IDAHO POWER®
An IDACORP Company

Idaho Power Company
Bennett Mountain Power Project

Application for a Tier 1 Operating Permit Renewal for IDEQ OP Number: T1-2011.0129

RECEIVED
JUL 11 2016
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A Q PROGRAM

RECEIVED
JUL 11 2016
By

July 8th, 2016

Table of Contents

1 Introduction 3
2 General Information 3
3 Overview 4
4 Completed Department of Environmental Quality Permit Application Forms . 4
5 Requested Changes to the Operating Permit 5
5.1 Alternative CO CEMS QA/QC Requirements 5
5.2 Alternate Stratification Tests Requirements 5
5.3 Request for Administrative Permit Amendment 6
6 Maps 6
7 Source Description 10
8 Process Flow Diagrams 11
9 NSPS, and NESHAP, and New Applicable Federal Requirements Review 16
9.1 New Source Performance Standards (NSPS) Review, 40 CFR 60 16
9.2 National Emission Standards for Hazardous Air Pollutants (NESHAPS) Review, 40 CFR 63 16
9.3 Mandatory Green House Gas Reporting Rule, 40 CFR 98 17
10 Emission Source Specifications 17
10.1 Facility Criteria Pollutant Potential to Emit 18
10.2 Hazardous Air Pollutant and Toxic Air Pollutant Potential to Emit 18
10.3 Air Quality Modeling 19
10.4 Facility Carbon Dioxide Equivalent Estimate 19
10.5 Combustion Turbine 20
10.6 Fuel Gas Heater 21
10.7 Emergency Diesel Generator 21
11 Compliance Assurance Monitoring 21
12 Insignificant Activities 22
13 Permit Shield Request 22
14 Incorporations by Reference 22
15 Compliance Certification and Certificate 23

1 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.

2 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:	Mike Williams Power Production Manager (208) 388-6321
Facility Contact:	Jeremy Jensen Mechanical Engineer (208) 388-5843

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:

Jeremy Jensen
Idaho Power Company – Mechanical Engineer
1221 W Idaho Street
Boise, Idaho 83702
Phone: (208) 388-5843
Fax: (208) 433-2838
E-mail: jjensen1@idahopower.com

3 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 12).

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 DEQ 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 4).

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 T1-2011.0129. The Bennett Mountain Power Project originally operated under Tier 1 Operating Permit No. T1-060006, issued April 23, 2007 and then operated under T1-2008.164. 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 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

5 Requested Changes to the Operating Permit

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

5.1 Alternative CO CEMS QA/QC Requirements

The simple cycle gas turbines at Evander Andrews are currently operated to meet peak electrical loads. As of December 31th, 2015 the annual (12 month rolling) operating hours were 1,150 hrs for CT01. IPC would like to request that CO CEMS data meet the quality assurance procedures in 40 CFR Part 60 Appendix F except IPC:

- be allowed to omit a CO CGA during any calendar quarter in which the unit operates less than 168hrs,
- be required to conduct a CGA, regardless of operation, at least once every four calendar quarters,
- be allowed to conduct a CO RATA every four operating quarters (quarter with more than 168 fired hrs),
- be required to conduct a CO RATA, regardless of operation, at least once every eight calendar quarters, and
- be allowed to omit a CO CGA and 7-day calibration drift on any CO span less than 30ppm.

IPC believes similar requests have been made and granted with the exception of the last bullet. A similar request has been included as **Attachment 10**. CT1 may have 1-3 operating quarters per year. IPC is making this request to align the CO quality assurance requirements with the NO_x quality assurance requirements. IPC believes that an exemption for a CO CGA on span less than 30ppm is reasonable for the same reasons that the exemption exists for NOx spans less than 30ppm under Part 75. Additionally, IPC believes that the 7-day calibration drift exemption is reasonable for the same reason that the exemption exists for NOx spans less than 50ppm. IPC is making this request to avoid starting the units for testing only and to avoid the additional emissions generated during testing.

5.2 Alternate Stratification Tests Requirements

The simple cycle gas turbine at Bennett Mountain Power Plant has a dedicated rectangular stack with the only stack gas being generated by the corresponding turbine. Stratification tests conducted during annual RATA testing show that the stack gases are not stratified. The stack gases have a single source. The source is tested at the same load, produces the same pollutant concentrations and has the same exhaust flow rate. IPC would like to request a stratification test be valid for 5 years when the stack gas source and source operation remains constant. IPC proposes that the reference method sampling location be based on the most recent stratification test.

5.3 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 Dale Koger to Mike Williams. 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. 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**.

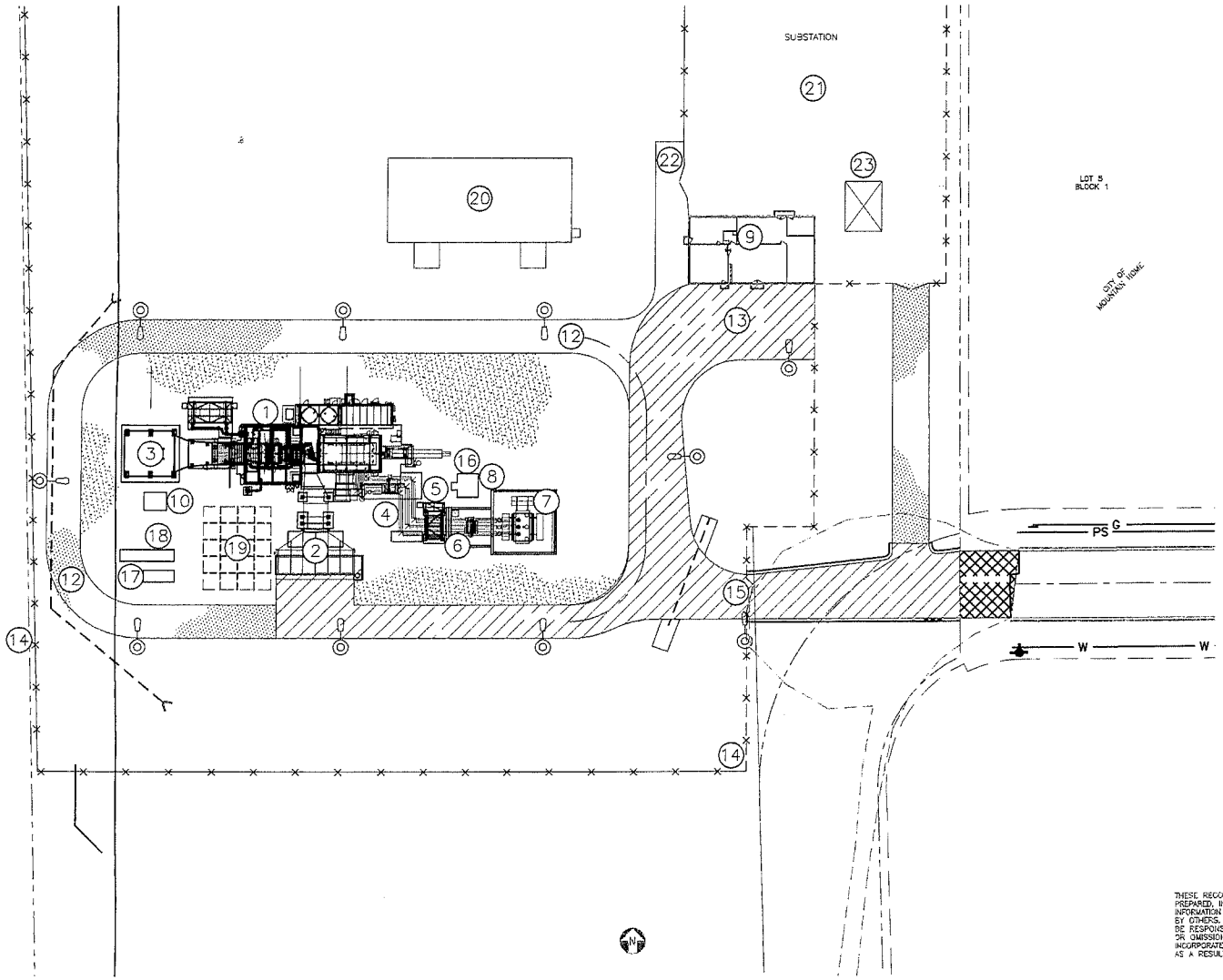
6 Maps

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

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

Figure 6.1: Regional Location Map

Figure 6.2: 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

3278+ 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.

GRAPHIC SCALE 1"=30'
30' 0 30' 60'

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.
501 South First Street Abilene, TX 79602
(325)670-0550 Fax (325)670-9672

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
C20-02

file: C:\IC-WORKSPACE\EMB0260\M-SEDONA,D-ENGVAULT\GENDESDOC\20\BMPR\55\315500B.DWG saved: 04/07/09 15:00 by: EMB0260

Figure 6.3: Facility Plot Plan

7 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 (O_2). 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.

8 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

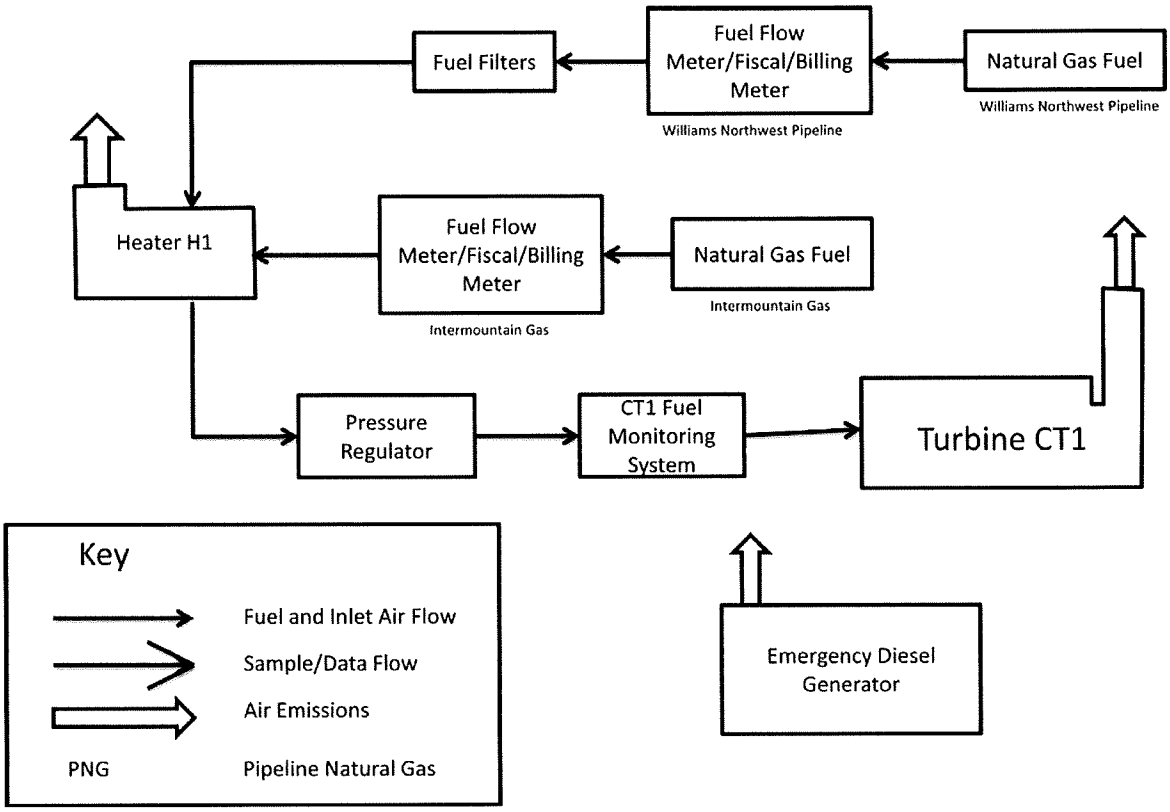
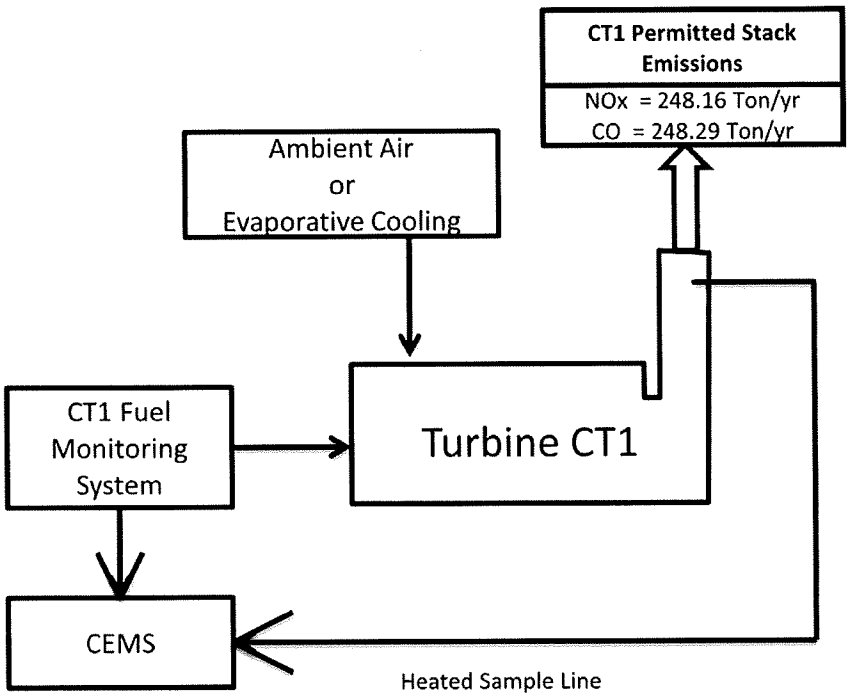


Figure 8.1: Facility-wide Process



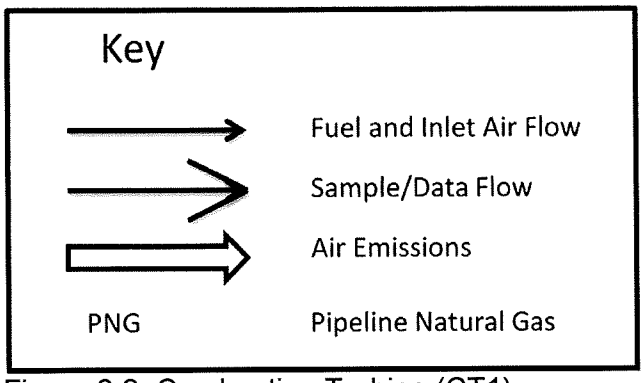


Figure 8.2: Combustion Turbine (CT1)

