Statement of Basis

Tier I Operating Permit No. T1-2016.0039
Project ID 61748

Idaho Power Company - Bennett Mountain
Mountain Home, Idaho

Facility ID 039-00025

Final

February 24, 2017
Morrie Lewis
Permit Writer

The purpose of this Statement of Basis is to set forth the legal and factual basis for the Tier I operating permit terms and conditions, including references to the applicable statutory or regulatory provisions for the terms and conditions, as required by IDAPA 58.01.01.362
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APPENDIX A - EMISSIONS INVENTORY
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1. **ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE**

**ASTM**  
American Society for Testing and Materials

**bhp**  
brake horsepower

**CAA**  
Clean Air Act

**CAM**  
Compliance Assurance Monitoring

**CEMS**  
continuous emission monitoring systems

**CFR**  
Code of Federal Regulations

**CGA**  
cylinder gas audits

**CI**  
compression ignition

**CMS**  
continuous monitoring systems

**CO**  
carbon monoxide

**CO₂**  
carbon dioxide

**CO₂ₑ**  
CO₂ equivalent emissions

**DEQ**  
Department of Environmental Quality

**EPA**  
U.S. Environmental Protection Agency

**GHG**  
greenhouse gases

**gr/dscf**  
grains (1 lb = 7,000 grains) per dry standard cubic foot

**HAP**  
hazardous air pollutants

**HHV**  
higher heating value

**ICE**  
internal combustion engines

**IDAPA**  
a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act

**kW**  
kilowatts

**lb/hr**  
pounds per hour

**MACT**  
Maximum Achievable Control Technology

**MMBtu**  
million British thermal units

**MRRR**  
Monitoring, Recordkeeping and Reporting Requirements

**NESHAP**  
National Emission Standards for Hazardous Air Pollutants

**NO₂**  
nitrogen dioxide

**NOₓ**  
nitrogen oxides

**NSPS**  New Source Performance Standards

**O₂**  
oxxygen

**PM**  
particulate matter

**PM_{2.5}**  
particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers

**PM_{10}**  
particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

**ppmv**  
parts per million by volume

**ppmw**  
parts per million by weight

**PSD**  
Prevention of Significant Deterioration

**PTC**  
permit to construct

**RATA**  
relative accuracy test audit

**RICE**  
reciprocating internal combustion engines

**Rules**  
*Rules for the Control of Air Pollution in Idaho*

**SO₂**  
sulfur dioxide

**T/yr**  
tons per consecutive 12 calendar month period

**T1**  
Tier I operating permit

**TAP**  
toxic air pollutants

**ULSD**  
ultra low sulfur diesel

**U.S.C.**  
United States Code

**VOC**  
volatile organic compound
2. INTRODUCTION AND APPLICABILITY

Bennett Mountain consists of a 170 megawatt natural gas-fired simple cycle combustion turbine and generator, a natural gas fuel heater, an emergency diesel generator, and emission units that are insignificant that are listed in that section of the permit. The turbine is primarily operated to generate electric power to meet peak system load requirements. The facility is located at 2750 N.E. Industrial Way, Mountain Home. The facility is classified as a major facility, as defined by IDAPA 58.01.01.008.10.c, because it emits or has the potential to emit NO\textsubscript{x} and CO above the major source threshold of 100 tons-per-year. At the time of this permitting action, the facility is not a major source of HAP emissions. As a major facility, Bennett Mountain is required to apply for a Tier I operation permit pursuant to IDAPA 58.01.01.301. The application for a Tier I operation permit must contain a certification from Bennett Mountain as to its compliance status with all applicable requirements (IDAPA 58.01.01.314.09).

IDAPA 58.01.01.362 requires that as part of its review of the Tier I application, DEQ shall prepare a technical memorandum (i.e. statement of basis) that sets forth the legal and factual basis for the draft Tier I operating permit terms and conditions including reference to the applicable statutory provisions or the draft denial. This document provides the basis for the draft Tier I operating permit for Bennett Mountain.

The format of this Statement of Basis follows that of the permit. Bennett Mountain Tier I operating permit is organized into sections. They are as follows:

Section 1 – Acronyms, Units, and Chemical Nomenclature

The acronyms, units, and chemical nomenclature used in the permit are defined in this section.

Section 2 - Tier I Operating Permit Scope

The scope describes this permitting action.

Section 3 - Facility-wide Conditions

The Facility-wide Conditions section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with a permit condition follows the permit condition.

Sections 4 through 6 - Emissions Unit/Source Name

The emissions unit-specific sections of the permit contain the applicable requirements that specifically apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the Facility-wide Conditions Section. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with an applicable requirement follows the applicable requirement.

