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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A Q PROGRAM

Idaho Power Company Bennett Mountain Power Project

Application for a Tier 1 Operating Permit Renewal
for IDEQ OP Number: T1-2008.0164

October 13, 2011

1. Table of Contents	
1. Table of Contents.....	2
2. List of Figures.....	4
3. List of Tables.....	4
4. Introduction.....	5
4.1. General Information.....	5
4.2. Overview.....	6
4.3. Completed Department of Environmental Quality Permit Application Forms.....	6
4.4. Requested Changes to the Operating Permit.....	7
5. Maps.....	9
6. Source Description.....	13
7. Process Flow Diagrams.....	15
8. NSPS, and NESHAP, and New Applicable Federal Requirements Review.....	19
8.1. New Source Performance Standards (NSPS) Review, 40 CFR 60.....	19
8.2. National Emission Standards for Hazardous Air Pollutants (NESHAPS) Review, 40 CFR 63.....	20
8.3. Mandatory Green House Gas Reporting Rule, 40 CFR 98.....	21
9. Emission Source Specifications.....	22
9.1. Facility Criteria Pollutant Potential to Emit.....	22
9.2. Hazardous Air Pollutant and Toxic Air Pollutant Potential to Emit.....	23
9.3. Air Quality Modeling.....	23
9.4. Facility Carbon Dioxide Equivalent Estimate.....	24
9.5. Combustion Turbine.....	24
9.6. Fuel Gas Heater.....	25
9.7. Emergency Diesel Generator.....	26
10. Compliance Assurance Monitoring.....	27
11. Insignificant Activities.....	28
12. Permit Shield Request.....	29
13. Incorporations by Reference.....	30
14. Compliance Certification and Certificate.....	31
15. Attachment 1 – IDEQ Forms.....	32
16. Attachment 2 – Combustion Turbine Performance Summary.....	33

17. Attachment 3 – 40 CFR 60, Subpart IIII, Applicability Analysis	34
18. Attachment 4 – 40 CFR 63, Subpart ZZZZ, Applicability Analysis.....	85
19. Attachment 5 – Cummins Power Generation Exhaust Emission Compliance Statement.....	90
20. Attachment 6 – IDEQ Permit to Construct Exemption Letter.....	91
21. Attachment 7 – Applicable Requirements Review.....	92
22. Attachment 8 – Acid Rain Permit Renewal Application.....	93
23. Attachment 9 – Criteria Pollutant Emission Calculations	94
24. Attachment 10 – Facility HAPs Emission Calculations.....	95
25. Attachment 11 - Compliance Certification and Compliance Plan	96
26. Attachment 12 – BMPR Semiannual Report – First Quarter, 2011	97

2. List of Figures

Figure 1: Regional Location Map.....	10
Figure 2: Area Location Map	11
Figure 3: Facility Plot Plan.....	12
Figure 4: Facility-wide Process	15
Figure 5: Combustion Turbine (CT1).....	16
Figure 6: Natural Gas Fuel Heater (H1)	17
Figure 7: Emergency Diesel Generator (EDG)	18

3. List of Tables

Table 4-1: Facility Criteria Pollutant Potential to Emit.....	22
Table 4-2: Facility HAP Potential to Emit	23
Table 4-3: Facility CO ₂ equivalent Potential to Emit.....	24

4. Introduction

This document presents technical and regulatory compliance information in support of an application for a Tier I air quality operating permit renewal from the State of Idaho, Department of Environmental Quality (IDEQ) for the Bennett Mountain Power Project.

4.1. General Information

Facility:	Bennett Mountain Power Project 2750 N.E. Industrial Way Mountain Home, ID 83647
Owner/Operator:	Idaho Power Company 1221 W. Idaho St. Boise, ID 83702
Responsible Official:	Dale Koger Power Production Manager (208) 388-5820
Facility Contact:	Trevor Mahlum Mechanical Engineer (208) 388-2426

The Bennett Mountain Power Project is identified by the following codes and classifications:

- Standard Industrial Classification (SIC): 4911
- North American Industry Classification System (NAICS): 221112
- Idaho Department of Environmental Quality, Facility ID: 039-00025
- Department of Energy (DOE), Plant Code (ORIS): 55733

The permit applicant is Idaho Power Company (IPC) (an IDACORP company). The principal contact for this project is:

Trevor Mahlum
Idaho Power Company – Mechanical Engineer
1221 W Idaho Street
Boise, Idaho 83702
Phone: (208) 388-2426
Fax: (208) 388-6689
E-mail: tmahlum@idahopower.com

4.2.Overview

The Bennett Mountain Power Project is located in Elmore County, Idaho. Emission units at the facility include one natural gas-fired simple cycle combustion turbine and generator (with a nominal generating capacity of 170 MW), a natural gas fuel heater, and an emergency diesel generator. This list does not include emission units that are presumptively insignificant or those emission units that are insignificant based on size or production rate (Section 11).

IDEQ issued a final permit to construct (PTC) (No. P-050002) for the Bennett Mountain Power Project in accordance with Idaho Administrative Procedures Act (IDAPA) 58.01.01.200 through 58.01.01.223 (Rules for the Control of Air Pollution in Idaho), effective June 24, 2005. In accordance with IDAPA 58.01.01.221, on December 29, 2008 IDEQ issued a Permit to Construct Exemption (No. X-2008.0196) for the addition of an emergency diesel generator located on the site (A copy of this letter has been included in this application as Attachment 6).

This Bennett Mountain Power Project Tier 1 Operating Permit Renewal Application is being submitted in accordance with IDAPA 58.01.01.313.03 for the renewal of the current operating permit T1-2008.0164. The Bennett Mountain Power Project originally operated under Tier 1 Operating Permit No. T1-060006, issued April 23, 2007. This application consists of applicable forms and information as required by IDAPA 58.01.01.314 and has been certified by a responsible official.

4.3.Completed Department of Environmental Quality Permit Application Forms

The IDEQ forms required for this permit renewal application are presented in Attachment 1 and include the following:

- Form CSTI – Cover Sheet
- Form GI – General Information
- Form EU0 (Combustion Turbine 1) – General Emissions Units
- Form EU0 (Fuel Gas Heater 1) – General Emissions Units
- Form EU1 (Emergency Diesel Generator) – General Emissions Units
- Emissions_facilitywide_potential_to_emit_application.doc
- Emissions_hap_application.doc
- Form FRA – NSPS/NESHAP Regulation Review and Applicability

4.4. Requested Changes to the Operating Permit

Idaho Power is requesting the following changes to be incorporated into this permit renewal.

4.4.1. Emergency Diesel Generator Requirements

Since this facility has a Tier I Operating Permit, the emergency diesel generator added under Permit to Construct Exemption No. X-2008.0196 needs to be incorporated into the Operating Permit (IDAPA 58.01.01.314(3)). In accordance with 40 CFR 60, Subpart IIII (4200), the following requirements apply to the emergency diesel generator.

- Permit Limits.
 - As noted in 40 CFR 60.4202(a)(2), the certification emission standards for this engine must meet the certification emission standards for new non-road compression ignition engines (40 CFR 89.112) for the same model year and maximum engine power. Based on this information, the following emission limits apply to these engines.
 - NMHC + NO_x = 6.4 (g/kW-hr)
 - CO = 3.5 (g/kW-hr)
 - PM = 0.20 (g/kW-hr)
- Operating Requirements
 - There is no time limit on the use of emergency stationary internal compression engines (ICE) in emergency situations by Subpart IIII, however the PTC Exemption was issued on the premise that the engine will be limited to a total of 500 hours of operation per year. [PTC Exemption No. X-2008.0196, Condition # 4.3]
 - Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 60.4211(f)]
 - The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and

testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4211(f)]

- Limit fuel purchases to diesel fuel with: (1) a sulfur content (i) of 15 ppm maximum; (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) a maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)]
 - Operate and maintain the stationary engine according to the manufacturer's emission-related written instructions. [60.4211(a)(1)]
 - Change only those emission-related settings that are permitted by the manufacturer. [40 CFR 60.4211(a)(2)]
 - If you do not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instruction, or you change the emission-related setting in a way that is not permitted by the manufacturer you must demonstrate compliance in accordance with 40 CFR 60.4211 (g). [40 CFR 60.4211(g)]
- Monitoring requirements
 - Install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]

4.4.2. Request for Administrative Permit Amendment

Idaho Power would like to use this opportunity to make an administrative amendment. We would like to change the responsible official for this facility from Vern Porter to Dale Koger. In addition, per IDAPA 58.01.01.381, this change is to be incorporated into Permit to Construct No. P-050002 as well. The administrative amendment will occur on the date of the certification of this Tier I Operating Permit Renewal Application (10/13/2011). We have incorporated this change throughout the application package and the new responsible official has certified the truth, accuracy, and completeness of this application in accordance with form GI which is included in this application in Attachment 1 – IDEQ Forms.

5. Maps

This section contains the following maps of the Bennett Mountain Power Project

- Regional Location Map
- Site Location Map
- Facility Plot Plan



Figure 1: Regional Location Map

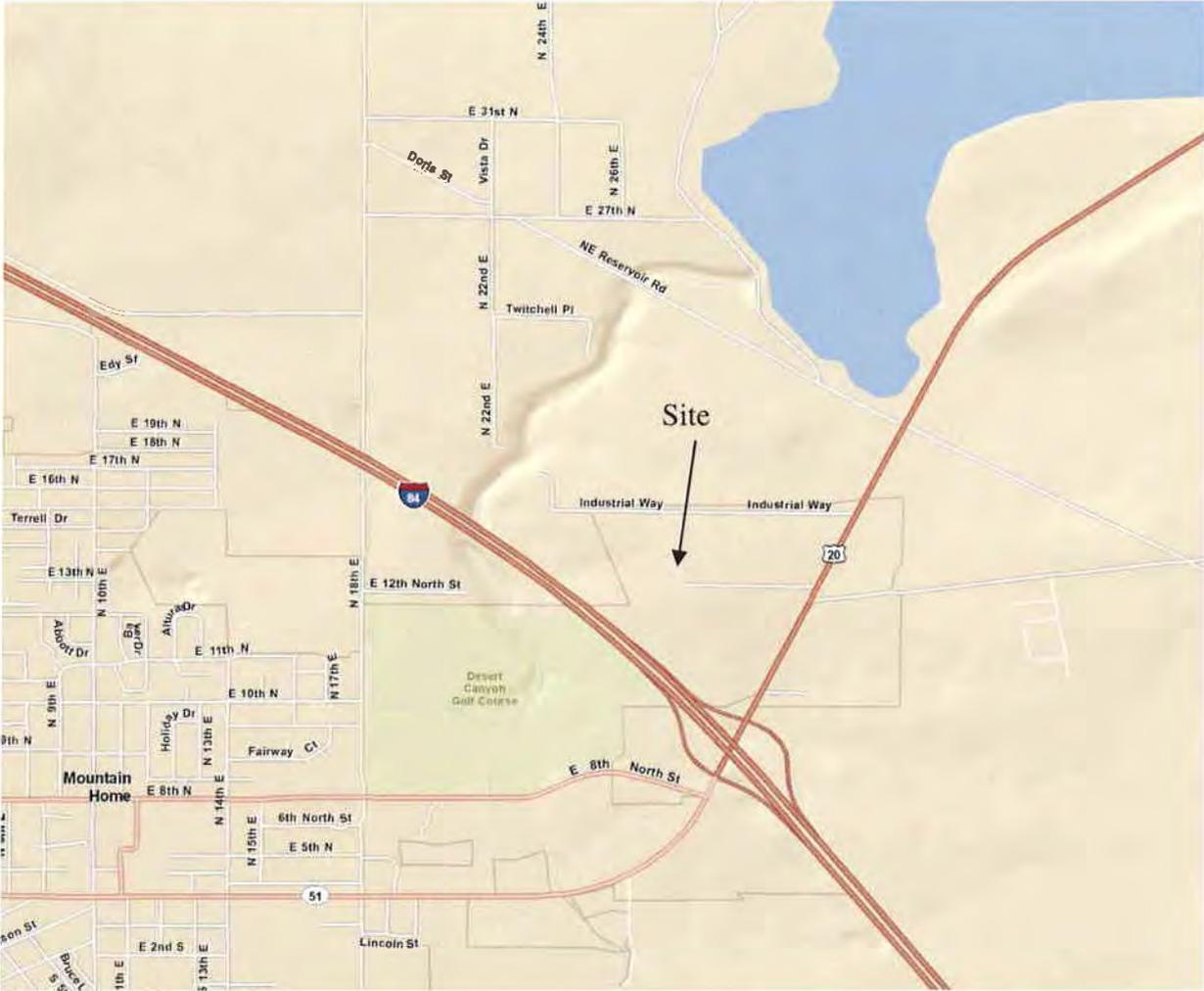
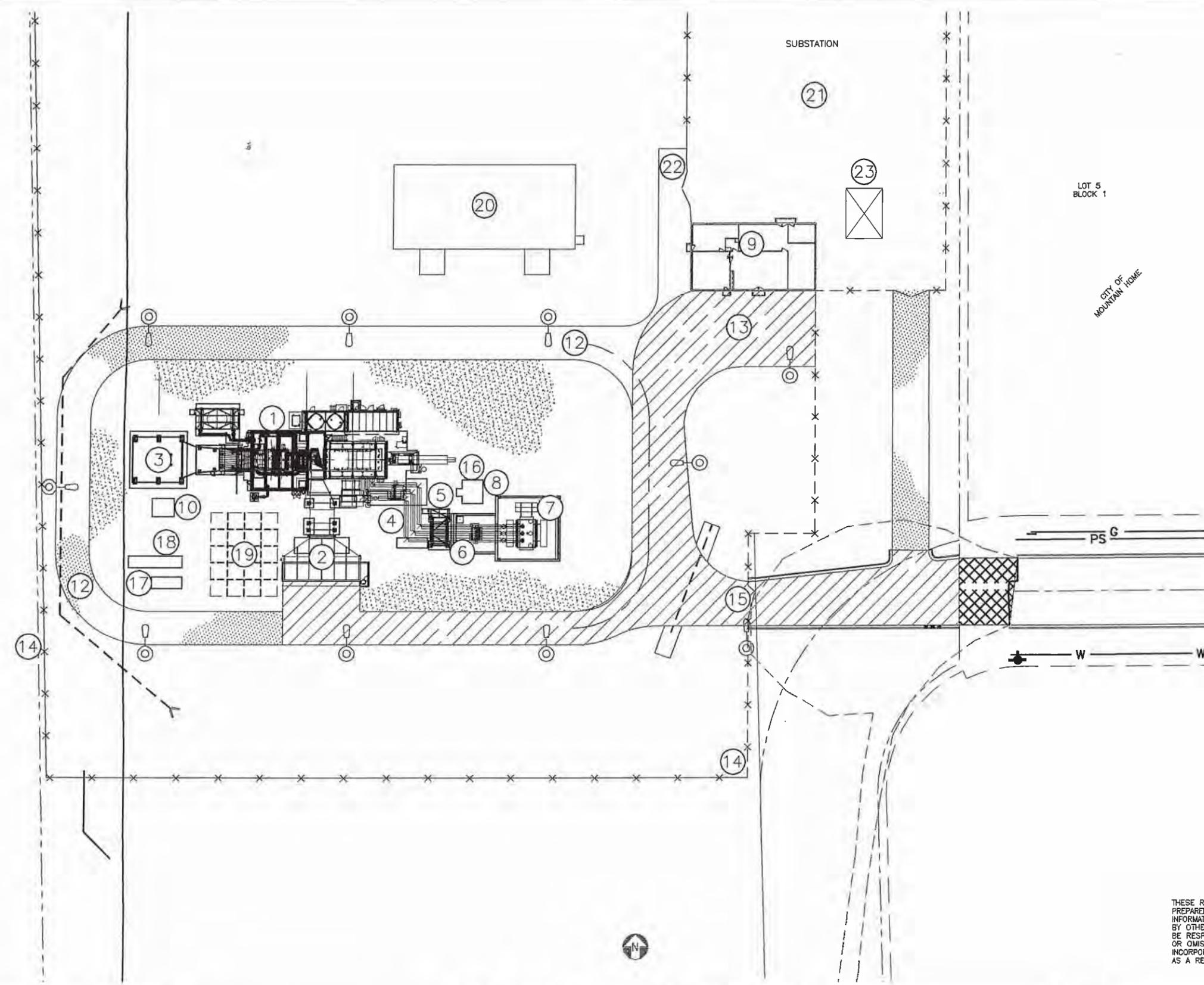


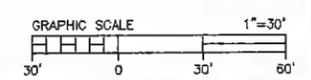
Figure 2: Area Location Map

NOTES:
 1. PLANT COORDINATES ARE BASED ON THE BENCH MARK LOCATED AT THE NORTHWEST CORNER OF THE SITE.



- LEGEND**
1. GAS TURBINE ENCLOSURE
 2. TURBINE AIR INLET FILTER
 3. EXHAUST STACK
 4. ISOPHASE BUS DUCT
 5. GENERATOR CIRCUIT BREAKER
 6. UNIT AUXILIARY TRANSFORMER
 7. GENERATOR STEP UP TRANSFORMER
 8. TRANSFORMER FIRE WALL
 9. ADMINISTRATION/CONTROL RM. BUILDING
 10. CEM ENCLOSURE
 11. OILY WATER SEPARATOR
 12. ROADS
 13. PARKING AREA
 14. FENCE
 15. GATE
 16. MEDIUM VOLTAGE SWITCHGEAR
 17. FUEL GAS CONDITIONING SKID
 18. DEW POINT HEATER
 19. MAINTENANCE CRANE PAD
 20. MAINTENANCE/STORAGE BUILDING
 21. SWITCHYARD AREA
 22. SWITCHYARD FENCE
 23. EMERGENCY GENERATOR
- 10" OF COMPACTED CRUSHED ROCK, FUTURE PAVING BY OTHERS
 4" OF ROCK SURFACING ON 6" OF COMPACTED CRUSHED ROCK
 NEW ASPHALT
 10" OF COMPACTED CRUSHED ROCK
 J278+ FINISH SPOT ELEVATION
 DRAINAGE ARROWS
 LIGHTING FIXTURE
 LIGHTING POLE

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT.



REV	DATE	BY	DESCRIPTION	APPD.
A	5-21-04		ISSUED FOR COMMENT	
0	6-11-04		ISSUED FOR CONSTRUCTION	
1	7-13-04		CORRECTED PLANT COORDINATES	
2	4-22-05		RECORD DRAWING	

LAUREN
 Engineers & Constructors, Inc.
 601 South First Street, Abilene, TX 79602
 (817) 670-9880 Fax (817) 670-9872

PROJECT: IDAHO POWER COMPANY
 BENNETT MOUNTAIN POWER PROJECT
 SIEMENS WESTINGHOUSE POWER CORPORATION

DRAWING TITLE: SITE PLAN

DRAWN:	JOB NO. 420430
CHECKED:	DATE:
SCALE: 1" = 30'	REV. 2
DRAWING NO. 20D-315500B	

Figure 3: Facility Plot Plan

6. Source Description

The Bennett Mountain combustion turbine is designated to supply electrical energy needs during periods of peak demand, generation emergency situations, and on an as needed basis. Therefore, the facilities operating schedule is expected to experience variations in operation seasonally, and on a year-to-year basis over the life of this permit. The operating permit regulations allow for such variation, so long as the variations do not result in emission rates greater than those presented in this application. No alternative operations scenarios are requested with this renewal.

Unit CT1 is a natural gas-fired Siemens-Westinghouse W501F simple-cycle combustion turbine (with generator). This unit has a nominal generating capacity of 170MW. The heat input is approximately 1,948 mmBtu/hr (higher heating value). This unit is equipped with Dry Low NO_x burners in order to combust a leaner mixture of fuel and air, thereby lowering the peak firing temperature and Nitrogen Oxide (NO_x) emissions.

In the combustion turbine process, ambient air is drawn through an inlet, and then is filtered and compressed. This compressed air is combined with fuel and combusted within the turbine combustion chamber. At the Bennett Mountain Power Project, the fuel (pipeline natural gas) is pre-heated by the nominal 3.6 mmBtu/hr natural gas fuel heater (H1) prior to combustion. Exhaust gas from the combustion process is expelled through a power turbine, driving a shaft. The mechanical work produced by the spinning shaft drives an air compressor and an electric power generator. Thus, electric power is produced directly by the mechanical work that spins the turbine shaft.

The combustion turbine includes a rectangular stack. Exhaust from CT1 is emitted through a series of sound-dampening baffles in the unit's respective stack directly to the atmosphere. The baffle systems were specially designed to meet local stack height restriction ordinances and to reduce noise levels in the surrounding area. The dimensions of the exhaust are 356.5 inches (in) (length) by 344.125 in (width) by 60 feet (ft) (height). These dimensions exclude the area of the stack that is occupied by the baffles.

The combustion turbine unit is equipped with a continuous emissions monitoring system (CEMS) to measure NO_x, carbon monoxide (CO), and diluent oxygen (O₂). Natural gas flow rates are measured continuously by a certified fuel flow monitoring system.

The emergency diesel generator EG1 is a Cummins 755 brake horsepower generator set. The 350 kilowatt (kW) engine is turbocharged with air-to-air charge air cooling. The guaranteed emission levels are compliant with the levels specified in 40 CFR 89.112, and the manufacturer has verified compliance with U.S.EPA and California emissions regulations under provisions of 40 CFR 89, Non-Road Tier 2 emissions limits. The guaranteed rates and compliance statement are included in this application as Attachment 5. This generator will be used for emergency operation whenever station power is interrupted. Subpart IIII allows for 100 hours of annual

operation for maintenance and readiness. It also allows for unlimited operation during emergency situations. However, the Permit to Construct Exemption No. X.2008.0196 and potential to emit emissions presented in this application are based on a total of 500 hours of operation per year for the emergency diesel generator.

The Bennett Mountain Power Project also includes the following:

- An enclosure for the combustion turbine (with an air inlet structure) that provides weather protection for the turbine and generator.
- A control room building and warehouse that includes a workshop, maintenance area, and offices for the facility.
- Electrically powered air compressor system for the combustion turbine unit.
- An electrical substation to step up the voltage of the power generated at the facility from 12kV to the transmission voltage of 138 kV.

The facility is monitored by an integrated microprocessor-based control system. This system includes a data acquisition and handling system (DAHS) and a CEMS for data acquisition and analysis. The system is used during facility operation (including startup and shutdown) to monitor emissions, and record the data.

Parking at the facility is provided in compacted gravel lots to accommodate all employees, maintenance crews, deliveries, and visitors and to reduce fugitive emissions.

7. Process Flow Diagrams

This section provides a general process flow diagram for the Bennett Mountain Power Project. In addition, detailed process flow diagrams for each of the following emission units are provided:

- Combustion Turbine
- Natural Gas Fuel Heater
- Emergency Diesel Generator

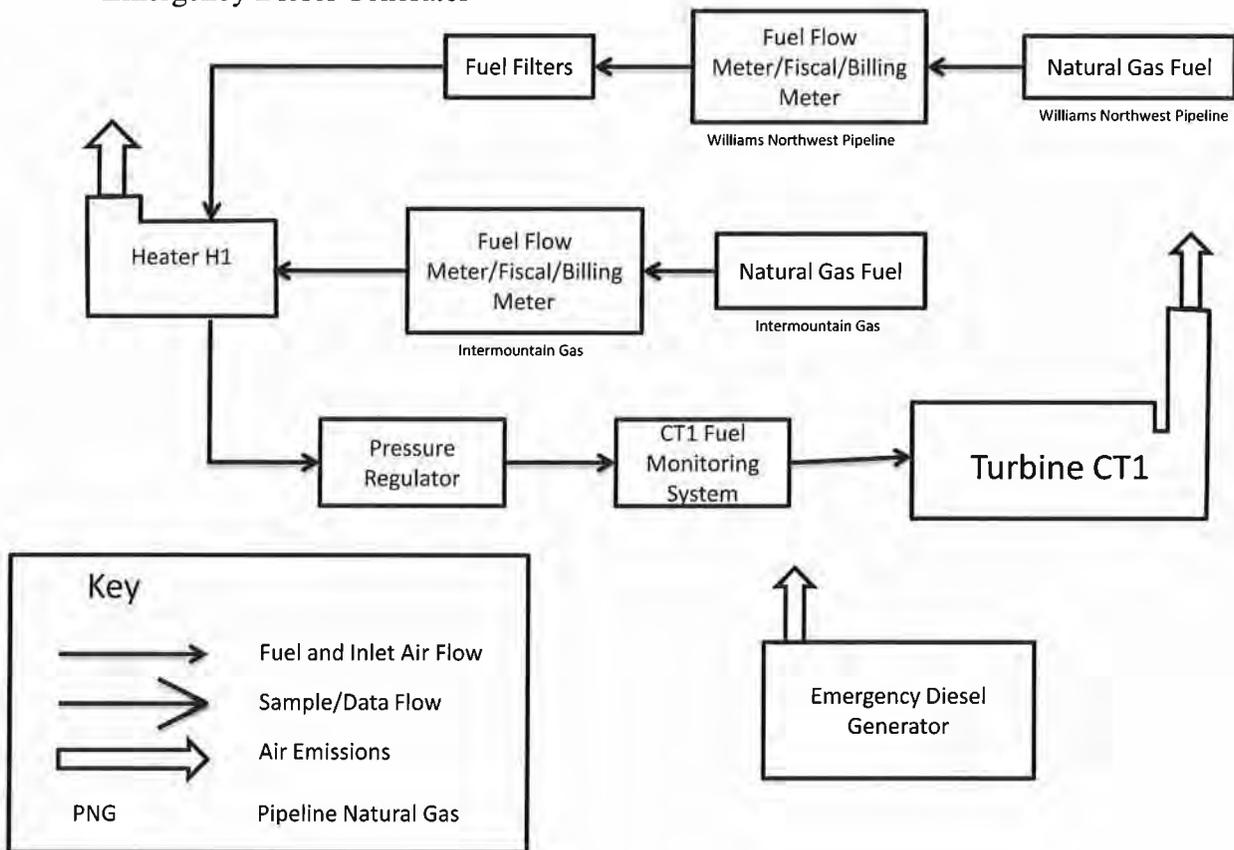


Figure 4: Facility-wide Process

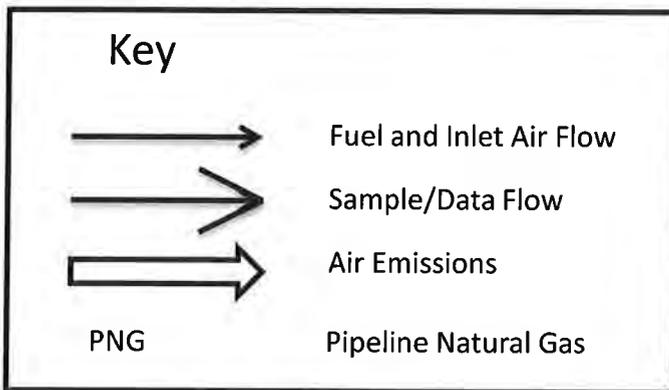
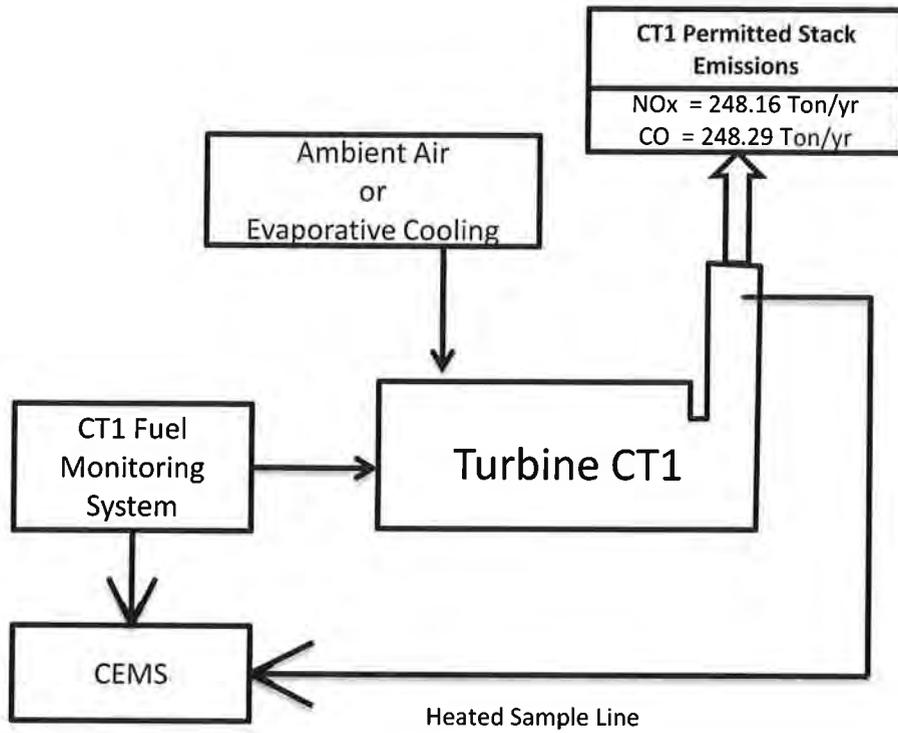