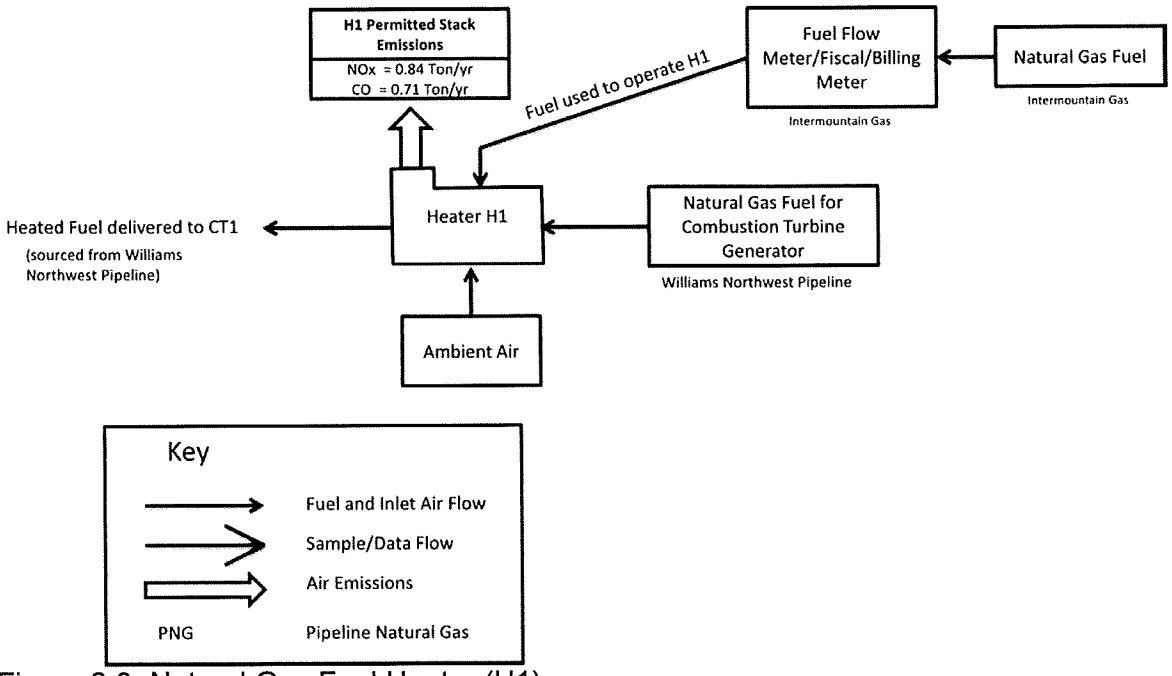


Figure 8.3: Natural Gas Fuel Heater (H1)

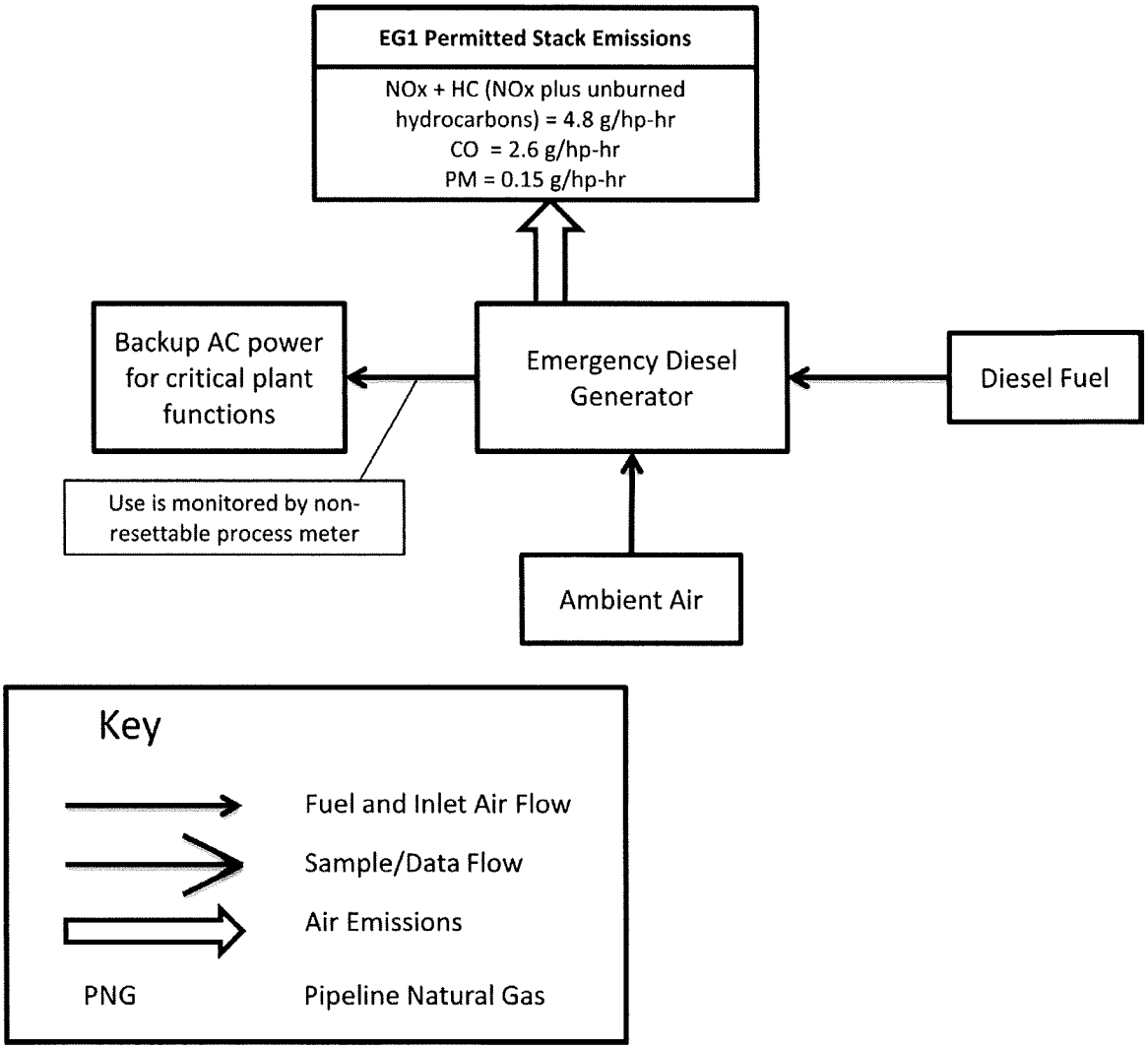


Figure 8.4: Emergency Diesel Generator (EDG)

9 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. An applicability analysis of the NSPS and NESHAP regulations is provided in this section in accordance with IDEQ Form FRA.

There are no new applicable new federal regulations that have become enacted since the last operating permit analysis was conducted.

9.1 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.

9.1.1 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.

9.1.2 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.

9.1.3 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.

9.2 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

YYYY sets NESHAP limits on Stationary Combustion Turbine Generators, and Subpart ZZZZ set NESHAP limits on Stationary Reciprocating Internal Combustion Engines. As outlined in Section 10, 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.

9.2.1 Subpart YYYY – National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

The requirements of 40 CFR 63, Subpart YYYY – 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 YYYY.

9.2.2 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)).

9.3 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.

10 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. T1-2011.0129 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.

10.1 Facility Criteria Pollutant Potential to Emit

The facility's criteria pollutant potential to emit estimate is provided in Table 10.1 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 3**. Emissions calculations for the combustion turbine and fuel gas heater are included in this application as **Attachment 7**.

Table 10.1: 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**

10.2 Hazardous Air Pollutant and Toxic Air Pollutant Potential to Emit

The facility wide hazardous air pollutant potential to emit estimate is provided in Table 10.2 below. Calculations for HAP emissions are included in this application as **Attachment 8**. The IDEQ toxic air pollutant (TAP) and hazardous air pollutant (HAP) screening levels are contained in IDAPA rules 58.01.01.585.

Table 10.2: Facility HAP Potential to Emit

HAP Summary	CT1	H1	EDG	Total Facility Emissions	CT1	H1	EDG	Total Facility Emissions
	lb/hr				Ton/yr			
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**
Formaldehyde	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**

10.3 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 P-050002. The modeling that was conducted demonstrated compliance with the NAAQS and the ACC for the facility.

10.4 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 CO_2 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 (CO_2e) 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 10.4 below.

Table 10.4: Facility CO_2 equivalent Potential to Emit

	Combustion Turbine (Ton/Year)	Fuel Gas Heater (Ton/year)	Emergency Diesel Generator (Ton/Year)
CO_2	574,574	692	570
CH4 [CO_2e]	10	3.73E-07	2.34E-02
N2O [CO_2e]	1	3.73E-08	4.67E-03
Total CO_2e	574,585	692	570
Is this source required to submit CO_2e estimates per 40 CFR Part 98?	Yes	Yes	No
Total Reportable CO_2e	**575,277**		

10.5 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 (SO_2) 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.

10.5.1 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)).

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

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

Y=9534 Btu/kW-hr (10.05 kJ/W-hr) (Performance Test Report, Attachment 2)
F=0.0 (40 CFR 60.332(a)(4))

10.5.2 SO2

The SO_2 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.

10.6 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.

10.7 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.

11 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)].

12 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))

13 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 8.19, be retained and incorporated into the renewed Tier I operating permit.

14 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. T1-2011.0129, issued March 23, 2012
- Tier I Operating Permit No. T1-2008.0164, issued November 20, 2008 - Superseded
- 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

15 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 and EPA on January 28, 2016 (Included as **Attachment 9**), 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: James Michael Williams

Title: Power Production Manager

Date: 7/8/2016

Attachment 1 – IDEQ Forms

Tier I Operating Permit Application Completeness Checklist

This checklist is designed to aid the applicant in submitting a complete Tier I permit application. In addition to the items in this checklist, information requested by DEQ during review of the application should be provided in accordance with IDAPA 58.01.01.314.12 and IDAPA 58.01.01.315.

1. General Facility Information

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

2. Applicable Equipment-Specific Application Forms

☒ Complete all applicable equipment-specific applications forms. For all forms listed below, please visit DEQ's website at www.deq.idaho.gov/permitting/air-quality-permitting/forms-checklists.aspx.

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 CBP (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 GI and CSTI (Tier I Operating Permit Application General Information and 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. Obsolete Permit Conditions

☒ Review all existing permit conditions or past requirements that had either been completed prior to issuance of the Tier I operating permit or were required by the Tier I operating permit to have been completed before the Tier I operating permit issuance date. For each permit condition determined to be obsolete, thoroughly explain the decision to omit an obsolete permit condition in the statement of basis.

Tier I Operating Permit Application Completeness Checklist

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. Compliance Schedules

☒ 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.

Tier I Operating Permit Application Completeness Checklist

12. 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.

13. 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).

14. 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.

15. 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.

16. Documents for Public Comment

☒ Copies of all compliance documents required by a Tier I operating permit, including but not limited to quality assurance plans, dust management plans, and operation and maintenance manuals, are to be included in the permit application for review during the public comment period.

17. 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.

18. 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

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

Cover Sheet for Air Permit Application – Tier I **Form CSTI**
Revision 5
08/28/08

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. ☐ Initial Tier I ☐ Tier I Administrative Amendment ☐ Tier I Minor Modification ☐ Tier I Significant Modification
☒ Tier I Renewal: Permit No.: T1-2011.0129 Date Issued: March 23, 2012

FORMS INCLUDED

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

Instructions for Form CSTI

This form is the cover sheet for an air quality permit application. It provides DEQ with basic information regarding the company and the proposed permitting action. This form helps DEQ efficiently determine whether the application is administratively complete. This form also provides the applicant with a list of forms available to aid the applicant to successfully submit a complete application.

Company Name, Facility Name, and Facility ID Number

1-3. Provide the name of your company, the name of the facility (if different than company name), and the facility identification (ID) number (Facility ID No.) in the boxes provided. The facility ID number is also known as the AIRS number or AIRS/AFS number (example: 095-00077). If you already have a permit, the facility ID number is located in the upper right hand corner of the cover page. The facility ID number must be provided unless your facility has not received one, in which case you may leave this box empty. **Use these same names and ID number on all forms**. This is useful in case any pages of the application are separated.

4. Provide a brief description of this permitting project in one sentence or less. Examples might be "Tier I Administrative Amendment to allow for the change of ownership of this facility" or "Tier I Significant Modification to change the existing monitoring, recordkeeping, and reporting requirements Boiler #1." **This description will be used by DEQ as a unique identifier for this permitting project, in conjunction with the name(s) and ID number referenced in 1-3.** You will need to put this description, using the exact same words, on all other forms that are part of this project application. This is useful in case any pages of the application are separated.

   If this Tier I is being issued as a result of a PTC issued pursuant to IDAPA 58.01.01.209.05.c, the source or modification may operate upon submittal for an administrative amendment issued pursuant to IDAPA 58.01.01.381.

Permit Application Type

5. Provide the reason you are submitting the permit application by checking the appropriate box and filling in the number and/or date if needed.

Forms Included

Check the "Included" box for each form included in this permit to construct application. If there are multiples of a form for multiple units of that type, check the box and fill in the number of forms in the blank provided.

The "N/A" box should only be checked if the form is absolutely unnecessary to complete the application. Additional information may be requested.

When complete, enclose the hardcopy application certified by a responsible official (as defined in IDAPA 58.01.01.006.94), and send to:

Air Quality Program Office – Application Processing
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706-1255

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

General Information - **Form GI**
4/7/16

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

FACILITY AND PERMIT INFORMATION

1. Facility Name:	2. Facility ID Number:
Bennett Mountain Power Plant	039-00025
3. Brief Project Description:	Electric Power Generation - Simply Cycle Gas Turbine
4. Facility Contact Name:	5. Facility Contact Title:
Mike Williams / Jeremy Jensen	Power Production Manager / Engineer
6. Facility Contact Telephone Number:	7. Facility Contact Email:
(208) 388-6321 / (208) 388-5843	mwilliams@idahopower.com / jjensen1@idahopower.com
8. Mailing address where permit will be sent (street/city/state/zip code):	9. Physical address of facility (if different than mailing address) (street/city/state/zip code):
1221 West Idaho Street Boise, Idaho 83702-5627	2750 North East Industrial Way Mountain Home, Idaho 83647
10. County Facility is located	Elmore
11. Is the equipment portable?	☐ No ☒ Yes
12. NAICS codes	Primary NAICS: 221112 / Secondary NAICS (if applicable):
13. Brief business description and principal product produced:	Power generation via 170MW simple cycle gas turbine fired exclusively with pipeline natural gas
14. Describe any contiguous or adjacent facility this company owns or operates:	NA
15. Permit Application Type. Provide Permit Number for existing permit. For a PTC, an application fee is required.	☐ Initial Permit to Construct (PTC) ☐ PTC Modification — PTC No. _____ Issued Date _____
	☐ Initial Tier II ☐ Tier II Modification ☐ Tier II Renewal — Tier II No. _____ Issued Date _____
	☐ Initial Tier I ☐ Tier I Administrative Amendment ☐ Tier I Minor Modification ☐ Tier I Significant Modification ☒ Tier I Renewal — Tier I No. _____ Issued Date _____
16. **For Tier I permitted facilities only:** If you are applying for a PTC then you must specify how the PTC will be incorporated into the Tier I permit.	☐ Incorporate PTC at the time of Tier I renewal (IDAPA 58.01.01.209.05.a) ☐ Co-process PTC with Tier I Modification (IDAPA 58.01.01.209.05.b) ☐ Administrative amend the Tier I to incorporate PTC upon applicant's request (IDAPA 58.01.01.209.05.c)
17. ☒ Check here to request facility draft permit before final issuance.	

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.