Section 7 - Insignificant Activities

This section contains a list 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 regulatory citation for units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

Section 8 – Title IV Acid Rain Permit

This section contains Title IV acid rain permit and program requirements.

Section 9 - General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I facilities. The General Provisions have been reviewed by EPA and contain all terms and conditions required by IDAPA 58.01.01 et al as well as requirements from other air quality laws, rules and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the
effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and a rule or permit, the rule or permit shall govern.

3. FACILITY INFORMATION

3.1 Facility Permitting History

The following information is the comprehensive permitting history of all underlying applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>Project Number</th>
<th>Project</th>
<th>Status</th>
<th>History Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 9, 2002</td>
<td>P-039-00025</td>
<td>Initial PTC a 170 MW natural gas-fired power plant.</td>
<td>S</td>
<td>Revised by P-030060.</td>
</tr>
<tr>
<td>June 21, 2005</td>
<td>P-050002</td>
<td>Revised PTC to transfer ownership and update NSPS Subpart GG requirements.</td>
<td>A</td>
<td>Revised P-030060.</td>
</tr>
<tr>
<td>April 23, 2007</td>
<td>T1-060006</td>
<td>Initial T1 operating permit.</td>
<td>S</td>
<td>Initial Title V operating permit. Amended by T1-2008.0164.</td>
</tr>
<tr>
<td>October 18, 2007</td>
<td>PROJ 0192</td>
<td>Exemption for 350kW emergency diesel generator.</td>
<td>A</td>
<td>PTC exemption.</td>
</tr>
</tbody>
</table>
4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

4.1 Application Scope
This permit is the renewal of the facility’s Tier I operating permit.

4.2 Application Chronology

July 11, 2016  DEQ received an application.
September 8, 2016  DEQ determined that the application was complete.
November 4, 2016  DEQ made available the draft permit and statement of basis for peer and regional office review.
November 7, 2016  DEQ made available the draft permit and statement of basis for applicant review.
November 30 – December 30, 2016  DEQ provided a public comment period on the proposed action.
January 3, 2017  DEQ provided the proposed permit and statement of basis for EPA review.
February 24, 2017  DEQ issued the final permit and statement of basis.
5. EMISSIONS UNITS, PROCESS DESCRIPTION(S), AND EMISSIONS INVENTORY

This section lists the emissions units, describes the production or manufacturing processes, and provides the emissions inventory for this facility. The information presented was provided by the applicant in the permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 Process No. 1 – Combustion Turbine

Table 5.1 lists the emissions units and control devices associated with the Combustion Turbine.

<table>
<thead>
<tr>
<th>Emissions Units / Processes</th>
<th>Control Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>170 MW Siemens Westinghouse 501F Combustion Turbine</td>
<td>Dry Low NOx combustors</td>
</tr>
</tbody>
</table>

Unit CT1 is a natural gas-fired Siemens-Westinghouse WS01F simple-cycle combustion turbine (with generator). This unit has a nominal generating capacity of 170 MW. The heat input is approximately 1,948 MMBtu/hr (higher heating value). This unit is equipped with Dry Low NOx burners in order to combat a leaner mixture of fuel and air, thereby lowering the peak firing temperature and Nitrogen Oxide (NOx) 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, the fuel (pipeline natural gas) is pre-heated by the nominal 3.6 MMBtu/hr natural gas fuel heater (HI) 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.

5.2 Process No. 2 – Fuel Heater

Table 5.2 lists the emissions units and control devices associated with Fuel Heater.

<table>
<thead>
<tr>
<th>Emissions Unit / Process</th>
<th>Control Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel heater</td>
<td>None</td>
</tr>
</tbody>
</table>

At the Bennett Mountain, the fuel (pipeline natural gas) is pre-heated by the nominal 3.6 MMBtu/hr natural gas fuel heater (HI) prior to combustion.

5.3 Process No. 3 - Emergency diesel generator

Table 5.3 lists the emissions units and control devices associated with the Emergency diesel generator.

<table>
<thead>
<tr>
<th>Emissions Unit / Process</th>
<th>Control Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency diesel generator</td>
<td>None</td>
</tr>
</tbody>
</table>

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 the application for this permit. This generator will be used for emergency operation whenever station power is interrupted. Subpart III 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 the application are based on a total of 500 hours of operation per year for the emergency diesel generator.