Figure 5: Combustion Turbine (CT1)

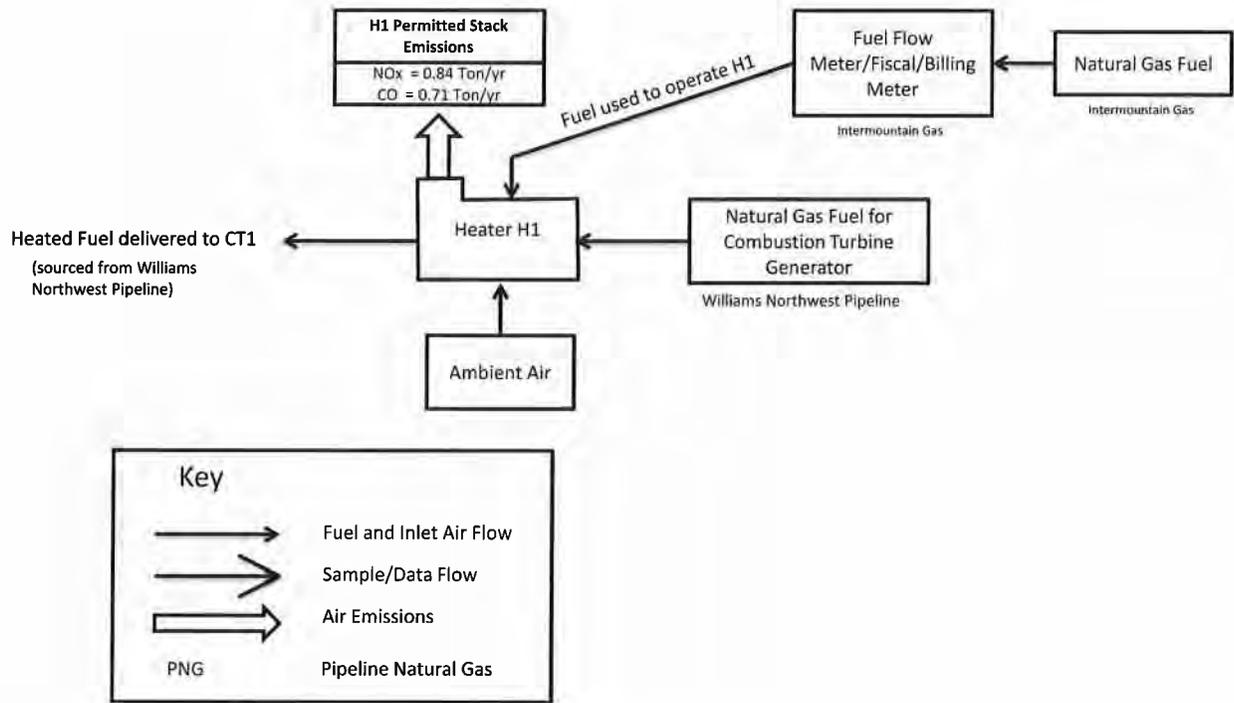


Figure 6: Natural Gas Fuel Heater (H1)

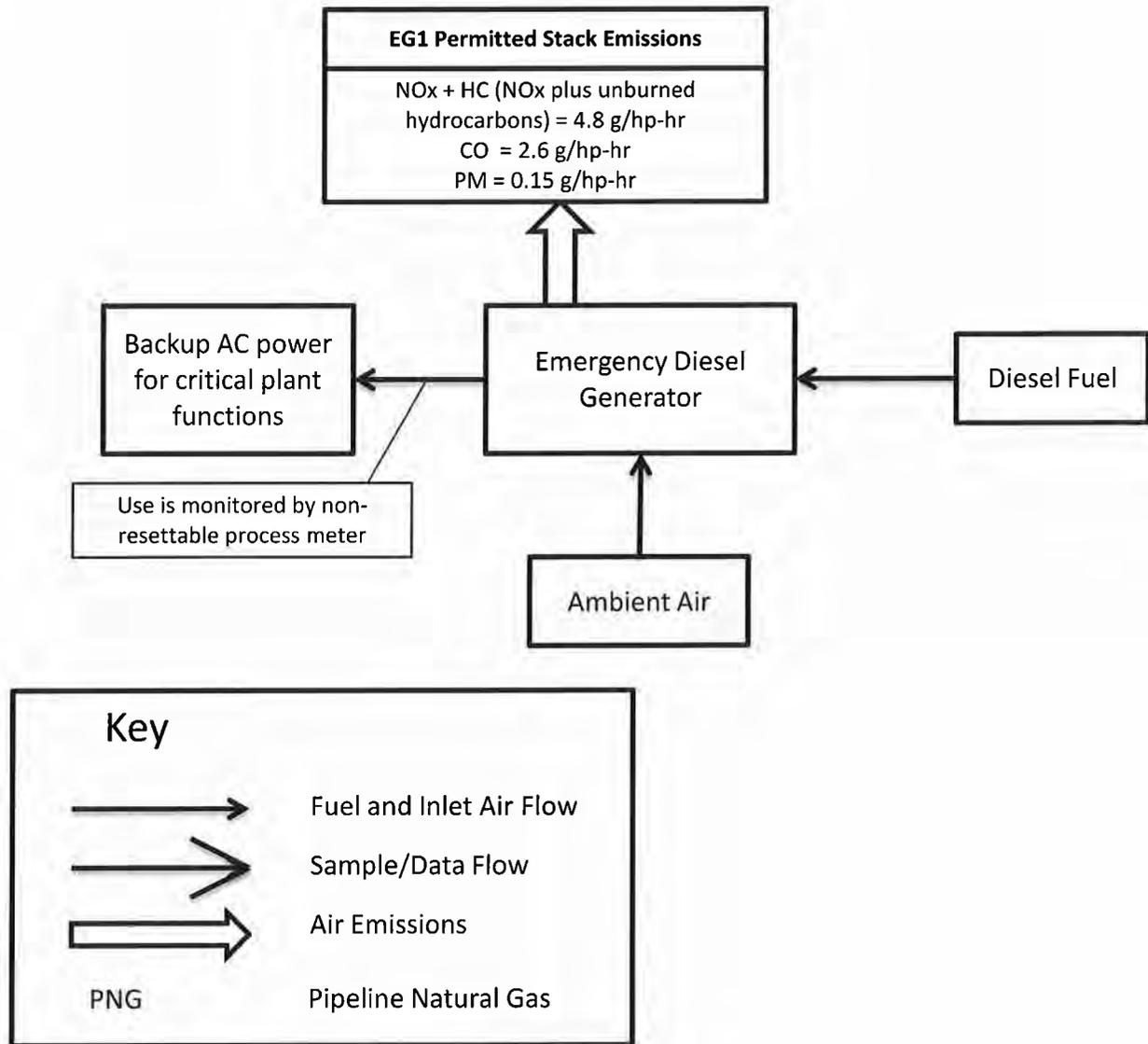


Figure 7: Emergency Diesel Generator (EDG)

8. NSPS, and NESHAP, and New Applicable Federal Requirements Review

Any existing applicable requirements to which the emission units are subject were included in the initial application, are still current and applicable, and have been included in this application as Attachment 7.

An applicability analysis of the NSPS and NESHAP regulations is provided in this section in accordance with IDEQ Form FRA, and a detailed regulatory review for the subparts relating directly to new equipment at the facility has been included in this application as Attachments 3 and 4.

The applicable new federal regulations that have become enacted since the last operating permit analysis was conducted are; 40 CFR 98 – Mandatory Green House Gas Reporting Rule.

8.1. New Source Performance Standards (NSPS) Review, 40 CFR 60

This facility is subject to the provisions of 40 CFR 60. Two subparts apply to combustion turbine generators. However, as outlined below, only Subpart GG is applicable to this combustion turbine. The emergency diesel generator is subject to the provisions of 40 CFR 60, Subpart IIII which was promulgated on July 11, 2006.

8.1.1. Subpart GG - Standard of Performance for Stationary Gas Turbines

The New Source Performance Standard (NSPS) requirements of 40 CFR 60.330, Subpart GG, apply to stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, for which construction commences after October 3, 1977. The combustion turbine for Bennett Mountain meets the applicability criteria given by 40 CFR 60.330; therefore, the turbine is subject to 40 CFR 60, Subpart GG.

8.1.2. Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The stationary compression ignition internal combustion emergency diesel generator located at the site is subject 40 CFR 60.4200, Subpart IIII, because construction was commenced in 2007, and the generator has a maximum brake horse power of 755.

8.1.3. Subpart KKKK - Standards of Performance for Stationary Combustion Turbines

The Provisions of 40 CFR 60.4300, Subpart KKKK do not apply to this project because construction of the combustion turbine commenced prior to February 18, 2005, and the turbine has not been modified or reconstructed since that time;

therefore, the provisions of Subpart KKKK do not apply. However, if modification or reconstruction of the combustion turbine occurs Subpart KKKK will be triggered.

8.2. National Emission Standards for Hazardous Air Pollutants (NESHAPS) Review, 40 CFR 63

This Part regulates hazardous air pollutants from stationary sources. Two Subparts apply to equipment like that used at the Bennett Mountain Plant. Namely, Subpart YYYYY sets NESHAP limits on Stationary Combustion Turbine Generators, and Subpart ZZZZ set NESHAP limits on Stationary Reciprocating Internal Combustion Engines.

As outlined in Section 9, below, this site is not a major source of hazardous air pollutant emissions because it emits less than 10 tons per year of any hazardous air pollutant and less than 25 tons per year of any combination of hazardous air pollutants.

8.2.1. Subpart YYYYY – National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

The requirements of 40 CFR 63, Subpart YYYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, do not apply to the combustion turbine, because this facility is not a major source of HAP emissions. Only new, existing, or reconstructed stationary combustion turbines located at a major source of HAP emissions are subject to the requirements contained in Subpart YYYYY.

8.2.2. Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Subpart ZZZZ, new MACT standards, imposes regulations on internal combustion engines located at major and area sources of HAP emissions; therefore Subpart ZZZZ applies to the emergency diesel generator. The emergency diesel generator at Bennett Mountain is an affected source and considered a “New Stationary RICE” because it was manufactured and constructed in 2007 and located at an area source of HAP emissions (63.6590(a)(2)(iii)), however, the subpart provides that new stationary RICE at area sources meet the requirements of the subpart by meeting all of the requirements of 40 CFR, Part 60, Subpart IIII (40 CFR 63.6590(c)(1)).

8.3.Mandatory Green House Gas Reporting Rule, 40 CFR 98

This part of the federal regulations was promulgated on October 30, 2009 and establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of facilities that directly emit GHG. The combustion turbine generator is subject to this requirement because it is subject to the requirements of the Acid Rain Program (ARP) and 40 CFR 98, Subpart D - Electrical Generation. The Fuel Gas Heater is subject to this regulation because of the presence of the Combustion Turbine. In accordance with 40 CFR 98.30(b)(2), the emergency diesel generator is exempt from these reporting requirements.

9. Emission Source Specifications

In accordance with IDAPA 58.01.01.314.04 this section provides relevant emission limitations subject to this facility, and the equipment operated at the facility. Idaho Power is not requesting to change the emission limits with this application. The emission rates presented in this section are the same as those presented in the previous operating permit application No. T1-2008.0164 for the combustion turbine and fuel gas heater. The emission rates for the emergency diesel generator were determined and included in the permit to construct exemption application No. X-2008.0196.

9.1. Facility Criteria Pollutant Potential to Emit

The facility's criteria pollutant potential to emit estimate is provided in Table 4.1 below. The emission estimates of criteria pollutant PTE were based on emission factors and process information specific to the facility for this project. Manufacturer's guaranteed emission rates for the combustion turbine are included as Attachment 2. Likewise, the manufacturer's guaranteed emission rates for the emergency diesel generator are included in this application as Attachment 5, and fuel heater are included in Attachment 9. Emissions calculations for the combustion turbine and fuel gas heater are included in this application as Attachment 9.

Table 4-1: Facility Criteria Pollutant Potential to Emit

	Facility Wide Criteria Pollutant Potential Emissions Estimates									
	PM ₁₀		SO ₂		NO _x		CO		VOC	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Combustion Turbine (CT1)	10	43.8	1.1	4.82	100	248.16	41	248.29	2.8	12.26
Fuel Gas Heater (H1)	0.033	0.15	0.026	0.11	0.436	0.84	0.366	0.71	0.048	0.21
Emergency Diesel Generator (EG1)	0.25	0.06	0.01	<0.01	7.99	2	4.33	1.08	0.53	0.13
Facility Totals	10.28	43.98	1.14	4.93	108.43	251.00	45.70	250.08	3.38	12.60

9.2. Hazardous Air Pollutant and Toxic Air Pollutant Potential to Emit

The facility wide hazardous air pollutant potential to emit estimate is provided in Table 4.2 below. Calculations for HAP emissions are included in this application as Attachment 10. The IDEQ toxic air pollutant (TAP) and hazardous air pollutant (HAP) screening levels are contained in IDAPA rules 58.01.01.585.

Table 4-2: Facility HAP Potential to Emit

HAP Summary	CT1	H1	EDG	Total Facility Emissions	CT1	H1	EDG	Total Facility Emissions
1,3-Butadine	7.69E-04	0	0	7.69E-04	3.4E-03	0	0	0.003
Acetaldehyde	7.15E-02	0	8.57E-05	7.16E-02	3.1E-01	0	2.14E-05	0.313
Acrolein	1.14E-02	0	2.68E-05	1.15E-02	5.0E-02	0	6.70E-06	0.050
Benzene	2.15E-02	7.56E-03	2.64E-03	3.17E-02	9.4E-02	3.31E-02	6.60E-04	0.128
EthylBensene	5.72E-02	0	0	5.72E-02	2.5E-01	0	0	0.251
Formaldehyd e	1.27E+00	2.70E-01	2.68E-04	1.54E+00	5.6E+00	1.18E+00	6.71E-05	6.743
Naphthalene	2.32E-03	2.20E-03	4.42E-04	4.96E-03	1.0E-02	9.62E-03	1.11E-04	0.020
Propylene Oxide	5.19E-02	0	0	5.19E-02	2.3E-01	0	0	0.227
Toluene	2.32E-01	1.22E-02	9.56E-04	2.46E-01	1.0E+00	5.36E-02	2.39E-04	1.072
Xylenes	1.14E-01	0	6.57E-04	1.15E-01	5.0E-01	0	1.64E-04	0.501

9.3. Air Quality Modeling

Air modeling is not required for Tier I Operating Permits. Air quality modeling was conducted for all applicable emission sources and pollutants as a part of the Permit to Construct No.P-050002. The modeling that was conducted demonstrated compliance with the NAAQS and the ACC for the facility.

9.4. Facility Carbon Dioxide Equivalent Estimate

Beginning on January 2, 2011, GHG became a regulated pollutant. The Bennett Mountain facility is an existing source and this application does not request a modification, therefore this renewal is not subject to the tailoring rule. However, the facility is subject 40 CFR 98, the Mandatory Green House Gas Reporting Rule which requires the facility to report annual CO₂ emission rates to the EPA on an annual basis for the Combustion Turbine Generator and the Fuel Gas Heater. Although, this requirement is only a federal reporting requirement, the estimate below has been provided to the state for informational purposes. The facility carbon dioxide equivalent (CO₂e) potential to emit has been calculated in accordance with Subpart D for the Combustion Turbine and Subpart C- General Stationary Fuel Combustion Sources for the Fuel Gas Heater. The potential to emit for these sources has been included in Table 4.3 below.

Table 4-3: Facility CO₂ equivalent Potential to Emit

	Combustion Turbine (Ton/Year)	Fuel Gas Heater (Ton/year)	Emergency Diesel Generator (Ton/Year)
CO ₂	574,574	692	570
CH ₄ [CO ₂ e]	10	3.73E-07	2.34E-02
N ₂ O [CO ₂ e]	1	3.73E-08	4.67E-03
Total CO₂e	574,585	692	570
Is this source required to submit CO ₂ e estimates per 40 CFR Part 98?	Yes	Yes	No
Total Reportable CO₂e	575,277		

9.5. Combustion Turbine

Emissions from the combustion turbine are primarily controlled through the Dry Low NO_x burners. As described in section, 6.0 Source Description, the Dry Low NO_x combust a leaner mixture of fuel and air thereby reduce the firing temperature which subsequently reduces NO_x emissions.

The combustion turbine is subject to the provisions of 40 CFR 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. This standard imposes limits for

both NO_x and sulfur dioxide (SO₂) for the combustion turbine. The combustion turbine is equipped with continuous emission monitoring systems (CEMS) for monitoring real time carbon monoxide (CO) and nitrogen oxides (NO_x) emission rates at all times during operation. These systems comply with the Acid Rain Program requirements for NO_x monitoring under 40 CFR 75.

9.5.1. NO_x

The hourly NO_x limit applicable to the combustion turbine is 107.4 ppm @ 15% O₂ (based on a rolling 4-hour averaging period, neglecting fuel bound nitrogen) calculated from the following equation (40 CFR 60.332(a)(1)).

$$\text{STD} = .0075 * (14.4/Y) + F = .0075 * (14.4/9534) + 0.0 = 0.01074\%$$

$$0.01074\% * 10,000 = 107.4 \text{ ppm}$$

Y=9534 Btu/kW-hr (10.05 kJ/W-hr) (Performance Test Report, Attachment 2)

F=0.0 (40 CFR 60.332(a)(4))

9.5.2. SO₂

The SO₂ limit states that no fuel which contains more than 0.8 percent total sulfur by weight (8000 ppmw) shall be burned in the turbine (40 CFR 60.333(b)). This limit is complied with by operating exclusively on pipeline quality natural gas, which contains no more than 0.5 grains per 100 standard cubic feet (9 ppmw) of total sulfur. The sulfur content of the fuel is tested annually during the performance test in accordance with 40 CFR 75, Appendix D, Table D-5.

9.6. Fuel Gas Heater

The fuel gas heater combusts pipeline natural gas fuel. The heat input for the unit is nominally 3.6 mmBtu/hr. The fuel gas heater (H1) increases the temperature of natural gas fuel to the turbine, thereby reducing the likelihood of having water vapor condense out of fuel prior to combustion in the combustion turbine. The air modeling analysis used fuel throughput and emission factors from AP-42 to determine the emissions impact from the fuel gas heater. From this analysis, a fuel use limit of 16,878,613 scf/yr was established for the fuel heater to demonstrate it does not exceed its respective modeled impacts.

9.7. Emergency Diesel Generator

The emergency diesel generator (EG1) is powered by a 755 brake-horsepower diesel fired engine. The generator provides power to critical loads within the facility during emergency situations. The generator was manufactured in 2007, and installed at the facility in 2008 under the PTC exemption rule IDAPA 58.01.01.222.01(d). In accordance with the PTC exemption rules, and 40 CFR 60, Subpart IIII, and 40 CFR 63, Subpart ZZZZ; the generator is used exclusively for testing and emergency situations with an annual maintenance and testing operation limit of 100 hr/yr. The operating hours are logged from the non-resettable hour meter on the generator. The PTC Exemption letter from the IDEQ (included as Attachment 6) limits the total operation of the emergency diesel generator to 500 hours per year.

10. Compliance Assurance Monitoring

The facility is not subject to 40 CFR 64, compliance assurance monitoring (CAM). The combustion turbine is the sole emission unit with potential pre-control device emissions that are equal to or greater than major source thresholds. A low-NO_x burner is integrated into the turbine, however, low-NO_x burner technology is not included under the definition of control device in §64.1 and therefore the combustion turbine does not meet the general applicability of the CAM requirements in §64.2(a)(2). In addition, the turbine is subject to a NO_x emission limitation under a new source performance standard, pursuant to section 111 of the Clean Air Act, thus NO_x emission limit is exempt from CAM [64.2(b)(1)(i)]. Further, the operating permit specifies a continuous compliance determination method, as defined in §64.1, for CO and therefore the CO emission limit is exempt from CAM [64.2(b)(1)(iv)].

11. Insignificant Activities

The following insignificant activities apply to this facility.

- Operation, loading and unloading of volatile organic compound storage tanks, ten thousand (10,000) gallons capacity or less, with lids or other appropriate closure, vp not greater than eighty (80) mm Hg at twenty-one (21) degrees C. Operation, loading and unloading of gasoline storage tanks, ten thousand (10,000) gallons capacity or less, with lids or other appropriate closure. (IDAPA 58.01.01.317.b.i(3))
- Welding using not more than one (1) ton per day of welding rod. (IDAPA 58.01.01.317.b.i(9))
- Surface coating, using less than two (2) gallons per day. (IDAPA 58.01.01.317.b.i(17))
- Cleaning and stripping activities and equipment, using solutions having less than one percent (1%) volatile organic compounds by weight. On metallic substrates, acid solutions are not considered for listing as insignificant. (IDAPA 58.01.01.317.b.i(26))

12. Permit Shield Request

Within this Tier I operating permit renewal application, Idaho Power has identified rules that do not apply to the facility. Compliance with all conditions of the renewed permit will be considered as compliance with all regulatory requirements in effect as of the date of permit issuance. A requirement identified in the permit as non-applicable is not enforceable by EPA, DEQ, or citizens. Idaho Power requests that the permit shield language contained in the existing Tier I operating permit, including 7.19, be retained and incorporated into the renewed Tier I operating permit.

13. Incorporations by Reference

The following IDEQ permit documents are to be incorporated by reference into this permit application. However, this application is to supersede any discrepancies that may exist in these documents.

- Permit to Construct Exemption No. X-2008.0196, issued December 29, 2008
- Tier I Operating Permit No. T1-2008.0164, issued November 20, 2008
- Tier I Operating Permit No. T1-060006, issued April 23, 2007 - Superseded
- Permit to Construct No. P-050002, issued June 21, 2005
- Permit to Construct No. P-030060, issued March 19, 2004 - Superseded
- Permit to Construct No. P-039-00025, issued September 9, 2002 – Superseded

14. Compliance Certification and Certificate

The methods used for determining compliance status, including applicable monitoring, recordkeeping, reporting or test methods were included with the initial operating permit application submittal, are still current and applicable, and have been included in this application as Attachment 11. As detailed in the most recent semiannual certification submitted to IDEQ on July 19, 2011 (Included as Attachment 12), the Bennett Mountain Power Project is in compliance with all applicable requirements affecting the facility as a whole as well as the specific emissions units located at the facility, therefore a compliance schedule is not required with this application. The Bennett Mountain Power Project will continue to be in compliance with applicable requirements, for which it is in compliance, and will, in a timely manner or at such a schedule expressly required by the applicable requirement, meet additional applicable requirements that become effective during the permit term.

The submittal of compliance certifications during the five year term of the operating permit will continue to occur semi-annually and annually within 30 days of the end of the specified reporting period.

Certification of Truth, Accuracy, and Completeness (by Responsible Official).

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Name: Dale Kogee

Title: MGR Power Production

Date: 10/13/11

15. Attachment 1 – IDEQ Forms



Tier I Operating Permit Application Completeness Checklist

This checklist identifies the majority of the information required for a Tier I operating permit application. DEQ's completeness determination will be made upon its review of the submitted application materials.

1. **General Facility Information**

- Complete and sign the Tier I Application and General Information Cover Sheet (Form T1GI/CS)

2. **Applicable Equipment-Specific Application Forms**

- Complete all applicable equipment-specific applications forms. The application forms listed below are available on DEQ's website at http://www.deq.idaho.gov/air/permits_forms/forms/forms.cfm#forms

Control Devices

- Form AO (Afterburner/Oxidizer)
- Form CA (Carbon Absorber)
- Form CYS (Cyclone Separator)
- Form ESP (Electrostatic Precipitator)
- Form BCE (Baghouse Control Equipment)
- Form SCE (Scrubber Control Equipment)
- Form VSCE (Venturi Scrubber Control Equipment)

Industrial Category Specific

- Form EU2 (Nonmetallic Mineral Processing Plant – fugitive dust only)
- Form HMAP (Hot-mix Asphalt Plant)
- Form CPB (Concrete Batch Plant)

Emissions Unit Specific

- Form EU0 (General Emissions Unit)
- Form EU1 (Industrial Engine)
- Form EU3 (Spray Paint Booth)
- Form EU4 (Cooling Towers)
- Form EU5 (Boilers)

Compliance Assurance Monitoring

- Form CAM (Compliance Assurance Monitoring). Refer to 40 CFR 64

Emissions Inventory

- Forms EI-CP (1 – 4) (Emissions Inventory Workbook)

Other Applicability Forms

- Form T1GI/CS (Tier I Operating Permit Application General Information Cover Sheet)
- Form FRA (Federal Requirements Applicability)

3. **Additional Required Information not Cover by Equipment-Specific Forms**

- For equipment that is not covered by any of the above equipment-specific forms, the following applicable data are required.

- Plot Plan - Equipment Location Drawing - Equipment Description - Fuel and Burners Used
- Operating Schedule - Process Description - Process Flow Diagram - Process Rate
- Material Safety Data Sheets (MSDS) - Other data needed to process application

4. **Applicable Requirements**

- Cite and describe all applicable requirements affecting each emissions unit. Describe or reference all methods required by each applicable requirement for determining the compliance status of the emissions unit with the applicable requirement, including any applicable monitoring, recordkeeping and reporting requirements or test methods.

5. **Proposed Determination of Non-applicability**

- Identify requirements for which the applicant seeks a determination of non-applicability and provide an explanation of why the requirement is not applicable to the Tier I source.

6. **Alternative Operating Scenarios**

- Identify all requested alternative operating scenarios. Provide a detailed description of all requested alternative operating scenarios. Include all the information required by Section 314 that is relevant to the alternative operating scenario.



Tier I Operating Permit Application Completeness Checklist

7. Compliance Certifications

- Provide a compliance certification regarding the compliance status of each emissions unit at the time the application is submitted to the DEQ that:
- Identifies all applicable requirements affecting each emissions unit.
 - Certifies the compliance status of each emissions unit with each of the applicable requirements.
 - Provides a detailed description of the method(s) used for determining the compliance status of each emissions unit with each applicable requirement, including a description of any monitoring, recordkeeping, reporting and test methods that were used. Also provide a detailed description of the method(s) required for determining compliance.
 - Certifies the compliance status of the emissions unit with any applicable enhanced monitoring requirements.
 - Certifies the compliance status of the emissions unit with any applicable enhanced compliance certification requirements.
 - Provides all other information necessary to determining the compliance status of the emissions unit.
 - Provide a schedule for submission of compliance certifications during the term of the Tier I operating permit. The schedule shall require compliance certifications to be submitted no less frequently than annually or more frequently if specified by the underlying applicable requirement or by the DEQ.

8. Compliance Plans

- Provide a compliance description as follows:
- For each applicable requirement with which the emissions unit is in compliance, state that the emissions unit will continue to comply with the applicable requirement.
 - For each applicable requirement that will become effective during the term of the Tier I operating permit that does not contain a more detailed schedule, state that the emissions unit will meet the applicable requirement on a timely basis.
 - For each applicable requirement that will become effective during the term of the Tier I operating permit that contains a more detailed schedule, state that the emissions unit will comply with the applicable requirement on the schedule provided in the applicable requirement.
 - For each applicable requirement with which the emission unit is not in compliance, state that the emissions unit will be in compliance with the applicable requirement by the time the Tier I operating permit is issued or provide a compliance schedule in accordance with Subsection 314.10.b.
- All compliance schedules shall:
- Include a schedule of remedial measures leading to compliance, including an enforceable sequence of actions and specific dates for achieving milestones and achieving compliance.
 - Incorporate the terms and conditions of any applicable consent order, judicial order, judicial consent decree, administrative order, settlement agreement or judgment.
 - Be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
 - Provide a schedule for submission to the DEQ of periodic progress reports no less frequently than every six (6) months or at a more frequent period if one (1) is specified in the underlying applicable requirement or by the DEQ.