James Michael Williams — *Responsible Official Signature*

Power Production Manager — *Responsible Official Title*

7/8/2016 — *Date*

JAMES MICHAEL WILLIAMS — *Print or Type Responsible Official Name*

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

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

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

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Idaho Power Company, Inc.	Bennett Mountain	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:	☐ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #:Renewal, T1-2011.0129 Date Issued: 03/23/12
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?	☐ No ☒ 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?	☐ Yes ☒ No
20. Does the manufacturer guarantee the control efficiency of the control equipment?	☒ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
Control Efficiency				x	x	x

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?	☒ Yes ☐ No (If Yes, indicate all that apply below)
	☐ Operation Hour Limit(s):	
	☐ Production Limit(s):	
	☐ Material Usage Limit(s):	
	☐ Limits Based on Stack Testing:	Please attach all relevant stack testing summary reports
	☒ Other:	AS LISTED IN PERMIT T1-2011.0129 AND RENEWAL APP
25.	Rationale for Requesting the Limit(s):	BELOW PSD THRESHOLD

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

Emissions Unit - General **Form EU0**
Revision 4
08/28/08

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

IDENTIFICATION

1. Company Name:	2. Facility Name:	3. Facility ID No:
Idaho Power Company, Inc.	Bennett Mountain	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:	☐ New Source ☐ Unpermitted Existing Source ☐ Modification to a Permitted Source -- Previous Permit #: Renewal, T1-2011.0129 Date Issued: 3/23/12
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?	☒ No ☐ 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?	☐ Yes ☒ No
20. Does the manufacturer guarantee the control efficiency of the control equipment?	☐ Yes ☐ No (If Yes, attach and label manufacturer guarantee)

	Pollutant Controlled					
	PM	PM10	SO_2	NOx	VOC	CO
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. See Attachment 7

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?	☒ Yes ☐ No (If Yes, indicate all that apply below)
	☐ Operation Hour Limit(s):	
	☐ Production Limit(s):	
	☐ Material Usage Limit(s):	
	☐ Limits Based on Stack Testing:	Please attach all relevant stack testing summary reports
	☒ Other:	AS LISTED IN PERMIT T1-2011.0129 AND RENEWAL APP
25.	Rationale for Requesting the Limit(s):	BELOW PSD THRESHOLD

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

Emissions Units Industrial IC Engine Information - **Form EU1**
Revision 9
10/23/13

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

IDENTIFICATION

1. Company Name	2. Facility Name:
Idaho Power Company, Inc.	Bennett Mountain Power Plant

3. Brief Project Description:	Electric Power Generation

IC ENGINE DESCRIPTION AND SPECIFICATIONS

4. Type of unit:
- ☐ New unit ☐ Unpermitted existing unit ☐ Modification to an existing permitted unit? Permit number: T1-2011.0129
- ☐ Full-time operation (non-emergency standby use)?
- ☒ Emergency standby use only (operation limited to 100 hrs/yr for maintenance and testing and emergency use only)?
- ☐ Emergency fire pump use only?
- ☐ Stationary test cell/stand operation only (as defined in NSPS Subpart ZZZZ)?
- ☐ National security operation only (as defined in NSPS Subpart ZZZZ)?
- ☐ Institutional emergency standby IC engine (as defined in NSPS Subpart ZZZZ)?

IC ENGINE SPECIFICATIONS

Questions 5 through 15 apply to **all IC engines**.

5. IC Engine Manufacturer: Cummins Power 6. Model: QSX15-G9 / 350DFEG 7. Date manufactured: 2007 8. Model year: 2007

9. Date of installation (if an existing IC engine): 12/29/2008 10. IC Engine cylinder displacement: 2.48 liters per cylinder

11. Maximum rated horsepower (per the data plate/manufacturer specifications): 755 bhp

12. EPA Certification: Tier certification number Tier 2 or ☐ None/not tier certified

13. Ignition type: ☐ Spark ☒ Compression

14. Fuel combusted in the IC engine? ☒ Distillate fuel oil ☐ Natural gas/LNG ☐ LPG/propane
If distillate fuel oil (#1, #2, or a mixture) is used, what is the maximum sulfur content? ☒ 15 ppm (0.0015% by weight) ☐ 500 ppm (0.05% by weight)

15. IC engine exhaust stack parameters: Diameter 6 inches Height 10 feet Temperature 810 °F Flow rate 2610 acfm

IC ENGINE EMISSIONS PARAMETERS

Questions 16 through 27 apply to **full-time** non-Tier certified IC engines or Tier certified IC engines manufactured prior to July 11, 2005. If you are proposing a Tier certified IC engine manufactured on and after July 11, 2005 or an emergency standby IC engine do not answer questions 17 through 27.

16. Testing schedule (for emergency standby IC engines only): 1 hrs/day 4 hrs/mon 12 hrs/qtr 48 hrs/yr

17. Maximum daily operation: _____ hrs/day 18. Maximum annual operation: 500 hrs/yr **Note:** These operational limits will be placed in the permit.

19. Will CO emissions be limited to a specific ppmvd (i.e. 49 or 23 ppmvd)? ☐ Yes ☒ No 20. What will the CO emissions limit be? _____ ppmvd

21. Will CO emissions be reduced by 70% or more? ☐ Yes ☒ No

22. Will a CEMS (Continuous Emissions Monitoring System) be used to measure pollutants in the IC engine exhaust stream? ☐ Yes ☒ No

23. Will a CPMS (Continuous Parameters Monitoring System) be used to measure parameters of the IC engine exhaust stream? ☐ Yes ☒ No

24. Will the IC engine be equipped with an oxidation catalyst? ☐ Yes ☐ No

25. If applicable, will the oxidation catalyst be equipped with a temperature measurement system to ensure it is operating properly? ☐ Yes ☐ No

26. Will the IC engine be equipped with a diesel particulate filter? ☐ Yes ☐ No

27. If applicable, will the diesel particulate filter be equipped with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached? ☐ Yes ☐ No

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 1, August 2010

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 submitted[1]. 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 *{For listed source categories only, see item 3 below in the instructions}*						
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 defined[2] 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

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Version 1, August 2010

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.

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Preapplication Meeting Information Form FRA (Federal Requirements Applicability) - Regulatory Review

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

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

APPLICABILITY DETERMINATION	
4. List all applicable subparts of the New Source Performance Standards (NSPS) (40 CFR part 60). List all non-applicable subparts of the NSPS which may appear to apply to the facility but do not. Examples of NSPS-affected emissions units include internal combustion engines, boilers, turbines, etc. Applicant must thoroughly review the list of affected emissions units.	List of all applicable subpart(s): GG applies to the combustion turbine IIII applies to the emergency diesel generator List of all non-applicable subpart(s) which may appear to apply but do not: KKKK does not apply ☐ Not Applicable
5. List applicable subpart(s) of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR part 61 and 40 CFR part 63). List all non-applicable subparts of the NESHAP which may appear to apply to the facility but do not. Examples of affected emission units include solvent cleaning operations, industrial cooling towers, paint stripping and miscellaneous surface coating. Reference EPA's webpage on NESHAPs for more information.	List of all applicable subpart(s): ZZZZ applies to the emergency diesel generator List of all non-applicable subpart(s) which may appear to apply but do not: ☐ Not Applicable
6. For each subpart identified above, conduct a complete regulatory analysis using the instructions and referencing the example 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 does or does not apply. Regulatory reviews submitted with insufficient detail will be determined incomplete.	☐ A detailed regulatory review is provided (Follow instructions and example). ☑ DEQ has already been provided a detailed regulatory review. Give a reference to the document including the date. A detailed review of the applicable regulations was provided in initial permit application and prior Tier 1 renewal.

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

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

SIEMENS Westinghouse

PDA - Mountain Home

Estimated W501F Gas Turbine Performanc <———— CTT-2348 Rev.4 ————>
Simple Cycle / Dry Low NOx Combustor <———— 07-Jul-03 ————>
AeroPac II 2-102x180 / 0.90 Power Factor

	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 11
SITE CONDITIONS:											
FUEL TYPE	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
LOAD LEVEL	93.9%	70%	98.4%	70.0%	80.0%	90.0%	BASE	70.0%	80.0%	90.0%	BASE
NET FUEL HEATING VALUE, Btu/lbm (LHV)	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981
GROSS FUEL HEATING VALUE, Btu/lbm (HHV)	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299
EVAPORATIVE COOLER STATUS/EFFECTIVENESS	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AMBIENT DRY BULB TEMPERATURE, °F	-20.0	-20.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	59.0
AMBIENT WET BULB TEMPERATURE, °F	-20.0	-20.0	0.0	0.0	0.0	0.0	43.3	43.3	43.3	43.3	51.1
AMBIENT RELATIVE HUMIDITY, %	100%	100%	100%	100%	100%	100%	60%	60%	60%	60%	60%
BAROMETRIC PRESSURE, psia	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036
COMPRESSOR INLET TEMPERATURE, °F	-20.0	-20.0	0.0	0.0	0.0	0.0	50.0	50.0	50.0	50.0	59.0
INLET PRESSURE LOSS, inches of water (Total)	4.0	2.8	4.0	2.7	3.3	3.7	3.9	2.6	3.1	3.5	3.8
EXHAUST PRESSURE LOSS, inches of water (Total)	9.4	6.4	9.5	6.1	7.3	8.5	8.3	5.3	6.3	7.3	8.0
EXHAUST PRESSURE LOSS, inches of water (Static)	5.9	4.0	6.0	3.8	4.6	5.3	5.2	3.3	3.9	4.6	5.0
INJECTION FLUID	-	-	-	-	-	-	-	-	-	-	-
INJECTION RATIO	-	-	-	-	-	-	-	-	-	-	-
COMBUSTION TURBINE PERFORMANCE:											
GROSS POWER OUTPUT, kW	190,700	141,820	190,700	135,280	154,840	174,390	172,170	120,030	137,420	154,800	167,410
GROSS HEAT RATE, Btu/kWh (LHV)	9,145	9,520	9,200	9,625	9,350	9,210	9,355	9,910	9,565	9,375	9,405
GROSS HEAT RATE, Btu/kWh (HHV)	10,155	10,570	10,215	10,685	10,380	10,230	10,390	11,005	10,620	10,410	10,445
FUEL FLOW, lbm/hr	83,090	64,320	83,600	62,030	68,970	76,540	76,740	56,690	62,620	69,160	75,020
INJECTION RATE, lbm/hr	-	-	-	-	-	-	-	-	-	-	-
HEAT INPUT, mmBtu/hr (LHV)	1,743	1,349	1,754	1,301	1,447	1,606	1,610	1,189	1,314	1,451	1,574
HEAT INPUT, mmBtu/hr (HHV)	1,936	1,499	1,948	1,445	1,607	1,783	1,788	1,321	1,459	1,611	1,748
EXHAUST TEMPERATURE, °F	1,022	970	1,056	985	976	1,011	1,088	1,028	1,011	1,036	1,094
EXHAUST FLOW, lbm/hr	3,865,819	3,239,729	3,824,805	3,142,088	3,466,324	3,678,254	3,553,678	2,894,105	3,189,818	3,393,616	3,483,357
EXHAUST FLOW, MACFM	2.76	2.23	2.80	2.19	2.40	2.61	2.66	2.08	2.26	2.45	2.62
EXHAUST GAS COMPOSITION (BY % VOL):											
OXYGEN	12.76	13.38	12.61	13.40	13.34	13.00	12.59	13.34	13.32	13.04	12.56
CARBON DIOXIDE	3.72	3.45	3.78	3.43	3.45	3.61	3.73	3.39	3.40	3.52	3.71
WATER	7.43	6.87	7.64	6.93	6.98	7.29	8.19	7.52	7.53	7.78	8.47
NITROGEN	75.19	75.40	75.07	75.35	75.33	75.21	74.60	74.86	74.86	74.76	74.37
ARGON	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89
MOLECULAR WEIGHT	28.48	28.52	28.46	28.51	28.51	28.49	28.40	28.44	28.44	28.43	28.37
NET EMISSIONS: Based on Westinghouse 21T5620 test methods											
NOx, ppmvd @ 15% O2	15	15	15	15	15	15	15	15	15	15	15
NOx, lbm/hr as NO2	108	84	109	81	90	100	100	74	82	90	98
CO, ppmvd @ 15% O2	10	10	10	10	10	10	10	10	10	10	10
CO, lbm/hr	44	34	45	33	37	41	41	30	33	37	40
SO2, lbm/hr	1.2	0.9	1.2	0.9	1.0	1.1	1.1	0.8	0.9	1.0	1.1
VOC, ppmvd @ 15% O2 as CH4	1.2	2.3	1.2	2.3	2.3	2.3	1.2	2.3	2.3	2.3	1.2
VOC, lbm/hr as CH4	3.0	4.5	3.0	4.3	4.8	5.3	2.8	3.9	4.4	4.8	2.7
PARTICULATES, lbm/hr	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

SIEMENS Westinghouse

PDA - Mountain Home

Estimated W501F Gas Turbine Performanc <---------- CTT-2348 Rev.4 ----------> <---------- CTT-2348 Rev.5 ---------->
Simple Cycle / Dry Low NOx Combustor <---------- 07-Jul-03 ----------> <---------- 21-Aug-03 ---------->
AeroPac II 2-102x180 / 0.90 Power Factor