5.4 Insignificant Emissions Units Based on Size or Production Rate

This section contains a list 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. Table 5.4 lists the units and activities which have been determined to be insignificant on the basis of size or production rate. The regulatory authority for emissions units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

<table>
<thead>
<tr>
<th>Emissions Unit / Activity</th>
<th>Regulatory Authority / Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>IDAPA 58.01.01.317.01.b.i(3)</td>
</tr>
<tr>
<td>Operation, loading and unloading of gasoline storage tanks, ten thousand (10,000) gallons capacity or less, with lids or other appropriate closure.</td>
<td>IDAPA 58.01.01.317.01.b.i(3)</td>
</tr>
<tr>
<td>Welding using not more than one (1) ton per day of welding rod.</td>
<td>IDAPA 58.01.01.317.01.b.i(9)</td>
</tr>
<tr>
<td>Surface coating, using less than two (2) gallons per day.</td>
<td>IDAPA 58.01.01.317.01.b.i(17)</td>
</tr>
<tr>
<td>Cleaning and stripping activities and equipment, using solutions having less than one percent (1%) volatile organic compounds by weight.</td>
<td>IDAPA 58.01.01.317.01.b.i(26)</td>
</tr>
</tbody>
</table>

5.5 Emissions Inventory

Table 5.5 summarizes the emissions inventory for this major facility. All values are expressed in units of tons-per-year and represent the facility's potential to emit. Potential to emit is defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hour of operation or on the type or amount of material combusted, stored or processed shall be treated as part of its design if the limitation or the effect it would have on emission is state or federally enforceable.

Listed below Table 5.5 are the references for the emission factors used to estimate the emissions. The documentation provided by the applicant for the emissions inventory and emission factors is provided as Appendix A of this statement of basis.

<table>
<thead>
<tr>
<th>Source Description</th>
<th>PM$_{10}$ T/yr</th>
<th>NO$_x$ T/yr</th>
<th>SO$_2$ T/yr</th>
<th>CO T/yr</th>
<th>VOC T/yr</th>
<th>HAP T/yr</th>
<th>GHG CO$_2$e T/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbine</td>
<td>43.8</td>
<td>248.16</td>
<td>4.82</td>
<td>248.29</td>
<td>12.26</td>
<td>8.0</td>
<td>574,585</td>
</tr>
<tr>
<td>Fuel gas</td>
<td>0.15</td>
<td>0.84</td>
<td>0.11</td>
<td>0.71</td>
<td>0.21</td>
<td>1.3</td>
<td>692</td>
</tr>
<tr>
<td>Emergency diesel generator</td>
<td>0.06</td>
<td>2.00</td>
<td>&lt;0.01</td>
<td>1.08</td>
<td>0.13</td>
<td>0.00</td>
<td>570</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>43.98</td>
<td>251.00</td>
<td>4.93</td>
<td>250.08</td>
<td>12.6</td>
<td>9.31</td>
<td>575,277</td>
</tr>
</tbody>
</table>
6. **EMISSIONS LIMITS AND MRRR**

This section contains the applicable requirements for this T1 facility. This section is divided into the following subsections.

- Facility-Wide Conditions;
- Emissions Unit No. 1 – Combustion Turbine Emissions Limits;
- Emissions Unit No. 2 – Fuel Heater Emissions Limits;
- Emissions Unit No. 3 – Diesel Generator Engine Emissions Limits;
- Tier I Operating Permit General Provisions.

**MRRR**

Monitoring, recordkeeping and reporting requirements (MRRR) are the means with which compliance with an applicable requirement is demonstrated. In this section, the applicable requirement (permit condition) is provided first followed by the MRRR. Should an applicable requirement not include sufficient MRRR to satisfy IDAPA 58.01.01.322.06, 07, and 08, then the permit must establish adequate monitoring, recordkeeping and reporting sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit (i.e. gap filling). In addition to the specific MRRR provided for each applicable requirement, generally applicable facility-wide conditions and general provisions may also be provided, such as performance testing, reporting, and certification requirements.

The legal and factual basis for each permit condition is provided for in this document. If a permit condition was changed due to facility draft comments or public comments, an explanation of the changes is provided.

**State Enforceability**

An applicable requirement that is not required by the federal CAA and has not been approved by EPA as a SIP-approved requirement is identified as a "State-only" requirement and is enforceable only under state law. State-only requirements are not enforceable by the EPA or citizens under the CAA. State-only requirements are identified in the permit within the citation of the legal authority for the permit condition.

**Federal Enforceability**

Unless identified as "State-only," all applicable requirements, including MRRR, are state and federally enforceable. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying applicable requirement (e.g. emissions limit).