9. Trading Scenarios

- Identify all requested trading scenarios, including alternative emissions limits (bubbles) authorized by Section 440.
- Provide a detailed description of all requested trading scenarios. Include all the information required by Section 314 that is relevant to the trading scenario and all the information required by Section 440, if applicable. Emissions trades must comply with all applicable requirements.
- Provide proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. Emissions trades involving emissions units for which the emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trade shall not be approved.



Tier I Operating Permit Application Completeness Checklist

10. Insignificant Activities Based on Size or Production Rate

- Provide a list of units or activities that are insignificant on the basis of size or production rate. Refer to IDAPA 58.01.01.317.01.b and 40 CFR 70.5(c).

11. Acid Rain Program Requirements

- For any affected units subject to the Acid Rain Program pursuant to 40 CFR 72.6, submit an Acid Rain Permit Application in accordance with 40 CFR 72, Subpart C.

12. Permit Shield Request

- A Tier I operating permit with a permit shield will identify rules that do not apply, and state that compliance with all conditions of the permit will be considered as compliance with all regulatory requirements in effect as of the date of permit issuance. A requirement identified in the permit as non-applicable is not enforceable by EPA, DEQ, or citizens. If a permit shield is being sought, describe the regulatory requirement that the facility is requesting a shield for and cite the rule reference and date of the rule version (e.g. IDAPA 58.01.01.860, 04/05/2000); explain the reason(s) for requesting a permit shield for each regulatory requirement; and indicate the length of time over which the permit shield should last.

13. Certification of Documents

- All documents, including but not limited to, application forms for permits to construct, application forms for operating permits, progress reports, records, monitoring data, supporting information, requests for confidential treatment, testing reports or compliance certifications submitted to the DEQ shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Refer to IDAPA 58.01.01.123.

14. DEQ Mailing Address

- Submit the certified Tier I operating permit application to the following address:

Department of Environmental Quality
Air Quality Division
Stationary Source Program Office
1410 North Hilton
Boise, ID 83706-1255



Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Idaho Power Company, Inc.		
2. Facility Name	Bennett Mountain	3. Facility ID No.	039-00025
4. Brief Project Description - One sentence or less	Electric Power Generation		

PERMIT APPLICATION TYPE	
5. <input type="checkbox"/> Initial Tier I	<input type="checkbox"/> Tier I Administrative Amendment
<input type="checkbox"/> Tier I Minor Modification	<input type="checkbox"/> Tier I Significant Modification
<input checked="" type="checkbox"/> Tier I Renewal: Permit No.: T1-2008.0164 Date Issued: November 20, 2008	

FORMS INCLUDED			
Include d	N/A	Forms	DEQ Verify
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form CSTI – Cover Sheet	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form GI – Facility Information	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form EU0 – Emissions Units General	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form EU1– Industrial Engine Information Please specify number of EU1s attached: <u>1</u>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU2– Nonmetallic Mineral Processing Plants Please specify number of EU2s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU3– Spray Paint Booth Information Please specify number of EU3s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU4– Cooling Tower Information Please specify number of EU4s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form EU5 – Boiler Information Please specify number of EU5s attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CBP– Concrete Batch Plant Please Specify number of CBPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form HMAP – Hot Mix Asphalt Plant Please specify number of HMAPs attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	PERF – Portable Equipment Relocation Form	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form BCE– Baghouses Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form SCE– Scrubbers Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form VSCE – Venturi Scrubber Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form ESP – Electrostatic Precipitator	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form AO – Afterburner/Oxidizer	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CYS – Cyclone Separator	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CA – Carbon Adsorber	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forms EI-CP1 - EI-CP4– Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Form CAM – Compliance Assurance Monitoring	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form FRA – Federal Regulation Applicability	<input type="checkbox"/>



Please see instructions on page 2 before filling out the form.

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION	
1. Company Name	2. Facility Name:
Idaho Power Company, Inc.	Bennett Mountain
3. Brief Project Description:	Electric Power Generation

FACILITY INFORMATION	
4. Primary Facility Permit Contact Person/Title	Dale Koger Power Production Manager
5. Telephone Number and Email Address	(208) 388-5820 dkoger@idahopower.com
6. Alternate Facility Contact Person/Title	Trevor Mahlum Mechanical Engineer
7. Telephone Number and Email Address	(208) 388-2426 tmahlum@idahopower.com
8. Address to Which the Permit Should be Sent	1221 W. Idaho St
9. City/County/State/Zip Code	Boise Ada ID 83702
10. Equipment Location Address (if different than the mailing address above)	2750 N.E. Industrial Way
11. City/County/State/Zip Code	Mountain Home Elmore ID 83647
12. Is the Equipment Portable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
13. SIC Code(s) and NAICS Code	Primary SIC: 4911 Secondary SIC: NAICS: 221112
14. Brief Business Description and Principal Product	Electric Power Generation
15. Identify any adjacent or contiguous facility that this company owns and/or operates	NA

16. Specify the reason for the application	<input type="checkbox"/> Permit to Construct (PTC) <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit.</p> <input type="checkbox"/> Incorporate the PTC at the time of the Tier I renewal <input type="checkbox"/> Co-process the Tier I modification and PTC <input type="checkbox"/> Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c) </div> <input checked="" type="checkbox"/> Tier I Permit <input type="checkbox"/> Tier II Permit <input type="checkbox"/> Tier II/Permit to Construct
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CERTIFICATION

In accordance with **IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho)**, I certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

17. Responsible Official's Name/Title	Dale Koger Power Production Manager
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18. Responsible Official's Signature	<i>Dale Koger</i>	Date:	10/13/11
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19. Check here to indicate that you would like to review the draft permit prior to final issuance.



Please see instructions on page 2 before filling out the form.

IDENTIFICATION		
1. Company Name: Idaho Power Company, Inc.	2. Facility Name: Bennett Mountain	3. Facility ID No: 039-00025
4. Brief Project Description: Electric Power Generation		

EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION	
5. Emissions Unit (EU) Name:	COMBUSTION TURBINE 01
6. EU ID Number:	CT01
7. EU Type:	<input type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:Renewal, T1-2008.0164 Date Issued: 4/23/07
8. Manufacturer:	SIEMENS
9. Model:	W501F
10.. Maximum Capacity:	170 MW
11. Date of Construction:	JUNE 21, 2005
12. Date of Modification (if any):	
13. Is this a Controlled Emission Unit?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.

EMISSIONS CONTROL EQUIPMENT													
14. Control Equipment Name and ID:	Dry Low NOx Combustors												
15. Date of Installation:	6/21/2005 16. Date of Modification (if any):												
17. Manufacturer and Model Number:	Siemens / DLN Burners												
18. ID(s) of Emission Unit Controlled:													
19. Is operating schedule different than emission units(s) involved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
20. Does the manufacturer guarantee the control efficiency of the control equipment?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)												
	Pollutant Controlled												
	<table border="1"> <thead> <tr> <th>PM</th> <th>PM10</th> <th>SO₂</th> <th>NOx</th> <th>VOC</th> <th>CO</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">x</td> <td style="text-align: center;">x</td> <td style="text-align: center;">x</td> </tr> </tbody> </table>	PM	PM10	SO ₂	NOx	VOC	CO				x	x	x
PM	PM10	SO ₂	NOx	VOC	CO								
			x	x	x								
Control Efficiency													

21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. Included in Attachment 2

EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)	
22. Actual Operation:	~1000 HOURS / YEAR
23. Maximum Operation:	8760 HOURS / YEAR

REQUESTED LIMITS	
24. Are you requesting any permit limits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, indicate all that apply below)
<input type="checkbox"/> Operation Hour Limit(s):	
<input type="checkbox"/> Production Limit(s):	
<input type="checkbox"/> Material Usage Limit(s):	
<input type="checkbox"/> Limits Based on Stack Testing:	Please attach all relevant stack testing summary reports
<input checked="" type="checkbox"/> Other:	AS LISTED IN PERMIT T1-2008.0164 AND RENEWAL APP
Rationale for Requesting the Limit(s):	BELOW PSD THRESHOLD



Please see instructions on page 2 before filling out the form.

IDENTIFICATION						
1. Company Name: Idaho Power Company, Inc.		2. Facility Name: Bennett Mountain		3. Facility ID No: 039-00025		
4. Brief Project Description:		Electric Power Generation				
EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION						
5. Emissions Unit (EU) Name:		FUEL GAS HEATER				
6. EU ID Number:		H1				
7. EU Type:		<input type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input type="checkbox"/> Modification to a Permitted Source -- Previous Permit #: Renewal, T1-2008.0164 Date Issued: 4/23/07				
8. Manufacturer:		SIVALLS INC.				
9. Model:						
10. Maximum Capacity:		3.6 MMBTU/HR (NOMINAL)				
11. Date of Construction:		JUNE 21, 2005				
12. Date of Modification (if any):						
13. Is this a Controlled Emission Unit?		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, complete the following section. If No, go to line 22.				
EMISSIONS CONTROL EQUIPMENT						
14. Control Equipment Name and ID:						
15. Date of Installation:			16. Date of Modification (if any):			
17. Manufacturer and Model Number:						
18. ID(s) of Emission Unit Controlled:						
19. Is operating schedule different than emission units(s) involved? <input type="checkbox"/> Yes <input type="checkbox"/> No						
20. Does the manufacturer guarantee the control efficiency of the control equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, attach and label manufacturer guarantee)						
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO ₂	NO _x	VOC	CO
21. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency.						
EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)						
22. Actual Operation:		~1000 HOURS / YEAR				
23. Maximum Operation:		8760 HOURS / YEAR				
REQUESTED LIMITS						
24. Are you requesting any permit limits?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, indicate all that apply below)				
<input type="checkbox"/> Operation Hour Limit(s):						
<input type="checkbox"/> Production Limit(s):						
<input type="checkbox"/> Material Usage Limit(s):						
<input type="checkbox"/> Limits Based on Stack Testing:		Please attach all relevant stack testing summary reports				
<input checked="" type="checkbox"/> Other:		AS LISTED IN PERMIT T1-2008.0164 AND RENEWAL APP				
Rationale for Requesting the Limit(s):		BELOW PSD THRESHOLD				



Please see instructions on page 2 before filling out the form.

IDENTIFICATION				
1. Company Name: Idaho Power Company, Inc.		2. Facility Name: Bennett Mountain		
3. Brief Project Description: Electric Power Generation				
ENGINE (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS				
4. Type of Unit: <input type="checkbox"/> New Unit <input type="checkbox"/> Unpermitted Existing Unit <input type="checkbox"/> Modification to a Unit with Permit #: Renewal, T1-2008-0164 Date Issued: April 23, 2007				
5. Engine Displacement: 2.48 (liters per cylinder)			6. Ignition Type: <input checked="" type="checkbox"/> Compression <input type="checkbox"/> Spark	
7. Use <input checked="" type="checkbox"/> Emergency <input type="checkbox"/> Non-Emergency				
8. Engine ID Number: EGen1		9. Maximum Rated Engine Power: <u>755</u> Brake Horsepower (bhp)		
10. Construction Date: 12/29/2008		11. Manufacturer: Cummins Power Generation	12. Model: QSX15-G9 Nonroad 2	13. Model Year: 2007
14. Date of Modification (if applicable): NA		15. Serial Number (if available): I070101236	16. Control Device (if any): None	
FUEL DESCRIPTION AND SPECIFICATIONS				
17. Fuel Type	<input checked="" type="checkbox"/> Diesel Fuel (#2) (gal/hr)	<input type="checkbox"/> Gasoline Fuel (gal/hr)	<input type="checkbox"/> Natural Gas (cf/hr)	<input type="checkbox"/> Other Fuels (unit:)
18. Full Load Consumption Rate	24.3			
19. Actual Consumption Rate	19			
20. Sulfur Content wt%	.0015	N/A	N/A	
OPERATING LIMITS & SCHEDULE				
21. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.): 500 hours of emergency operation and 100 hours of that can be used for maintenance and readiness checks.				
22. Operating Schedule (hours/day, months/year, etc.): Intermittent and as necessary.				



Facility Wide Potential to Emit Emission Inventory Application Template and Instructions

For new stationary sources provide the facility's potential to emit for all NSR Regulated Air Pollutants. The potential to emit provided here must match the emissions rates which are requested to be permitted.

For modifications to existing facilities (including the addition of new emissions units), if the existing facility classification is in question an existing facility wide potential to emit emission inventory will be required to be submitted¹. Contact DEQ to determine if a facility wide emission inventory for the existing facility is required.

All emissions inventories must be submitted with thorough documentation. The emission inventories will be subjected to technical review. Therefore, prepare your application with sufficient documentation so that the public and DEQ can verify the validity of the emission estimates. **Applications submitted without sufficient documentation are incomplete. Follow the instructions provided on page 2; do not proceed until you have read the instructions.**

Applicants must use the Potential to Emit Summary table provided below.

Table 1. POTENTIAL TO EMIT FOR NSR REGULATED POLLUTANTS

Emissions Unit	PM	CO	Pb	NO2	VOC	SO2
	T/yr	T/yr	T/yr	T/yr	T/yr	T/yr
Point Sources						
CT01	43.8	248.29	2.41	248.16	12.26	4.82
H1	0.15	0.71	<0.01	0.84	0.21	0.11
EG1	0.06	1.08	<0.01	2.00	0.13	<0.01
Fugitive Sources						
<i>{For listed source categories only, see item 3 below in the instructions}</i>						
XXX	0.00	0.00	0.00	0.00	0.00	0.00
XXX	0.00	0.00	0.00	0.00	0.00	0.00
XXX	0.00	0.00	0.00	0.00	0.00	0.00
Totals	43.98	250.08	2.41	251.00	12.60	4.93

a) NSR Regulated air Pollutants are defined² as: Particulate Matter (PM, PM-10, PM-2.5), Carbon Monoxide, Lead, Nitrogen Dioxide, Ozone (VOC), Sulfur Dioxide, all pollutants regulated by NSPS ([40 CFR 60](#)) (i.e. TRS, fluoride, sulfuric acid mist) & [Class I & Class II Ozone Depleting Substances](#) (40 CFR 82)(i.e. CFC, HCFC, Halon, etc.)

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.

¹ The applicant must determine if the existing facility is a major facility. If the facility is an existing PSD major facility and changes are being made to the facility the major modification test must be conducted.

² 40 CFR 52.21(b)(50), as incorporated by reference at IDAPA 58.01.01.107.03.d



Facility Wide Hazardous Air Pollutant Potential to Emit Application Template and Instructions

Provide the facility wide potential to emit for all Hazardous Air Pollutants (HAPs). **The potential to emit provided here must match the emissions rates which are requested to be permitted.**

HAPs are pollutants that are required to be regulated under the Clean Air Act. A list of the HAPs may be found by following this link: [HAP list](#); review the list carefully to be sure you have included all listed HAPs.

All emissions inventories must be submitted with thorough documentation. The emission inventories will be subjected to technical review; prepare your application with sufficient documentation so that either the public or DEQ can verify the validity of the emission estimates. **Applications submitted without sufficient documentation are incomplete. Follow the instructions provided on the following page; do not proceed until you have read the instructions.**

Applicants must use the Potential to Emit Summary table provided below. Identify the individual HAP with the highest emissions and total HAP emissions. The potential to emit provided here must match the emissions rates which are requested to be permitted. **All fugitive emissions of HAPs must be included.**

Table X HAP POTENTIAL TO EMIT EMISSIONS SUMMARY

HAP Pollutants	PTE (T/yr)
Formaldehyde*	6.74
Toluene	1.07
Xylene	0.50
Acetaldehyde	0.31
Ethylbenzene	0.25
Propylene Oxide	0.23
Total	9.31

* Maximum Individual HAP

Applicants are encouraged to call DEQ's Air Quality Permit Hotline (1-877-573-7648) to ask questions as they prepare the application.



DEQ AIR QUALITY PROGRAM
 1410 N. Hilton, Boise, ID 83706
 For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

AIR PERMIT APPLICATION

Revision 6
 10/7/09

For each box in the table below, CTRL+click on the blue underlined text for instructions and information.

IDENTIFICATION	
1. Company Name: Idaho Power Company, Inc	2. Facility Name: Bennett Mountain
3. Brief Project Description: Electric Power Generation	

APPLICABILITY DETERMINATION	
4. List applicable subparts of the New Source Performance Standards (NSPS) (<u>40 CFR part 60</u>). Examples of NSPS affected emissions units include internal combustion engines, boilers, turbines, etc. The applicant must thoroughly review the list of affected emissions units.	List of applicable subpart(s): GG applies to the combustion turbine IIII applies to the emergency diesel generator <input type="checkbox"/> Not Applicable
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) found in <u>40 CFR part 61</u> and <u>40 CFR part 63</u> . Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. <u>EPA has a web page dedicated to NESHAP</u> that should be useful to applicants.	List of applicable subpart(s): ZZZZ applies to the emergency diesel generator <input type="checkbox"/> Not Applicable
6. For each subpart identified above, conduct a complete a regulatory analysis using the instructions and referencing the example provided on the following pages. Note - Regulatory reviews must be submitted with sufficient detail so that DEQ can verify applicability and document in legal terms why the regulation applies. Regulatory reviews that are submitted with insufficient detail will be determined incomplete.	<input checked="" type="checkbox"/> A detailed regulatory review is provided (Follow instructions and example). IIII, ZZZZ included as attachment to this application <input checked="" type="checkbox"/> DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date. GG - Initial Tier I AQ permit application 2/2006

IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT

It is emphasized that it is the applicant's responsibility to satisfy all technical and regulatory requirements, and that DEQ will help the applicant understand what those requirements are prior to the application being submitted but that DEQ will not perform the required technical or regulatory analysis on the applicant's behalf.

16. Attachment 2 – Combustion Turbine Performance Summary

TABLE 1 – W501F Simple Cycle Thermal Performance Test Official Results
MOUNTAIN VIEW POWER – BENNETT MOUNTAIN POWER PROJECT

Guarantee Conditions

Ambient Temperature = 90 °F
 Barometric Pressure = 13.036 psia
 Relative Humidity = 20 %
 Generator Power Factor = 0.90 Lagging
 Generator Frequency = 60 Hz
 Evaporative Cooler Status = ON (CIT=65.9°F)
 Fuel: Natural Gas, LHV = 20,981 Btu/lbm
 Fuel Temperature = 60 °F
 Engine Operation = Baseload

Unit Shop Order No. Test Date Test Time Evaporative Cooler	CT1 37A8214 Mar-22-05 15:45-16:15 EC OFF	FINAL TEST RESULTS CT1 37A8214 Mar-22-05 Adjusted for May-13-05 EC Effectiveness Test
Net Power (kW) Guarantee Test Results _{Corrected} Difference % Difference	162,224 164,546 +2,322 +1.431%	162,224 164,159 +1,935 +1.192%
Net Heat Rate (LHV) (Btu/kW-hr) Guarantee Test Results _{Corrected} Difference % Difference	9,534 9,146 -388 -4.074%	9,534 9,151 -383 -4.020%

17. Attachment 3 – 40 CFR 60, Subpart III, Applicability Analysis

40 CFR 60, Subpart III (4200) Applicability Determination

e-CFR Data is current as of August 5, 2011

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

[Browse Previous](#) | [Browse Next](#)

Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

What This Subpart Covers

§ 60.4200 Am I subject to this subpart?

[Link to an amendment published at 76 FR 37967, June 28, 2011.](#)

~~(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.~~

~~(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:~~

~~(i) 2007 or later, for engines that are not fire pump engines,~~

~~(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.~~

~~(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:~~

~~(i) Manufactured after April 1, 2006 and are not fire pump engines, or~~

~~(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.~~

~~(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37967 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37967

Effective Date(s): August 29, 2011

2. Section 60.4200 is amended by revising paragraph (a) and adding paragraph (e) to read as follows:

§ 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

This sub-section was amended on June 28, 2011. The updated section is included below.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines;

(ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

(i) Manufactured after April 1, 2006, and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.

(4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

This subpart is applicable because 60.4200(a)(2)(i) and 60.4200(a)(4) apply to the emergency diesel generator at the Bennett Mountain facility. The model year for the generator is 2007, and it was constructed in 2008.

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

[Link to an amendment published at 76 FR 37967, June 28, 2011.](#)

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.

~~(d) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

Amendment(s) published June 28, 2011, in 76 FR 37967

Effective Date(s): August 29, 2011

3. Section 60.4201 is amended by revising paragraph (d) and adding paragraphs (e) through (g) to read as follows:

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and

(2) Marine offshore installations.

(g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

This subsection does not apply. Idaho Power is not an engine manufacturer, rather Idaho Power is an owner and operator of an affected unit under this subpart.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

[Link to an amendment published at 76 FR 37968, June 28, 2011.](#)

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

~~(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37968](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37968

Effective Date(s): August 29, 2011

4. Section 60.4202 is amended by removing and reserving paragraph (c) and adding paragraphs (e) through (h) to read as follows:

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(c) [Reserved]

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3

new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

This subsection does not apply. Idaho Power is not an engine manufacturer, rather Idaho Power is an owner and operator of an affected unit under this subpart.

§ 60.4203 How long must my engines meet the emission standards if I am a stationary CI internal combustion engine manufacturer?

[Link to an amendment published at 76 FR 37968, June 28, 2011.](#)

~~Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the useful life of the engines.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37968 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37968

Effective Date(s): August 29, 2011

5. Section 60.4203 is revised to read as follows:

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the certified emissions life of the engines.

This subsection does not apply. Idaho Power is not an engine manufacturer, rather Idaho Power is an owner and operator of an affected unit under this subpart.

Emission Standards for Owners and Operators

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 76 FR 37968, June 28, 2011.](#)

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

~~(c) Owners and operators of non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (c)(1) and (2) of this section.~~

~~(1) Reduce nitrogen oxides (NO_x) emissions by 90 percent or more, or limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to 1.6 grams per kW hour (g/KW hr) (1.2 grams per HP hour (g/HP hr)).~~

~~(2) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW hr (0.11 g/HP hr).~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37968](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37968

Effective Date(s): August 29, 2011

6. Section 60.4204 is amended by revising paragraph (c) and adding paragraphs (d) and (e) to read as follows:

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) For engines installed on or after January 1, 2016, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

- (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) $9.0 \cdot n^{-0.20}$ g/KW-hr ($6.7 \cdot n^{-0.20}$ g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
 - (iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.
- (4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).
- (d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.
- (e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

This subsection is not applicable because the CI ICE at Bennett Mountain is classified as an emergency generator that only supplies energy to critical plant equipment (lube oil pumps, actuation air pumps, etc.) during emergency situations.

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

~~(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).~~

~~(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.~~

(c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.

~~(d) Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in paragraphs (d)(1) and (2) of this section.~~

~~(1) Reduce NO_x emissions by 90 percent or more, or limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to 1.6 grams per KW hour (1.2 grams per HP hour).~~

~~(2) Reduce PM emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW hr (0.11 g/HP hr).~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37969 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

7. Section 60.4205 is amended by revising paragraphs (a) and (d) and adding paragraphs (e) and (f) to read as follows:

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.

(1) For engines installed prior to January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $45 \cdot n^{-0.2}$ g/KW-hr ($34 \cdot n^{-0.2}$ g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and

(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.

(2) For engines installed on or after January 1, 2012, limit the emissions of NO_x in the stationary CI internal combustion engine exhaust to the following:

(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;

(ii) $44 \cdot n^{-0.23}$ g/KW-hr ($33 \cdot n^{-0.23}$ g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and

(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.

(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.

(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

Section 60.4205(b) is applicable to the emergency diesel generator at Bennett Mountain because it was constructed in 2007, has a total engine displacement of 14.9 liters, and is an emergency generator (not fire pump generator). This section [60.4205(b)] refers the owner and operator to follow the emission standards set for the same equipment set forth in section 60.4202. Furthermore, Idaho Power will not be conducting performance tests in use, therefore, (e) is not applicable. For the readers convenience Section 60.4202 has been included below.

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

[Link to an amendment published at 76 FR 37968, June 28, 2011.](#)

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.

(1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.

(2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

~~(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.~~

(d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 5, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37968 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37968

Effective Date(s): August 29, 2011

4. Section 60.4202 is amended by removing and reserving paragraph (c) and adding paragraphs (e) through (h) to read as follows:

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(c) [Reserved]

Attachment 3 – 40 CFR 60, Subpart III, Applicability Analysis

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;

(2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;

(3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and

(4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:

(1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

(2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:

(1) Areas of Alaska not accessible by the FAHS; and

(2) Marine offshore installations.

(h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

Section 60.4202(a)(2) is the applicable portion of the regulation for the emergency generator at Bennett Mountain. This section requires the engine to comply with section 89.112 and 89.113 which is titled "Control of Emissions

from New and In-Use Nonroad Compression-Ignition Engines”. For the readers convenience the noted sections have been included subsequently.

§ 89.112 Oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter exhaust emission standards.

[top](#)

(a) Exhaust emission from nonroad engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards contained in Table 1, as follows:

Table 1.—Emission Standards (g/kW-hr)

Rated Power (kW)	Tier	Model Year ¹	NOx	HC	NMHC + NOx	CO	PM
kW<8	Tier 1	2000	—	—	10.5	8.0	1.0
	Tier 2	2005	—	—	7.5	8.0	0.80
8≤kW<19	Tier 1	2000	—	—	9.5	6.6	0.80
	Tier 2	2005	—	—	7.5	6.6	0.80
19≤kW<37	Tier 1	1999	—	—	9.5	5.5	0.80
	Tier 2	2004	—	—	7.5	5.5	0.60
37≤kW<75	Tier 1	1998	9.2	—	—	—	—
	Tier 2	2004	—	—	7.5	5.0	0.40
	Tier 3	2008	—	—	4.7	5.0	—
75≤kW<130	Tier 1	1997	9.2	—	—	—	—
	Tier 2	2003	—	—	6.6	5.0	0.30
	Tier 3	2007	—	—	4.0	5.0	—
130≤kW<225	Tier 1	1996	9.2	1.3	—	11.4	0.54
	Tier 2	2003	—	—	6.6	3.5	0.20
	Tier 3	2006	—	—	4.0	3.5	—
225≤kW<450	Tier 1	1996	9.2	1.3	—	11.4	0.54
	Tier 2	2001	—	—	6.4	3.5	0.20
	Tier 3	2006	—	—	4.0	3.5	—
450≤kW≤560	Tier 1	1996	9.2	1.3	—	11.4	0.54
	Tier 2	2002	—	—	6.4	3.5	0.20
	Tier 3	2006	—	—	4.0	3.5	—
kW>560	Tier 1	2000	9.2	1.3	—	11.4	0.54
	Tier 2	2006	—	—	6.4	3.5	0.20

¹ The model years listed indicate the model years for which the specified tier of standards take effect.

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(b) Exhaust emissions of oxides of nitrogen, carbon monoxide, hydrocarbon, and nonmethane hydrocarbon are measured using the procedures set forth in subpart E of this part.

(c) Exhaust emission of particulate matter is measured using the California Regulations for New 1996 and Later Heavy-Duty Off-Road Diesel Cycle Engines. This procedure is incorporated by reference. See §89.6.

(d) In lieu of the NO_x standards, NMHC + NO_x standards, and PM standards specified in paragraph (a) of this section, manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in subpart C of this part. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in Table 2. The FEL established by the manufacturer serves as the standard for that engine family. Table 2 follows:

Table 2.—Upper Limit for Family Emission Limits (g/kW-hr)

Rated Power (kW)	Tier	Model Year ¹	NO _x FEL	NMHC+ NO _x FEL	PM FEL
kW<8	Tier 1	2010	—	16.0	1.2
	Tier 2	2005	—	10.5	1.0
8≤kW<19	Tier 1	2000	—	16.0	1.2
	Tier 2	2005	—	9.5	0.80
19≤kW<37	Tier 1	1999	—	16.0	1.2
	Tier 2	2004	—	9.5	0.80
37≤kW<75	Tier 1	1998	14.6	—	—
	Tier 2	2004	—	11.5	1.2
	Tier 3	2008	—	7.5	
75≤kW<130	Tier 1	1997	14.6	—	—
	Tier 2	2003	—	11.5	1.2
	Tier 3	2007	—	6.6	
130≤kW<225	Tier 1	1996	14.6	—	—
	Tier 2	2003	—	10.5	0.54
	Tier 3	2006	—	6.6	
225≤kW<450	Tier 1	1996	14.6	—	—
	Tier 2	2001	—	10.5	0.54
	Tier 3	2006	—	6.4	
450≤kW≤560	Tier 1	1996	14.6	—	—
	Tier 2	2002	—	10.5	0.54
	Tier 3	2006	—	6.4	
kW>560	Tier 1	2000	14.6	—	—
	Tier 2	2006	—	10.5	0.54

¹ The model years listed indicate the model years for which the specified tier of limits take effect.