	CASE 12	CASE 13	CASE 14	CASE 15	CASE 16	CASE 17	CASE 18	CASE 19	CASE 20	CASE 21	CASE 22
SITE CONDITIONS:											
FUEL TYPE	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
LOAD LEVEL	BASE	BASE	BASE	BASE	70.0%	80.0%	90.0%	BASE	60.0%	60.0%	60.0%
NET FUEL HEATING VALUE, Btu/lbm (LHV)	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981	20,981
GROSS FUEL HEATING VALUE, Btu/lbm (HHV)	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299	23,299
EVAPORATIVE COOLER STATUS/EFFECTIVENESS	85%	OFF	85%	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
AMBIENT DRY BULB TEMPERATURE, °F	59.0	90.0	90.0	100.0	100.0	100.0	100.0	110.0	0.0	50.0	100.0
AMBIENT WET BULB TEMPERATURE, °F	51.1	61.6	61.6	61.7	61.7	61.7	61.7	67.0	0.0	43.3	61.7
AMBIENT RELATIVE HUMIDITY, %	60%	20%	20%	10%	10%	10%	10%	10%	100%	60%	10%
BAROMETRIC PRESSURE, psia	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036	13.036
COMPRESSOR INLET TEMPERATURE, °F	52.3	90.0	65.9	100.0	100.0	100.0	100.0	110.0	0.0	50.0	100.0
INLET PRESSURE LOSS, inches of water (Total)	3.9	3.4	3.7	3.3	2.4	2.8	3.1	3.2	2.0	1.9	1.8
EXHAUST PRESSURE LOSS, inches of water (Total)	8.2	6.9	7.7	6.6	4.5	5.2	5.9	6.3	4.7	4.2	3.6
EXHAUST PRESSURE LOSS, inches of water (Static)	5.1	4.3	4.8	4.1	2.8	3.2	3.7	3.9	2.9	2.6	2.2
INJECTION FLUID	-	-	-	-	-	-	-	-			
INJECTION RATIO	-	-	-	-	-	-	-	-			
COMBUSTION TURBINE PERFORMANCE:											
GROSS POWER OUTPUT, kW	171,280	148,020	163,440	141,890	98,800	113,170	127,530	136,060	115,710	102,620	84,420
GROSS HEAT RATE, Btu/kWh (LHV)	9,370	9,650	9,465	9,745	10,555	10,115	9,840	9,855	10,230	10,560	11,290
GROSS HEAT RATE, Btu/kWh (HHV)	10,405	10,715	10,510	10,820	11,720	11,230	10,925	10,940	11,360	11,730	12,535
FUEL FLOW, lbm/hr	76,490	68,070	73,700	65,870	49,680	54,540	59,780	63,880	56,400	51,650	45,420
INJECTION RATE, lbm/hr	-	-	-	-	-	-	-	-			
HEAT INPUT, mmBtu/hr (LHV)	1,605	1,428	1,546	1,382	1,042	1,144	1,254	1,340	1,183	1,084	953
HEAT INPUT, mmBtu/hr (HHV)	1,782	1,586	1,717	1,535	1,158	1,271	1,393	1,488	1,314	1,203	1,058
EXHAUST TEMPERATURE, °F	1,091	1,113	1,100	1,119	1,059	1,046	1,070	1,127	1,079	1,107	1,135
EXHAUST FLOW, lbm/hr	3,530,999	3,221,619	3,414,620	3,144,864	2,643,951	2,876,669	3,029,208	3,061,895	2,677,170	2,508,920	2,337,199
EXHAUST FLOW, MACFM	2.65	2.45	2.58	2.40	1.94	2.09	2.24	2.35	1.98	1.90	1.80
EXHAUST GAS COMPOSITION (BY % VOL):											
OXYGEN	12.47	12.72	12.40	12.85	13.65	13.59	13.30	12.83	12.90	12.96	13.34
CARBON DIOXIDE	3.73	3.65	3.71	3.62	3.26	3.29	3.42	3.60	3.65	3.56	3.40
WATER	8.74	8.27	9.23	7.89	7.16	7.22	7.48	8.09	7.38	7.85	7.45
NITROGEN	74.18	74.47	73.78	74.75	75.03	75.01	74.91	74.58	75.17	74.73	74.92
ARGON	0.89	0.89	0.88	0.89	0.90	0.90	0.90	0.89	0.90	0.89	0.90
MOLECULAR WEIGHT	28.34	28.38	28.28	28.42	28.47	28.47	28.45	28.40	28.48	28.42	28.45
NET EMISSIONS: Based on Westinghouse 21T5620 test methods											
NOx, ppmvd @ 15% O2	15	15	15	15	15	15	15	15	25	25	25
NOx, lbm/hr as NO2	100	89	96	86	65	71	78	83	123	112	99
CO, ppmvd @ 15% O2	10	10	10	10	10	10	10	10	50	50	50
CO, lbm/hr	41	36	39	35	27	29	32	34	150	137	121
SO2, lbm/hr	1.1	1.0	1.0	0.9	0.7	0.8	0.9	0.9	0.8	0.7	0.7
VOC, ppmvd @ 15% O2 as CH4	1.2	1.2	1.2	1.2	2.3	2.3	2.3	1.2	10.0	10.0	10.0
VOC, lbm/hr as CH4	2.8	2.5	2.7	2.4	3.5	3.8	4.2	2.3	17.1	15.6	13.8
PARTICULATES, lbm/hr	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Attachment 3 – 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
Nameplate BHP @ 1800 RPM: 755
Type: 4 Cycle, In-Line, 6 Cylinder Diesel
Aspiration: Turbo-charged with air-to-air charge air cooling
Compression Ratio: 17:1
Emission Control Device: Turbocharged with Charge Air Cooled

Bore: 5.39 in. (137 mm)
Stroke: 6.65 in. (169 mm)
Displacement: 912 cu. in. (14.9 liters)

PERFORMANCE DATA	1/4 Standby	1/2 Standby	3/4 Standby	Full Standby	Full 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 H_2O/lb) of dry air Humidity (required for NOx 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.

388
6-6-09

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

COMPONENT	(All values are Grams per HP-Hour)
NOx + HC (Oxides of Nitrogen as NO2 + 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.

Attachment 4 – IDEQ Permit to Construct Exemption Letter

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • 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.

Printed on Recycled Paper

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

Darrin Pampaian
Permit Writer
Air Quality Division

DRP/hp Project No. X-2008.0196

Enclosure

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

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
$\mu g/m^3$	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

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

3.2 Emissions Inventory

An emissions inventory was developed for the emergency standby IC engine (see Appendix B) associated with this proposed project. Emissions estimates of criteria pollutant PTE were based on emission factors and process information specific to the facility for this proposed project.

Table 3.2 POST-PROJECT CONTROLLED EMISSIONS ESTIMATES OF CRITERIA POLLUTANTS

Emissions Unit	PM_{10}		SO_2		NO_x		CO		VOC		Lead	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Sources Affected by the Permitting Action												
Emergency standby IC engine	0.25	0.06	0.01	0.00	7.99	2.00	4.33	1.08	0.53	0.13	0	0
Post Project Totals	**0.25**	**0.06**	**0.01**	**0.00**	**7.99**	**2.00**	**4.33**	**1.08**	**0.53**	**0.13**	**0**	**0**

3.3 Ambient Air Quality Impact Analysis

An ambient air impact analysis is not required for this project because this project is for a permit exempt piece of equipment.

4. REGULATORY REVIEW

4.1 Attainment Designation (40 CFR 81.313)

The Idaho Power facility is located in Elmore County (AQCR 63), which is designated as unclassifiable/attainment for $PM_{2.5}$, PM_{10}, SO_2, NO_x, CO, and Ozone for federal and state criteria air pollutants. Reference 40 CFR 81.313.

4.2 Permit to Construct (IDAPA 58.01.01.201)

IDAPA 58.01.01.201 ..... Permit to Construct Required

The facility's proposed project meets the permit to construct exemption criteria contained in Sections 220 through 223 of the Rules. Therefore, a PTC is not required.

4.3 General Exemption Criteria for Permit to Construct Exemptions (IDAPA 58.01.01.220)

IDAPA 58.01.01.220 General Exemption Criteria for Permit to Construct Exemptions

In accordance with IDAPA 58.01.01.220.01.a, the maximum capacity of the source to emit an air pollutant under its physical and operational design without consideration of limitations on emissions such as air pollution control equipment, restrictions on hours of operation and restrictions on the type and amount of material combusted needs to be determined for this project. Using these exemption criteria results in annual emissions increases of 0.06 T-PM_{10}/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 100 tons/yr for all regulated air pollutants. Per EPA policy, the PTE for an emergency IC engine powering a generator is based on 500 hours per year of operation. Operation, in this case, is for maintenance and testing of the engine.

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-PM_{10}/yr, and 40 T-VOC/yr. Using these criteria results in annual emissions increases of 0.06 T-PM_{10}/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.

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 YYYY **National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines**

The requirements of 40 CFR 63, Subpart YYYY – 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 YYYY.

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] – PM_{10}, 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 SO_2 (with a sulfur content of 0.0015% by weight for ULSD) and VOC.

Attachment 5 – 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

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*
Air Pollution Control Technology	None.	None.	No requirements under *40 CFR Part 60 Subpart GG.*	None.
Emission Limitations	SO_2 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. 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. 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 SO_2.	3.4 — NO_X and CO Emissions 3.3 - NOx Emissions NSPS 3.5 — Fuel Burning Equipment Standard	IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance With Standards and Maintenance Requirements. Requirements of 40 CFR Part 60 Section 332 — Standard for Nitrogen Oxides The allowable NO_X emissions will not exceed 132 ppm. Requirements of 40 CFR Part 60 Section 333 — Standard for Sulfur Dioxide (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). (b) No owner or operator shall burn in any stationary gas turbine any fuel that contains sulfur in excess of 0.8% (by	Requirements of IDAPA 58.01.01.008.10 — Definitions for the Purposes of Sections 300 through 386 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. Requirements Of ID APA 58.01.01.384 — Section 502(B)(10) Changes And Certain Emission Trades 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

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*
	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.		weight).	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. Requirements of IDAPA 58.01.01 Sections 106, 161, 585 and 586 — Toxic Air Pollutants 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). Requirements of IDAPA 58.01.01.577 — Ambient Air Quality Standards for Specific Air Pollutants IPC must comply with the ambient air quality standards for the pollutants described in this section, including: PM_{10}, SO_2, Ozone, NO_X, CO, Fluorides, and

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*
				Lead. Requirements of IDAPA 58.01.01.625 — Visible Emissions 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. Requirements of IDAPA 58.01.01.775 — Rules for Control of Odors 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).
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 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*
		3.7 - NO_x Monitoring Equipment Requirements *3.8 - CO Monitoring Equipment Requirements* *3.9 – Turbine Exhaust Flowrate Quantification Requirment* *3.10 – Turbine Startup Restriction*	CFR Part 60.11 — Compliance With Standards and Maintenance Requirements. Requirements of 40 CFR Part 60 Section 334 — Monitoring of Operations 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. IPC must comply with all applicable requirements of 40 CFR Part 60 Appendix F — Quality Assurance Procedures.	IDAPA 58.01.01.133 — Startup, Shutdown and Scheduled Maintenance Requirements, and IDAPA 58.01.01.134 — Upset, Breakdown and Safety Requirements.
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 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*
			With Standards and Maintenance Requirements.	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. Requirements of IDAPA 58.01.01 Sections 130 through 136 — Startup, Shutdown, Scheduled Maintenance, Safety Measures and Breakdown 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. Requirements of IDAPA 58.01.01.155 — Circumvention No person shall willfully cause or permit the installation or use

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*
				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. Requirements of IDAPA 58.01.01 Sections 510 through 516 — Stack Heights and Dispersion Techniques Sections 510 through 516 establish criteria for good engineering practices for stack heights/dispersion techniques.
Testing and Sampling	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*. Fuel testing will be performed according to the applicable requirements of *40 CFR Part 75 Appendices D*, *G* and *E*.	*3.13 — CO RATA – NSPS* *3.14 — Turbine NO_X Performance Test – NSPS*	IPC must comply with all applicable requirements of 40 CFR Part 60.8 — Performance Tests. Requirements of 40 CFR Part 60 Section 11 — Compliance With Standards and Maintenance Requirements Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance	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

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*
			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). Requirements of 40 CFR Part 60 Section 335 — Test Methods and Procedures 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.	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. Requirements of IDAPA 58.01.01.157 — Test Methods and Procedures The purpose of Section 157 is to establish procedures and requirements for test methods and results. 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). Prior to conducting any emission test, owners or operators are strongly encouraged to submit to

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*
				IDEQ in writing, at least 30 days in advance, the following for approval: Requirements of IDAPA 58.01.01.322.09 — Testing 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.
Monitoring	The owner or operator shall measure opacity and all SO_2, NO_X, and CO_2 emissions for each affected unit as follows: 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 SO_2 mass emissions (lb/hr) discharged to the atmosphere. Gas heating value will be	*3.12 — NO_X Monitoring* *3.15 — Fuel Monitoring*	IPC must comply with all applicable requirements of 40 CFR Part 60.13 — Monitoring Requirements. 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	Requirements of IDAPA 58.01.01.107 — Incorporations by Reference Unless expressly provided otherwise, any reference in these rules to any document identified in *Subsection 107.03* 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

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*
	obtained from analysis of fuel samples in accordance with *40 CFR Part 75 Appendix D.* 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.* 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 CO_2 estimated mass emissions (in tons/day) discharged to the atmosphere. 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.*		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. IPC must comply with all applicable requirements of 40 CFR Part 60 Appendix F — Quality Assurance Procedures. 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. IPC must comply with all applicable requirements of 40 CFR Part 60.11 — Compliance (See above)	organization or association. Included as part of *Subsection 107.03* is: *(k) Compliance Assurance Monitoring, 40 CFR Part 64.* (See below) Requirements of 40 CFR Part 64 — Compliance Assurance Monitoring 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. *From 40 CFR Part 64.3(d) — Special criteria for the use of continuous emission, opacity or predictive monitoring systems.* 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.
Record-keeping	The owner or operator shall	*3.11 —— Fuel Consumption*	IPC must comply with all	Requirements of IDAPA

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*
	maintain records and supporting documentation under the acid rain program in accordance with 40 CFR Part 75 Subpart F and Appendix J. QA/QC of CEMS data will be maintained in accordance with 40 CFR Part 75 Appendix B. Requirements of 40 CFR Part 75.54 — General Recordkeeping Provisions 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... 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).	*Monitoring* *3.12 — NO_X Monitoring* *3.13 — CO RATA* *3.14 — NO_X Performance Standard NSPS* *3.15 — Fuel monitoring* *3.16 — Emission Rate Quantification Protocol* *3.17 — NO_X and CO Emission Rates Requirements* *3.18 – General Provisions Requirements NSPS*	applicable requirements of *40 CFR Part 60.7 — Notification and Recordkeeping.* IPC must comply with all applicable requirements of *40 CFR Part 60 Section 19 — General Notification and Reporting Requirements.*	58.01.01.322.07 — Recordkeeping All Tier I operating permits shall incorporate by reference all applicable requirements regarding recordkeeping and require all of the following: (1) Sufficient recordkeeping to assure compliance with all of the terms and conditions of the Tier I operating permit. (2) Recording of monitoring information including but not limited to the following: (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. IPC must comply with all applicable requirements of

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*
				IDAPA 58.01.01.133 — Startup, Shutdown and Scheduled Maintenance Requirements. IPC must comply with all applicable requirements of IDAPA 58.01.01.134 — Upset, Breakdown, and Safety Requirements. IPC must comply with all applicable requirements of IDAPA 58.01.01.135 — Excess Emissions Reports. IPC must maintain records according to the applicable provisions of IDAPA 58.01.01.136 — Excess Emissions Records.
Reporting	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.* The owner or operator shall report excess emissions under the Acid Rain Program in accordance with the requirements of *40 CFR Part 77.*	*3.19 — Test Protocols for NO_X CEMS Certification and/or Recertification Tests* *3.20 — CEMS QA Procedures* *3.21 — RATA Information* *3.22 — Required NO_X CEMS Information* *3.23 — Performance Test*	IPC must comply with all applicable requirements of *40 CFR Part 60.7 — Notification and Recordkeeping.* IPC must comply with all applicable requirements of *40 CFR Part 60 Section 19 — General Notification and Reporting Requirements.*	Requirements of IDAPA 58.01.01.322.08 — Reporting All Tier I operating permits shall incorporate by reference all applicable requirements regarding reporting and require all of the following: Sufficient reporting to assure compliance with all of the terms

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*
	The designated representative shall submit all recertification applications according to 40 CFR Part 75.63 (from 40 CFR Part 75.60(b)(2)).	*Protocols* *3.24 — Performance Test Reports* *3.25 — NSPS Excess NO_x Emissions* *3.26 — NSPS Excess SO_2 Emissions*		and conditions of the Tier I operating permit. 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 *Sections 130* through *136*. For all other deviations, the report shall be submitted in accordance with *Subsection 322.08.c.* 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. Submittal 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 *Section 123*.

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*
				Requirements of IDAPA 58.01.01.123 — 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 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. All documents submitted to the Department shall be truthful, accurate and complete (IDAPA *58.01.01.124 — Truth, Accuracy and Completeness of Documents*). IPC must comply with all applicable requirements of IDAPA 58.01.01.133 — Startup,

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*
				Shutdown and Scheduled Maintenance Requirements. IPC must comply with all applicable requirements of IDAPA 58.01.01.134 — Upset, Breakdown, and Safety Requirements. IPC must comply with all applicable requirements of IDAPA 58.01.01.135 — Excess Emissions Reports. IPC must maintain records according to the applicable provisions of IDAPA 58.01.01.136 — Excess Emissions Records.
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 applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard	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 otherwise provided for in these rules. Requirements of IDAPA 58.01.01.562

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*
			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. *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. IPC must comply with all applicable requirements of *40 CFR Part 60 Section 14 —*	— Specific 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.