To minimize the length of this document, the following permit conditions and MRRR have been paraphrased. Refer to the permit for the complete requirements.

**Facility-Wide Conditions**

**Permit Condition 3.1 - Fugitive Dust**

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 3/30/07]

**MRRR (Permit Conditions 3.2 through 3.4)**

- Monitor and maintain records of the frequency and the methods used to control fugitive dust emissions;
• Maintain records of all fugitive dust complaints received and the corrective action taken in response to the complaint;
• Conduct facility-wide inspections of all sources of fugitive emissions. If any of the sources of fugitive dust are not being reasonably controlled, corrective action is required.

[IDAPA 58.01.01.322.06, 07, 08, 4/5/2000]

Permit Condition 3.5 - Odors
The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[IDAPA 58.01.01.775-776 (State-only), 5/1/94]

MRRR (Permit Condition 3.6)
• Maintain records of all odor complaints received and the corrective action taken in response to the complaint;
• Take appropriate corrective action if the complaint has merit, and log the date and corrective action taken.

[IDAPA 58.01.01.322.06, 07 (State only), 5/1/94]

Permit Condition 3.7 - Visible Emissions
The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 4/5/00]

MRRR (Permit Condition 3.8 through 3.9)
• Conduct facility-wide inspections of all emissions units subject to the visible emissions standards (or rely on continuous opacity monitoring);
• If visible emissions are observed, take appropriate corrective action and/or perform a Method 9 opacity test;
• Maintain records of the results of each visible emissions inspection.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Conditions 3.10 through 3.14 - Excess Emissions
The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the excess emissions facility wide conditions and the regulations of IDAPA 58.01.01.130-136.

MRRR (Permit Conditions 3.11 through 3.14)
Monitoring, recordkeeping and reporting requirements for excess emissions are provided in Sections 131 through 136.
• Take appropriate action to correct, reduce, and minimize emissions from excess emissions events;
• Prohibit excess emissions during any DEQ Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory;
• Notify DEQ of each excess emissions events as soon as possible, including information regarding upset, breakdown, or safety events.
• Submit a report for each excess emissions event to DEQ;
• Maintain records of each excess emissions event.
Permit Condition 3.15 – Fuel-Burning Equipment PM Standards

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/1000 scf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/1000 scf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/1000 scf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/1000 scf of effluent gas corrected to 8% oxygen by volume for wood products.  

[IDA 58.01.676-677, 5/1/94]  

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.16 – Sulfur Content Limits

The permittee shall not sell, distribute, use, or make available for use any of the following:

- Distillate fuel oil containing more than the following percentages of sulfur:
  - ASTM Grade 1 fuel oil, 0.3% by weight.
  - ASTM Grade 2 fuel oil, 0.5% by weight.
- DEQ may approve an exemption from these fuel sulfur content requirements (IDA 58.01.1725.01 125.04) if the permittee demonstrates that, through control measures or other means, SO2 emissions are equal to or less than those resulting from the combustion of fuels complying with these limitations.

[IDA 58.01.1725, 3/29/10]  

MRRR - (Permit Condition 3.17)

The permittee shall maintain documentation of supplier verification of fuel sulfur content on an as received basis.

[IDA 58.01.322.06, 5/1/94]  

Permit Condition 3.18 – Open Burning

The permittee shall comply with the Rules for Control of Open Burning, IDA 58.01.600-623.

[IDA 58.01.600-623, 5/08/09]  

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.19 – Asbestos

The permittee shall comply with all applicable requirements of 40 CFR 61, Subpart M—“National Emission Standard for Asbestos.”

[40 CFR 61, Subpart M]  

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.20 - Accidental Release Prevention

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:
• Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.

• The date on which a regulated substance is first present above a threshold quantity in a process.  
  [40 CFR 68.10 (a)]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.21 – Recycling and Emissions Reductions

The permittee shall comply with applicable standards for recycling and emissions reduction of refrigerants and their substitutes pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.  
  [40 CFR 82, Subpart F]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.22 – NSPS General Provisions

This facility is subject to NSPS Subparts GG and IIII, and is therefore required to comply with applicable General Provisions.  
  [40 CFR 60/63, Subpart A]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.23 – Monitoring and Recordkeeping

The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five 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, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 3.24 through 3.27 – Performance Testing

If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.
All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

**MRRR (Permit Conditions 3.25 through 3.27)**

The permittee shall submit compliance test report(s) to DEQ following testing.

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

**Permit Condition 3.28 – Reports and Certifications**

This permit condition establishes generally applicable MRRR for submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

[IDAPA 58.01.01.322.08, 11, 5/1/94]

**MR**

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

**Permit Condition 3.29 – Incorporation of Federal Requirements by Reference**

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein.

