granted in accordance with OAR 340-218-0150. The permittee must promptly submit an application for the following types of administrative amendments upon becoming aware of the need for one, but no later than 60 days of such event:

- a. Legal change of the registered name of the company with the Corporations Division of the State of Oregon, or
- b. Sale or exchange of the activity or facility.

G17. Minor Permit Modification [OAR 340-218-0170]

The permittee must submit an application for a minor permit modification in accordance with OAR 340-218-0170.

G18. Significant Permit Modification [OAR 340-218-0180]

The permittee must submit an application for a significant permit modification in accordance with OAR 340-218-0180

G19. Staying Permit Conditions [OAR 340-218-0050(6)(c)]

Notwithstanding Conditions G16 and G17, the filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G20. Construction/Operation Modification [OAR 340-218-0190]

The permittee must obtain approval from DEQ prior to construction or modification of any stationary source or air pollution control equipment in accordance with OAR 340-210-0200 through OAR 340-210-0250.

G21. New Source Review Modification [OAR 340-224-0010]

The permittee may not begin construction of a major source or a major modification of any stationary source without having received an Air Contaminant Discharge Permit (ACDP) from DEQ and having satisfied the requirements of OAR 340, Division 224.

G22. Need to Halt or Reduce Activity Not a Defense [OAR 340-218-0050(6)(b)]

The need to halt or reduce activity will not be a defense. It will 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 permit.

G23. Duty to Provide Information [OAR 340-218-0050(6)(e) and OAR 340-214-0110]

The permittee must furnish to DEQ, within a reasonable time, any information that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee must also furnish to DEQ copies of records required to be retained by the permit or, for information claimed to be confidential, the permittee may furnish such records to DEQ along with a claim of confidentiality.

G24. Reopening for Cause [OAR 340-218-0050(6)(c) and 340-218-0200]

- a. The permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by DEQ.
- b. A permit must be reopened and revised under any of the circumstances listed in OAR 340-218-0200(1)(a).
- c. Proceedings to reopen and reissue a permit must follow the same procedures as apply to initial permit issuance and affect only those parts of the permit for which cause to reopen exists.

G25. Severability Clause [OAR 340-218-0050(5)]

Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, recordkeeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with.

G26. Permit Renewal and Expiration [OAR 340-218-0040(1)(a)(D) and 340-218-0130]

- a. This permit expires at the end of its term, unless a timely and complete renewal application is submitted as described below. Permit expiration terminates the permittee's right to operate.
- b. Applications for renewal must be submitted at least 12 months before the expiration of this permit, unless DEQ requests an earlier submittal. If more than 12 months is required to process a permit renewal application, DEQ must provide no less than six (6) months for the owner or operator to prepare an application.
- c. Provided the permittee submits a timely and complete renewal application, this permit will remain in effect until final action has been taken on the renewal application to issue or deny the permit.

G27. Permit Transference [OAR 340-218-0150(1)(d)]

The permit is not transferable to any person except as provided in OAR 340-218-0150(1)(d).

G28. Property Rights [OAR 340-200-0020 and 340-218-0050(6)(d)]

The permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations, except as provided in OAR 340-218-0110.

G29. Permit Availability [OAR 340-200-0020 and 340-218-0120(2)]

The permittee must have available at facility at all times a copy of the Oregon Title V Operating Permit and must provide a copy of the permit to DEQ or an authorized representative upon request.

ALL INQUIRIES SHOULD BE DIRECTED TO:

DEQ - Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
541-388-6146

ATTACHMENT 1: STATE ACID RAIN PERMIT (KCP)

Issued to: Klamath Cogeneration Project
 Operated by: Klamath Energy, LLC
 ORIS code: 55103
 Effective: 5 years, beginning on the date this permit is issued as part of the Oregon Title V Operating permit

Acid Rain Permit Contents

- 1) Statement of Basis.
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Comments, notes and justification regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with ORS 468.020 and 468.310(2) and Title IV and V of the Clean Air Act, DEQ issues this permit pursuant to OAR 340-228-0300 and 340-218-0010.

2) SO₂ Allowance Allocations and NO_x Requirements for each affected unit.

		2017	2018	2019	2020	2021	2022
CT1.EU	SO ₂ allowances	0	0	0	0	0	0
CT2.EU	SO ₂ allowances	0	0	0	0	0	0

*The number of allowances actually held by an affected source in a unit account may differ from the number allocated by EPA. A change in the number of allowances actually held by an affected source in a unit account does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (see 40 CFR §72.84)

3) Comments, notes, and justifications:

The Acid Rain regulations do not specify a NO_x emissions limit for affected facilities that burn only natural gas or liquid fuels (e.g., distillate fuel oil).

4) Permit application:

Attached



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ~ new ~ revised ~ **for Acid Rain permit renewal**

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name: Klamath Cogeneration Project	State: OR	Plant Code: 55103
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STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CT1	Yes
CT2	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

STEP 3**Permit Requirements**

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited

- STEP 3, Cont'd.** authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the

STEP 3, Cont'd. source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the
certification
statement,
sign, and date.

Certification

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

Name Raymond Martens	
Signature [On file]	Date 8/8/08

ATTACHMENT 2: STATE ACID RAIN PERMIT (KGP)

Issued to: Klamath Generation Peakers
 Operated by: Klamath Energy, LLC
 ORIS code: 55544
 Effective: 5 years, beginning on the date this permit is issued as part of the Oregon Title V Operating permit

Acid Rain Permit Contents

- 5) Statement of Basis.
- 6) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 7) Comments, notes and justification regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- 8) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

5) Statement of Basis

Statutory and Regulatory Authorities: In accordance with ORS 468.020 and 468.310(2) and Title IV and V of the Clean Air Act, DEQ issues this permit pursuant to OAR 340-228-0300 and 340-218-0010.

6) SO₂ Allowance Allocations and NO_x Requirements for each affected unit.

		2017	2018	2019	2020	2021	2022
CT3.EU	SO ₂ allowances	0	0	0	0	0	0
CT4.EU	SO ₂ allowances	0	0	0	0	0	0
CT5.EU	SO ₂ allowances	0	0	0	0	0	0
CT6.EU	SO ₂ allowances	0	0	0	0	0	0

*The number of allowances actually held by an affected source in a unit account may differ from the number allocated by EPA. A change in the number of allowances actually held by an affected source in a unit account does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (see 40 CFR §72.84)

7) Comments, notes, and justifications:

The Acid Rain regulations do not specify a NO_x emissions limit for affected facilities that burn only natural gas or liquid fuels (e.g., distillate fuel oil).

8) Permit application:

Attached



United States
 Environmental Protection Agency
 Acid Rain Program

OMB No. 2060-0258
 Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

[illegible]

STEP 3**Permit Requirements**

Read the standard requirements.

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 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
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- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited

STEP 3, Cont'd.

authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Recordkeeping and Reporting Requirements, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the

STEP 3, Cont'd. source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

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(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the
certification
statement,
sign, and date.

Certification

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

Name Raymond Martens	
Signature [On file]	Date 8/8/08