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*
			Modification.	

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. Requirements of IDAPA 58.01.01.677 — Standards for Minor and Existing Sources
Emission Limitations (Continued)	(See above)	(See above)	(See above)	A person shall not discharge into the atmosphere from any natural

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*
				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). 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,
Emission Limitations (Continued)	(See above)	(See above)	(See above)	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.
Operating Parameters	Not applicable.	*4.5 — Fuel Restriction*	Not applicable.	Not applicable.

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*
		4.6 — Fuel Firing Restriction		
Work Practice Standard(s)	Not applicable.	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

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*
				method approved in accordance with Subsection 157.02.d. Test methods and procedures shall comply with Section 157.
Monitoring	Not applicable.	*4.7 — Operational Monitoring Requirement*	Not applicable.	Not applicable.
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 39-1 01,* 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*

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*
		PTC General Provisions — 6.1 - .8	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.*	*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.*

TABLE 8-3
COMPARISON OF APPLICABLE REQUIREMENTS
FACILITY WIDE

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*
Air Pollution Control Technology	None.	None.	None.	None.
Emission Limitations	Not applicable.	*2.1 — Reasonable Control of Fugitive Dust* *2.2 - Opacity Limit* *2.3 – Odorous Emissions* *2.4 - Air Pollution Emergency Rule*	**IPC must comply with all applicable requirements of *40 CFR Part 60 Subpart A* —** *General Provisions.*	*Requirements of IDAPA 58.01.01 Section 625 — Visible Emissions* **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. **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

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*
Emission Limitations (Continued)				requirements of this rule. **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: • 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 *Procedures Manual for Air Pollution Control, Section II (Evaluation of Visible Emissions Manual), September 1986.* • Sources subject to New

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*
Emission Limitations (Continued)				Source Performance Standards must calculate opacity as detailed above and as specified in *40 CFR Part 60*. Requirements of IDAPA 58.01.01 Section 776 — Odorous Emissions 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. *Requirements of IDAPA 58.01.01 Section 651 — Fugitive Dust, General Rules* 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

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*
Emission Limitations (Continued)				not limited to, the following: **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. **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. **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. **04. Covering Of Trucks.** Covering, when practical, open bodied trucks transporting

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*
Emission Limitations (Continued)				materials likely to give rise to airborne dusts. **05. Paving.** Paving of roadways and their maintenance in a clean condition, where practical. **06. Removal Of Materials.** Prompt removal of earth or other stored material from streets, where practical. Requirements of IDAPA 58.01.01 Section 776 — Rules for the Control of Odors, General Rules 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.
Operating Parameters	None.	None.	None.	None.
Work Practice Standard(s)	Not applicable.	Not applicable.	Not applicable.	Requirements of IDAPA 58.01.01.155 — Circumvention No person shall willfully cause or permit the installation or use of

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*
				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

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*
Record-keeping (Continued)				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. *Odors — IPC shall maintain records of all odor complaints received. If the compliant has merit, the permittee should take the appropriate corrective action as expediously as practicable.*
Reporting		*2.6 - Excess Emissions* *2.7 — Reports and Certifications* *2.8 – Permit Application Requirements*		*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.
Other		*PTC General Provisions — 3.1* *PTC General Provisions — 6.1-6.8*		

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*	IPC must comply with all applicable requirements of *40 CFR Part 60.13 — Monitoring Requirements.* 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. [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.*	From 40 CFR Part 64.3(d) — Special criteria for the use of continuous emission, opacity or predictive monitoring systems. 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.

			IPC must comply with all applicable requirements of *40 CFR Part 60.11 — Compliance* (See above).	
Record-keeping				
Reporting			IPC must comply with all applicable requirements of *40 CFR Part 60.7 — Notification and Recordkeeping.* 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: • Nitrogen oxides — *40 CFR Part 60.334I(1)* • Sulfur dioxide — *40 CFR Part 60.334I(2)* (See above).] 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 $S0_2$ in accordance with *40 CFR Part 60.7(b)* through *(d).* For this report, excess $S0_2$ emissions are defined in *40 CFR Part 60.334(c)(2).*	

Attachment 6 – Acid Rain Permit Renewal Application

United States
Environmental Protection Agency
Acid Rain Program

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

Acid Rain Permit Application

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

This submission is: ☐ New ☐ Revised ☒ for ARP permit renewal

STEP 1

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

Facility (Source) Name	State	Plant Code
Bennett Mountain Power Plant	Idaho	55733

STEP 2

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

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
CT01	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

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;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

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

STEP 3, Cont'd.

Effect on Other Authorities, 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.

STEP 4
Read the certification statement, sign, and date.

Certification

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

Name Mike Williams	
Signature	Date 7/8/2016

Attachment 7 – 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] – PM_{10}, 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 SO_2 (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

Item	Value	Min.	Max.
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.	800	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 Emmisions Data)			
Fuel Gas Usage, SCF/hr:	4357.1429		
Flue Gas Generated, SCF/hr:	50630.		
Actual Flue Gas Rate (including execess 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 (condensible), 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. Evironmental Protection Agency, "Compilation of Air Pollutant Emission Factors", July 1998, Tables 1.4-1 to 1.4-3

Attachment 8 – 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-Butadine	Acetaldehyde	Acrolein	Benzene	EthylBensene	Formaldehyde	Naphthalene	Propylene Oxide	Toluene	Xylenes
Emission Factor	lb/mmBtu	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	lb/hr	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	Ton/yr	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	lb/mmBtu	2.10E-03	7.50E-02	6.10E-04	3.40E-03
H1 Emissions	lb/hr	7.56E-03	2.70E-01	2.20E-03	1.22E-02
H1 Emissions	Ton/yr	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	Napthalene
Emission Factor	lb/mmBtu	7.76E-04	2.81E-04	1.93E-04	7.89E-05	2.52E-05	7.88E-06	1.30E-04
EDG Emissions	lb/hr	2.64E-03	9.56E-04	6.57E-04	2.68E-04	8.57E-05	2.68E-05	4.42E-04
EDG Emissions	Ton/yr	6.60E-04	2.39E-04	1.64E-04	6.71E-05	2.14E-05	6.70E-06	1.11E-04

Facility Total

	1,3-Butadine	Acetaldehyde	Acrolein	Benzene	EthylBensene	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	2.5E-01	1.15E-01	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

Attachment 9 – Annual Report January 1st to December 31st, 2015

IDAHO POWER
An IDACORP Company

RECEIVED
JAN 28 2016
DEPARTMENT OF
ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE

January 29, 2016

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706

EPA Region 10
Air Operating Permits AWT-150
1200 Sixth Avenue, Ste. 900
Seattle, WA 98101

Subject: Idaho Power Company - Bennett Mountain Power Plant
2015 Tier I Annual Compliance Certification
Permit: T1-2011.0129

Dear Sir:

Enclosed is the 2015 Tier I Annual Compliance Certification for the Bennett Mountain Power Plant located in Mountain Home, Idaho. This report is also being submitted as the semiannual report for the reporting period of 7/1/2015 – 12/31/2015. The CEMS summary report and the quarterly linearity/CGA results have also been attached for the semiannual reporting period.

Table 1: Summary of the rolling 12-month emissions

	Regulated Parameters	**Status**
CT01	Sulfur Dioxide Emissions (SO_2) Total Emissions (Rolling 12 Month)	0.5 tons/yr (In Compliance)
	Nitrogen Oxide Emissions (NO_x) Total Emissions (Rolling 12 Month)	55.5 tons/yr (248.16 tons/yr limit)
	Carbon Monoxide Emissions (CO) Total Emissions (Rolling 12 Month)	112.3 Tons (248.29 tons/yr limit)
	Opacity	In Compliance

P.O. Box 70 (83707)
1221 W Idaho St
Boise, ID 83702

Table 2: Operating Hours (12-Month Rolling)

Unit	Hours
CT01	1,150

If you have any questions, please do not hesitate to contact me at 208-388-5843 or by email at jjensen1@idahopower.com.

Sincerely,

Jeremy Jensen
Facility Contact
Idaho Power Company

Enclosures: 2015 Annual Compliance Certification Report

TIER I ANNUAL COMPLIANCE CERTIFICATION

FORM AQ-C1

FACILITY INFORMATION

Facility/Permittee Name: Idaho Power Company - Bennett Mountain Power Plant
Co-Permittee Name(s):
Facility Location: Mountain Home, ID
AIRS Facility No.: 039-00025
Facility Contact: Jeremy Jensen **Ph:** 208-388-5843 **Fax:** 208-433-2838

PERMIT AND COMPLIANCE INFORMATION

Tier I Operating Permit No.: T1-2011.0129 **Issuance Date:** March 23, 2012
Tier I Operating Permit No.: **Issuance Date:**
Compliance Reporting Period: From: 1/1/2015 To: 12/31/2015
Is This Intended To Be A Semiannual Report Also? ☒ Yes ☐ No
Deviations Reported This Period? ☐ Yes ☒ No

List of Attachments:

☒	Annual Compliance Certification Table (Form AQ-C2)	No. of Pages: 20
☒	Semiannual Deviation Summary Table (Form AQ-C3)	No. of Pages: 1
☒	Other: NOx/CO CEMS 40 CFR 60.79 (d) Summary	No. of Pages: 2
	CEMS Excess Emissions Reports	No. of Pages: 1
	CEMS Downtime Reports	No. of Pages: 4
	Linearity and CGA 3rd QTR	No. of Pages: 3
	Linearity and CGA 4th QTR	No. of Pages: 3
		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.

Dale Koger — *Responsible Official Signature*
Power Production MGR — *Responsible Official Title*
1-27-16 — *Date*
Dale Koger — *Print or Type Responsible Official Name*

Co-Permittee Responsible Official Signature
Co-Permittee Responsible Official Title
Date
Print or Type Co-Permittee Responsible Official Name

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

EPA Region10
Air Operating Permits AWT-150
1200 Sixth Avenue, Ste. 900
Seattle, WA 98101

9590 9403 0514 5173 2818 17

2. Article Number *(Transfer from service label)*
7015 0640 0004 7467 1471

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* C. Date of Delivery 2/2

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, April 2015 PSN 7530-02-000-9053 Domestic Return Receipt

7015 0640 0004 7467 1471

U.S. Postal Service™ Bennett Mountain
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee
$

Extra Services & Fees *(check box, add fee as appropriate)*
☐ Return Receipt (hardcopy) $
☐ Return Receipt (electronic) $
☐ Certified Mail Restricted Delivery $
☐ Adult Signature Required $
☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
$

Postmark Here

JAN 28 2016

Sent To EPA Region10
Street and Apt. Air Operating Permits AWT-150
1200 Sixth Avenue, Ste. 900
City, State, ZIP+4 Seattle, WA 98101

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

IDAHO POWER®
An IDACORP Company

January 29, 2016

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 North Orchard
Boise, ID 83706

EPA Region 10
Air Operating Permits AWT-150
1200 Sixth Avenue, Ste. 900
Seattle, WA 98101

Subject: Idaho Power Company - Bennett Mountain Power Plant
2015 Tier I Annual Compliance Certification
Permit: T1-2011.0129

Dear Sir:

Enclosed is the 2015 Tier I Annual Compliance Certification for the Bennett Mountain Power Plant located in Mountain Home, Idaho. This report is also being submitted as the semiannual report for the reporting period of 7/1/2015 – 12/31/2015. The CEMS summary report and the quarterly linearity/CGA results have also been attached for the semiannual reporting period.

Table 1: Summary of the rolling 12-month emissions

	Regulated Parameters	**Status**
CT01	Sulfur Dioxide Emissions (SO_2) Total Emissions (Rolling 12 Month)	0.5 tons/yr (In Compliance)
	Nitrogen Oxide Emissions (NO_x) Total Emissions (Rolling 12 Month)	55.5 tons/yr (248.16 tons/yr limit)
	Carbon Monoxide Emissions (CO) Total Emissions (Rolling 12 Month)	112.3 Tons (248.29 tons/yr limit)
	Opacity	In Compliance

P.O. Box 70 (83707)
1221 W. Idaho St.
Boise, ID 83702

Table 2: Operating Hours (12-Month Rolling)

Unit	Hours
CT01	1,150

If you have any questions, please do not hesitate to contact me at 208-388-5843 or by email at jjensen1@idahopower.com.

Sincerely,

Jeremy Jensen
Facility Contact
Idaho Power Company

Enclosures: 2015 Annual Compliance Certification Report

TIER I ANNUAL COMPLIANCE CERTIFICATION

FORM AQ-C1

FACILITY INFORMATION

Facility/Permittee Name: Idaho Power Company - Bennett Mountain Power Plant
Co-Permittee Name(s):
Facility Location: Mountain Home, ID
AIRS Facility No.: 039-00025
Facility Contact: Jeremy Jensen **Ph:** 208-388-5843 **Fax:** 208-433-2838

PERMIT AND COMPLIANCE INFORMATION

Tier I Operating Permit No.: T1-2011.0129 **Issuance Date:** March 23, 2012
Tier I Operating Permit No.: **Issuance Date:**
Compliance Reporting Period: From: 1/1/2015 To: 12/31/2015
Is This Intended To Be A Semiannual Report Also? ☒ Yes ☐ No
Deviations Reported This Period? ☐ Yes ☒ No

List of Attachments:

☒	Annual Compliance Certification Table (Form AQ-C2)	No. of Pages: 20
☒	Semiannual Deviation Summary Table (Form AQ-C3)	No. of Pages: 1
☒	Other: NOx/CO CEMS 40 CFR 60.79 (d) Summary	No. of Pages: 2
	CEMS Excess Emissions Reports	No. of Pages: 1
	CEMS Downtime Reports	No. of Pages: 4
	Linearity and CGA 3rd QTR	No. of Pages: 3
	Linearity and CGA 4th QTR	No. of Pages: 3
		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 *Responsible Official Title* *Date*

Print or Type Responsible Official Name

Co-Permittee Responsible Official Signature *Co-Permittee Responsible Official Title* *Date*

Print or Type Co-Permittee Responsible Official Name

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

Facility/Permittee Name: Bennett Mountain / Idaho Power Company
Facility Location: Mountain Home, ID
AIRS Facility No.: 039-00025

Tier I Operating Permit No.: T1-2011.0129
Issuance Date: 3/23/12
Compliance Reporting Period: 1/1/2015 thru 12/31/2015