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(e) Naturally aspirated nonroad engines to which this subpart is applicable shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision applies to all Tier 2 engines and later models. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

(f) The following paragraphs define the requirements for low-emitting Blue Sky Series engines:

(1) *Voluntary standards.* Engines may be designated “Blue Sky Series” engines by meeting the voluntary standards listed in Table 3, which apply to all certification and in-use testing, as follows:

Table 3—Voluntary Emission Standards (g/kW-hr)

Rated Brake Power (kW)	NMHC+NO_x	PM
kW<8	4.6	0.48
8≤kW<19	4.5	0.48
19≤kW<37	4.5	0.36
37≤kW<75	4.7	0.24
75≤kW<130	4.0	0.18
130≤kW≤560	4.0	0.12
kW>560	3.8	0.12

(2) *Additional standards.* Blue Sky Series engines are subject to all provisions that would otherwise apply under this part, except as specified in paragraph (f)(3) of this section.

(3) *Test procedures.* NO_x, NMHC, and PM emissions are measured using the procedures set forth in 40 CFR part 1065, in lieu of the procedures set forth in subpart E of this part. CO emissions may be measured using the procedures set forth either in 40 CFR part 1065 or in subpart E of this part. Manufacturers may use an alternate procedure to demonstrate the desired level of emission control if approved in advance by the Administrator. Engines meeting the requirements to qualify as Blue Sky Series engines must be capable of maintaining a comparable level of emission control when tested using the procedures set forth in paragraph (c) of this section and subpart E of this part. The numerical emission levels measured using the procedures from subpart E of this part may be up to 20 percent higher than those measured using the procedures from 40 CFR part 1065 and still be considered comparable.

(g) Manufacturers of engines at or above 37 kW and below 56 kW from model years 2008 through 2012 that are subject to the standards of this section under 40 CFR 1039.102 must take the following additional steps:

(1) State the applicable PM standard on the emission control information label.

(2) Add information to the emission-related installation instructions to clarify the equipment manufacturer's obligations under 40 CFR 1039.104(f).

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57000, Oct. 23, 1998; 69 FR 39212, June 29, 2004; 70 FR 40444, July 13, 2005]

By converting the mechanical power of the emergency diesel generator, the rated power in kW is 563kW. Based on the attached documents (Attachment 5) the Cummins Power Generation engine model #QXC15-C9 installed complies with the emission rate standards set forth for this Tier 2 engine of NO_x+NMHC = 6.4 g/kW-hr, CO = 3.5, and PM = 0.20. The engine used in the generator set complies with U.S. EPA and California emission regulations under these provisions for Non-Road (mobile Off Highway) Tier 2 emissions limits when tested per ISO 8178 D2. In addition, the engine is an in line, 6 cylinder, 4 cycle, diesel engine with turbo-charged aspiration so it is not subject to crankcase regulation under subsection (e).

§ 89.113 Smoke emission standard.

[↑ top](#)

(a) Exhaust opacity from compression-ignition nonroad engines for which this subpart is applicable must not exceed:

- (1) 20 percent during the acceleration mode;
- (2) 15 percent during the lugging mode; and
- (3) 50 percent during the peaks in either the acceleration or lugging modes.

(b) Opacity levels are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.

(c) The following engines are exempt from the requirements of this section:

- (1) Single-cylinder engines;
- (2) Propulsion marine diesel engines; and
- (3) Constant-speed engines.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57003, Oct. 23, 1998]

The emergency generator has an electronic governor; therefore per subpart 89.113(c) is exempt from the opacity provisions of 89.113. However, the IDEQ visible emissions standards (IDAPA 58.01.01.625) still apply to this emission source.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

~~Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 9, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37969](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

8. Section 60.4206 is revised to read as follows:

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

Idaho Power acknowledges this standard and has adopted the manufacturer's instructions and procedures for maintaining and operating the unit.

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

~~(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.~~

~~(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.~~

~~(d) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the Federal Aid Highway System may petition the Administrator for approval to use any fuels mixed with used lubricating oil that do not meet the fuel requirements of paragraphs (a) and (b) of this section. Owners and operators must demonstrate in their petition to the Administrator that there is no other place to use the lubricating oil. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.~~

(e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 9, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37969 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

9. Section 60.4207 is amended by revising paragraph (b), removing and reserving paragraph (c), and revising paragraph (d) to read as follows:

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

(c) [Reserved]

(d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

This section references 80.510(b). For the readers convenience, this subpart is included below.

e-CFR Data is current as of August 25, 2011

Title 40: Protection of Environment

PART 80—REGULATION OF FUELS AND FUEL ADDITIVES

Subpart I—Motor Vehicle Diesel Fuel; Nonroad, Locomotive, and Marine Diesel Fuel; and ECA Marine Fuel General Information

[Browse Previous](#) | [Browse Next](#)

§ 80.510 What are the standards and marker requirements for NRLM diesel fuel and ECA marine fuel?

(a) *Beginning June 1, 2007*. Except as otherwise specifically provided in this subpart, all NRLM diesel fuel is subject to the following per-gallon standards:

- (1) Sulfur content. 500 parts per million (ppm) maximum.
- (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.

(b) *Beginning June 1, 2010*. Except as otherwise specifically provided in this subpart, all NR and LM diesel fuel is subject to the following per-gallon standards:

- (1) Sulfur content.
 - (i) 15 ppm maximum for NR diesel fuel.
 - (ii) 500 ppm maximum for LM diesel fuel.
- (2) Cetane index or aromatic content, as follows:
 - (i) A minimum cetane index of 40; or
 - (ii) A maximum aromatic content of 35 volume percent.

(c) *Beginning June 1, 2012*. Except as otherwise specifically provided in this subpart, all NRLM diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content. 15 ppm maximum.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

(d) *Marking provisions*. From June 1, 2007 through May 31, 2010:

(1) Except as provided for in paragraph (i) of this section, prior to distribution from a truck loading terminal, all heating oil shall contain six milligrams per liter of marker solvent yellow 124.

(2) All motor vehicle and NRLM diesel fuel shall be free of solvent yellow 124.

(3) Any diesel fuel that contains greater than or equal to 0.10 milligrams per liter of marker solvent yellow 124 shall be deemed to be heating oil and shall be prohibited from use in any motor vehicle or nonroad diesel engine (including locomotive, or marine diesel engines).

(4) Except as provided for in paragraph (i) of this section, any diesel fuel, other than jet fuel or kerosene that is downstream of a truck loading terminal, that contains less than 0.10 milligrams per liter of marker solvent yellow 124 shall be considered motor vehicle diesel fuel or NRLM diesel fuel, as appropriate.

(5) Any heating oil that is required to contain marker solvent yellow 124 pursuant to the requirements of this paragraph (d) must also contain visible evidence of dye solvent red 164.

(e) *Marking provisions*. From June 1, 2010 through May 31, 2012:

(1) Except as provided for in paragraph (i) of this section, prior to distribution from a truck loading terminal, all heating oil and diesel fuel designated as 500 ppm sulfur LM diesel fuel shall contain six milligrams per liter of solvent yellow 124.

(2) All motor vehicle and NR diesel fuel shall be free of marker solvent yellow 124.

(3) Any diesel fuel that contains greater than or equal to 0.10 milligrams per liter of marker solvent yellow 124 shall be deemed to be LM diesel fuel or heating oil, as appropriate, and shall be prohibited from use in any motor vehicle or nonroad diesel engine (except for locomotive or marine diesel engines).

(4) Except as provided for in paragraph (i) of this section, any diesel fuel, other than jet fuel or kerosene that is downstream of a truck loading terminal, that contains less than 0.10 milligrams per liter of marker solvent yellow 124 shall be considered motor vehicle diesel fuel or NR diesel fuel, as appropriate.

(5) Any LM diesel fuel or heating oil that is required to contain marker solvent yellow 124 pursuant to the requirements of this paragraph (e) must also contain visible evidence of dye solvent red 164.

(f) *Marking provisions*. From June 1, 2012 through May 31, 2014:

(1) Except as provided for in paragraph (i) of this section, prior to distribution from a truck loading terminal, all heating oil shall contain six milligrams per liter of marker solvent yellow 124.

- (2) All motor vehicle and NRLM diesel fuel shall be free of marker solvent yellow 124.
- (3) Any diesel fuel that contains greater than or equal to 0.10 milligrams per liter of marker solvent yellow 124 shall be deemed to be heating oil and shall be prohibited from use in any motor vehicle or nonroad diesel engine (including locomotive, or marine diesel engines).
- (4) Except as provided for in paragraph (i) of this section, any diesel fuel, other than jet fuel or kerosene that is downstream of a truck loading terminal, that contains less than 0.10 milligrams per liter of marker solvent yellow 124 shall be considered motor vehicle diesel fuel or NRLM diesel fuel, as appropriate.
- (5) Any heating oil that is required to contain marker solvent yellow 124 pursuant to the requirements of this paragraph (f) must also contain visible evidence of dye solvent red 164.
- (6) Marker solvent yellow 124 shall not be used in any MVNRLM or heating oil after May 31, 2014.
- (g) Special provisions in this part apply to the following areas:
- (1) Northeast/Mid-Atlantic Area, which includes the following States and counties, through May 31, 2014: North Carolina, Virginia, Maryland, Delaware, New Jersey, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, Washington DC, New York (except for the counties of Chautauqua, Cattaraugus, and Allegany), Pennsylvania (except for the counties of Erie, Warren, McKean, Potter, Cameron, Elk, Jefferson, Clarion, Forest, Venango, Mercer, Crawford, Lawrence, Beaver, Washington, and Greene), and the eight eastern-most counties of West Virginia (Jefferson, Berkeley, Morgan, Hampshire, Mineral, Hardy, Grant, and Pendleton).
- (2) Alaska.
- (h) Pursuant and subject to the provisions of §80.536, §80.554, §80.560, or §80.561:
- (1) Except as provided in paragraph (j) of this section, from June 1, 2007 through May 31, 2010, NRLM diesel fuel produced or imported in full compliance with the requirements of §§80.536, 80.554, 80.560, and 80.561 is exempt from the per-gallon sulfur content standard and cetane or aromatics standard of paragraph (a) of this section.
- (2) Except as provided in paragraph (j) of this section, from June 1, 2010 through May 31, 2012 for NR diesel fuel and from June 1, 2012 through May 31, 2014 for NRLM diesel fuel produced or imported in full compliance with the requirements of §§80.536, 80.554, 80.560, and 80.561 is exempt from the per-gallon standards of paragraphs (b) and (c) of this section, but is subject to the per-gallon standards of paragraph (a) of this section.
- (i) The marking requirements of paragraphs (d)(1), (d)(4), (e)(1), (e)(4), (f)(1), and (f)(4) of this section do not apply to heating oil, or, for paragraphs (e)(1) and (e)(4) of this section, diesel fuel designated as LM diesel fuel that is distributed from a truck loading terminal located within the areas listed in paragraphs (g)(1) and (g)(2) of this section and is for sale or intended for sale within these areas, or that is distributed from any other truck loading terminal and is for sale or intended for sale within the area listed in (g)(2) of this section.
- (j) The provisions of paragraphs (h)(1) and (h)(2) of this section do not apply to diesel fuel sold or intended for sale in the areas listed in paragraph (g)(1) of this section that is produced or imported in full compliance with the requirements of §§80.536 and 80.554 or to diesel fuel sold or intended for sale in the area listed in paragraph (g)(2) of this section that is produced or imported in full compliance with the requirements of §80.536.
- (k) *Beginning June 1, 2014.* All ECA marine fuel is subject to a maximum per-gallon sulfur content of 1,000 ppm.

[69 FR 39168, June 29, 2004, as amended at 70 FR 40895, July 15, 2005; 75 FR 22969, Apr. 30, 2010]

This standard requires all purchases of fuel to have a sulfur content less than 15 ppm. Idaho Power has not purchased any fuel since June, 1 2010 that has a sulfur content more than 15ppm.

Other Requirements for Owners and Operators

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.
- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- ~~(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.~~
- ~~(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 9, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37969](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

10. Section 60.4208 is amended by revising the section heading, revising paragraphs (g) and (h), and adding paragraph (i) to read as follows:

§ 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

(i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

Idaho Power acknowledges that any new emergency generator installed would need to meet the requirements of 2008 model year engines.

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

~~(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.~~

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 9, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37969](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

11. Section 60.4209 is amended by revising paragraph (a) to read as follows:

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

Idaho Power installed a non-resettable hour meter prior to startup of the engine. The operational hours are recorded monthly. The engine meets the emission standards without a diesel particulate filter.

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

[Link to an amendment published at 76 FR 37969, June 28, 2011.](#)

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

Attachment 3 – 40 CFR 60, Subpart III, Applicability Analysis

~~(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and §60.4202(e) using the certification procedures required in 40 CFR part 94 subpart C, and must test their engines as specified in 40 CFR part 94.~~

~~(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 40 CFR 1039.125, 40 CFR 1039.130, 40 CFR 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89 or 40 CFR part 94 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.~~

(1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.

(2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:

(i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.

(ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.

(iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

~~(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate.~~

~~(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in part 89, 94 or 1039, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.~~

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

~~(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under parts 89, 94, or 1039 for that model year may certify any such family that contains both~~

~~nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under these parts.~~

(e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words “and stationary” after the word “nonroad” or “marine,” as appropriate, to the label.

(f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.

(g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as “Fire Pump Applications Only”.

(h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 9, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37969 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37969

Effective Date(s): August 29, 2011

12. Section 60.4210 is amended by:

- (a) Revising paragraph (b);
- (b) Revising paragraph (c) introductory text;
- (c) Revising paragraph (c)(3)(i);
- (d) Revising paragraph (c)(3)(ii); and
- (e) Revising paragraph (d) to read as follows:

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and (e) and §60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

(3) * * *

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

This subsection does not apply. Idaho Power is not an engine manufacturer, rather Idaho Power is an owner and operator of an affected unit under this subpart.

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

[Link to an amendment published at 76 FR 37970, June 28, 2011.](#)

~~(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.~~

(b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

(1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

~~(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.~~

(d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.

(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.

(i) Identification of the specific parameters you propose to monitor continuously;

Attachment 3 – 40 CFR 60, Subpart III, Applicability Analysis

(ii) A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions;

(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

~~(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under §60.4205 but not §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.~~

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 10, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page 76 FR 37970 in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37970

Effective Date(s): August 29, 2011

13. Section 60.4211 is amended:

- (a) By revising paragraph (a);
- (b) By revising the second sentence in paragraph (c);
- (c) By redesignating paragraph (e) as paragraph (f);

- (d) By adding a new paragraph (e);
- (e) By revising newly redesignated paragraph (f); and
- (f) By adding paragraph (g) to read as follows:

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(c) * * * The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

(e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.

(1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.

(2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. 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 non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

(g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

(1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

The Cummins Power Generation Engine model year 2007 installed complies with the Emission standard limit set forth for Tier 2 engines. The engine used in the generator set complies with U.S. EPA and California emission regulations under these provisions for Non-Road (mobile Off Highway) Tier 2 emissions limits when tested per ISO 8178 D2. The EPA Nonroad Diesel Engine Family Emission identification number is 6CEXL015.AAB. The engine is operated in accordance with the manufacturers' emissions related operation and maintenance procedures are followed.

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

[Link to an amendment published at 76 FR 37971, June 28, 2011.](#)

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

This sub-section was amended on June 28, 2011. The updated section is included below.

e-CFR Data is current as of August 10, 2011

Amendment from June 28, 2011

[Browse Previous](#) | [Browse Next](#)

40 CFR--PART 60

View Printed Federal Register page [76 FR 37971](#) in PDF format.

Amendment(s) published June 28, 2011, in 76 FR 37971

Effective Date(s): August 29, 2011

14. Section 60.4212 is amended by revising the introductory text and paragraph (a) and adding paragraph (e) to read as follows:

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

Idaho Power does not conduct performance tests on emergency generators, therefore this section does not apply.

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

[Link to an amendment published at 76 FR 37971, June 28, 2011.](#)

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 2})$$

Where:

C_i = concentration of NO_x or PM at the control device inlet,

C_o = concentration of NO_x or PM at the control device outlet, and

R = percent reduction of NO_x or PM emissions.

(2) You must normalize the NO_x or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{\text{adj}} = C_d \frac{5.9}{20.9 - \% \text{O}_2} \quad (\text{Eq. 3})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O_2 .

C_d = Measured concentration of NO_x or PM, uncorrected.

5.9 = 20.9 percent O_2 – 15 percent O_2 , the defined O_2 correction value, percent.

$\% \text{O}_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_g}{F_c} \quad (\text{Eq. 4})$$

Where:

F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O_2 , percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $\text{dscf} / 10^6 \text{ Btu}$.

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ / J (dscf/10⁶ Btu).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂, as follows:

$$X_{CO_2} = \frac{5.9}{F_c} \quad (\text{Eq. 5})$$

Where:

X_{CO_2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.

(iii) Calculate the NO_x and PM gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

$$C_{adj} = C_a \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 6})$$

Where:

C_{adj} = Calculated NO_x or PM concentration adjusted to 15 percent O₂.

C_a = Measured concentration of NO_x or PM, uncorrected.

%CO₂ = Measured CO₂ concentration, dry basis, percent.

(e) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_a \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 7})$$

Where:

ER = Emission rate in grams per KW-hour.

C_a = Measured NO_x concentration in ppm.

1.912×10^{-3} = Conversion constant for ppm NO_x to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \quad (\text{Eq. 8})$$

Where:

ER = Emission rate in grams per KW-hour.

C_{adj} = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

This section is not applicable to the emergency diesel generator at Bennett Mountain because the engine displacement is only 2.48 liters/cylinder.

§ 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.

(1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

This section is not applicable to the emergency diesel generator at Bennett Mountain because the engine horsepower is 755 bhp and was installed in 2007.

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

[Link to an amendment published at 76 FR 37971, June 28, 2011.](#)

(a) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §60.4205. Non-emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder, must meet the applicable emission standards in §60.4204(c).

(b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.

This section is not applicable to the emergency diesel generator at Bennett Mountain because the engine is located in Mountain Home, Idaho.

§ 60.4216 What requirements must I meet for engines used in Alaska?

[Link to an amendment published at 76 FR 37971, June 28, 2011.](#)

(a) Prior to December 1, 2010, owners and operators of stationary CI engines located in areas of Alaska not accessible by the Federal Aid Highway System should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.

(b) The Governor of Alaska may submit for EPA approval, by no later than January 11, 2008, an alternative plan for implementing the requirements of 40 CFR part 60, subpart IIII, for public-sector electrical utilities located in rural areas of Alaska not accessible by the Federal Aid Highway System. This alternative plan must be based on the requirements of section 111 of the Clean Air Act including any increased risks to human health and the environment

and must also be based on the unique circumstances related to remote power generation, climatic conditions, and serious economic impacts resulting from implementation of 40 CFR part 60, subpart IIII. If EPA approves by rulemaking process an alternative plan, the provisions as approved by EPA under that plan shall apply to the diesel engines used in new stationary internal combustion engines subject to this paragraph.

This section is not applicable to the emergency diesel generator at Bennett Mountain because the engine is located in Mountain Home, Idaho.

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

[Link to an amendment published at 76 FR 37972, June 28, 2011.](#)

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under §60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of §60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in §60.4202 or §60.4203 using such fuels.

(b) [Reserved]

This section is not applicable to the emergency diesel generator at Bennett Mountain because Idaho Power only uses diesel fuel.

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

Definitions

Idaho Power has read and understands these provisions and has incorporated them into this regulatory analysis.

§ 60.4219 What definitions apply to this subpart?

[Link to an amendment published at 76 FR 37972, June 28, 2011.](#)

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of “manufacturer” in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

- (1) The calendar year in which the engine was originally produced, or
- (2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a

stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Idaho Power has incorporated them into this regulatory analysis.

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007–2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007–2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO _x	HC	NO _x	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)			
	Model year(s)	NO _x + NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

[Link to an amendment published at 76 FR 37972, June 28, 2011.](#)

[As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:]

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d)
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

Attachment 3 – 40 CFR 60, Subpart IIII, Applicability Analysis

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO _x	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ ¹	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ ¹	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+ ²	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ ³	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ ³	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

¹For model years 2011–2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

²For model years 2010–2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³In model years 2009–2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed ¹	Torque (percent) ²	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

¹Engine speed: ±2 percent of point.

²Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of	a. Reduce NO _x emissions by 90 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.

Attachment 3 – 40 CFR 60, Subpart IIII, Applicability Analysis

≥30 liters per cylinder				
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for NO _x concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO _x concentration.
		iv. Measure NO _x at the inlet and outlet of the control device	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see §60.17)	(d) NO _x concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO _x in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same

		engine exhaust at the sampling port location; and,		time as the measurement for NO _x concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO _x concentration.
		iv. Measure NO _x at the exhaust of the stationary internal combustion engine	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 (incorporated by reference, see §60.17)	(d) NO _x concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O ₂ at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the

Attachment 3 – 40 CFR 60, Subpart IIII, Applicability Analysis

				measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart III.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device	No	

	requirements		
§60.19	General notification and reporting requirements	Yes	

[Browse Previous](#) | [Browse Next](#)

18. Attachment 4 – 40 CFR 63, Subpart ZZZZ, Applicability Analysis

40 CFR 63, Subpart ZZZZ (6580) Applicability Determination

e-CFR Data is current as of August 5, 2011

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

[Browse Next](#)

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

Idaho Power owns and operates a stationary RICE located at an area source of HAP emissions. Idaho Power is therefore subject to the requirements of this subpart.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

The emergency diesel generator at Bennett Mountain is “A Stationary RICE” as defined in this section. The Bennett Mountain facility is categorized as an Area Source of HAP emissions. Bennett Mountain facility is categorized as a major source of criteria emissions, therefore Idaho Power has obtained permits under Part 70.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

Attachment 4 – 40 CFR 63, Subpart ZZZZ, Applicability Analysis

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;

(vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or

(viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

Attachment 4 – 40 CFR 63, Subpart ZZZZ, Applicability Analysis

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

As a “new stationary RICE”, IPCO must meet the requirements of this subpart by meeting the requirements of 40 CFR 60, Subpart IIII. IPCO has demonstrated that the generator meets subpart IIII, therefore IPCO meets the requirements of Subpart ZZZZ.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010]

19. Attachment 5 – Cummins Power Generation Exhaust Emission Compliance Statement.



**Power
Generation**

**Exhaust Emission Data Sheet
350DFEG
60 Hz Diesel Generator Set
EPA Emissions: Tier 2**

Engine Information:

Model:	Cummins Inc. QSX15-G9 Nonroad 2	Bore:	5.39 in. (137 mm)
Nameplate BHP @ 1800 RPM:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-Line, 6 Cylinder Diesel	Displacement:	912 cu. in. (14.9 liters)
Aspiration:	Turbo-charged with air-to-air charge air cooling		
Compression Ratio:	17:1		
Emission Control Device:	Turbocharged with Charge Air Cooled		

PERFORMANCE DATA	1/4	1/2	3/4	Full	Full
	Standby	Standby	Standby	Standby	Prime
Engine HP @ Stated Load (1800 RPM)	150	273	397	520	478
Fuel Consumption (gal/hr)	9.1	14.6	19.4	24.3	22.8
Exhaust Gas Flow (CFM)	1150	1720	2280	2610	2540
Exhaust Temperature (°F)	680	785	820	810	815
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.23	0.10	0.07	0.06	0.06
NOx (Oxides of Nitrogen as NO2)	2.90	3.20	3.70	4.35	4.15
CO (Carbon Monoxide)	0.60	0.45	0.30	0.54	0.36
PM (particular Matter)	0.11	0.06	0.05	0.05	0.05
Smoke (Pierburg)	0.50	0.55	0.55	0.50	0.51

All values are Grams per HP-Hour

TEST METHODS AND CONDITIONS

Test Methods:

Steady-State emissions recorded per ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rated stabilized.

Fuel Specification: 40-48 Cetane Number, 0.05 Wt.% max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

Reference Conditions:

25 °C (77 °F) Air Inlet Temperature, 40 °C (104 °F) Fuel Inlet Temperature, 100 kPa (29.53 In Hg) Barometric Pressure; 10.7 g/kg (75 grains H₂O/lb) of dry air Humidity (required for NO_x correction); Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data Subject to Change Without Notice.

344
66-29



**Power
Generation**

**EPA Tier 2 Exhaust Emission
Compliance Statement
350DFEG
60 Hz Diesel Generator Set**

Compliance Information:

The engine used in this generator set complies with U.S. EPA and California emission regulations under the provisions of 40 CFR 89, Non-Road (Mobile Off Highway) Tier 2 emissions limits when tested per ISO 8178 D2.

Engine Manufacturer: Cummins Inc.
 EPA Certificate Number: CEX-NRCI-06-02
 Effective Date: 08/22/2005
 Date Issued: 08/22/2005
 EPA Nonroad Diesel Engine Family: 6CEXL015.AAB
 CARB Executive Order: U-R-002-0318

Engine Information:

Model: Cummins Inc. QSX15-G9 Nonroad 2 Bore: 5.39 in. (137 mm)
 Engine Nameplate HP: 755
 Type: 4 Cycle, In-Line, 6 Cylinder Diesel Stroke: 6.65 in. (169 mm)
 Aspiration: Turbo-charged with air-to-air charge air cooling Displacement: 912 cu. in. (14.9 liters)
 Compression Ratio: 17:1
 Emission Control Device: Turbocharged with Charge Air Cooled

U.S. Environmental Protection Agency Non-Road Tier 2 Limits

(All values are Grams per HP-Hour)

COMPONENT	
NO _x + HC (Oxides of Nitrogen as NO ₂ + Total Unburned Hydrocarbons)	4.8
CO (Carbon Monoxide)	2.6
PM (Particulate Matter)	0.15

Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

20. Attachment 6 – IDEQ Permit to Construct Exemption Letter



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hillton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

December 29, 2008

Certified Mail No. 7190 0596 0014 0000 5056

Trevor Mahlum, Mechanical Engineer
Idaho Power Company – Bennett Mountain
P.O. Box 70
Boise, ID 83707

RE: Facility ID No. 039-00025, Idaho Power Company – Bennett Mountain, Mountain Home
Permit to Construct Exemption Concurrence, Emergency Standby IC Engine

Dear Mr. Mahlum:

On December 4, 2008, the Department of Environmental Quality (DEQ) received a permit to construct (PTC) exemption concurrence request from Idaho Power Company - Bennett Mountain for the diesel-fired emergency standby IC engine used to power an electrical generator located at Mountain Home. Based on a review of the application materials and all applicable state and federal rules and regulations, DEQ has determined that the project meets the permit to construct exemption requirements in accordance with IDAPA 58.01.01.221 (Rules for the Control of Air Pollution in Idaho). Therefore, a PTC is not required for this project.

In order to maintain the permit exemption, records of operation of the emergency standby IC engine shall be maintained in accordance with IDAPA 58.01.01.220.02. The records shall demonstrate that annual operation for maintenance and testing does not exceed 500 hours per year and must be maintained in accordance with IDAPA 58.01.01.222.01.d. These records must be available to DEQ personnel upon request. Please notify DEQ of any changes associated with this emergency standby IC engine. Maintain a copy of this letter on the premises for future reference.

This letter is in no way intended to supersede any other federal, state, or local rules and regulations that may apply. Also, be advised that this letter does not constitute a waiver of any compliance actions that may result from misinformation or noncompliance of the criteria set in the submittal received for this project that may cause unreasonable risk to human or animal life, or violate any ambient air quality standard.