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
Fugitive Dust							
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.	Take reasonable precautions to prevent PM from being airborne. • Frequently used facility roads and parking areas are paved. Facility grounds are covered in cleaned rock	I		C	
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.	Monitor and maintain records of frequency and methods used to control fugitive emissions. • Paving and spreading rock was a one-time occurrence.	I		C	
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.	Maintain records of fugitive dust complaints and corrective actions taken. • All complaints received are kept in a file onsite.	I		C	
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.	Conduct quarterly facility-wide inspections of potential fugitive emission sources. Maintain records of control and any corrective actions taken. • Quarterly inspections are conducted and reports are kept onsite.	I		C	
Odors							
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.	Do not allow emission of odorous gases, liquids or solids to cause air pollution. • Any odorous substances onsite are used and stored in a manner to prevent air pollution.	I		C	
2.6	Reserved		Reserved				
Visible Emissions							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
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.	Do not discharge any air pollutant to the atmosphere for a period of more than three minutes in any 60-minute period which is greater than 20% opacity. • Operations staff monitors for opacity during plant operation on a see/no see basis.	I		C	
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.	Conduct quarterly facility-wide inspection of potential sources of visible emissions during normal operating conditions. • Quarterly inspections are conducted and reports are kept onsite.	I		C	
Excess Emissions							
2.9	Permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136.	The facility complies with the excess emissions rules and regulations.	Permittee shall comply with IDAPA 58.01.01.130-136.	I		C	
2.9.1	The person responsible for a facility during an excess emission event shall initiate and complete appropriate and reasonable action to correct, reduce, and minimize the event; and shall submit a full report.	The facility complies with the excess emission rules and regulations	Respond to an excess emission event by implementing corrective action as expeditiously as practicable. Submit a full report of the event to DEQ as soon as practicable. • All excess emission events are dealt with in accordance with the rules outlined in IDAPA 58.01.01	I		C	
2.9.2	In the event that startup, shutdown, or scheduled maintenance is expected to cause an excess emissions; the permittee shall prohibit such events during Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory declarations, notify the DEQ in advance, and file the required excess emissions forms.	The facility complies with the excess emission rules and regulations. The facility does not exceed any permit limits during startup, shutdown, or maintenance activities during normal operations.	Give advanced notice to DEQ of any expected excess emissions events due to startup, shutdown or scheduled maintenance. Report and record accordingly. • DEQ is notified in advance of any expected excess emissions.	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 **Permit Condition**	2 **Condition Title / Description**	3 **Comments**	2 **Compliance Determination Methods**	3 **Monitoring Frequency** (C, I, or N/A)	4 **Deviations and Excess Emission Events**	5 **Permit Condition Compliance Status** (C/I)	6 attachment
2.9.3	In the event that upset, breakdown or safety measures cause an excess emissions event, the permittee shall comply with IDAPA 58.01.01.134.01(a) and (b).	The facility has preventative maintenance procedures developed for equipment onsite. Repairs are completed immediately to address any excess emissions.	When excess emissions result during upset or breakdown conditions or due to implementing safety measures, owner shall comply with IDAPA 58.01.01.134.01(a) and (b) and conditions 2.9.3.1-2.9.3.2	I		C	
2.9.3.1	For upset, breakdown, or safety measures in which excess emissions occur, permittee shall immediately take measures to reduce and/or eliminate the cause, shall notify the DEQ within 24 hours, and shall report the information IAW PC 2.9.4-5 and IDAPA 58.01.01.135-136.	The facility takes immediate actions to deal with excess emissions and sends the initial notifications to the DEQ within the required timeline.	When excess emissions from upset/breakdown conditions happen, owner shall: • Undertake appropriate measures to reduce and/or eliminate the excess emissions • Notify the DEQ within 24 hours of the event • Record the information required under conditions 2.9.4 and 2.9.5 and under IDAPA 58.01.01.135-136.	I		C	
2.9.3.2	DEQ may require a facility to reduce or cease operations due to excess emissions.	The facility will comply with DEQ requirements.	During any period of excess emissions caused by upset, breakdown, or operation under facility safety measures, DEQ may require the owner or operator to immediately reduce or cease operation of the equipment or emissions unit causing the period until such time as the condition causing the excess has been corrected or brought under control. • All excess emission events are dealt with in accordance with the rules outlined in IDAPA 58.01.01	I		C	
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.	A written report for each excess emissions event shall be submitted to DEQ by the owner no later than 15 days after the beginning of such an event. • All excess emission events are dealt with in accordance with the rules outlined in IDAPA 58.01.01	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
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.	The owner shall maintain excess emissions records at the facility for the most recent five-calendar-year period and shall be available to DEQ upon request. • All excess emission reports are kept onsite • An excess emissions record book or file shall be kept containing all reports that have been submitted to DEQ • Copies shall be kept of all startup, shutdown and scheduled maintenance procedures and upset, breakdown or safety preventative maintenance plans to demonstrate compliance.	I		C	
Performance Testing							
2.10	If performance testing is required, permittee shall provide notice of the testing at least 15 days prior to the testing. Testing shall be done IAW IDAPA 58.01.01.157 and should be approved by submitting a testing protocol 30 days prior to testing. A final testing report shall be submitted within 30 days after the completion of the test.	The facility complies with the performance testing requirements and submits both testing protocols and test reports for DEQ's review.	All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. • Testing protocol reports are submitted to DEQ at least 30 days prior to testing. • Submit a testing report to DEQ within 30 days following the completion of the test.	I		C	
Monitoring and Recordkeeping							
2.11	Permittee shall maintain records to assure compliance with all terms and conditions of the permit. Records shall be maintained for 5 yrs.	Both electronic and hardcopy records are retained to assure compliance with the permit conditions.	The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating permit. • Records are kept onsite for all monitoring requirements.	I		C	
Reports and Certifications							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
2.12	Reports and certifications required by the permit shall be submitted to the DEQ within 30 days of the end of the reporting period. Compliance certifications shall also be submitted to the EPA within 30 days of the end of the reporting period.	Semiannnual and annual reports are submitted to both the DEQ and EPA within 30 days of the end of the reporting periods. Certification and quality assurance tests are submitted within their required time periods.	All periodic reports and certifications required by this permit shall be submitted to DEQ and EPA within 30 days of the end of each specified reporting period. • Reports and test results are submitted within the required time frame.	I		C	
Fuel Burning Equipment							
2.13	Permitte 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)	The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas. • The fuel burning equipment operates exclusively on natural gas.	I		C	
Open Burning							
2.14	The permittee shall comply with the Rules for Control of Open Burning.	No open burning was conducted at the facility for the reporting period.	The permittee shall comply with the Rules for Control of Open Burning. • No open burning is permitted onsite.	N/A		C	
Asbestos							
2.15	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.	The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility. • No asbestos containing materials were used during construction	N/A		C	
Regulated Substances for Accidental Release Prevention							
2.16	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.	If applicable, comply with the requirements of the Chemical Accident Prevention Provisions. • The facility does not have any threshold quantities of regulated substances IAW 40 CFR 68.115	N/A		C	
Air Stagnation Advisory Days							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
2.17	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.	For all affected units, the permittee shall comply with the requirements of IDAPA 58.01.01.561 during any air pollution emergency episode. • Idaho Power will comply with any necessary requirements during emergency episodes.	I		C	
Recycling and Emissions Reductions							
2.18	Permittee shall comply with the applicable standards for recycling and emissions reduction.	All maintenance and repairs on refrigerant systems are contracted to qualified vendors.	All refrigerant containing equipment at the facility is maintained by certified technicians.	I		C	
NSPS General Provisions							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
2.19	Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A.	• 60.4: All submittals required are sent to the DEQ Boise Regional office. • 60.7(a),(b), and (f): Notifications of the commencement of construction and initial startup were submitted previously. Any facility modifications (physically or operationally) which will increase emissions shall be accompanied with the necessary notifications. All operational data, including startup, shutdown, or malfunction are stored within the archives of the plant DCS and CEMS DAHS. Logs of all maintenance and inspection logs, calibrations, and other maintenance performed are maintained by the facility staff. • 60.7(a),(c)-(f): Notification of the CEMS certification testing was done upon initial installation. Additional notifications are made when required for testing. Excess emissions and CEMS performance reports are submitted semiannually in the format specified. CEMS subhourly records are maintained electronically in the CEMS archives. • 60.8: The DEQ is notified of all performance testing at least 30 days prior to the test date. Initial performance testing was performed within the time requirements tied to the 1st fire and maximum production events. All performance testing is done in accordance with the requirements listed in 60.8(b),(c), and (f). • 60.11(a),(d),(f), and (g): The facility is maintained in good working order.	Permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A. • 60.4: All submittals required are sent to the DEQ Boise Regional office. • 60.7(a),(b), and (f): Notifications of the commencement of construction and initial startup were submitted previously. Any facility modifications (physically or operationally) which will increase emissions shall be accompanied with the necessary notifications. All operational data, including startup, shutdown, or malfunction are stored within the archives of the plant DCS and CEMS DAHS. Logs of all maintenance and inspection logs, calibrations, and other maintenance performed are maintained by the facility staff. • 60.7(a),(c)-(f): Notification of the CEMS certification testing was done upon initial installation. Additional notifications are made when required for testing. Excess emissions and CEMS performance reports are submitted semiannually in the format specified. CEMS subhourly records are maintained electronically in the CEMS archives. • 60.8: The DEQ is notified of all performance testing at least 30 days prior to the test date. Initial performance testing was performed within the time requirements tied to the 1st fire and maximum production events. All performance testing is done in accordance with the requirements listed in 60.8(b),(c), and (f).				

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
		• 60.11(b),(c), and (e): All opacity standards are complied with at the facility. Initial opacity testing was completed concurrently with the initial performance testing. • 60.12: No machines, equipment, or processes at the facility have been built or used to conceal emissions. • 60.13: A CEMS is installed on each combustion turbine at the facility. The CEMS are maintained in good working order and all calibrations are completed on time to ensure the emissions data collected meets the requirements of 40 CFR 60. • 60.14: No modifications or changes which would increase emissions from the facility have been done during the reporting period. If modifications are made, the facility will comply the applicable standards within the 180 day limit. • 60.15: The facility has not undergone any work that would qualify for "reconstruction".	• 60.11(a),(d),(f), and (g): The facility is maintained in good working order. • 60.11(b),(c), and (e): All opacity standards are complied with at the facility. Initial opacity testing was completed concurrently with the initial performance testing. • 60.12: No machines, equipment, or processes at the facility have been built or used to conceal emissions. • 60.13: A CEMS is installed on each combustion turbine at the facility. The CEMS are maintained in good working order and all calibrations are completed on time to ensure the emissions data collected meets the requirements of 40 CFR 60. • 60.14: No modifications or changes which would increase emissions from the facility have been done during the reporting period. If modifications are made, the facility will comply the applicable standards within the 180 day limit. • 60.15: The facility has not undergone any work that would qualify for "reconstruction".	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
Incorporation of Federal Requirements by Reference							
2.20	Any reference in this permit in any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of the document for the purposes of the reference. Any conflicts between the requirements between the permit and documents, the document shall take precedence.		In the case of conflict between the federal requirements incorporated by reference and the permit conditions, the federal requirements shall govern.	N/A		C	
3 EMISSION UNIT 1 – COMBUSTION TURBINE							
Permit Limits / Standard Summary							
3.1	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.	On and after the date that performance test required by 40 CFR 60.8 is completed, the permittee shall not discharge into the atmosphere from the combustion turbine, any gases that contain NOx in excess. • NOx emissions verified by CEMS	C		C	
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.	Emissions of NOX and CO from the combustion turbine stack shall not exceed any corresponding emissions rate limits listed in Table 3.3 • CEMS is used to track emissions of consecutive 12-month period.	C		C	
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)	Emissions of PM from the combustion turbine shall comply with Permit Condition 2.10. • Turbine is operated exclusively on pipeline natural gas.	I		C	
Operating Requirements							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
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. The sulfur content of the most recent annual fuel sample did not exceed 0.02 gr/dscf.	The combustion turbine shall be fired exclusively by natural gas. The natural gas burned in the combustion turbine shall not contain sulfur in excess of 0.02 gr/dscf of natural gas [2.0 gr/hscf]. • The turbine is fired exclusively on pipeline quality natural gas which is verified annually to have less than 0.5 gr/hscf of sulfur.	I		C	
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.	The permittee shall install, certify, operate, and maintain in accordance with the requirements of 40 CFR 75, a NOx CEMS with an O2 diluent monitor. • A CEMS is installed and operational.	C		C	
3.6	Permittee shall install, certify, operate and maintain a CO CEMS IAW 40 CFR 60, Appendices B and F with an O2 diluent monitor and automatic DAHS.	CO CEMS is installed and maintained.	The permittee shall install, certify, operate, and maintain a CEMS consisting of a CO pollutant concentration monitor and an oxygen diluent gas monitor. • A CEMS is installed and operational	C		C	
3.7	The permittee shall use the methodologies in Method 19 of 40 CFR 60, Appendix A to quantify the turbine exhaust flowrate.	Turbine flow rate 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).	The permittee shall use the methodologies prescribed by Method 19 in 40 CFR 60, Appendix A, to quantify the turbine exhaust flowrate. • CT flowrate is quantified using the Fd factor of 8,710dscf/MMBtu.	C		C	
Monitoring and Recordkeeping Requirements							
3.8	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.	The permittee shall monitor and record the amount of natural gas combusted in the turbine on an hourly basis. The amount shall be recorded as cubic feet per hour. • Hourly gas usage reports are electronically archived onsite for each run.	C		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
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.	For the NOx CEMS, the permittee shall fully comply with all monitoring requirements established by 40CFR 72.9(b). • The CEMS is operated and maintained IAW the specified requirements.	I		C	
3.10	The permittee shall perform RATAs on the CO CEMS.	A RATA was performed on 8/5/15. All records are maintained for a minimum of 5 years.	The permittee shall perform RATAs on the CO CEMS, in accordance with 40 CFR 60, Appendix F. • RATAs are performed as necessary in accordance with the air permit.	I		C	
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.	The permittee shall comply with the fuel sulfur and nitrogen monitoring provisions of 40 CFR Part 60.334(h) and 40 CFR Part 75, Appendix D • Fuel samples are analyzed annually and included in the RATA reports. • Nitrogen monitoring is not required since the facility does not claim an F-value for fuel bound nitrogen IAW 40 CFR 332.	I		C	
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.	The permittee shall monitor and record the information listed below for the combustion turbine. The listed information shall be compiled in accordance with the emissions calculation protocol: NOx emission per month, NOx emission per 12-month period, CO emissions per month, and CO emission per 12-month period. • Reports are kept onsite.	C		C	
Reporting Requirements							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
3.13	Shall submit a testing protocol to DEQ for certification/recertification of the NOx and CO CEMS at least 30 days prior to the test date.	Protocols are submitted to DEQ prior to testing.	The permittee shall submit a test protocol to DEQ for each certification and recertification of the NOx and CO CEMS required by Permit Conditions 3.9 and 3.10 • Test protocols are submitted no later than 30 days prior to the test.	I		C	
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.	All CEMS data submitted to EPA or DEQ shall meet the quality assurance procedures in 40 CFR 60, Appendix F. • The CEMS is maintained IAW the QA procedures specified in 40 CFR 60, Appendix F	I		C	
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.	The results of any RATAs conducted for compliance shall be submitted to DEQ within 60 days of the completion of the test. • Test results are submitted in a report to the DEQ within the required timeline.	I		C	
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.	The permittee shall fully comply with the reporting requirements set forth in 40 CFR 75, Subpart G. • Reports and notifications are submitted within the required timeline.	I		C	
3.17	Excess emissions of NOx 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 NOx (See PTC P-050002 Statement of Basis, Section 6.1)	Excess emissions of NOx are defined as any period in which the fuel bound nitrogen exceeds the maximum nitrogen content allowed by the fuel bound nitrogen allowance used during the performance test. • The facility uses a CEMS to identify excess emissions of NOx IAW 40 CFR 60.334(c) and does not claim an F-value for fuel bound nitrogen. [See PTC P-050002 Statement of Basis, Section 6.1]	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
3.18	Permittee shall submit a report of all excess emissions of SO2 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 0.5 gr/hscf analyzed on 7/23/13.	The permittee shall submit a report of all excess emissions of SO2 to DEQ in accordance with 40 CFR 60.7(b) through (d).	I		C	
4 EMISSIONS UNIT NO.2 – ONE FUEL HEATER							
Permit Limits / Standard Summary							
4.1	The emissions from the fuel heater shall not exceed 0.84 T/yr (NOx) 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).	The NOx and CO emissions from the fuel heater stack shall not exceed any corresponding emissions rate limits listed in Table 4.3. NOx 0.84 Tons/yr, CO 0.71 Tons/yr • Compliance with the limits is verified by not exceeding the fuel throughput restrictions under Permit Condition 4.4 (See PTC P-030060 Statement of Basis, Section 6.3)	N/A		C	
4.2	PM emissions shall not exceed 0.015 gr/dscf @ 3% O2.	The fuel heater operates exclusively on natural gas. (See PTC P-030060 Statement of Basis, Section 5.3)	Emissions of PM from the fuel heater shall comply with Permit Condition 2.10. • Fuel heater is operated exclusively on natural gas. (See PTC P-030060 Statement of Basis, Section 5.3)	N/A		C	
	Operating Requriements		*Operating Requirements*				
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.	The fuel heater shall be fired exclusively by natural gas. The natural gas burned in the fuel heater shall not contain sulfur in excess of 0.02 gr/dscf of natural gas [2.0 gr/dscf] • The fuel heater is operated exclusively on natural gas.	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
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.	The volume of natural gas combusted in the fuel heater shall not exceed 16,878,613 cubic feet in any consecutive 12-month period. • Fuel usage reports are kept onsite. Site uses Intermountain Gas Company billing receipts as the official fuel use logs.	I		C	
Monitoring and Recordkeeping Requirements							
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.	The permittee shall monitor and record the following information: • The total volume of natural gas combusted in the fuel heater in standard cubic feet per calendar month. • The total volume of natural gas combusted in the fuel heater in standard cubic feet per any consecutive 12-month period • Reports are kept onsite	I		C	
EMISSIONS UNIT NO.3 – EMERGENCY DIESEL GENERATOR							
Operating Requirements							
5.1	Owners must purchase fuel that meets the requirements of 40 CFR 80.510(b). 15 ppm.	The engine is operated exclusively on ULSD (15 ppm) fuel. Fuel receipts are kept in a file at the facility.	Owner must purchase fuel that meets the requirements of 40 CFR 80.510(b) • Only ULSD (15ppm sulfur) fuel is purchased for use in the emergency generator. Fuel receipts are maintained onsite.	I		C	
5.2	Permittee must comply with 40 CFR 60.4211(a), with the exceptions under 40 CFR 60.4211(g), including: (1) operate the engine according to the manufacturers written instructions, (2) change only emissions-related settings as permitted by the manufacturer, and (3) meet the requirements of 40 CFR 89.	The engine is maintained within the manufacturer's recommendations.	Engine must be operated in accordance with the manufacturer's instructions (which pertain to emissions), cannot change emission-related settings, and must meet the applicable parts of 40 CFR 89, 94, and/or 1068.	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
5.3	In accordance with 40 CFR 60.4211(f), the emergency diesel generator can be operated for 100 hours per year for maintenance and readiness testing. There is no limit on emergency use during emergency situations.	The engine use is limited to 100 hours/yr for maintenance and readiness testing. Operational hours are logged and filed at the facility.	The emergency generator is only used for emergency situations. Test and maintenance runs are limited to 100 hours/year.	I		C	
6 INSIGNIFICANT ACTIVITIES							
6.1	The activities listed in Table 6.1 are allowed to occur onsite within the limits identified.		There are no monitoring, recordkeeping, or reporting requirements for insignificant emission units or activities beyond those required in the Facility-wide Permit Conditions.	NA		C	
7 ACID RAIN PERMIT							
Statement of Basis							
7.1	DEQ issued the Acid Rain Permit IAW IDAPA 58.01.01 and Titles IV and V of the CAA.		In accordance with IDAPA 58.01.01 (Rules for the Control of Air Pollution in Idaho) and Titles IV and V of the Clean Air Act, DEQ issues this permit pursuant to IDAPA 58.01.01.300.	NA		C	
Sulfur Dioxide Allowance Allocations and Nitrogen Oxides Requirements							
7.2	Permittee is required to obtain SO2 allowances not less than the total annual emissions of SO2 for the pervious 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.	The permittee is required to obtain SO2 allowances, after deductions under 40 CFR 73.34(c), • Sulfur allowances are held for the facility. Allowances are tracked using the EPA's CAMD website.	I		C	
Comments, Notes, and Justifications							
7.3	The Phase II Acid Rain Permit incorporates by reference the definitions and terms of 40 CFR 72.2		The Phase II Acid Rain Permit incorporates by references the definitions and terms of 40 CFR 72.2.	NA		C	
Compliance with Permit Application							
7.4	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.	The permittee shall comply with the standard requirements and special provisions set forth in the EPA Phase II Acid Rain Permit Application, signed and dated April 5, 2005.	I		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
Permit Application							
7.5	A copy of the Acid Rain Permit application is contained in the appendix of the Tier 1 permit.		A copy of the Phase II Acid Rain Permit application is contained in the appendix of this Tier I operating permit.	NA		C	
8 TIER 1 OPERATING PERMIT GENERAL CONDITIONS							
General Compliance							
8.1	Permittee shall comply with all conditions of the permit.		The permittee shall comply with all conditions of this permit.	I		C	
8.2	Halting or reducing permitted activity to maintain compliance with the permit shall not be a defense from an enforcement action.		It shall not be a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the terms and conditions of this permit.	N/A		C	
8.3	Permittee shall submit supplementary facts or correct information if incorrect information has been submitted.		Any permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.	N/A		C	
Reopening							
8.4	Permit may be revised, reopened, revoked and reissued, or terminated for cause.		This permit may be revised, reopened, revoked and reissued, or terminated for cause.	NA		C	
8.5	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.		The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.	NA		C	
Property Rights							
8.6	Permit does not convey any property rights		This permit does not convey any property rights of any sort, or any exclusive privilege.	NA		C	
Information Requests							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
8.7	Permittee shall furnish information requested by DEQ.		The permittee shall furnish all information requested by DEQ, within a reasonable time, that DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.	I		C	
8.8	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	Upon request, the permittee shall furnish to DEQ copies of records required to be kept by this permit. • Records are kept onsite and are made available to DEQ upon request.	I		C	
Severability							
8.9	Provisions of the permit are severable.		The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.	N/A		C	
Changes Requiring Permit Revision or Notice							
8.10	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.	The 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	N/A		C	
8.11	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.		Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA,	N/A		C	
Federal and State Enforceability							
8.12	Unless specifically identified as "State-Only" provision, all terms and conditions in the permit are enforceable by both the DEQ and United States.		Unless specifically identified as a "State-only" provision, all terms and conditions in this permit, including any terms and conditions designed to limit a source's potential to emit, are enforceable:	NA		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
8.13	Provisions identified as "State-Only" are only enforceable under state law.		Provisions specifically identified as a "State-only" provision are enforceable only in accordance with state law.	NA		C	
Inspection and Entry							
8.14	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.	Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following: enter the premises, have access to records, inspect the facilities, and sample or monitor applicable emission parameters.	I		C	
New Requirements During Permit Term							
8.15	Permittee shall comply with applicable requirements that become effective during the permit term on a timely basis		The permittee shall comply with applicable requirements that become effective during the permit term on a timely basis.	I		C	
Fees							
8.16	Owner/operator shall pay annual registration fees to DEQ IAW IDAPA 58.01.01	Registration fees are paid annually.	The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397. • Registration fees are paid annually.	I		C	
Certification							
8.17	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.	All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.	I		C	
Renewal							
8.18	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.		The owner or operator of a Tier I source shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit.	I		C	
Permit Shield							

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
8.19	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.		Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance,	N/A		C	
Compliance Schedule and Progress Reports							
8.20	Permittee shall comply with the compliance schedule and comply with requirements that become effective during the term of the permit		a. For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit. b. For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule. c. For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis. For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.	NA		C	
Periodic Compliance Certification							
8.21	Permittee shall submit compliance certifications during the term of the permit for each emissions unit.		The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA	I		C	
False Statements							
8.22	No person shall knowingly make false statements, representation, or certification required under the permit		No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.	N/A		C	

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I ANNUAL COMPLIANCE CERTIFICATION TABLE / SEMIANNUAL MONITORING TABLE

FORM AQ-C2 / AQ-C5

	SEMIANNUAL MONITORING TABLE		ANNUAL COMPLIANCE CERTIFICATION TABLE				
1 Permit Condition	2 Condition Title / Description	3 Comments	2 Compliance Determination Methods	3 Monitoring Frequency (C, I, or N/A)	4 Deviations and Excess Emission Events	5 Permit Condition Compliance Status (C/I)	6 attachment
No Tampering							
8.23	No person shall knowingly render inaccurate any monitoring device or method required under the permit.		No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.	N/A		C	
Semiannual Monitoring Reports							
8.24	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	In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months.	I		C	
Reporting Deviations and Excess Emissions							
8.25	Permittee shall promptly report all deviations from permit requirements.	All deviations from the permit conditions are promptly reported to the DEQ.	The permittee shall promptly report all deviations from permit requirements including upset conditions, their probable cause, and any corrective actions or preventive measures taken.	I		C	
Permit Revision Not Required							
8.26	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		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.	NA		C	
Emergency							
8.27	An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation.		In accordance with IDAPA 58.01.01.332, an "emergency" as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.	I		C	

6

[1] C = Continuous [2] I = Intermittent [3] N/A = Not Applicable

TIER I SEMIANNUAL DEVIATION SUMMARY TABLE

FORM AQ-C3

Facility/Permittee Name: Bennett Mountain Power Plant / Idaho Power Company

Facility Location: Mountain Home, Idaho

AIRS Facility No.: 039-00025

Tier I Operating Permit No.: T1-2011.0129

Issuance Date: March 23,2012

Compliance Reporting Period: 07/01/2015 to 12/31/2015

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											

NSPS SEMIANNUAL SUMMARY REPORT, 40 CFR 60.7(d)
CONTINUOUS EMISSION MONITOR SYSTEM

POLLUTANT: SO_2 NO_X TRS H_2S (CO) Opacity O_2

REPORTING PERIOD DATES: FROM: 07/01/15 TO: 12/31/15

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: 08/05/2015

PROCESS UNIT DESCRIPTION: CT01

TOTAL SOURCE OPERATING HOURS IN REPORTING PERIOD[1]: 717

HOURS IN PERIOD 4416 CT DOWNTIME HOURS: 3699

EMMISSION DATA SUMMARY[1]

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 0
   c. Non-Monitor Equipment Malfunctions 0
   d. Quality Assurance or Calibration 6
   e. Unknown Causes 0
2. TOTAL CEM DOWNTIME HOURS 6
3. [(TOTAL CEM DOWNTIME HOURS / TOTAL SOURCE OPERATING TIME) * 100] 0.8%

NSPS SEMIANNUAL SUMMARY REPORT, 40 CFR 60.7(d)
CONTINUOUS EMISSION MONITOR SYSTEM

POLLUTANT: SO_2 (NO_X) TRS H_2S CO Opacity O_2

REPORTING PERIOD DATES: FROM: 07/01/15 TO: 12/31/15

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: 08/05/2015

PROCESS UNIT DESCRIPTION: CT01

TOTAL SOURCE OPERATING HOURS IN REPORTING PERIOD[1]: 717

HOURS IN PERIOD 4416 CT DOWNTIME HOURS 3699

EMMISSION DATA SUMMARY[1]

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] 0.0%

CEMS PERFORMANCE SUMMARY

1. CEM DOWNTIME HOURS IN REPORTING PERIOD DUE TO:
   a. Other Known Causes 0
   b. Monitor Equipment Malfunctions 6
   c. Non-Monitor Equipment Malfunctions 0
   d. Quality Assurance or Calibration 6
   e. Unknown Causes 0
2. TOTAL CEM DOWNTIME HOURS 12
3. [(TOTAL CEM DOWNTIME HOURS / TOTAL SOURCE OPERATING TIME) * 100] 1.7%

Turbine 1 Excess Emissions Summary

Bennett Mountain

NOx ppm @15% O2 (Subpart GG) 4-Hr Rolling- Gas Excess Emissions for 7/1/2015 thru 12/31/2015

Reason	Duration
There are no excess emissions for this report.	
Total duration of NOx ppm @15% O2 (Subpart GG) 4-Hr Rolling- Gas excess emissions	0
Total operating time	717 hours
Operating time with excess emissions	0.0%

Turbine 1 CEMS Downtime Summary

Bennett Mountain

NOx ppm @15% O2 CEMS Downtime for 7/1/2015 thru 12/31/2015

Reason	Duration
Not specified	12 hours

Total duration of NOx ppm @15% O2 CEMS downtime	12 hours
Total operating time	717 hours
Operating time with CEMS downtime	1.7%

Turbine 1 CEMS Downtime

Bennett Mountain

NOx ppm @15% O2 CEMS Downtime for 7/1/2015 thru 12/31/2015

Parameter	Start	End	Duration	Reason	Action
NOx ppm @15% O2	7/22/2015 10:00 AM	3:59 PM	6 hours	*Not specified*	
NOx ppm @15% O2	8/20/2015 1:00 PM	1:59 PM	1 hour	*Not specified*	
NOx ppm @15% O2	9/29/2015 2:00 PM	3:59 PM	2 hours	*Not specified*	
NOx ppm @15% O2	11/5/2015 6:00 AM	6:59 AM	1 hour	*Not specified*	
NOx ppm @15% O2	12/10/2015 6:00 PM	7:59 PM	2 hours	*Not specified*	
	Total duration		12 hours		

Turbine 1 CEMS Downtime Summary

Bennett Mountain

CO ppm @15% O2 CEMS Downtime for 7/1/2015 thru 12/31/2015

Reason	Duration
Not specified	6 hours

Total duration of CO ppm @15% O2 CEMS downtime	6 hours
Total operating time	717 hours
Operating time with CEMS downtime	0.8%

Turbine 1 CEMS Downtime

Bennett Mountain

CO ppm @15% O2 CEMS Downtime for 7/1/2015 thru 12/31/2015

Parameter	Start	End	Duration	Reason	Action
CO ppm @15% O2	8/20/2015 1:00 PM	1:59 PM	1 hour	*Not specified*	
CO ppm @15% O2	9/29/2015 2:00 PM	3:59 PM	2 hours	*Not specified*	
CO ppm @15% O2	11/5/2015 6:00 AM	6:59 AM	1 hour	*Not specified*	
CO ppm @15% O2	12/10/2015 6:00 PM	7:59 PM	2 hours	*Not specified*	
	Total duration		6 hours		

Turbine 1 NOx/H Linearity

Bennett Mountain

Test Information

Test Date:	**9/29/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1
ORIS:	
Test Reason(s):	
Aborted:	No