If you have any questions regarding this letter or about the air quality permitting process, please contact me at (208) 373-0502 or darrin.pampaian@deq.idaho.gov.

Sincerely,



Darrin Pampaian
Permit Writer
Air Quality Division

DRP/hp

Project No. X-2008.0196

Enclosure



State of Idaho
Department of Environmental Quality
Air Quality Division

**AIR QUALITY PERMIT
STATEMENT OF BASIS**

Permit to Construct Exemption No. X-2008.0196

Final

Idaho Power Company

Bennett Mountain

Mountain Home, Idaho

Facility ID No. 039-00025

December 29, 2008

Darrin Pampaian

D.P.

Permit Writer

The purpose of this Statement of Basis is to satisfy the requirements of IDAPA 58.01.01. et seq, Rules for the Control of Air Pollution in Idaho, for issuing air permits.

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE 3

1. FACILITY INFORMATION 4

2. APPLICATION SCOPE AND APPLICATION CHRONOLOGY 4

3. TECHNICAL ANALYSIS 4

4. REGULATORY REVIEW 5

5. PERMIT FEES 7

6. PUBLIC COMMENT 7

STATEMENT OF BASIS

Permittee:	Idaho Power Company – Bennett Mountain	Project No.	X-2008.0196
Location:	Mountain Home, Idaho	Facility ID No.	039-00025

Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
bhp	brake horsepower
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAP	Hazardous Air Pollutant
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
lb/hr	pounds per hour
m	meter(s)
MACT	Maximum Achievable Control Technology
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SM	Synthetic Minor
SO_2	sulfur dioxide
SO_x	sulfur oxides
TAP	Toxic Air Pollutant
T2	Tier II operating permit
T2/PTC	Tier II operating permit and permit to construct
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

STATEMENT OF BASIS

Permittee:	Idaho Power Company – Bennett Mountain	Project No.	X-2008.0196
Location:	Mountain Home, Idaho	Facility ID No.	039-00025

1. FACILITY INFORMATION

1.1 Facility Description

This facility consists of a 170-megawatt (170-MW) Siemens Westinghouse Model 501F combustion turbine. Operations at the facility also require ancillary equipment (e.g., a fuel heater and an emergency standby IC engine used to power an electrical generator). The turbine is a natural gas-fired, simple-cycle unit, and is primarily operated to generate electric power to meet peak system load requirements.

2. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

2.1 Application Scope

Idaho Power Company – Bennett Mountain (Idaho Power) proposes to receive an exemption concurrence for a recently installed diesel-fired emergency standby IC engine used to power an electrical generator. Idaho Power has prepared documentation to record the PTC exemption for this project and has asked DEQ to review it for concurrence with the PTC rules.

2.2 Application Chronology

December 4, 2008	DEQ received the request from Idaho Power for review and concurrence with the PTC exemption documentation
December 29, 2008	DEQ issued an exemption concurrence to Idaho Power for the diesel-fired emergency standby IC engine.

3. TECHNICAL ANALYSIS

3.1 Emission Unit and Control Device

Table 3.1 EMISSION UNIT AND CONTROL DEVICE INFORMATION

Emission Unit/ID No.	Emissions Unit Description	Control Device Description	Emissions Discharge Point ID No. and/or Description
Emergency standby IC engine	Manufacturer: Cummins Engine model: QSX15-G9 Nonroad 2 Maximum rating: 755 bhp Genset model: 350DFEG Maximum rating: 350 kW Manufacture date: 2007 Fuel: diesel	N/A	EXHAUST STACK Exit flow rate: 2,600 acfm Exit temperature: 810 °F

STATEMENT OF BASIS

Permittee:	Idaho Power Company – Bennett Mountain	Project No.	X-2008.0196
Location:	Mountain Home, Idaho	Facility ID No.	039-00025

In addition, the significance thresholds of IDAPA 58.01.01.006.101 are increases of 100 T-CO/yr, 40 T-NO_x/yr, 40 T-SO_x/yr, 25 T-PM/yr, 15 T-PM₁₀/yr, and 40 T-VOC/yr. Using these criteria results in annual emissions increases of 0.06 T-PM₁₀/yr, 0.00 T-SO_x/yr, 2.00 T-NO_x/yr, 1.08 T-CO/yr, and 0.13 T-VOC/yr (see Table 3.2). Therefore, this project results in an uncontrolled increase in PTE for this source of less than the significance thresholds for all regulated air pollutants.

The “Record Retention” requirements of Section 220.02 apply, and a copy of the relevant parts of this rule is shown below:

“The owner or operator of the source...shall maintain documentation on site which shall identify the exemption determined to apply to the source and verify that the source qualifies for the identified exemption. The records and documentation shall be kept for a period of time not less than five years form the date the exemption determination has been made or for the life of the source for which the exemption has been determined to apply, which ever is greater, or until such time as a PTC or operating permit is issued which covers the operation of the source. The owner or operator shall submit the documentation to the Department upon request.”

Per Section 222, this project qualifies for a Category II exemption from the PTC requirements. This project is for a stationary internal combustion engines used exclusively for emergency purposes which is operated less than 500 hours per year and is fueled by diesel fuel. Therefore, the facility is required to maintain records of operation of the diesel-fired emergency standby IC engine that show that it is operated less than 500 hours per year for maintenance and testing.

4.4 Tier II Operating Permit (IDAPA 58.01.01.401)

IDAPA 58.01.01.401 Tier II Operating Permits

The project is not subject to IDAPA 58.01.01.400 through 410, and Idaho Power is not requesting an optional Tier II operating permit. Therefore, the requirements of IDAPA 58.01.01.401 do not apply.

4.5 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

IDAPA 58.01.01.301 Tier I Operating Permit

The facility is a Tier I source in accordance with IDAPA 58.01.01.006.113. Therefore, the requirements of IDAPA 58.01.01.301 apply and the facility has a Tier I operating permit.

4.6 PSD Classification (40 CFR 52.21)

40 CFR 52.21 Prevention of Significant Deterioration of Air Quality

Although the combustion turbine has a physical potential to emit NO_x and/or CO at rates greater than 250 T/yr, Permit to Construct (PTC) No. P-050002, issued June 21, 2005, establishes federally enforceable emission rate limits for these two pollutants beneath the 250 T/yr threshold. Subsequently, the facility is a not a major facility as defined by IDAPA 58.01.01.205; therefore, Prevention of Significant Deterioration (PSD) permitting requirements do not apply.

STATEMENT OF BASIS

Permittee:	Idaho Power Company – Bennett Mountain	Project No.	X-2008.0196
Location:	Mountain Home, Idaho	Facility ID No.	039-00025

4.7 NSPS Applicability (40 CFR 60)

40 CFR 60-Subpart GG Standards of Performance for Stationary Gas Turbines

The New Source Performance Standard (NSPS) requirements of 40 CFR 60.330, Subpart GG, apply to all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, for which construction commences after October 3, 1977. The combustion turbine proposed for this project meets the applicability criteria given by 40 CFR 60.330; therefore, the turbine is subject to 40 CFR 60, Subpart GG.

40 CFR 60-Subpart KKKK Standards of Performance for Stationary Combustion Turbines

This NSPS is only applicable to the Bennett Mountain facility if the facility modifies or reconstructs the combustion turbine after February 18, 2005. The facility commenced construction of the combustion turbine prior to February 18, 2005, and the turbine has not been modified or reconstructed since that time; therefore, the provisions of Subpart KKKK have not been triggered.

4.8 NESHAP Applicability (40 CFR 61)

No NESHAP is applicable to this facility.

4.9 MACT Applicability (40 CFR 63)

40 CFR 61-Subpart YYYYY National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines

The requirements of 40 CFR 63, Subpart YYYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustions Turbines do not apply to the combustion turbine because this facility is not a major source of HAP emissions. Only new, existing, or reconstructed stationary combustion turbines located at a major source of HAP emissions are subject to the requirements contained in Subpart YYYYY.

4.10 CAM Applicability (40 CFR 64)

40 CFR 64 does not apply to this facility. This is because this facility is required to obtain a part 70 permit, but the gas turbine has no add-on pollution control equipment.

5. PERMIT FEES

Per Section 224.01, PTC application and processing fees do not apply to this project because it is for a PTC exemption applicability determination.

6. PUBLIC COMMENT

PTC public comment requirements do not apply to a project that is exempt from PTC requirements.

Appendix A – Emissions Inventory

Emergency standby IC engine PTE Emissions Calculations:

**Table A.1 EMERGENCY STANDBY IC ENGINE HOURLY AND ANNUAL PTE FOR CRITERIA POLLUTANTS
WHEN COMBUSTING DIESEL FUEL**

Emissions Unit	Rated Output (bhp)	Annual Hours of Operation (hrs/yr) ¹	Criteria Pollutant	Emissions Factors (g/bhp-hr)	Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)
Emergency standby IC engine	755	500	PM ₁₀ ²	0.15	0.25	0.06
			SO ₂ ³	0.0055	0.01	0.00
			NO _x ²	4.8	7.99	2.00
			CO ²	2.6	4.33	1.08
			VOC ³	0.319	0.53	0.13

¹ – To be exempt from permit emergency IC engines are limited 500 hours per year for maintenance and testing (IDAPA 58.01.01222.01.d).

² – PM₁₀, NO_x, and CO emissions are taken from the manufacturer supplied EPA Tier 2 certification as supplied by the Applicant.

³ – Based on AP-42 Table 3.4-5 (10/96) for SO₂ (with a sulfur content of 0.0015% by weight for ULSD) and VOC.

21. Attachment 7 – Applicable Requirements Review

8.0 APPLICABLE REQUIREMENTS

This section contains a streamlining analysis (tables) of applicable requirements, by source related to the following:

- Acid Rain Requirements
- Permit to Construct Requirements
- New Source Performance Requirements
- *IDAPA* Requirements

Two federal regulations are not applicable to this facility and are not discussed in this section. First, the *Pollutants for Stationary Combustion Turbines 40CFR63 Subpart YYYY* is not applicable because the facility is not a major source for any hazardous air pollutants (>25 tons). Next, the facility is not subject to the proposed rule *40CFR60 Subpart KKKK Standards of Performance for Stationary Combustion Turbines* since the commencement of construction was before February 18, 2005.

**TABLE 8-1
 COMPARISON OF APPLICABLE REQUIREMENTS**

<i>Combustion Turbine Unit CTI</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
Air Pollution Control Technology	None.	None.	No requirements under 40 CFR Part 60 Subpart GG.	None.
Emission Limitations	<p>SO₂ allowance calculations are provided under the Acid Rain Program (see 40 CFR Part 72 and Part 75 Appendix D). However, there are no emissions limits listed at this time.</p> <p>IPC will comply with all applicable requirements of 40 CFR Part 72.9 — Standard Requirements, including 40 CFR Part 72.9(c): Sulfur Dioxide Requirements.</p> <p>The owners and operators of each source and each affected unit at the source shall: hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR Part 73.34(c)) not less than the total annual emissions of SO₂ for the previous calendar year from the unit; and comply with the applicable Acid Rain emissions limitation for SO₂.</p>	<p>3.4 — NO_x and CO Emissions</p> <p>3.3 - NO_x Emissions NSPS</p> <p>3.5 — Fuel Burning Equipment Standard</p>	<p>IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance With Standards and Maintenance Requirements.</p> <p>Requirements of 40 CFR Part 60 Section 332 — Standard for Nitrogen Oxides</p> <p>The allowable NO_x emissions will not exceed 132 ppm.</p> <p>Requirements of 40 CFR Part 60 Section 333 — Standard for Sulfur Dioxide</p> <p>(a) No owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015% (by volume, on a dry basis, and at 15% oxygen).</p> <p>(b) No owner or operator shall burn in any stationary gas turbine any fuel that contains sulfur in excess of 0.8% (by</p>	<p>Requirements of IDAPA 58.01.008.10 — Definitions for the Purposes of Sections 300 through 386</p> <p>Major Facility. A facility (as defined in Section 006) is major if the facility meets any of the criteria listed in Section 008.10. In order to remain a non-major source for the purpose of the Tier I operating permit, the Bennett Mountain Power Project must not meet these criteria.</p> <p>Requirements Of ID APA 58.01.01.384 — Section 502(B)(10) Changes And Certain Emission Trades</p> <p>This section authorizes emission changes within a permitted facility without requiring a permit revision, if the changes are not modifications under any provision of the Title I of the Clean Air Act and the changes do not exceed the emissions</p>



<p>Combustion Turbine Unit CT1</p>	<p>Acid Rain Program Requirements</p> <p>IPC will comply with all applicable requirements of 72.9(d) — 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 NO_x.</p>	<p>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</p>	<p>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p> <p>weight).</p>	<p>State of Idaho Regulatory Requirements IDAPA 58.01.01</p> <p>allowable under the permit (whether expressed therein as a rate of emissions or total emissions). The permit shield described in Section 325 shall only extend to changes made in accordance with Subsection 384.01.a.iii.</p> <p>Requirements of IDAPA 58.01.01 Sections 106, 161, 585 and 586 — Toxic Air Pollutants</p> <p>Any contaminant which is by its nature toxic to human or animal life or vegetation shall not be emitted in such quantities or concentrations as to alone, or in combination with other contaminants, injure or unreasonably affect human or animal life or vegetation (IDAPA 58.01.01.161).</p> <p>Requirements of IDAPA 58.01.01.577 — Ambient Air Quality Standards for Specific Air Pollutants</p> <p>IPC must comply with the ambient air quality standards for the pollutants described in this section, including: PM₁₀, SO₂, Ozone, NO_x, CO, Fluorides, and</p>
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**IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION**

Combustion Turbine Unit CTI	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
				<p>Lead.</p> <p>Requirements of IDAPA 58.01.01.625 — Visible Emissions</p> <p>A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than 3 min in any 60-min period which is greater than 20% opacity as determined by this section.</p> <p>Requirements of IDAPA 58.01.01.775 — Rules for Control of Odors</p> <p>The purpose of Sections 775 through 776 is to control odorous emissions from all sources for which no gaseous emission control rules apply. No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids into the atmosphere in such quantities as to cause air pollution (IDAPA 58.01.01.776.01).</p>
Operating Parameters	None.	3.6 – Fuel Restrictions	IPC must comply with all applicable requirements of 40	IPC must comply with all applicable requirements of





Combustion Turbine Unit CTI	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
		<p>3.7 - NO_x Monitoring Equipment Requirements</p> <p>3.8 - CO Monitoring Equipment Requirements</p> <p>3.9 - Turbine Exhaust Flowrate Quantification Requirement</p> <p>3.10 - Turbine Startup Restriction</p>	<p>CFR Part 60.11 — Compliance With Standards and Maintenance Requirements.</p> <p>Requirements of 40 CFR Part 60 Section 334 — Monitoring of Operations</p> <p>If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Appendix F — Quality Assurance Procedures.</p>	<p>IDAPA 58.01.01.133 — Startup, Shutdown and Scheduled Maintenance Requirements, and IDAPA 58.01.01.134 — Upset, Breakdown and Safety Requirements.</p>
Work Practice Standard(s)	None.	None.	IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance	Requirements of IDAPA 58.01.01.126 — Tampering





Combustion Turbine Unit CTI	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision) With Standards and Maintenance Requirements.	State of Idaho Regulatory Requirements IDAPA 58.01.01
				<p>No person shall knowingly render inaccurate any monitoring device or method required under any permit, or any applicable rule or order in force pursuant thereto.</p> <p>Requirements of IDAPA 58.01.01 Sections 130 through 136 — Startup, Shutdown, Scheduled Maintenance, Safety Measures and Breakdown</p> <p>The purpose of Sections 130 through 136 is to establish procedures and requirements to be implemented in all excess emissions events and to establish criteria to be applied by IDEQ in determining whether to take enforcement action to impose penalties for an excess emissions event where the excess emissions are caused by startup, shutdown, scheduled maintenance, upset, or breakdown of any emissions unit or which occur as a direct result of the implementation of any safety measure.</p> <p>Requirements of IDAPA 58.01.01.155 — Circumvention</p> <p>No person shall willfully cause or permit the installation or use</p>





Combustion Turbine Unit CTI	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
<p>Testing and Sampling</p>	<p>IPC must insure that the CEMS is certified and re-certified as necessary in accordance with 40 CFR Part 75.20. Compliance with QA/QC requirements must be demonstrated by adherence to 40 CFR Part 75.21 and Appendices A, B, and H.</p> <p>Fuel testing will be performed according to the applicable requirements of 40 CFR Part 75 Appendices D, G and E.</p>	<p>3.13 — CO RATA — NSPS</p> <p>3.14 — Turbine NO_x Performance Test — NSPS</p>	<p>IPC must comply with all applicable requirements of 40 CFR Part 60.8 — Performance Tests.</p> <p>Requirements of 40 CFR Part 60 Section 11 — Compliance With Standards and Maintenance Requirements</p> <p>Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance</p>	<p>of any device or use of any means which, without resulting in a reduction in the total amount of regulated air pollutants emitted, conceals an emission of regulated air pollutants which would otherwise violate the provisions of this chapter.</p> <p>Requirements of IDAPA 58.01.01 Sections 510 through 516 — Stack Heights and Dispersion Techniques</p> <p>Sections 510 through 516 establish criteria for good engineering practices for stack heights/dispersion techniques.</p>
			<p>IPC must comply with all applicable requirements of 40 CFR Part 60.8 — Performance Tests.</p> <p>Requirements of 40 CFR Part 60 Section 11 — Compliance With Standards and Maintenance Requirements</p> <p>Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance</p>	<p>Requirements of IDAPA 58.01.01.725 — Rules for Sulfur Content of Fuels</p> <p>The purpose of Sections 725 through 729 is to prevent excessive ground level concentrations of SO₂ from fuel burning sources in Idaho.</p> <p>The reference test method for measuring fuel sulfur content shall be ASTM method D129-95 Standard Test for Sulfur in</p>





Combustion Turbine Unit CT1	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
			<p>tests established by 40 CFR Part 60.8, unless otherwise specified in the applicable standard. Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in 40 CFR Part 60 Appendix A, any alternative method that is approved by the Administrator, or as provided in 40 CFR Part 60.11(e)(5).</p> <p>Requirements of 40 CFR Part 60 Section 335 — Test Methods and Procedures</p> <p>To compute the NO_x emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator to determine the nitrogen content of the fuel being fired.</p>	<p>Petroleum Products (General Bomb Method) or such comparable and equivalent method approved in accordance with Subsection 157.02.d. Test methods and procedures shall comply with Section 157.</p> <p>Requirements of IDAPA 58.01.01.157 — Test Methods and Procedures</p> <p>The purpose of Section 157 is to establish procedures and requirements for test methods and results.</p> <p>If a source test is performed to satisfy a performance test requirement or a compliance test requirement imposed by state or federal regulation, rule, permit, order or consent decree, then the test methods and procedures shall be conducted in accordance with the requirements of Section 157 (unless otherwise specified in these rules, permit, order, consent decree, or prior written approval by IDEQ).</p> <p>Prior to conducting any emission test, owners or operators are strongly encouraged to submit to</p>



<p style="text-align: center;">Combustion Turbine Unit CTI</p>	<p style="text-align: center;">Acid Rain Program Requirements</p>	<p style="text-align: center;">Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</p>	<p style="text-align: center;">New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p>	<p style="text-align: center;">State of Idaho Regulatory Requirements IDAPA 58.01.01</p>
<p style="text-align: center;">Monitoring</p>	<p>The owner or operator shall measure opacity and all SO₂, NO_x, and CO₂ emissions for each affected unit as follows:</p> <p>The owner or operator shall install, calibrate, operate, and maintain fuel flow monitoring and sampling systems in accordance with 40 CFR Part 75 Appendices A, B, C and D and an automated DAHS for measuring and recording fuel flows, fuel heating values, fuel sulfur content for natural gas, volumetric gas flow (scf/hr), and SO₂ mass emissions (lb/hr) discharged to the atmosphere. Gas heating value will be</p>	<p>3.12 — NO_x Monitoring 3.15 — Fuel Monitoring</p>	<p>IPC must comply with all applicable requirements of 40 CFR Part 60.13 — Monitoring Requirements.</p> <p>Requirements of 40 CFR Part 60 Subpart GG (60.334 — Monitoring of Operations (h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart: (4) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and for which a</p>	<p>IDEQ in writing, at least 30 days in advance, the following for approval:</p> <p>Requirements of IDAPA 58.01.01.322.09 — Testing</p> <p>All Tier I operating permits shall contain terms and conditions requiring sufficient testing to assure compliance with all of the terms and conditions of the Tier I operating permit.</p>
			<p>Requirements of IDAPA 58.01.01.107 — Incorporations by Reference</p> <p>Unless expressly provided otherwise, any reference in these rules to any document identified in <i>Subsection 107.03</i> shall constitute the full incorporation into these rules of that document for the purposes of the reference, including any notes and appendices therein. The term “documents” includes codes, standards or rules that have been adopted by an agency of the state or of the United States or by any nationally recognized</p>	



<p>Combustion Turbine Unit CTI</p>	<p>Acid Rain Program Requirements</p> <p>obtained from analysis of fuel samples in accordance with 40 CFR Part 75 Appendix D.</p> <p>The owner or operator shall install, calibrate, operate and maintain a NO_x emissions monitoring system in accordance with 40 CFR Part 75 Section 75.12.</p> <p>The owner or operator shall install, calibrate, operate, and maintain fuel flow monitoring and sampling systems in accordance with 40 CFR Part 75 Appendix G and an automated DAHS for measuring and recording fuel flows, fuel carbon content, and CO₂ estimated mass emissions (in tons/day) discharged to the atmosphere.</p> <p>As an alternative, the owner or operator may install, calibrate, operate, and maintain a predictive emissions monitoring system that meets the requirements of 40 CFR Part 75 Subpart E.</p>	<p>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</p>	<p>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p> <p>custom fuel monitoring schedule has previously been approved, the owner or operator may, without submitting a special petition to the Administrator, continue monitoring on this schedule.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Appendix F — Quality Assurance Procedures.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Subpart A (60.1 through 60.19) — Standards of Performance for New Stationary Sources, General Provisions.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance (See above)</p>	<p>State of Idaho Regulatory Requirements IDAPA 58.01.01</p> <p>organization or association.</p> <p>Included as part of Subsection 107.03 is: (k) Compliance Assurance Monitoring, 40 CFR Part 64. (See below)</p> <p>Requirements of 40 CFR Part 64 — Compliance Assurance Monitoring</p> <p>In order to provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, monitoring under this part must meet the criteria defined in this section.</p> <p>From 40 CFR Part 64.3(d) — Special criteria for the use of continuous emission, opacity or predictive monitoring systems.</p> <p>If a CEMS, COMS or predictive emission monitoring system (PEMS) is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy these requirements.</p>
<p>Record-keeping</p>	<p>The owner or operator shall</p>	<p>3.11 — Fuel Consumption</p>	<p>IPC must comply with all</p>	<p>Requirements of IDAPA</p>





<p>Combustion Turbine Unit CTI</p>	<p>Acid Rain Program Requirements</p> <p>maintain records and supporting documentation under the acid rain program in accordance with 40 CFR Part 75 Subpart F and Appendix J.</p> <p>QA/QC of CEMS data will be maintained in accordance with 40 CFR Part 75 Appendix B.</p> <p>Requirements of 40 CFR Part 75.54 — General Recordkeeping Provisions</p> <p>The owner or operator of any affected source subject to the requirements of this part shall maintain for each affected unit a file of all measurements, data, reports and other information required by this part at the source in a form suitable for inspection for at least 3 years from the date of each record...</p> <p>IPC will maintain records of sulfur dioxide allowances purchased and held for the current year of operation (from 40 CFR Part 72.9 and Part 73).</p>	<p>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</p> <p><i>Monitoring</i></p> <p>3.12 — <i>NO_x Monitoring</i></p> <p>3.13 — <i>CO RATA</i></p> <p>3.14 — <i>NO_x Performance Standard NSPS</i></p> <p>3.15 — <i>Fuel monitoring</i></p> <p>3.16 — <i>Emission Rate Quantification Protocol</i></p> <p>3.17 — <i>NO_x and CO Emission Rates Requirements</i></p> <p>3.18 — <i>General Provisions Requirements NSPS</i></p>	<p>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p> <p>applicable requirements of 40 CFR Part 60.7 — <i>Notification and Recordkeeping.</i></p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Section 19 — <i>General Notification and Reporting Requirements.</i></p>	<p>State of Idaho Regulatory Requirements IDAPA 58.01.01</p> <p>58.01.01.322.07 — Recordkeeping</p> <p>All Tier I operating permits shall incorporate by reference all applicable requirements regarding recordkeeping and require all of the following:</p> <p>(1) Sufficient recordkeeping to assure compliance with all of the terms and conditions of the Tier I operating permit.</p> <p>(2) Recording of monitoring information including but not limited to the following:</p> <p>(3) Retention of all monitoring records and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report or application. Supporting information includes but is not limited to all calibration and maintenance records and all original strip-chart recordings for CEMS instrumentation and copies of all reports required by the Tier I operating permit.</p> <p>IPC must comply with all applicable requirements of</p>
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Combustion Turbine Unit CTI	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Reporting	<p>The owner or operator shall provide reports on the CEMS and continuous opacity monitoring system in accordance with 40 CFR Part 75 Subpart G (including 75.60(b)(2)) — Reporting Requirements.</p> <p>The owner or operator shall report excess emissions under the Acid Rain Program in accordance with the requirements of 40 CFR Part 77.</p>	<p>3.19 — Test Protocols for NO_x CEMS Certification and/or Recertification Tests</p> <p>3.20 — CEMS QA Procedures</p> <p>3.21 — RATA Information</p> <p>3.22 — Required NO_x CEMS Information</p> <p>3.23 — Performance Test</p>	<p>IPC must comply with all applicable requirements of 40 CFR Part 60.7 — Notification and Recordkeeping.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Section 19 — General Notification and Reporting Requirements.</p>	<p>IDAPA 58.01.01.133 — Startup, Shutdown and Scheduled Maintenance Requirements.</p> <p>IPC must comply with all applicable requirements of IDAPA 58.01.01.134 — Upset, Breakdown, and Safety Requirements.</p> <p>IPC must comply with all applicable requirements of IDAPA 58.01.01.135 — Excess Emissions Reports.</p> <p>IPC must maintain records according to the applicable provisions of IDAPA 58.01.01.136 — Excess Emissions Records.</p>
				<p>Requirements of IDAPA 58.01.01.322.08 — Reporting</p> <p>All Tier I operating permits shall incorporate by reference all applicable requirements regarding reporting and require all of the following:</p> <p>Sufficient reporting to assure compliance with all of the terms</p>





<p>Combustion Turbine Unit CTI</p>	<p>Acid Rain Program Requirements</p> <p>The designated representative shall submit all recertification applications according to 40 CFR Part 75.63 (from 40 CFR Part 75.60(b)(2)).</p>	<p>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</p> <p><i>Protocols</i></p> <p>3.24 — <i>Performance Test Reports</i></p> <p>3.25 — <i>NSPS Excess NO_x Emissions</i></p> <p>3.26 — <i>NSPS Excess SO₂ Emissions</i></p>	<p>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p>	<p>State of Idaho Regulatory Requirements IDAPA 58.01.01</p>
<p>and conditions of the Tier I operating permit.</p> <p>Prompt reporting of deviations from permit requirements including, but not limited to, those attributable to excess emissions. If the deviation is an excess emission, the report shall be submitted in accordance with the requirements of <i>Sections 130 through 136</i>. For all other deviations, the report shall be submitted in accordance with <i>Subsection 322.08.c</i>, unless the permit specifies another time frame. The reports shall describe the probable cause of such deviations and any corrective actions or preventative measures taken.</p> <p>Submission of reports for any required monitoring at least every 6 months. All instances of deviations from Tier I operating permit requirements, which include monitoring, recordkeeping, and reporting, must be clearly identified in such reports. All required reports must be certified in accordance with <i>Section 123</i>.</p>				





<p><i>Combustion Turbine Unit CTI</i></p>	<p><i>Acid Rain Program Requirements</i></p>	<p><i>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</i></p>	<p><i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</i></p>	<p><i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i></p>
<p><i>Requirements of IDAPA 58.01.01.123 — Certification of Documents</i></p> <p>All documents, including but not limited to, application forms for permits to construct, <i>application</i> forms for operating permits, progress reports, records, monitoring data, supporting information, requests for confidential treatment, testing reports or compliance certifications submitted to the Department shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</p> <p>All documents submitted to the Department shall be truthful, accurate and complete (IDAPA 58.01.01.124 — <i>Truth, Accuracy and Completeness of Documents</i>).</p> <p>IPC must comply with all applicable requirements of IDAPA 58.01.01.133 — Startup.</p>				





Combustion Turbine Unit CT1	Acid Rain Program Requirements	Permit To Construct Requirements (NoP040031) Issued: March 19, 2004	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Other	None.	None.	<p>Requirements of 40 CFR Part 60 Section 10 — State Authority</p> <p>The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from: (a) adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard</p>	<p>Shutdown and Scheduled Maintenance Requirements.</p> <p>IPC must comply with all applicable requirements of IDAPA 58.01.01.134 — Upset, Breakdown, and Safety Requirements.</p> <p>IPC must comply with all applicable requirements of IDAPA 58.01.01.135 — Excess Emissions Reports.</p> <p>IPC must maintain records according to the applicable provisions of IDAPA 58.01.01.136 — Excess Emissions Records.</p>
	None.	None.	<p>Requirements of IDAPA 58.01.01.156 — Total Compliance</p> <p>Where more than one section of these rules applies to a particular situation, all such rules must be met for total compliance, unless otherwise provided for in these rules.</p> <p>Requirements of IDAPA 58.01.01.562</p>	





<p><i>Combustion Turbine Unit CTI</i></p>	<p><i>Acid Rain Program Requirements</i></p>	<p><i>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</i></p>	<p><i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</i></p>	<p><i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i></p>
<p>applicable to such facility; or (b) requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.</p> <p><i>Requirements of 40 CFR Part 60 Section 12 — Circumvention</i></p> <p>No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Section 14 —</p> <p>— Specific Emergency Episode Abatement Plans for Point Sources</p> <p>In addition to the general rules presented in <i>Section 561</i>, IDEQ shall require that specific point sources adopt and implement their own Emergency Episode Abatement Plans in accordance with the criteria set forth in <i>Sections 551</i> through <i>556</i>. An individual plan can be revised periodically by IDEQ after consultation between IDEQ and the owners and/or operators of the source.</p> <p>Requirements of IDAPA 58.01.01.600</p> <p>— Rules for Control of Open Burning</p> <p>The purpose of <i>Sections 600</i> through <i>616</i> is to protect public health and welfare from air pollutants resulting from open burning.</p>				





<p><i>Combustion Turbine Unit CTI</i></p>	<p><i>Acid Rain Program Requirements</i></p>	<p><i>Permit To Construct Requirements (NoP040031) Issued: March 19, 2004</i></p>	<p><i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision) Modification.</i></p>	<p><i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i></p>
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TABLE 8-2
 COMPARISON OF APPLICABLE REQUIREMENTS
 Natural Gas Fuel Heater – Unit H1

Natural Gas Fuel Heater Unit H1	Acid Rain Program Requirements	Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Air Pollution Control Technology	None.	None.	None.	None.
Emission Limitations	None.	4.3 – Criteria Pollutant Emission Limits 4.4 – Particulate Matter: Fuel Burning Equipment	Not applicable — unit exempt.	Requirements of IDAPA 58.01.01.317 — Insignificant Activities This section contains lists of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. The following are determined to be insignificant based on their size or production rate: Combustion source, less than 5 mmBtu/hr, exclusively using natural gas, butane, propane, and/or LPG.
Emission Limitations (Continued)	(See above)	(See above)	(See above)	Requirements of IDAPA 58.01.01.677 — Standards for Minor and Existing Sources A person shall not discharge into the atmosphere from any natural





**IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION**

<p align="center"><i>Natural Gas Fuel Heater Unit H1</i></p>	<p align="center"><i>Acid Rain Program Requirements</i></p>	<p align="center"><i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i></p>	<p align="center"><i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</i></p>	<p align="center"><i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i></p>
				<p>gas fuel burning equipment with a maximum rated input of less than 10 mmBtu/hr (or commencing operation prior to October 1, 1979) PM in excess of 0.015 gr/dscf (the effluent gas volume shall be corrected to 3% oxygen).</p> <p>Requirements of IDAPA 58.01.01.725 — Rules for Sulfur Content of Fuels</p> <p>The purpose of Sections 725 through 729 is to prevent excessive ground level concentrations of SO₂ from fuel burning sources in Idaho. The reference test method for measuring fuel sulfur content shall be ASTM method.</p>
<p align="center">Emission Limitations (Continued)</p>	<p align="center">(See above)</p>	<p align="center">(See above)</p>	<p align="center">(See above)</p>	<p>D129-95 Standard Test for Sulfur in Petroleum Products (General Bomb Method) or such comparable and equivalent method approved in accordance with Subsection 157.02.d. Test methods and procedures shall comply with Section 157.</p>
<p align="center">Operating Parameters</p>	<p align="center">Not applicable.</p>	<p align="center">4.5 — Fuel Restriction</p>	<p align="center">Not applicable.</p>	<p align="center">Not applicable.</p>





Natural Gas Fuel Heater Unit H1	Acid Rain Program Requirements	Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Work Practice Standard(s)	Not applicable.	4.6 — Fuel Firing Restriction None.	Not applicable.	Requirements of IDAPA 58.01.01.155 — Circumvention No person shall willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of regulated air pollutants emitted, conceals an emission of regulated air pollutants which would otherwise violate the provisions of this chapter.
Testing and Sampling	Not applicable.	Not applicable.	Not applicable.	Requirements of IDAPA 58.01.01.725 — Rules for Sulfur Content of Fuels The purpose of Sections 725 through 729 is to prevent excessive ground level concentrations of SO2 from fuel burning sources in Idaho. The reference test method for measuring fuel sulfur content shall be ASTM method D129-95 Standard Test for Sulfur in Petroleum Products (General Bomb Method) or such comparable and equivalent





**IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION**

Natural Gas Fuel Heater Unit H1	Acid Rain Program Requirements	Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Monitoring	Not applicable.	4.7 — Operational Monitoring Requirement	Not applicable.	method approved in accordance with Subsection 157.02.d. Test methods and procedures shall comply with Section 157.
Record-keeping	Not applicable.	4.7 — Operational Monitoring Requirement	Not applicable.	Not applicable.
Reporting	Not applicable.	Not applicable.	Not applicable.	Not applicable.
Other	None.	None.	Requirements of 40 CFR Part 60 Section 10 — State Authority The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from: (a) adopting and enforcing any emission standard or limitation	Requirements of IDAPA 58.01.01.156 — Total Compliance Where more than one section of these rules applies to a particular situation, all such rules must be met for total compliance, unless
Other (Continued)	(See above)	Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code 39-101, et.seq.	Applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility; or (b)	Otherwise provided for in these rules. Requirements of IDAPA 58.01.01.562 — Specific





<p>Natural Gas Fuel Heater Unit H1</p>	<p>Acid Rain Program Requirements</p>	<p>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</p>	<p>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)</p>	<p>State of Idaho Regulatory Requirements IDAPA 58.01.01</p>
		<p>PTC General Provisions — 6.1 - .8</p>	<p>requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility. Requirements of 40 CFR Part 60 Section 12 — Circumvention No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. with all applicable requirements of 40 CFR Part 60 Section 14 — Modification.</p>	<p>Emergency Episode Abatement Plans for Point Sources In addition to the general rules presented in Section 561, IDEQ shall require that specific point sources adopt and implement their own Emergency Episode Abatement Plans in accordance with the criteria set forth in Sections 551 through 556. An individual plan can be revised periodically by IDEQ after consultation between IDEQ and the owners and/or operators of the source. Requirements of IDAPA 58.01.01.600 — Rules for Control of Open Burning The purpose of Sections 600 through 616 is to protect public health and welfare from air pollutants resulting from open burning.</p>





**TABLE 8-3
 COMPARISON OF APPLICABLE REQUIREMENTS
 FACILITY WIDE**

<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
Air Pollution Control Technology	None.	None.	None.	None.
Emission Limitations	Not applicable.	<p>2.1 — Reasonable Control of Fugitive Dust</p> <p>2.2 - Opacity Limit</p> <p>2.3 — Odorous Emissions</p> <p>2.4 - Air Pollution Emergency Rule</p>	<p>IPC must comply with all applicable requirements of 40 CFR Part 60 Subpart A — General Provisions.</p>	<p>Requirements of IDAPA 58.01.01 Section 625 — Visible Emissions</p> <p>02. Standards For Exempted Sources. Except as provided in Section 626, for sources exempted from the provisions of this section, a person shall not discharge into the atmosphere from any point of emission, for any air pollutant for a period or periods aggregating more than 3 minutes in any 60-minute period which is greater than 40% opacity as determined by this section.</p> <p>03. Exception. The provisions of this section shall not apply when the presence of uncombined water, nitrogen oxides and/or chlorine gas are the only reason(s) for the failure of the emission to comply with the</p>





Facility-Wide	Acid Rain Program Requirements	Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
<p>Emission Limitations (Continued)</p>				<p>requirements of this rule.</p> <p>04. Test Methods And Procedures. The appropriate test method under this section shall be EPA Method 9 (contained in 40 CFR Part 60) with the method of calculating opacity exceedances altered as follows:</p> <ul style="list-style-type: none"> • Opacity evaluations shall be conducted using forms available from IDEQ or similar forms approved by IDEQ. • Opacity shall be determined by counting the number of readings in excess of the percent opacity limitation, dividing this number by 4 (each reading is deemed to represent 15 seconds) to find the number of minutes in excess of the percent opacity limitation. This method is described in the <i>Procedures Manual for Air Pollution Control, Section II (Evaluation of Visible Emissions Manual)</i>, September 1986. • Sources subject to New





<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
<p>Emission Limitations (Continued)</p>				<p>Source Performance Standards must calculate opacity as detailed above and as specified in 40 CFR Part 60.</p> <p>Requirements of IDAPA 58.01.01 Section 776 — Odorous Emissions</p> <p>No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.</p> <p>Requirements of IDAPA 58.01.01 Section 651 — Fugitive Dust, General Rules</p> <p>All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and/or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions may include, but are</p>





<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
<p>Emission Limitations (Continued)</p>				<p>not limited to, the following:</p> <p>01. Use Of Water Or Chemicals. Use, where practical, 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.</p> <p>02. Application Of Dust Suppressants. Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.</p> <p>03. Use Of Control Equipment. Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.</p> <p>04. Covering Of Trucks. Covering, when practical, open bodied trucks transporting</p>





IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION

<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
Emission Limitations (Continued)				<p>materials likely to give rise to airborne dusts.</p> <p>05. Paving. Paving of roadways and their maintenance in a clean condition, where practical.</p> <p>06. Removal Of Materials. Prompt removal of earth or other stored material from streets, where practical.</p> <p>Requirements of IDAPA 58.01.01 Section 776 — Rules for the Control of Odors, General Rules</p> <p>No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids into the atmosphere in such quantities as to cause air pollution.</p>
Operating Parameters	None.	None.	None.	None.
Work Practice Standard(s)	Not applicable.	Not applicable.	Not applicable.	<p>Requirements of IDAPA 58.01.01.155 — Circumvention</p> <p>No person shall willfully cause or permit the installation or use of</p>





**IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION**

<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
				any device or use of any means which, without resulting in a reduction in the total amount of regulated air pollutants emitted, conceals an emission of regulated air pollutants which would otherwise violate the provisions of this chapter.
Testing and Sampling	None.	None.	None.	None.
Monitoring	None.	2.5 — Fugitive Emissions Monitoring	None.	None.
Record-keeping		2.5 — Fugitive Emissions Monitoring		Requirements of IDAPA 58.01.01 Section 332 — Visible Emissions IPC shall maintain records of the results of visible emission inspections and each opacity test when conducted. The records shall include, at a minimum, the date and results of each





IDAHO POWER COMPANY
BENNETT MOUNTAIN POWER PROJECT
TIER I AIR QUALITY OPERATING PERMIT APPLICATION

<i>Facility-Wide</i>	<i>Acid Rain Program Requirements</i>	<i>Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002</i>	<i>New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (July 1, 1996 Revision)</i>	<i>State of Idaho Regulatory Requirements IDAPA 58.01.01</i>
Record-keeping (Continued)				<p>inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.</p> <p><i>Odors — IPC shall maintain records of all odor complaints received. If the compliant has merit, the permittee should take the appropriate corrective action as expeditiously as practicable.</i></p>
Reporting		<p>2.6 - Excess Emissions</p> <p>2.7 — Reports and Certifications</p> <p>2.8 — Permit Application Requirements</p>		<p><i>Visible Emissions — IPC will report visible emissions and opacity exceedances in the annual compliance certification and in accordance with IDAPA 58.01.01.130-136.</i></p>
Other		<p>PTC General Provisions — 3.1</p> <p>PTC General Provisions — 6.1-6.8</p>		





TABLE 8-4
 COMPARISON OF APPLICABLE REQUIREMENTS
 PERMIT SHIELDS REQUESTED

Combustion Turbine Units CT2 and CT3	Acid Rain Program Requirements	Permit To Construct Requirements (No. 039-00024) Issued: August 21, 2002	New Source Performance Standards (NSPS) 40 CFR Part 60 Requirements (September 26, 2005 Revision)	State of Idaho Regulatory Requirements IDAPA 58.01.01
Operating Parameters				
Testing and Sampling			IPC must comply with all applicable requirements of 40 CFR Part 60.8 — Performance Tests.	
Monitoring		3.15 — Fuel Monitoring	<p>IPC must comply with all applicable requirements of 40 CFR Part 60.13 — Monitoring Requirements.</p> <p>The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. For turbines that are supplied fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. [</p> <p>IPC must comply with all applicable requirements of 40 CFR Part 60 Subpart A (60.1 through 60.19) — Standards of Performance for New Stationary Sources, General Provisions.</p>	<p>From 40 CFR Part 64.3(d)</p> <p>— Special criteria for the use of continuous emission, opacity or predictive monitoring systems.</p> <p>If a CEMS, COMS or predictive emission monitoring system (PEMS) is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy these requirements.</p>





			<p>IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance (See above).</p>	
<p>Record-keeping</p>			<p>IPC must comply with all applicable requirements of 40 CFR Part 60.7 — Notification and Record-keeping. IPC must comply with all applicable requirements of 40 CFR Part 60 Section 19 — General Notification and Reporting Requirements. For the purpose of reports required under 40 CFR Part 60.7I, periods of excess emissions that shall be reported are defined as follows:</p> <ul style="list-style-type: none"> • Nitrogen oxides — 40 CFR Part 60.334I(1) • Sulfur dioxide — 40 CFR Part 60.334I(2) (See above).] <p>Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR Part 60.335(a). IPC shall submit to IDEQ a report of all excess emissions of SO₂ in accordance with 40 CFR Part 60.7(b) through (d). For this report, excess SO₂ emissions are defined in 40 CFR Part 60.334(c)(2).</p>	
<p>Reporting</p>				



22. Attachment 8 – Acid Rain Permit Renewal Application

Permit Requirements**STEP 3**

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).

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(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 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.

STEP 3, 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 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

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

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.

Certification

STEP 4
Read the certification statement, sign, and date.

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 Dale Koger	
Signature Dale Koger	Date 10/13/11

23. Attachment 9 – Criteria Pollutant Emission Calculations

Combustion Trubine Data Operating Data

Emissions Data	Emissions	
	lb/hr (a)	Ton/yr (b)
NOx	100.00	248.16
CO	41	248.29
VOC	2.8	12.26
SOx (as SO2)	1.1	4.82
PM10	10	43.80

(a) Emission rates taken from manufacturer guarantee data
(b) Annual emissions for NOx and CO determined in the PTC application, were set just below the PSD threshold when taking into account the annual emissions for the fuel heater. The rest of the annual emissions were calculated based on manufacturer guarantee data and assuming 8760 hr of operation per year.

Fuel Heater Data

Operating Data

Fuel Use Limit

16878613 scf/yr

Fuel Heater Fuel Input

0.0036 MMscf/hr

Emissions Data

	Emission Factor lb/MMscf (a)	Emissions lb/hr (b)	Ton/yr (c)	
NOx	100	0.44	0.84	
CO	84	0.366	0.71	
VOC		0.0479	0.21	
SOx (as SO2)		0.0261	0.11	
PM10		0.0331	0.14	

(a) Emission factors from EPA AP-42, Table 1.4-1

(b) Emission rates taken from manufacturer guarantee data

(c) Annual emissions for NOx and CO were based on Emission Factors and the fuel use limitation determined in PTC, all the rest were calculated based on manufacturer data and 8760 hr of operation per year.

Emergency standby IC engine PTE Emissions Calculations:

**Table A.1 EMERGENCY STANDBY IC ENGINE HOURLY AND ANNUAL PTE FOR CRITERIA POLLUTANTS
WHEN COMBUSTING DIESEL FUEL**

Emissions Unit	Rated Output (bhp)	Annual Hours of Operation (hrs/yr) ¹	Criteria Pollutant	Emissions Factors (g/bhp-hr)	Hourly Emissions (lb/hr)	Annual Emissions (ton/yr)
Emergency standby IC engine	755	500	PM ₁₀ ²	0.15	0.25	0.06
			SO ₂ ³	0.0055	0.01	0.00
			NO _x ²	4.8	7.99	2.00
			CO ²	2.6	4.33	1.08
			VOC ³	0.319	0.53	0.13

¹ - To be exempt from permit emergency IC engines are limited 500 hours per year for maintenance and testing (IDAPA 58.01.01222.01.d).

² - PM₁₀, NO_x and CO emissions are taken from the manufacturer supplied EPA Tier 2 certification as supplied by the Applicant.

³ - Based on AP-42 Table 3.4-5 (10/96) for SO₂ (with a sulfur content of 0.0015% by weight for ULSD) and VOC.



Sivalls Inc., Odessa, Texas

Quotation Number:
 Job Order Number: 59437
 Customer: Siemens - Bennett Mtn.
 Service: Indirect Heater
 Calculation By: JSB
 7/12/04 4:04:12 PM

COMBUSTION CALCULATIONS

<u>Item</u>	<u>Value</u>	<u>Min.</u>	<u>Max.</u>
Data Entry			
Total Nominal Heat Duty, MMBTU/hr:	3.6	0	300
Total Actual Heat Duty, MMBTU/hr:	3.05	0	300
Thermal Efficiency, %:	70.	0	100
Excess Air, %:	0.	0	1000
Stack Gas Temperature, °F:	1000.	300	2000
Stack Diameter, Inches:	24 in. o.d.	na	na
Number of Fire Tubes:	1	na	na
Standards			
Flue to Fuel Ratio, cu.ft./cu.ft.:	11.62	0	100
Air to Fuel Ratio, cu.ft./cu.ft.:	10.47	0	100
Fuel Gas HHV, BTU/SCF:	1000.	700	1200
Calculated Values (Total Emmissions Data)			
Fuel Gas Usage, SCF/hr:	4357.1429		
Flue Gas Generated, SCF/hr:	50630.		
Actual Flue Gas Rate (including excess air), ACF/hr:	142153.4615		
Stack Cross Sectional Area, sq.ft.:	3.1134		
Actual Stack Gas Velocity ft/sec:	12.683		
Sulfur Dioxide, lbs/hr:	0.0026143		
Nitrogen Oxides, lbs/hr:	0.4357143		
Carbon Monoxide, lbs/hr:	0.366		
Particulates (filterable), lbs/hr:	0.0082786		
Particulates (condensable), lbs/hr:	0.0248357		
Total Organic Compounds, lbs/hr:	0.0479286		

NOTE: SO2 is based on 0.2 grains hydrogen sulfide/ 100 SCF of fuel

REFERENCE: U.S. Environmental Protection Agency, "Compilation of Air Pollutant Emission Factors", July 1998, Tables 1.4-1 to 1.4-3

24.Attachment 10 – Facility HAPs Emission Calculations

Bennett Mountain
Facility HAP Emission Calculations

Combustion Turbine

CT Heat Input Rate	1788 mmBtu/hr (LHV)
Annual Operation	8760 hr/yr

Emission Factors - from Natural Gas-Fired Stationary Gas Turbines (lb/mmBtu)

Table 3.1-3	1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	Propylene Oxide	Toluene	Xylenes
Emission Factor	4.30E-07	4.00E-05	6.40E-06	1.20E-05	3.20E-05	7.10E-04	1.30E-06	2.90E-05	1.30E-04	6.40E-05
CT Emissions	7.7E-04	7.2E-02	1.1E-02	2.1E-02	5.7E-02	1.3E+00	2.3E-03	5.2E-02	2.3E-01	1.1E-01
CT Emissions	3.4E-03	3.1E-01	5.0E-02	9.4E-02	2.5E-01	5.6E+00	1.0E-02	2.3E-01	1.0E+00	5.0E-01

Fuel Gas Heater

H1 Heat Input Rate	3.6 mmBtu/hr
Annual Operation	8760 hr/yr

Emission Factors - From Natural Gas Combustion (lb/mmBtu)

Table 1.4-3	Benzene	Formaldehyde	Naphthalene	Toluene
Emission Factor	2.10E-03	7.50E-02	6.10E-04	3.40E-03
H1 Emissions	7.56E-03	2.70E-01	2.20E-03	1.22E-02
H1 Emissions	3.31E-02	1.18E+00	9.62E-03	5.36E-02

Emergency Diesel Generator

EDG Heat Input Rate	3.402 MMBtu/hr
Annual Operation	500 hr/yr

Emission Factors for large Uncontrolled Stationary Diesel Engines (lb/mmBtu)

Table 3.4-3	Benzene	Toluene	Xylenes	Formaldehyde	Acetaldehyde	Acrolein	Naphthalene
Emission Factor	7.76E-04	2.81E-04	1.93E-04	7.89E-05	2.52E-05	7.88E-06	1.30E-04
EDG Emissions	2.64E-03	9.56E-04	6.57E-04	2.68E-04	8.57E-05	2.68E-05	4.42E-04
EDG Emissions	6.60E-04	2.39E-04	1.64E-04	6.71E-05	2.14E-05	6.70E-06	1.11E-04

Facility Total

Table 3.4-3	1,3-Butadiene	Acetaldehyde	Acrolein	Benzene	Ethylbenzene	Formaldehyde	Naphthalene	Propylene Oxide	Toluene	Xylenes	Total HAPs all units
lb/hr	7.7E-04	7.16E-02	1.1E-02	3.17E-02	5.7E-02	1.54E+00	5.0E-03	5.2E-02	1.15E-01	2.1E+00	2.1E+00
Ton/yr	3.4E-03	3.13E-01	5.0E-02	1.3E-01	2.5E-01	6.7E+00	1.99E-02	2.3E-01	1.07E+00	5.0E-01	9.31E+00

25.Attachment 11 - Compliance Certification and Compliance Plan

9.0 COMPLIANCE CERTIFICATION AND COMPLIANCE PLAN

The purpose of this section is to identify the compliance elements of *IDAPA 58.01.01.322.09* to determine applicable compliance requirements for each emission unit at the Bennett Mountain Power Project. Tables for each emission unit (CT1 and H1) are provided in the following subsections as a guide to unit compliance. Compliance elements are shown as the column headings across the top of each table, and are footnoted with supporting documentation or additional information. Applicable regulations appear along the left-hand margin of each table, and are grouped according to regulatory source (similar to the streamlining table format in Section 8.0 of this Tier I permit application).

9.1 COMPLIANCE — COMBUSTION TURBINE UNIT CT1

According to *IDAPA 58.01.01.322.09*, all Tier I operating permit applications must contain a description of the monitoring, record-keeping, reporting, and test methods used for compliance certification of each emission unit. The combustion turbine unit CT1 requires Tier I compliance demonstration for the use of a CEMS to monitor emissions (Table 9-1). In addition, the PTC contains requirements for periodic compliance demonstrations. All other compliance demonstration requirements for CT1 are met by conducting initial performance tests for permit applications.

9.1.1 CEMS Compliance Description

The following subsections describe the compliance certification requirements for the CEMS, used in part to demonstrate compliance for unit CT1.

9.1.1.1 CEMS Monitoring Description and QA/QC Measures

The CEMS is used to monitor air emissions from the combustion turbine unit. This system automatically and continuously measures NO_x, CO, and O₂ concentrations, as well as fuel flow, on a real-time basis. The CEMS is completely automatic; operator attention is necessary only for periodic manual verification of accuracy and normal maintenance. Concentrations of SO₂ and CO₂ are estimated using the procedures outlined in *40 CFR Part 75 Appendices D and G*. The operational hours for CT1 are also recorded and stored by the CEMS.