Analyzer and Monitor Information

Range:	High
Instrument Span:	150 ppm
Component ID:	002
Monitoring System ID:	102
Manufacturer:	API
Model:	200AH
Serial Number:	608

Run Number	Time	Reference Gas	CEMS Response			Cylinder Information
Low Gas						
1	2:12 PM	41.01	40.38			
2	2:30 PM	41.01	42.06			
3	2:48 PM	41.01	41.99			Allowable Reference Values: 30-45 ppm (20-30% of span)
	Mean (ppm)	41.01	41.48			Cylinder ID: CC402723
	Difference of means (R-A) (ppm)	0.5	*Limit 5*	*Passed*		Expiration Date: 9/4/2020
						EPA Vendor ID: B12012
	Linearity Error (%)	1.1	*Limit 5.0*	*Passed*		Cylinder contains: CO,NO,BALN
Mid Gas						
1	2:18 PM	81.16	81.07			
2	2:36 PM	81.16	84.11			
3	2:54 PM	81.16	83.87			Allowable Reference Values: 75-90 ppm (50-60% of span)
	Mean (ppm)	81.16	83.02			Cylinder ID: CC231163
	Difference of means (R-A) (ppm)	1.9	*Limit 5*	*Passed*		Expiration Date: 8/26/2019
						EPA Vendor ID: B12011
	Linearity Error (%)	2.3	*Limit 5.0*	*Passed*		Cylinder contains: CO,NO,BALN
High Gas						
1	2:24 PM	136.70	137.30			Allowable Reference Values: 120-150 ppm (80-100% of span)
2	2:42 PM	136.70	141.12			
3	3:00 PM	136.70	140.69			
	Mean (ppm)	136.70	139.70			Cylinder ID: CC187497
	Difference of means (R-A) (ppm)	3.0	*Limit 5*	*Passed*		Expiration Date: 6/29/2023
						EPA Vendor ID: B72015
	Linearity Error (%)	2.2	*Limit 5.0*	*Passed*		Cylinder contains: CO,NO,NOX,BALN

Linearity Error (LE) Determination

*LE (%) = (|R-A| / R) * 100*

R = Reference gas value

A = Mean of actual CEMS responses

Turbine 1 CO/H CGA

Bennett Mountain

Test Information

Test Date:	**9/29/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1

Analyzer and Monitor Information

Range:	High
Instrument Span:	2500 ppm
Manufacturer:	API
Model:	300EM
Serial Number:	151

Run Number	Time	Reference Gas	CEMS Response		Cylinder Information
Low Gas					
1	2:12 PM	611.100	609.983		
2	2:30 PM	611.100	610.161		Allowable Reference Values:
3	2:48 PM	611.100	610.715		500-750 ppm (20-30% of span)
	Mean (ppm)	611.100	610.286		Cylinder ID: CC402723
	Difference of means (Cm-Ca) (ppm)	-0.8	*Limit 5*	*Passed*	Expiration Date: 9/4/2020
					EPA Vendor ID: B12012
	CEMS Accuracy (%)	-0.1	*Limit 15*	*Passed*	Cylinder contains: CO,NO,BALN
Mid Gas					
1	2:18 PM	1402.000	1408.473		Allowable Reference Values:
2	2:36 PM	1402.000	1408.335		1250-1500 ppm (50-60% of span)
3	2:54 PM	1402.000	1408.759		
	Mean (ppm)	1402.000	1408.522		Cylinder ID: CC231163
	Difference of means (Cm-Ca) (ppm)	6.5	*Limit 5*		Expiration Date: 8/26/2019
					EPA Vendor ID: B12011
	CEMS Accuracy (%)	0.5	*Limit 15*	*Passed*	Cylinder contains: CO,NO,BALN

CEMS Accuracy Determination (%)

*Accuracy (%) = ((Cm - Ca) / Ca) * 100*

Ca = Reference gas value

Cm = Mean of actual CEMS responses

Turbine 1 O2 Linearity

Bennett Mountain

Test Information

Test Date:	**9/29/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1
ORIS:	
Test Reason(s):	
Aborted:	No

Analyzer and Monitor Information

Range:	Single Scale
Instrument Span:	25 %O2
Component ID:	003
Monitoring System ID:	102
Manufacturer:	SERVOMEX
Model:	1440D
Serial Number:	01440D1V02/3641

Run Number	Time	Reference Gas	CEMS Response		Cylinder Information
Low Gas					
1	3:07 PM	6.072	6.003		
2	3:22 PM	6.072	6.059		
3	3:37 PM	6.072	6.058		Allowable Reference Values:
	Mean (%O2)	6.072	6.040		5-7.5 %O2 (20-30% of span)
	Difference of means (R-A) (%O2)	0.0	*Limit 0.5*	*Passed*	Cylinder ID: CC281774 Expiration Date: 9/14/2018 EPA Vendor ID: NONPGVP
	Linearity Error (%)	0.5	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN
Mid Gas					
1	3:12 PM	13.520	13.407		
2	3:27 PM	13.520	13.440		
3	3:42 PM	13.520	13.447		Allowable Reference Values:
	Mean (%O2)	13.520	13.431		12.5-15 %O2 (50-60% of span)
	Difference of means (R-A) (%O2)	0.1	*Limit 0.5*	*Passed*	Cylinder ID: SG9168205BAL Expiration Date: 9/20/2018 EPA Vendor ID: NONPGVP
	Linearity Error (%)	0.7	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN
High Gas					
1	3:17 PM	22.510	22.476		
2	3:32 PM	22.510	22.469		
3	3:47 PM	22.510	22.471		Allowable Reference Values:
	Mean (%O2)	22.510	22.472		20-25 %O2 (80-100% of span)
	Difference of means (R-A) (%O2)	0.0	*Limit 0.5*	*Passed*	Cylinder ID: CC432299 Expiration Date: 3/8/2019 EPA Vendor ID: B12013
	Linearity Error (%)	0.2	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN

Linearity Error (LE) Determination

*LE (%) = (|R-A| / R) * 100*

R = Reference gas value

A = Mean of actual CEMS responses

Turbine 1 NOx/H Linearity

Bennett Mountain

Test Information

Test Date:	**12/10/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1
ORIS:	
Test Reason(s):	
Aborted:	No

Analyzer and Monitor Information

Range:	High
Instrument Span:	150 ppm
Component ID:	002
Monitoring System ID:	102
Manufacturer:	API
Model:	200AH
Serial Number:	608

Run Number	Time	Reference Gas	CEMS Response		Cylinder Information
Low Gas					
1	6:18 PM	41.01	40.89		
2	6:36 PM	41.01	40.82		
3	6:54 PM	41.01	40.97		Allowable Reference Values:
	Mean (ppm)	41.01	40.89		30-45 ppm (20-30% of span)
	Difference of means (R-A) (ppm)	0.1	*Limit 5*	*Passed*	Cylinder ID: CC402723 Expiration Date: 9/4/2020 EPA Vendor ID: B12012
	Linearity Error (%)	0.3	*Limit 5.0*	*Passed*	Cylinder contains: CO,NO,BALN
Mid Gas					
1	6:24 PM	81.16	81.17		
2	6:42 PM	81.16	81.05		
3	7:00 PM	81.16	81.37		Allowable Reference Values:
	Mean (ppm)	81.16	81.20		75-90 ppm (50-60% of span)
	Difference of means (R-A) (ppm)	0.0	*Limit 5*	*Passed*	Cylinder ID: CC231163 Expiration Date: 8/26/2019 EPA Vendor ID: B12011
	Linearity Error (%)	0.0	*Limit 5.0*	*Passed*	Cylinder contains: CO,NO,BALN
High Gas					
1	6:30 PM	136.00	135.89		Allowable Reference Values:
2	6:48 PM	136.00	136.84		120-150 ppm (80-100% of span)
3	7:06 PM	136.00	136.48		
	Mean (ppm)	136.00	136.40		Cylinder ID: CC164824
	Difference of means (R-A) (ppm)	0.4	*Limit 5*	*Passed*	Expiration Date: 8/7/2023 EPA Vendor ID: B72015
	Linearity Error (%)	0.3	*Limit 5.0*	*Passed*	Cylinder contains: CO,NO,NOX,BALN

Linearity Error (LE) Determination

*LE (%) = (|R-A| / R) * 100*

R = Reference gas value

A = Mean of actual CEMS responses

Turbine 1 CO/H CGA

Bennett Mountain

Test Information

Test Date:	**12/10/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1

Analyzer and Monitor Information

Range:	High
Instrument Span:	2500 ppm
Manufacturer:	API
Model:	300EM
Serial Number:	151

Run Number	Time	Reference Gas	CEMS Response		Cylinder Information
Low Gas					
1	6:18 PM	611.100	607.063		
2	6:36 PM	611.100	608.374		Allowable Reference Values:
3	6:54 PM	611.100	607.967		500-750 ppm (20-30% of span)
	Mean (ppm)	611.100	607.801		Cylinder ID: CC402723
	Difference of means (Cm-Ca) (ppm)	-3.3	*Limit 5*	*Passed*	Expiration Date: 9/4/2020
					EPA Vendor ID: B12012
	CEMS Accuracy (%)	-0.5	*Limit 15*	*Passed*	Cylinder contains: CO,NO,BALN
Mid Gas					
1	6:24 PM	1402.000	1386.591		Allowable Reference Values:
2	6:42 PM	1402.000	1388.452		1250-1500 ppm (50-60% of span)
3	7:00 PM	1402.000	1386.486		
	Mean (ppm)	1402.000	1387.176		Cylinder ID: CC231163
	Difference of means (Cm-Ca) (ppm)	-14.8	*Limit 5*		Expiration Date: 8/26/2019
					EPA Vendor ID: B12011
	CEMS Accuracy (%)	-1.1	*Limit 15*	*Passed*	Cylinder contains: CO,NO,BALN

CEMS Accuracy Determination (%)

*Accuracy (%) = ((Cm - Ca) / Ca) * 100*

Ca = Reference gas value

Cm = Mean of actual CEMS responses

Turbine 1 O2 Linearity

Bennett Mountain

Test Information

Test Date:	**12/10/2015**
Facility:	Bennett Mountain
Unit:	Turbine 1
ORIS:	
Test Reason(s):	
Aborted:	No

Analyzer and Monitor Information

Range:	Single Scale
Instrument Span:	25 %O2
Component ID:	003
Monitoring System ID:	102
Manufacturer:	SERVOMEX
Model:	1440D
Serial Number:	01440D1V02/3641

Run Number	Time	Reference Gas	CEMS Response		Cylinder Information
Low Gas					
1	7:15 PM	6.072	6.067		
2	7:30 PM	6.072	6.085		
3	7:45 PM	6.072	6.090		Allowable Reference Values:
	Mean (%O2)	6.072	6.081		5-7.5 %O2 (20-30% of span)
	Difference of means (R-A) (%O2)	0.0	*Limit 0.5*	*Passed*	Cylinder ID: CC281774 Expiration Date: 9/14/2018 EPA Vendor ID: NONPGVP
	Linearity Error (%)	0.1	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN
Mid Gas					
1	7:20 PM	13.520	13.488		
2	7:35 PM	13.520	13.499		
3	7:50 PM	13.520	13.511		Allowable Reference Values:
	Mean (%O2)	13.520	13.499		12.5-15 %O2 (50-60% of span)
	Difference of means (R-A) (%O2)	0.0	*Limit 0.5*	*Passed*	Cylinder ID: SG9168205BAL Expiration Date: 9/20/2018 EPA Vendor ID: NONPGVP
	Linearity Error (%)	0.2	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN
High Gas					
1	7:25 PM	22.580	22.577		
2	7:40 PM	22.580	22.596		
3	7:55 PM	22.580	22.619		Allowable Reference Values:
	Mean (%O2)	22.580	22.597		20-25 %O2 (80-100% of span)
	Difference of means (R-A) (%O2)	0.0	*Limit 0.5*	*Passed*	Cylinder ID: CC12764 Expiration Date: 6/1/2023 EPA Vendor ID: B72015
	Linearity Error (%)	0.1	*Limit 5.0*	*Passed*	Cylinder contains: O2,BALN

Linearity Error (LE) Determination

*LE (%) = (|R-A| / R) * 100*

R = Reference gas value

A = Mean of actual CEMS responses

Attachment 10 – CO Requirements

Sean R. Gregory, P.E., Air Quality Engineer
DSG Solutions, LLC
20 Monadnock Street
Gardiner, MA 01440

Re: Alternative Part 60 RATA and CGA Frequencies for Mystic Station Auxiliary Boiler EU17

Dear Mr. Gregory:

This is a response to your letter dated September 22, 2010, on behalf of your client Boston Generating, LLC, regarding the Mystic Station in Charlestown, MA ("Mystic" or "Mystic Station"). Your letter requested U.S. Environmental Protection Agency ("EPA") approval of alternative frequency requirements for Cylinder Gas Audits ("CGAs") and Relative Accuracy Test Audits ("RATAs") for EU17's continuous emission monitoring system ("CEMS") for nitrogen oxides ("NOx"), carbon monoxide ("CO"), and oxygen ("O2") under 40 CFR Part 60, Appendix F. In your letter, you state that because EU17 operates on an intermittent and infrequent basis, Mystic is requesting to follow the timing requirements for RATAs and CGAs under 40 CFR Part 75, Appendix B.

Mystic Station houses a Rentech Type D auxiliary boiler, Emissions Unit 17 ("EU17" or "the Unit"), rated at 203.8 million British thermal units per hour ("mmBtu/hr") that burns only natural gas. The unit is subject to federally enforceable Prevention of Significant Deterioration ("PSD") permit limits for NOx and CO, as well as a NOx limit under 40 CFR Part 60, Subpart Db, New Source Performance Standards for industrial-Commercial-Institutional Steam Generating Units. Accordingly, the permit requires EU17 to maintain a CEMS for NOx, CO, and O2 that meets the requirements of 40 CFR Part 60 (including Appendix F).

Under 40 CFR 60.13(i)(2), EPA has the authority to address RATA and CGA frequency changes. As requested, EPA approves Mystic's request to omit a NOx, CO, and O2 CGA during any calendar quarter in which the unit is operated less than one hundred sixty-eight (168) unit operating hours (where a unit operating hour means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour). Regardless of operation, Mystic shall conduct a CGA for NOx, CO, and O2 at least once every four calendar quarters.

EPA also approves Mystic's request to conduct a RATA once every four quality assurance ("QA") operating quarters (where a QA operating quarter is defined as one in which the unit operates 168 unit operating hours or more). Regardless of operation, Mystic shall conduct a RATA at least once every eight calendar quarters. The frequency time line for the RATAs shall begin with the last RATA tests conducted in Quarter 1 of 2010.

This EPA approval also allows Mystic to follow the grace period provisions of 40 CFR Part 75, Appendix B, Section 2.2.4 for CGAs and Section 2.3.3 for RATAs.

EPA may alter this approval in the future, in accordance with applicable regulations, if the agency determines that it is warranted. If you have any questions regarding this monitoring approval, please contact Steve Rapp of my staff at (617) 918-1551.

Sincerely,

Roger Janson, Technical Enforcement Manager
Office of Environmental Stewardship

Cc: Gary Basilesco, Boston Generating, LLC
Jim Belsky, MassDEP
Joseph Su, MassDEP