The CEMS QC measures required under *40 CFR Part 60* and *Part 75* include the following:

- Daily calibration error (CE) tests and calibration drift (CD) tests
- Linearity tests (or cylinder gas audits [CGA])

The CEMS QA measures required under the *40 CFR Part 60* and *Part 75* include the following:



**TABLE 9-1
 APPLICABLE REGULATIONS AND
 COMPLIANCE STATUS OF EMISSION UNITS
 C11**

Applicable Regulations	In Compliance	Method IDAPA 58.01.01.314.09	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demonstration	Monitoring IDAPA 58.01.01.322.06	Record-keeping IDAPA 58.01.01.322.07	Reporting IDAPA 58.01.01.322.08
40 CFR Part 72 Acid Rain Program Application	Yes	NA	Certification	NA	Every Tier I renewal or revision	CEMS	General Record-keeping provisions (3 years) 40 CFR 75.57	Quarterly reports 40 CFR Part 75.65
40 CFR Part 72.9 and Part 73 SO ₂ allowances	Yes	NA	NA	Acid Rain Reconciliation Form	Within 60 days of end of calendar year. 40 CFR 77.3	CEMS	General Record-keeping provisions (3 years) 40 CFR 75.57	Quarterly reports 40 CFR Part 75.65
40 CFR Part 75 CEMS operation	Yes	Reference Test Methods 40 CFR 75.22 App D - SO ₂ App G - CO ₂	Initial Certification and Recertification 40 CFR 75.20 App D - SO ₂ App G - CO ₂	QA/QC requirements 40 CFR 75.20-21	QA/QC procedures 40 CFR Part 75 App B	Subpart B Monitoring Provisions 40 CFR Part 75	Record-keeping requirements 40 CFR Part 75 Subpart F	Reporting Requirements 40 CFR Part 75 Subpart G
40 CFR Part 77 Report Excess Emissions- SO ₂ only	Yes	NA	NA	Acid Rain Reconciliation Certification Statement	Within 60 days after end of calendar year	Allowance Tracking System (ATS)	ATS	Offset plans for excess emissions of sulfur dioxide. (Within 60 days of end of calendar year.) 40 CFR 77.3
Permit to Construct P-030060 (reference to number of permit provision) 3.3 & 3.7, 3.6 Fuel Restriction, NO _x , 3.8 CO, 3.9 Flowrate, 3.15 Fuel,	Yes	58.01.01.157	Initial performance test	QA/QC requirements 40 CFR 75 and 60	QA/QC requirements 40 CFR 75 and 60	3.11 - 3.18 Monitoring requirements	3.11 - 3.20 Monitoring requirements and Reporting requirements	3.19 - 3.20 Reporting requirements





TABLE 9-1 (Continued)
APPLICABLE REGULATIONS AND
COMPLIANCE STATUS OF EMISSION UNITS
CTI

Applicable Regulations	In Compliance	Method IDAPA 58.01.01.314.09	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demonstration	Monitoring IDAPA 58.01.01.322.06	Record-keeping IDAPA 58.01.01.322.07	Reporting IDAPA 58.01.01.322.08
Permit to Construct P-030060 3.10 Turbine Startup Restriction	Yes		3.16 Emission rate quantification protocol approval	3.16 Emission rate quantification protocol approval	Initial	NA	Emission rate quantification protocol	Emission rate quantification protocol
Permit to Construct P-030060 3.9 Turbine Exhaust Flowrate Quantification	Yes	Method 19	Initial performance test	Initial performance test	Initial	NA	Test Report	Test Report
40 CFR 60 Subpart A General Provisions	Yes	Performance Test 40 CFR 60.8 Test Methods 40 CFR 60, App A	40 CFR 60.8	Initial	NA	Monitoring Requirements 40 CFR 60.13	Notification 40 CFR 60.7 Record-keeping (2 years) 40 CFR 60.19	Address 40 CFR 60.4 General notification and reporting requirements 40 CFR 60.19
40 CFR Part 60 Subpart GG Standards of Performance for stationary gas turbines	Yes	Test Methods and procedures 40 CFR 60.335	40 CFR 60.8	60.332(a) Standard for Nitrogen Oxides	60.334(b)(3)(i)(ii) A 4 hour rolling for NO _x limit.	Alternative Fuel Monitoring Plan (Appendix I)	2 Years 40 CFR 60.19	Quarterly within 30 days of end of period 40 CFR 60.19
40 CFR Part 60 Appendices B and F	Yes	7E, 10, 3A	NO _x RATA CO RATA	7E, 10, 3A	Quarterly CGA and annual RATA	CEMS	2 Years 40 CFR 60.19	Quarterly within 30 days of end of period 40 CFR 60.19



**TABLE 9-1 (Continued)
APPLICABLE REGULATIONS AND
COMPLIANCE STATUS OF EMISSION UNITS
CT1**

Applicable Regulations	In Compliance	Method IDAPA 58.01.01.314.09	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demonstration	Monitoring IDAPA 58.01.01.322.06	Record-keeping IDAPA 58.01.01.322.07	Reporting IDAPA 58.01.01.322.08
IDAPA 58.01.01.123 Cert of Doc	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.124 truth accuracy	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.130-136 Excess Emissions	Yes	Operational Procedure	NA	NA	NA	NA	Excess emission records (5 years) IDAPA 58.01.01.136	Excess emissions reports IDAPA 58.01.01.135
IDAPA 58.01.01.155 Circumvention	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.156 Total Compliance	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.157 Test Methods	Yes	IDAPA 58.01.01.157 Test Methods	NA	NA	NA	NA	NA	IDAPA 58.01.01.157.04 Reporting Requirements
IDAPA 58.01.01.161 HAP	Yes	Air Dispersion Modeling calculation	NA	Air Dispersion Modeling calculation	One time	NA	NA	NA



**TABLE 9-1 (Continued)
 APPLICABLE REGULATIONS AND
 COMPLIANCE STATUS OF EMISSION UNITS
 CT1**

Applicable Regulations	In Compliance	Method IDAPA 58.01.01.314.09	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demo	Monitoring IDAPA 58.01.01.322.06	Record-keeping IDAPA 58.01.01.322.07	Reporting IDAPA 58.01.01.322.08
IDAPA 58.01.01.200 -203 Permit to Construct Application	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.211 Conditions for Permit to Construct	Yes	IDAPA 58.01.01.157 Test Methods	IDAPA 58.01.01.211.04 Performance Test	IDAPA 58.01.01.211.03 Notification to the Department	Once	NA	NA	IDAPA 58.01.01.211.03 Notification to the Department
IDAPA 58.01.01.300 - 386 Tier I Operating Permits	Yes	NA	NA	IDAPA 58.01.01.322.11 Periodic Compliance Certifications	IDAPA 58.01.01.322.10 Compliance Schedule and Progress Reports	IDAPA 58.01.01.322.06 Monitoring	IDAPA 58.01.01.322.07 Record-keeping	IDAPA 58.01.01.322.08 Reporting
IDAPA 58.01.01 Sections 510 – 516 heights and dispersion	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.600 - 616 open burn	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.625 Visible emissions	Yes	IDAPA 58.01.01.04 Test Methods and procedures	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.675 – 681 Fuel burning equipment – particulate matter	Yes	IDAPA 58.01.01.681 Test Methods and Procedures	NA	NA	NA	NA	NA	NA



TABLE 9-1 (Continued)
APPLICABLE REGULATIONS AND
COMPLIANCE STATUS OF EMISSION UNITS
CT1

Applicable Regulations	In Compliance	Method IDAPA 58.01.01.314.09	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demo	Monitoring IDAPA 58.01.01.322.06	Record-keeping IDAPA 58.01.01.322.07	Reporting IDAPA 58.01.01.322.08
IDAPA 58.01.01.725 -729 Rules for sulfur content of fuels	Yes	ASTM method, D129-95 Subsection 157.02.d.	Subsection 157	NA	NA	NA	NA	NA
IDAPA 58.01.01.775 -776 rules for control of Odors	Yes	NA	NA	NA	NA	NA	NA	NA



- Linearity tests (referred to as CGA in *40 CFR Part 60*),
- Relative accuracy test audits (RATA)
- Compliance tests or relative accuracy audits (RAA)

The Bennett Mountain Power Project has been initially certified using results from an initial performance test and RATA performed according to the requirements and procedures in *40 CFR Part 60* and *Part 75*. The CEMS fuel flow meter has been also initially certified, according to the requirements of *40 CFR Part 75 Appendix D*. The natural gas fuel combusted in the turbine unit (CT1) was defined under *40 CFR Part 72* as pipeline natural gas.

The CEMS QA measures required under the *40 CFR Part 60* and *Part 75* include the following:

- Linearity tests (referred to as CGA in *40 CFR Part 60*)
- RATA
- Compliance tests or RAA

9.1.1.2 CEMS Tier I Operating Permit Compliance

The Tier I compliance demonstration for the CEMS system is specified in *40 CFR Part 60* and *Part 75*. These regulations contain QA/QC procedures for maintaining a certified CEMS. A compliance demonstration for CO must be performed quarterly (*40 CFR Part 60 Appendix F*). This demonstration may be a RATA, RAA, or linearity test. The NO_x and the diluent O₂ monitors must meet the most stringent requirements of both parts (*40 CFR Part 60* and *Part 75*) for the pollutant of concern. Quarterly compliance demonstrations must be performed for each monitor.

Concentrations of SO₂ and CO₂ are estimated (not monitored) using emission factors and fuel analysis methods defined in *40 CFR Part 75 Appendices D* and *G*. Schedules for fuel sampling and allowable emission factors for pipeline natural gas—found in *40 CFR Part 75 Appendix D*—are used to estimate SO₂ emissions as outlined in *40 CFR Part 60 Subpart GG*. The daily emission rate of CO₂ is estimated using fuel analysis and fuel flow measurement procedures described in *40 CFR Part 75 Appendix G*. Compliance for both SO₂ and CO is therefore demonstrated by certification of the fuel flow meter and by visual orifice inspection of the meter. The CEMS fuel flow meter must be certified at least once every four QA-operating quarters and within 20 successive calendar quarters. A visual orifice inspection must be performed at least once every 12 calendar quarters.

9.1.1.3 CEMS Compliance Test Methods

Approved EPA test methods for compliance certification are cited in the table of applicable regulations (Table 9-1). The methods presented below (Table 9-2) are suggested for compliance certification, but may be replaced with equivalent test methods as specified in *40 CFR Part 75.22* and *40 CFR Part 60 Appendix A*.

**TABLE 9-2
 CEMS COMPLIANCE TEST METHODS**

Parameter	Units	EPA Test Method (40 CFR Part 60 Appendix A)
NO _x	ppm	7E
O ₂	%	3A
CO	ppm	10

Notes: 40 CFR Title 40 Code of Federal Regulations
 % Percent
 CEMS Continuous emissions monitoring system
 CO Carbon monoxide
 NO_x Nitrogen oxides
 O₂ Oxygen
 ppm Parts per million

9.1.1.4 CEMS Compliance Record-keeping Requirements

Record-keeping requirements to demonstrate CEMS compliance are specified in *40 CFR Part 60.7*, *40 CFR Part 60.19* and *40 CFR Part 75.57*. These regulations state that the owner or operator must maintain a file of all required information—including CEMS measurements, performance testing measurements, CEMS performance evaluations, CEMS calibration checks, and records of adjustments or maintenance of the CEMS—recorded in a permanent form suitable for inspection. According to *40 CFR Part 60*, records must be archived for a minimum of 2 years; *40 CFR Part 75* requires that records be archived for at least 3 years.

9.1.1.5 CEMS Compliance Reporting Requirements

Reporting requirements to demonstrate CEMS compliance are specified in *40 CFR Part 75 Subpart G* and *40 CFR Part 60.19* and *40 CFR Part 60 Subpart GG*. These regulations state that all required CEMS information (including raw data) must be submitted in a written report within 60 days of the certification and re-certification tests. In addition, a written report of performance test results must be submitted within 60 days of conducting the test. All required periodic reports and compliance certifications must be submitted within 60 days of the end of each quarterly reporting period.

All correspondence with the EPA—including requests, reports, applications, submittals, and other communications—will be submitted in duplicate to the EPA Region 10 office. In addition, copies of all information required for submittal to EPA will be submitted to IDEQ. When hard copy relative accuracy test reports, certification reports, re-certification reports, or semiannual or annual reports for the CEMS are required or requested under *40 CFR Part 75.60(b)(6)* or *40 CFR Part 75.63*, the reports will include, at a minimum, the following elements (as applicable to the types of tests performed):

- Summarized test results
- DAHS printouts of the CEMS data generated during the calibration error, linearity, cycle time, and relative accuracy tests

- For pollutant concentration monitor or diluent monitor, relative accuracy tests at normal operating load include the following:
 - The raw reference method data from each run (usually in the form of a computerized printout, showing a series of 1-minute readings and the run average)
 - The raw data and results for all required pre-test, post-test, pre-run, and post-run QA checks (that is, calibration gas injections) of the reference method analyzers
 - The raw data and results for any moisture measurements made during the relative accuracy testing
 - Tabulated, final, corrected reference method run data (that is, the actual values used in the relative accuracy calculations), along with the equations used to convert the raw data to the final values and example calculations to demonstrate how the test data were reduced
- Calibration gas certificates for the gases used in the linearity, calibration error, and cycle time tests and for the calibration gases used to QA the gas monitor reference method data during the RATA
- Laboratory calibrations of the source sampling equipment
- A copy of the test protocol used for the CEMS certifications or re-certifications, including narrative that explains any testing abnormalities, problematic sampling, and analytical conditions that required a change to the test protocol, and/or solutions to technical problems encountered during the testing program
- Diagrams illustrating test locations and sampling point locations (to verify that locations are consistent with information in the monitoring plan). Include a discussion of any special traversing or measurement scheme. The discussion will also confirm that sampling points satisfy applicable acceptance criteria
- Names of key personnel involved in the test program, including test team members, plant contacts, agency representatives and test observers on site



9.1.2 PTC Compliance Description

The following subsections describe the compliance certification requirements for the PTC (No. P-030060), used in part to demonstrate compliance for the combustion turbine units.

9.1.2.1 PTC Monitoring Description and QA/QC Measures

The PTC requires monitoring of NO_x, CO, and fuel. IPC uses a CEMS to continuously monitor emissions from unit CT1 at the Bennett Mountain Power Project. For QA/QC measures specific to the CEMS and fuel monitoring, refer to Section 9.1.1 of this Tier I operating permit application (above).

The turbine exhaust flowrate requires quantification using Method 19 in 40 *CFR 60, Appendix A* during the initial performance test.

An emission rate quantification protocol is required within 60 days of PTC issuance. The protocol will address the methodology used to quantify NO_x and CO emissions rates for IDEQ approval. The protocol shall explicitly describe and discuss the manner by which facility utilizes data collected and/or derived in accordance with the CEMS for ppm and lb/hr. This data from the protocol is reproduced in Section 5 Emission Estimates.

Sulfur and nitrogen fuel monitoring required by 40 CFR Part 60.334 will be demonstrated by 40 *CFR Part 75 Appendix D* and NO_x CEMS, respectively. QA/QC measures specific to the CEMS and fuel monitoring are found in Section 9.1.1 of this Tier I operating permit application.

9.1.2.2 PTC Compliance Test Methods

The PTC requires an initial performance test to show compliance for pollutants as well as quantification of the turbine exhaust rate. The pollutants will use the same test methods as shown in Table 9.2. The stack flowrate will be determined using Method 19 in 40 *CFR Part 60 Appendix A*.

Annual compliance test methods will be performed on the monitoring systems as previously discussed under Section 9.1.1.3.

9.1.2.3 PTC Compliance Recordkeeping Requirements

According to the PTC Sections 3.11 through 3.17, IPC must comply with all applicable record-keeping requirements set forth in 40 *CFR Part 75 Subpart F* and 40 *CFR 60, Appendix F*. All such records shall be kept on site for a minimum of five years and shall be made available for inspection to IDEQ representatives upon request.

During required NO_x, CO, and stack flowrate performance tests, IPC will record visible emissions using the methods specified in *IDAPA 58.01.01.625*. In addition, the amount of fuel used during the performance tests will be recorded (PTC Section 3.11).

IPC must comply with the sulfur and nitrogen monitoring provisions 40 *CFR Part 60 Subpart GG* and keep documentation according to requirements of the PTC Section 3.15. All such data

shall be kept on site for a minimum of 5 years and made available to IDEQ representatives upon request.

According to the PTC Section 2.5, IPC must maintain records of the frequency and the methods used (that is, water, chemical dust suppressants) to reasonably control fugitive dust. IPC must also maintain records of all fugitive dust complaints received. The records will, at a minimum, include the date that each complaint was received and a description of the following: the complaint, IPC's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

9.1.2.4 PTC Compliance Reporting Requirements

As listed in the PTC requirements (Section 3.19), IPC must submit a test protocol for each required certification and recertification of the NO_x and CO CEMS, required by PTC Sections 3.7 and 3.8, to IDEQ for approval at least 30 days prior to the respective test date. One year after permit issuance, the permittee may waive the reporting requirements of PTC Section 3.19.1. All CEMS data submitted to EPA or DEQ (PTC Section 3.20) shall meet the quality assurance procedures in *40 CFR 60*.

IPC must submit to IDEQ any RATAs conducted for compliance within 60 days of the completion of the test (PTC Section 3.21)

IPC must also submit to IDEQ a written report (including all raw field data) for each required certification or recertification test within 60 days of the date on which the respective test was completed (PTC Section 3.22). In addition, IPC will comply with the reporting requirements of *40 CFR Part 75 Subpart G* and *40 CFR 75.60 (b) (2)*.

IPC must submit a test protocol for each required performance test to the IDEQ for approval at least 30 days prior to the test date (PTC Section 3.23). IPC must also submit to IDEQ a written report of the performance test results within 60 days of performing each respective test (PTC Section 3.24).

As listed in the PTC requirements (Section 3.25), IPC must submit to IDEQ copies of all excess emissions and monitoring systems performance reports and/or summary reports for the NO_x CEMS. The reporting requirements and report format shall be the same as those specified in *40 CFR Part 60.7(c)*. Each report shall include the average fuel consumption, ambient conditions, gas turbine load, nitrogen content of the fuel during the period of excess emissions, and the graphs developed under *40 CFR 60.33(a)*. IPC must submit to IDEQ a report of all excess emissions of SO₂ in accordance with *40 CFR Part 60.7(b) through (d)* (PTC Section 3.26). For this report, excess emissions are defined as any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight, as defined in *40 CFR 60.334(c)(2)*.

IPC must submit to IDEQ a report of any and all exceedances of any emission rate, visible emission, or operating requirement listed in the PTC in accordance with *IDAPA 58.01.01 Sections 130 through 136* (PTC Section 2.6).



All required periodic reports and certifications shall be submitted to IDEQ within 60 days of the end of each specified reporting period (unless specified otherwise in the PTC). All correspondence with the EPA pursuant to *40 CFR Part 60* (NSPS)—including requests, reports, applications, submittals, and other communications—shall be submitted in duplicate to the EPA Region 10 office. In addition, copies of all information required for submittal to EPA will be submitted to IDEQ (PTC Section 2.7).

The PTC (Section 2.8.1) stipulated that IPC submit to IDEQ a complete application for an original Tier I operating permit within 12 months of operational start-up. IPC must also comply with the Acid Rain Permit requirements in accordance with *40 CFR Part 72.9(a)* and *40 CFR Part 72 Subpart C*. (PTC Section 2.8.2)

9.1.3 Compliance Assurance Monitoring

The compliance assurance monitoring (CAM) requirements of *40 CFR Part 64.2* are not applicable to unit CT1 described as a major source under *40 CFR Part 70*. CT1 does not require a compliance assurance monitoring (CAM) plan. Unit 1 does not use an add-on control device to achieve compliance with any emission limitation or standard for the applicable regulated air pollutants. Emission limitations developed under Part 75 are exempt from the CAM requirements.

9.1.4 Specific Operating Conditions and Emission Limits

9.1.4.1 Specific Operating Conditions

Specific operating conditions are contained in the PTC. These include a fuel restriction where CT1 will be fired exclusively on natural gas. The sulfur content of the natural gas will not contain sulfur in excess of 2 grains of hydrogen sulfide per dry standard cubic feet (gr/dscf).

A CEMS will be installed, certified, operated and maintained for NO_x and CO. Both pollutants will be reported in parts per million by volume (ppmv) and lb/hr by a DAHS. For QA/QC measures specific to the CEMS, refer to Section 9.1.1 of this Tier I operating permit application.

9.1.4.2 Emission Limits

On and after the date of startup of unit CT1, IPC will not discharge or cause the discharge into the atmosphere from CT1, the following pollutants in excess of the following specified limits:

NO_x Emissions

Emissions of NO_x from the gas turbine stack shall not exceed 248.16 tons per year (tpy) averaged over any consecutive 12-month period. NO_x emissions of will not exceed 132 dppmv averaged over a 4-hour rolling period as defined in 60.334.

CO Emissions

Emissions of CO from the gas turbine stack shall not exceed 248.29 tpy averaged over any consecutive 12-month period.



Particulate Matter (PM) - Fuel Burning Equipment

PM emissions from the combustion turbine shall not exceed 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3 percent oxygen by volume when fired with natural gas.

Visible Emissions

Visible emissions from any point of emission at the facility shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 55.01.01.625.

Odorous Emissions

Odorous gases shall not be emitted to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.776.01.

9.2 COMPLIANCE — NATURAL GAS HEATER UNIT H1

According to IDAPA 58.01.01.322.09, all Tier I operating permit applications must contain a description of the monitoring, record-keeping, reporting and test methods used for compliance certification of each emission unit. The natural gas heater, while an insignificant combustion unit under IDAPA 58.01.01.317, is part of the Tier I application. The initial compliance demonstration and ongoing monitoring of emissions will be to measure the natural gas consumption using a gas meter and the use of an emission factor from AP-42. Table 9-3 presents applicable regulations and the compliance status of the gas heater (H1).

The following subsections describe the compliance requirements for the natural gas heater.

9.2.1 Monitoring Description and QA/QC Measures

Fuel consumption measurements (cubic feet) will be obtained from the natural gas fuel flowmeter. The fuel flowmeter will be maintained for QA/QC purposes as outlined in 40 Part 75 Appendix D.

9.2.2 PTC Compliance

Compliance for estimating emissions from the natural gas heater will be accomplished using a fuel flow meter. Total gas consumption will not exceed 16,878,613 scf in any consecutive 12-month period. The gas turbines will be fired exclusively on natural gas. The natural gas burned in the natural gas heater will not contain sulfur in excess of 0.02 gr/dscf.

9.2.2.1 PTC Compliance Test Methods

Not applicable.

9.2.2.2 PTC Compliance Record-keeping Requirements

Measurements of fuel consumption in standard cubic feet (scf) will be monitored and recorded



per calendar month and any consecutive 12-month period. Records for the most recent 5-year period will be available for inspection by the IDEQ.

9.2.2.3 PTC Compliance Reporting Requirements

IPC shall submit a report of any and all exceedances of any emission rate, visible emission or operating requirements from H1 in accordance with *IDAPA 58.01.01.13-136*.

9.2.3 Specific Operating Conditions and Emission Limits

Specific operating conditions are contained in the PTC. These include a fuel restriction where CT1 will be fired exclusively on natural gas. The sulfur content of the natural gas will not contain sulfur in excess of 0.02 grains per dry standard cubic feet (gr/dscf).

On and after the date of startup of HI, IPC will not discharge or cause the discharge into the atmosphere, the following pollutants in excess of the following specified limits:

NO_x Emissions

Emissions of NO_x from the gas turbine stack shall not exceed 0.84 tpy averaged over any consecutive 12-month period.

CO Emissions

Emissions of CO from the gas turbine stack shall not exceed 0.71 tpy averaged over any consecutive 12-month period.

Particulate Matter (PM) - Fuel Burning Equipment

PM emissions from the combustion turbine shall not exceed 0.015 gr/dscf of effluent gas corrected to 3 percent oxygen by volume when fired with natural gas.



**TABLE 9-3
 APPLICABLE REGULATIONS AND
 COMPLIANCE STATUS OF EMISSION UNITS
 HI**

Applicable Regulations	Compliance	Method	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demonstration	Monitoring	Record Keeping	Reporting
Natural Gas Heater IDAPA 58.01.01.625 — Visible Emissions	Yes	NA	NA	NA	NA	NA	NA	IDAPA 58.01.01.130-136. NA
IDAPA 58.01.01.317 — Insignificant Activities	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.677 — Standards for Minor and Existing Sources	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.725 — Rules for Sulfur Content of Fuels	Yes	ASTM method, D129-95 Subsection 157.02.d.	Part 75 Appendix D	Part 75 Appendix D	Annual	NA	5 years	NA
IDAPA 58.01.01.156 — Total Compliance	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.401, 5/1/94 Emergency Operation	Yes	NA	NA	NA	NA	NA	NA	NA
IDAPA 58.01.01.562 — Specific Emergency Episode Abatement Plans for Point Sources	Yes	NA	NA	NA	NA	NA	NA	NA



TABLE 9-3 (Continued)
APPLICABLE REGULATIONS AND
COMPLIANCE STATUS OF EMISSION UNITS
H1

Applicable Regulations	Compliance	Method	Initial Compliance Demonstration	Tier I Compliance Demonstration	Frequency of Demonstration	Monitoring	Record-Keeping	Reporting
4.3 - Criteria Pollutant Emission Limits	Yes	Emission Factor and fuel combusted	NA	NA	Annual	Fuel Meter	5 years	NA
4.4 - Particulate Matter - Fuel Burning Equipment	Yes	NA	Restrict fuel usage natural gas	NA	NA	NA	NA	NA
4.5 - Fuel Sulfur Content	Yes	ASTM method, D129-95 Subsection 157.02.d.	Part 75 Appendix D	Part 75 Appendix D	Annual	NA	5 years	NA
4.6 - Fuel Firing Restriction	Yes	NA	Part 75 Appendix D	Part 75 Appendix D	Monthly	Fuel Meter	5 years	NA



9.3 COMPLIANCE — FACILITY-WIDE

The following requirements generally apply to all emission units and sources at this facility.

Fugitive Dust

According to *IDAPA 58.01.01.650*, IPC will monitor and maintain records of the frequency and the methods used (that is, water, chemical dust suppressants) to reasonably control fugitive dust (PTC Section 2.5).

IPC will maintain records of all fugitive dust complaints received, and will take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records will include at a minimum the date each complaint was received and a description of the following: the complaint, IPC's assessment of the validity of the complaint, any correction action taken, and the date the corrective action was taken (PTC Section 2.5.2).

Opacity

IPC will not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than 3 minutes in any 60-minute period which exceeds 20% opacity as required by *IDAPA 58.01.01.625*. Method 9 will be used to determine opacity emissions.

Odors

Odorous gases shall not be emitted in such quantities as to cause air pollution in accordance with *IDAPA 58.01.01.776.01*

Air Pollution Emergency Rule

IPC will comply the Air Pollution Emergency Rule in *IDAPA 58.01.01.550-562*.

Excess Emissions

Any exceedances of any emission rate, visible emission or operating requirement will be reported in accordance with *IDAPA 58.01.01.130-136*.

Reports and Certifications

All periodic reports and certifications required by permit shall be submitted to IDEQ within 60 days of the end of each quarter. All requests, reports, applications, submittals, and other communications applicable to *40 CFR Part 60 NSPS* shall be submitted to EPA Region 10. Copies of this information shall also be submitted to IDEQ.

9.4 COMPLIANCE CERTIFICATION STATEMENT

IPC will submit the following compliance certification statement with all reports and notifications

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

26. Attachment 12 – BMPR Semiannual Report – First Quarter, 2011

July 19, 2011

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706

EPA Region 10
Air Operating Permits OAQ-107
1200 Sixth Ave
Seattle, WA 98101

Subject: Idaho Power Company
Bennett Mountain Power Plant
Tier I Semiannual Report (1st Half 2011)
Permit # T1-2008.0164

Dear Sir:

Enclosed is the Tier I Semiannual Report for the reporting period of 01/01/2011 – 06/30/2011. Included in the report are the Semiannual Cover Sheet (Form AQ-C4), the Semiannual Monitoring Table (Form AQ-C5), and the Semiannual Deviation Summary Table (AQ-C3). Also included in this submittal is the Continuous Emissions Monitoring System summary report.

The following information is submitted for Bennett Mountain Power Plant CT01. The intent of this information is to provide data relevant to the compliance status of the combustion turbine.

Table 1: Summary of the rolling 12-month emissions emitted from the Bennett Mountain Power Plant combustion turbine.

	Regulated Parameters	Status
CT01	Sulfur Dioxide Emissions (SO ₂) Total Emissions (Rolling 12 Month)	0.1 Tons (In Compliance)
	Nitrogen Oxide Emissions (NO _x) Total Emissions (Rolling 12 Month)	18.25 Tons (In Compliance)
	Carbon Monoxide Emissions (CO) Total Emissions (Rolling 12 Month)	4.93 Tons (In Compliance)
	Opacity	In Compliance

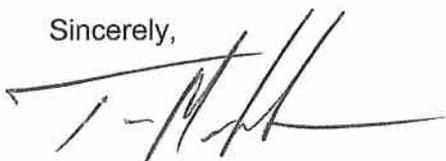
Table 2: Operating Hours (12-Month Rolling)

Unit	Hours
CT01	364

NOTEWORTHY ITEMS

The plant operated during this period for system support and quality assurance checks. If you have any questions, please do not hesitate to contact me at 208-388-2426 or by email at tmahlum@idahopower.com.

Sincerely,



Trevor Mahlum
Facility Contact
Idaho Power Company

TIER I SEMIANNUAL REPORT

FORM AQ-C4

FACILITY INFORMATION

Facility/Permittee Name: Bennett Mountain Power Plant / Idaho Power Company
Co-Permittee Name(s): _____
Facility Location: Mountain Home, ID
AIRS Facility No.: 039-00025
Facility Contact: Trevor Mahlum Ph: 208-388-2426 Fax: 208-388-6902

PERMIT AND COMPLIANCE INFORMATION

Tier I Operating Permit No.: T1-2008.0164 Issuance Date: April 23, 2007
Tier I Operating Permit No.: _____ Issuance Date: _____
Compliance Reporting Period: From: 01/01/2011 To: 06/30/2011
Deviations Reported This Period? Yes No

List of Attachments: Semiannual Monitoring Table (Form AQ-C5) No. of Pages: 8
 Semiannual Deviation Summary Table (Form AQ-C3) No. of Pages: 1
 Other: Summary Report – CEMS (CO & NOx) No. of Pages: 3
CEMS Data Reports No. of Pages: 4
_____ No. of Pages: _____
_____ No. of Pages: _____
_____ No. of Pages: _____
_____ No. of Pages: _____

Certification of Truth, Accuracy, and Completeness (by Responsible Official)

I hereby certify that based on information and belief formed after reasonable inquiry, the statements and information contained in this and any attached and/or referenced document(s) are true, accurate, and complete in accordance with IDAPA 58.01.01.123-124.


Responsible Official Signature
VERN PORTER
Print or Type Responsible Official Name

V.P. DELIVERY ENGINEERING & OPERATIONS
Responsible Official Title

7-20-2011
Date

Co-Permittee Responsible Official Signature

Co-Permittee Responsible Official Title

Date

Print or Type Co-Permittee Responsible Official Name

TIER I SEMIANNUAL DEVIATION SUMMARY TABLE

FORM AQ-C3

Facility/Permittee Name: Bennett Mountain Power Plant / Idaho Power Company Tier I Operating Permit No.: T1-2008.0164
 Facility Location: Mountain Home, Idaho Issuance Date: April 23, 2007
 AIRS Facility No.: 039-00025 Compliance Reporting Period: 01/01/2011 to 06/30/2011

1 No.	2 Permit Condition	3 Emissions Unit	4 Deviation	5 Time Began		6 Time Ended		7 Date DEQ Notified	8 Cause	9 Corrective Action & Preventative Measures	10 Attachment
				Date	Hour	Date	Hour				
1											
2											
3											
4											
5											
6											
7											
8											

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

Facility/Permittee Name: Bennett Mountain / Idaho Power Company Tier I Operating Permit No.: T1-2008.0164
 Facility Location: Mountain Home, ID Issuance Date: April 23, 2007
 AIRS Facility No.: 039-00025 Compliance Reporting Period: 01/01/2011 – 06/30/2011

1 Permit Condition	2 Condition Title / Description	3 Comments
2	FACILITY WIDE CONDITIONS	
	<i>Fugitive Dust</i>	
2.1	All reasonable precautions shall be taken to prevent PM from becoming airborne.	Facility driving and parking areas are paved. All other areas of the facility are covered with gravel.
2.2	The permittee shall monitor and maintain records of the frequency and the methods used to reasonably control fugitive dust emissions.	All fugitive dust emissions are controlled by engineering controls. No other methods were used during this period to control fugitive emissions.
2.3	The permittee shall maintain records of all fugitive dust complaints received.	Records are maintained at the facility. No complaints have been received during this reporting period.
2.4	The permittee shall conduct a quarterly facility wide inspection of potential sources of fugitive dust emissions, during daylight hours and under normal operating conditions.	Quarterly inspections are performed and records are maintained at the facility. All fugitive dust emissions have been reasonable controlled during the reporting period.
	<i>Odors</i>	
2.5	The permittee shall maintain records of all odor complaints received.	All applicable records are maintained at the facility. No odor complaints have been received during this reporting period.
2.6	Reserved	
	<i>Visible Emissions</i>	
2.7	The permittee shall not discharge any air pollutant to the atmosphere for a period of 3 minutes or greater in any 60-minute period with opacity of 20% or greater.	The facility had no emissions greater than 20% opacity during the reporting period.
2.8	The permittee shall conduct a quarterly facility wide inspection of the potential sources of visible emissions, during daylight hours and under normal operating conditions.	Quarterly inspections are performed on a "see/no see" basis and records are maintained at the facility. All visible emissions have been reasonably controlled during the reporting period.
	<i>Excess Emissions</i>	

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
2.9.3.1	The owner or operator shall notify DEQ of any upset, breakdown, or safety event that results in excess emissions.	All applicable excess emission notifications are maintained at the facility. No excess emissions occurred during the reporting period.
2.9.4	A written report for each excess emission event shall be submitted to DEQ by the owner or operator no later than 15 days after the beginning of such an event.	All applicable excess emission reports are maintained at the facility. No excess emissions occurred during the reporting period.
2.9.5	The owner or operator shall maintain excess emission records at the facility for the most recent 5 calendar year period.	All excess emission event records are maintained at the facility for a minimum of five years. No excess emissions occurred during the reporting period.
2.9.5.1	An excess emission file for each emissions unit or piece of equipment containing copies of all reports submitted to DEQ.	A file containing all excess emission events are maintained at the facility by emissions unit. No excess emissions occurred during the reporting period.
2.9.5.2	Copies of all startup, shutdown, and scheduled procedures and upset, breakdown, or safety preventative maintenance plans developed by owner and all records necessary to demonstrate compliance.	Equipment O&M manuals and turbine operating procedures are maintained onsite.
2.10	<i>Fuel Burning Equipment</i> Permittee shall not discharge PM to the atmosphere from any fuel burning equipment in excess of 0.015 gr/dscf of effluent @ 3% O2 by volume.	The fuel heater operates exclusively on natural gas. (See PTC P-030060 Statement of Basis, Section 5.3)
2.11	<i>Open Burning</i> The permittee shall comply with the Rules for Control of Open Burning.	No open burning was conducted at the facility for the reporting period.
2.12	<i>Renovation/Demolition</i> The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities.	No applicable renovation or demolition activities occurred at the facility during the reporting period.
2.13	<i>Regulated Substances for Accidental Release Prevention</i> An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process shall comply with the CAPP.	The facility does not meet any threshold quantities of a regulated substance.
2.14	<i>Air Stagnation Advisory Days</i> For all affected units, the permittee shall comply with IDAPA during any air pollution emergency episode.	No air pollution emergency episodes occurred during the reporting period.
	<i>Performance Testing</i>	

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
2.15	The permittee will provide notice of intent to test.	A testing protocol and notification was submitted to DEQ prior to the annual RATA.
2.16	<i>Monitoring and Recordkeeping</i> The permittee shall maintain sufficient records to assure compliance with all the terms and conditions of the operating permit.	All monitoring records and support information is maintained at the facility for a minimum of five years.
2.17	<i>Reports and Certifications</i> All periodic reports required shall be submitted to DEQ within 30 days of the end of each specified reporting period.	Semiannual reports are submitted within 30 days of the end of the reporting period.
3	EMISSIONS UNIT NO.1 – ONE COMBUSTION TURBINE	
3.1	<i>Permit Limits / Standard Summary</i> Permittee shall not discharge any gases from the turbine containing NOx emissions in excess of 111 ppm. [STD=0.0075*(14.4/Y)+F]	NOx emissions from the combustion turbine did not exceed the permit limit during the reporting period. All hourly emissions data are archived on the CEMS DAHS.
3.2	Emissions from the combustion turbine shall not exceed 248.16 T/yr (NOx) and 248.29 T/yr (CO) based on any consecutive 12-month period.	12-month rolling emissions did not exceed the permit limits during the reporting period. Cumulative emissions from the turbine are archived in the CEMS DAHS. • 12-Month NOx – 18.25 Tons • 12-Month CO – 4.93 Tons
3.3	Emissions of PM shall comply with Permit Conditions 2.10 (Shall not exceed 0.015 gr/dscf @ 3% O2)	Emissions from the turbine were shown to comply with the grain loading standard in the original statement of basis (see PTC P-030060 Statement of Basis, Section 5.3; Issued to Mountain View Power)
3.4	Combustion turbine shall be fired exclusively on natural gas containing no more sulfur than 0.02 gr/dscf (2.0 gr/hscf)	Annual fuel analysis is performed IAW 40 CFR 75, Appendix D, 2.3.1.4. Last fuel sample resulted in sulfur content of less than 0.032 gr/hscf (08/04/2010).
3.5	Permittee shall install, certify, operate, and maintain a NOx CEMS IAW 40 CFR 75 with an O2 diluent monitor and automatic DAHS.	NOx CEMS is installed and maintained IAW the requirements of 40 CFR 75.
3.7	The permittee shall use the methodologies in Method 19 of 40 CFR 60, Appendix A to quantify the turbine exhaust flowrate.	Turbine flowrate is quantified using the heat input and the Fd factor of 8.710 dscf/MMBtu from Table 19-1 (40 CFR 60, Appendix A, Method 19).
3.8	<i>Monitoring and Recordkeeping Requirements</i> The permittee shall monitor and record the amount of natural gas combusted in the turbine on an hourly basis.	Hourly natural gas fuel records for the combustion turbine are maintained in the CEMS and the plant DCS archives. All records are maintained for a minimum of five years.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
3.9	For NO _x , CEMS, the permittee shall fully comply with all monitoring requirements by 40 CFR 72.9(b); 40 CFR 75, Subpart F; and 40 CFR 60, Appendix F	The facility complies with all monitoring and recordkeeping requirements. All records are maintained for a minimum of five years.
3.10	The permittee shall perform RATAs on the CO CEMS.	A RATA was performed on 07/29/10. All records are maintained for a minimum of 5 years.
3.11	The permittee shall comply with the fuel sulfur and nitrogen monitoring provisions of 40CFR60.334(h) and 40CFR75 Appendix D.	The facility complies with fuel sulfur monitoring provisions. Nitrogen monitoring is not required since the facility does not claim an F-value for fuel bound nitrogen IAW 40 CFR 60.332. All records are maintained for a minimum of 5 years. Refer to fuel analysis in the RATA report.
3.12	The permittee shall monitor and record the information listed in the permit for the combustion turbine.	Monthly and 12-month emission records are maintained at the facility. NO _x 12-Month: 18.25 Tons CO 12-Month: 4.98 Tons
	<i>Reporting Requirements</i>	
3.13	Shall submit a testing protocol to DEQ for certification/recertification of the NO _x and CO CEMS at least 30 days prior to the test date.	Protocols are submitted to DEQ prior to testing.
3.14	All CEMS data used for reporting purposes shall meet the QA procedures in 40 CFR 60, Appendix F	CEMS maintenance is IAW with the requirements of 40 CFR 60, Appendix F
3.15	RATA reports shall be submitted to DEQ within 60 days of the test.	RATA reports are submitted to DEQ within the required time frame.
3.16	Permittee shall comply with the reporting requirements in 40 CFR 75, Subpart G. In addition, written reports for all certification/recertification shall be submitted within 60 days of testing.	All notifications and submittals are done IAW the requirements listed in 40 CFR 75, Subpart G. Test reports are submitted to DEQ following all certification/recertification testing.
3.17	Excess emissions of NO _x are defined as any period in which the fuel-bound nitrogen of the fuel exceeds the maximum nitrogen content allowed by the fuel bound nitrogen allowance used during the performance test required by 40 CFR 60.8.	Fuel-bound nitrogen content is not required since the facility does not claim an allowance for fuel-bound nitrogen. The CEMS is used to identify excess emissions of NO _x (See PTC P-050002 Statement of Basis, Section 6.1)
3.18	Permittee shall submit a report of all excess emissions to SO ₂ to the DEQ IAW 40 CFR 60.7(b)-(d). Excess emissions are defined in 40 CFR 60.334(c)(2) as any period when the sulfur content of the fuel exceeds 0.8% by weight.	The facility is operated exclusively on pipeline quality natural gas. Annual fuel samples are taken IAW 40 CFR 75, Appendix D, 2.3.1.4 to verify the sulfur content meets the definition of pipeline natural gas in 40 CFR 72.2. The last sample shows the sulfur content of less than 0.032 gr/hscf analyzed on 8/4/10.
4	EMISSIONS UNIT NO.2 – ONE FUEL HEATER	
	<i>Permit Limits / Standard Summary</i>	
4.1	The emissions from the fuel heater shall not exceed 0.84 T/yr (NO _x) and 0.71 T/yr (CO) based on any consecutive 12-month period.	The annual emission limits are complied with by not exceeding the fuel throughput restrictions of Permit Condition 4.4 (See PTC P-030060 Statement of Basis, Section 6.3).
4.2	PM emissions shall not exceed 0.015 gr/dscf @ 3% O ₂ .	The fuel heater operates exclusively on natural gas. (See PTC P-030060 Statement of Basis, Section 5.3)
	<i>Operating Requirements</i>	

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
4.3	The fuel heater shall be fired exclusively by natural gas. Natural gas shall not contain sulfur in excess of 0.02 gr/dscf [2.0 gr/hscf].	Fuel heater is operated only on natural gas.
4.4	The volume of natural gas combusted in the heater shall not exceed 16,878.613 cubic feet in any consecutive 12-month period.	Monthly meter readings are logged and a running 12-month total is calculated to ensure compliance with the fuel throughput requirement. Files are kept onsite.
	<i>Monitoring and Recordkeeping Requirements</i>	
4.5	The permittee shall monitor and record the total volume of natural gas combusted in scf per calendar month and scf per consecutive 12-month period.	Monthly and 12-month fuel heater fuel usage is maintained at the facility. All records are maintained for a minimum of 5 years.
5	INSIGNIFICANT ACTIVITIES	
5.1	There are not monitoring, recordkeeping, or reporting requirements beyond those required in the facility wide conditions.	
6	TITLE IV ACID RAIN PERMIT	
6.1	<i>Statement of Basis</i> DEQ issued the Acid Rain Permit IAW IDAPA 58.01.01 and Titles IV and V of the CAA.	
6.2	<i>Sulfur Dioxide Allowance Allocations and Nitrogen Oxides Requirements</i> Permittee is required to obtain SO2 allowances not less than the total annual emissions of SO2 for the previous calendar year from the unit IAW 40 CFR 72.9(c). The unit is not subject to the NOx emission limitations under 40 CFR 76.	Facility maintains SO2 allowances in excess of the total annual SO2 emissions. SO2 allowances are tracked using the EPA's CAMD system.
6.3	<i>Comments, Notes, and Justifications</i> The Phase II Acid Rain Permit incorporates by reference the definitions and terms of 40 CFR 72.2	
6.4	<i>Compliance with Permit Application</i> Permittee shall comply with the standard requirements and special provisions set forth in the Acid Rain Permit Application.	All requirements of the Acid Rain Permit application have been complied with.
6.5	<i>Permit Application</i> A copy of the Acid Rain Permit application is contained in the appendix of the Tier 1 permit.	
7	TIER 1 OPERATING PERMIT GENERAL PROVISIONS	

TIER I SEMI-ANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
7.1	<i>General Compliance</i> Permittee shall comply with all conditions of the permit.	
7.2	Halting or reducing permitted activity to maintain compliance with the permit shall not be a defense from an enforcement action.	
7.3	Permittee shall submit supplementary facts or correct information if incorrect information has been submitted.	
	<i>Reopening</i>	
7.4	Permit may be revised, reopened, revoked and reissued, or terminated for cause.	
7.5	Filing of a request by the permittee to revise, revocation and reissuance, termination, or notification of planned changes or noncompliance does not stay the permit conditions.	
	<i>Property Rights</i>	
7.6	Permit does not convey any property rights	
	<i>Information Requests</i>	
7.7	Permittee shall furnish information requested by DEQ.	
7.8	Upon request, permittee shall furnish DEQ copies of records required to be kept by the permit.	All information requests by DEQ are fulfilled on a timely basis
	<i>Severability</i>	
7.9	Provisions of the permit are severable.	
	<i>Changes Requiring Permit Revision or Notice</i>	
7.10	Permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.	No construction or modifications to the facilities commenced during the reporting period.
7.11	Any changes may require a permit revision if subject to requirements under Title IV of the CAA, Title I of the CAA, or IDAPA 58.01.01.	
	<i>Federal and State Enforceability</i>	
7.12	Unless specifically identified as "State-Only" provision, all terms and conditions in the permit are enforceable by both the DEQ and United States.	
7.13	Provisions identified as "State-Only" are only enforceable under state law.	
	<i>Inspection and Entry</i>	
7.14	Upon presentation of credentials, DEQ shall be allowed to enter the premises, have access to records, inspect facilities, and sample/monitor parameters to ensure compliance.	DEQ is granted access to all permitted facilities and associated records.
	<i>New Requirements During Permit Term</i>	

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
7.15	Permittee shall comply with applicable requirements that become effective during the permit term on a timely basis	
	<i>Fees</i>	
7.16	Owner/operator shall pay annual registration fees to DEQ IAW IDAPA 58.01.01	Registration fees are paid annually.
	<i>Certification</i>	
7.17	All documents submitted to DEQ shall be certified IAW IDAPA 58.01.01.123-124.	Certification and compliance documents submitted to the DEQ are certified by the Responsible Official.
	<i>Renewal</i>	
7.18	Owner/operator shall submit a permit renewal application at least 6 months prior to expiration, but no more than 18 months prior to expiration. If a permit renewal application is submitted, but DEQ fails to issue or deny the renewal permit prior to expiration of the existing permit, then the existing permit shall stay in effect until the renewal is either issued or denied.	
	<i>Permit Shield</i>	
7.19	Compliance with the terms and conditions of the Tier 1 permit shall be deemed compliance with any applicable requirements as of the date of issuance.	
	<i>Compliance Schedule and Progress Reports</i>	
7.20	Permittee shall comply with the compliance schedule and comply with requirements that become effective during the term of the permit	
	<i>Periodic Compliance Certification</i>	
7.21	Permittee shall submit compliance certifications during the term of the permit for each emissions unit.	
	<i>False Statements</i>	
7.22	No person shall knowingly make false statements, representation, or certification required under the permit	
	<i>No Tampering</i>	
7.23	No person shall knowingly render inaccurate any monitoring device or method required under the permit.	
	<i>Semiannual Monitoring Reports</i>	
7.24	Permittee shall submit reports of any required monitoring at least every 6 months with all deviations clearly identified.	Semiannual reports are submitted to the DEQ and EPA IAW 40 CFR 60
	<i>Reporting Deviations and Excess Emissions</i>	
7.25	Permittee shall promptly report all deviations from permit requirements.	All deviations from the permit conditions are promptly reported to the DEQ.

TIER I SEMIANNUAL MONITORING TABLE

FORM AQ-C5

1 Permit Condition	2 Condition Title / Description	3 Comments
7.26	<i>Permit Revision Not Required</i> No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit	
7.27	<i>Emergency</i> An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation.	

**NSPS SEMIANNUAL SUMMARY REPORT, 40 CFR 60.7(d)
CONTINUOUS EMISSION MONITOR SYSTEM**

POLLUTANT: SO₂ NO_x TRS H₂S **CO** Opacity O₂

REPORTING PERIOD DATES: FROM: 01/01/11 TO: 06/30/11

COMPANY: Idaho Power Company – Bennett Mountain Power Plant

EMISSION LIMITATION: 248.29 Tons/Year (Based on consecutive rolling 12-month period)

ADDRESS: 2750 NE Industrial Way , Mountain Home, ID 83647

MONITOR MANUFACTURER AND MODEL NUMBER: Advanced Pollution Instrumentation
Model: 300

DATE OF LATEST CEM CERTIFICATION OR AUDIT: 07/10

PROCESS UNIT DESCRIPTION: CT01

TOTAL SOURCE OPERATING HOURS IN REPORTING PERIOD¹: 96

HOURS IN PERIOD 4344 CT DOWNTIME HOURS: 4248

EMISSION DATA SUMMARY¹

1. DURATION OF EXCESS EMISSIONS HOURS IN REPORTING PERIOD DUE TO:
 - a. Other Known Causes 0
 - b. Startup or Shutdown 0
 - c. Control Equipment 0
 - d. Process Problems 0
 - e. Unknown Causes 0
2. TOTAL DURATION OF EXCESS EMISSIONS 0
3. TOTAL DURATION OF EXCESS EMISSIONS X (100)/[TOTAL SOURCE OPERATING] 0%

CEMS PERFORMANCE SUMMARY

1. CEM DOWNTIME HOURS IN REPORTING PERIOD DUE TO:
 - a. Other Known Causes 0
 - b. Monitor Equipment Malfunctions 1
 - c. Non-Monitor Equipment Malfunctions 1
 - d. Quality Assurance or Calibration 6
 - e. Unknown Causes 0
2. TOTAL CEM DOWNTIME HOURS 8
3. [TOTAL CEM DOWNTIME HOURS] X (100)/[TOTAL SOURCE OPERATING TIME] 8.3%

¹For Opacity, record all times in minutes. For gases, record all times in hours.
07/21/94:eForm\1AStaNOx.cjm

**NSPS SEMIANNUAL SUMMARY REPORT, 40 CFR 60.7(d)
CONTINUOUS EMISSION MONITOR SYSTEM**

POLLUTANT: SO₂ **NO_x** TRS H₂S CO Opacity O₂

REPORTING PERIOD DATES: FROM: 01/01/11 TO: 06/30/11

COMPANY: Idaho Power Company – Bennett Mountain Power Plant

EMISSION LIMITATION: 248.16 Tons/year (Based on any consecutive rolling 12-month period)
111 ppm (4-hr average)

ADDRESS: 2750 NE Industrial Way, Mountain Home, ID 83647

MONITOR MANUFACTURER AND MODEL NUMBER: Advanced Pollution Instrumentation
Model: 200AH

DATE OF LATEST CEM CERTIFICATION OR AUDIT: 7/10

PROCESS UNIT DESCRIPTION: **CT01**

TOTAL SOURCE OPERATING HOURS IN REPORTING PERIOD¹: 96

HOURS IN PERIOD 4344 CT DOWNTIME HOURS 4248

EMISSION DATA SUMMARY¹

1. DURATION OF EXCESS EMISSIONS HOURS IN REPORTING PERIOD DUE TO:
 - a. Other Known Causes 0
 - b. Startup or Shutdown 0
 - c. Control Equipment 0
 - d. Process Problems 0
 - e. Unknown Causes 0
2. TOTAL DURATION OF EXCESS EMISSIONS 0.00
3. TOTAL DURATION OF EXCESS EMISSIONS X (100)/[TOTAL SOURCE OPERATING] 0.0%

CEMS PERFORMANCE SUMMARY

1. CEM DOWNTIME HOURS IN REPORTING PERIOD DUE TO:
 - a. Other Known Causes 0
 - b. Monitor Equipment Malfunctions 0
 - c. Non-Monitor Equipment Malfunctions 1
 - d. Quality Assurance or Calibration 6
 - e. Unknown Causes 0
2. TOTAL CEM DOWNTIME HOURS 7
3. [TOTAL CEM DOWNTIME HOURS] X (100)/[TOTAL SOURCE OPERATING TIME] 7.3%

¹For Opacity, record all times in minutes. For gases, record all times in hours.
07/21/94:eForm\1AStaNOx.cjm

XML EDR & Emission Totals

Select source

Unit "CT01" (EDR: Unit "CT01")

Select Quarter

Start Date Time : 1/1/2011 00:00 Previous Current

End Date Time : 3/31/2011 23:00 Select Quarter Apply

Emission Totals for selected Stack/Unit/Pipe & Time Range

Select EDR Type

- Emission EDR
- Certification EDR
- Monitoring Plan EDR
- ALL

Parameter	Value	Units
SO2 (mass)	0.0	tons
CO2 (mass)	3,105.5	tons
NOx (rate)	0.082	#/mmBtu
NOx (mass)	0.0	tons
Heat Input	52,253.3	mmBtu
Load	5,204.0	MWhrs
Operating Time	34.01	hours
# of Hours in which Operation occurred	38	[count]

One Step XML EDR

Generate XML EDR Only
(no Hourgen/Hours sub)

XML EDR & Emission Totals

Select source

Unit "CT01" (EDR: Unit "CT01")

Select Quarter

Start Date Time : 4/1/2011 00:00 Previous Current
End Date Time : 6/30/2011 23:00 Select Quarter Apply

Emission Totals for selected Stack/Unit/Pipe & Time Range

Select EDR Type

- Emission EDR
- Certification EDR
- Monitoring Plan EDR
- ALL

Parameter	Value	Units
SO2 (mass)	0.0	tons
CO2 (mass)	5,401.7	tons
NOx (rate)	0.073	#/mmBtu
NOx (mass)	0.0	tons
Heat Input	90,892.7	mmBtu
Load	9,404.0	MWhrs
Operating Time	64.56	hours
# of Hours in which Operation occurred	73	[count]

One Step XML EDR

Generate XML EDR Only
(no Hourgen/Hours_{sub})

Episode List Report
 Version 62.0
 Bennett Mountain Power Project
 1015 W. Hays Street
 Boise, Idaho, 83702
 from 1/1/2011 00:00 to 6/30/2011 23:59
 Generated: 7/15/2011 17:10
 Types: INVALID

Pollutant: NOx Episode: NOx Analyzer Downtime

Incident Start	Incident End	Type	Reason	Action
02/02/11 07:00 - 02/02/11 09:59		6: Invalid - In Cal	In calibration	No Action Needed.
04/03/11 02:00 - 04/03/11 02:59		9: Invalid - Untouched/CommFail	Communication Failure	No Action Taken
06/06/11 13:00 - 06/06/11 15:59		6: Invalid - In Cal	In calibration	No Action Taken

Reported Operating Time: 4344.0 Hours

TOTAL DURATION 7.00 Hours

6: Invalid - In Cal = 6.00 Hours
 252: In calibration = 6.00 Hours
 9: Invalid - Untouched/CommFai = 1.00 Hours
 23: Communication Failure = 1.00 Hours

Pollutant: CO Episode: CO Analyzer Downtime

Incident Start	Incident End	Type	Reason	Action
02/02/11 07:00 - 02/02/11 09:59		6: Invalid - In Cal	In calibration	No Action Needed.
03/04/11 07:00 - 03/04/11 07:59		8: Invalid - DataErr/HWFail	In calibration	Recalibrated Analy
04/03/11 02:00 - 04/03/11 02:59		9: Invalid - Untouched/CommFail	Communication Failure	No Action Taken
06/06/11 13:00 - 06/06/11 15:59		6: Invalid - In Cal	In calibration	No Action Taken

Reported Operating Time: 4344.0 Hours

TOTAL DURATION 8.00 Hours

6: Invalid - In Cal = 6.00 Hours
 252: In calibration = 6.00 Hours
 8: Invalid - DataErr/HWFail = 1.00 Hours
 252: In calibration = 1.00 Hours
 9: Invalid - Untouched/CommFai = 1.00 Hours
 23: Communication Failure = 1.00 Hours

Pollutant: O2 Episode: O2 Analyzer Downtime

Incident Start	Incident End	Type	Reason	Action
04/03/11 01:00 - 04/03/11 02:59		9: Invalid - Untouched/CommFail	Communication Failure	No Action Taken
04/27/11 12:00 - 04/27/11 13:59		9: Invalid - Untouched/CommFail	Communication Failure	No Action Taken

Reported Operating Time: 4344.0 Hours

TOTAL DURATION 4.00 Hours

9: Invalid - Untouched/CommFai = 4.00 Hours
 23: Communication Failure = 4.00 Hours

Source Operations Report

Version 62.0

Channel: diFlameOn

Episode: DAHS Downtime / Process Off

Bennett Mountain Power Project

1015 W. Hays Street

Boise, Idaho, 83702

from 1/1/2011 00:00 to 6/30/2011 23:59

Generated: 7/15/2011 17:10

Outage Start	Outage End	Downtime dd/hh:mm	Reason	Action
01/01/11 00:00 - 01/07/11 14:37	6/14:37	Process Down	No Action Taken	
01/07/11 14:39 - 01/31/11 07:38	23/17:00	Process Down	No Action Taken	
01/31/11 13:34 - 02/01/11 07:00	17:27	Process Down	No Action Taken	
02/01/11 12:59 - 02/02/11 05:27	16:29	Process Down	No Action Taken	
02/02/11 12:14 - 02/04/11 07:01	1/18:47	Process Down	No Action Taken	
02/04/11 11:57 - 03/04/11 06:47	27/18:51	Process Down	No Action Taken	
03/04/11 12:48 - 03/28/11 07:03	23/18:15	Process Down	No Action Taken	
03/28/11 11:31 - 04/03/11 01:58	5/14:28	Process Down	No Action Taken	
04/03/11 02:59 - 04/12/11 06:50	9/03:51	Process Down	No Action Taken	
04/12/11 12:22 - 04/27/11 09:24	14/21:03	Process Down	No Action Taken	
04/27/11 13:26 - 05/27/11 10:35	29/21:10	Process Down	No Action Taken	
05/27/11 17:06 - 06/06/11 11:31	9/18:26	Process Down	No Action Taken	
06/06/11 11:36 - 06/06/11 11:54	00:19	Process Down	No Action Taken	
06/06/11 16:53 - 06/15/11 13:50	8/20:58	Process Down	No Action Taken	
06/15/11 18:32 - 06/21/11 13:08	5/18:36	Process Down	No Action Taken	
06/21/11 23:08 - 06/22/11 11:48	12:41	Process Down	No Action Taken	
06/22/11 21:40 - 06/27/11 13:01	4/15:22	Process Down	No Action Taken	
06/27/11 21:54 - 06/28/11 10:48	12:54	Process Down	No Action Taken	
06/28/11 21:57 - 06/30/11 23:59	2/02:02	Process Down	No Action Taken	

Outage Summary

=====

Total Times	Days/Hr:Min
Process Up Time	4/04:37
Process Down Time	176/19:22
Data Acquisition Down Time	00:00
Total Time Reported	181/00:00

Time percentages	
% Process Up Time	2.3% Process Up Time / Time Reported
% Process Down Time	97.7% Process Down Time / Time Reported
% Data Acquisition Down Time	0.0% Data Acquisition Down Time / Time Reported

Process Availability = 100.0% Process Up Time / (Process Up Time + Data Acquisition Down Time)

Calculate maximum additional Data Acquisition Down Time permitted for the remainder of the Quarter:

Availability Base (Uptime + Downtime + Time left in Quarter) = 181/00:00
 - 90% Availability * Availability Base = - 162/21:35

Maximum Data Acquisition Down Time permitted for the Quarter = 18/02:24
 - Time Data Acquisition was already down for the Quarter = - 00:00

Maximum Data Acquisition Down Time permitted for the remainder of the Quarter = 18/02:24