[IDAPA 58.01.01.107, 4/7/11]

**MR**

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

**Emissions Unit No. 1-Specific Emissions Limits and MRRR**

**Permit Condition 4.1 – NSPS NOx Emissions Limit**

The combustion turbine is subject to the NSPS requirements of 40 CFR 60.330, Subpart GG. The applicable NOx emissions limit established in the NSPS, and also contained as Permit Condition 3.3 in PTC No. P-050002, appears as Permit Condition 3.1 in the Tier I operating permit.

**MR** – (Permit Conditions 4.6, 4.12, 4.13, 4.14, 4.18, and 4.19)

The primary demonstration of compliance with the NSPS NOx emissions limit will be the data generated by the NOx CEMS, which is required for operations under Permit Condition 4.6 of the Tier I permit. Although the NOx CEMS is required under the Acid Rain Program, it will also be utilized as part of the compliance demonstration for the NSPS NOx emissions rate limit. Monitoring and reporting requirements relative to this permit requirement are contained in Permit Conditions 4.13 and 4.14, respectively. Compliance with the NSPS NOx emissions limit may also be assessed by use of the NSPS fuel monitoring requirement, which is contained in Permit Condition 4.12 of the Tier I permit.

In addition to the general reporting requirements of Permit Condition 4.10, NSPS excess emissions reporting requirements have been included within the Tier I permit as Permit Conditions 4.18 and 4.19.
It should be noted that Idaho Power Co. conducted the initial NSPS performance test required by 40 CFR 60.335 (i.e., to demonstrate compliance with the NSPS NOx emissions limit) on March 23, 2005. Idaho Power Co. provided DEQ written report for the source testing on May 16, 2005, and DEQ determined that the test successfully demonstrated compliance with Subpart GG requirements in a letter dated August 30, 2005. Consequently, this one-time, NSPS requirement has been satisfied and is not included in the Tier I permit as an applicable requirement.

**Permit Condition 4.2 – NOx and CO Emissions Limits**

The combustion turbine is subject to the NSPS requirements of 40 CFR 60.330, Subpart GG. The applicable SO2 emissions limit established in the NSPS, appears as Permit Condition 4.2 in the Tier I operating permit.

**Permit Condition 4.3 – NOx and CO Emissions Limits**

The turbine is subject to annual NOx and CO emissions rate limits which appear as Permit Condition 3.4 in PTC No. P-050002. These emissions rate limits, in conjunction with similar limits for the gas heater, were originally established to maintain actual, facility-wide emissions rates of these pollutants at rates less than 249.0 T/yr, and assure that the facility is a not a major facility as defined by IDAPA 58.01.01.205 (i.e., PSD permitting requirements do not apply). With the addition of the emergency generator, the estimated potential emissions are now greater than the PSD threshold.

**MRRR – (Permit Conditions 4.6-4.7)**

To ensure that the facility does not exceed the estimated emissions, the permittee is required to operate NOx and CO CEMS and quantify the volumetric flowrate from the turbine stack, to continually monitor the NOx and CO emissions actually emitted from the turbine. These requirements appear as Permit Conditions 4.6 through 4.7 in the Tier I permit. Although the NOx CEMS is also required under the Acid Rain Program, it is utilized as part of the compliance demonstration for the annual NOx emissions rate limit. Permit Conditions 4.6 through 4.7 ensure that emissions rates of NOx and CO from the turbine are directly monitored for compliance with the emissions rate limits in Permit Condition 4.5, and also serve to make the emissions rate limits federally enforceable.

**Permit Condition 4.4 – PM Emissions Limit**

Permit Condition 3.5 of PTC No. P-050002 requires the combustion turbine to comply with the PM emissions limit established by IDAPA 58.01.01.676 (i.e., the fuel-burning equipment standard). Since the PTC contains this requirement, it is an applicable requirement in accordance with IDAPA 58.01.01.008.03.b and has been included in the Tier I permit as Permit Condition 4.4.

**Permit Condition 4.5 – Fuel Restrictions**

Permit Condition 3.6 of PTC No. P-050002 restricts fuel for the combustion turbine to natural gas with a sulfur content of 0.02 grains per dry standard cubic foot (gr/dscf) of gas, or less. This PTC condition appears as Permit Condition 4.5 in the Tier I permit.

**MRRR – (Permit Conditions 4.5, 4.9, and 4.12)**

The turbine is only allowed to combust natural gas (refer to Permit Condition 4.5 of the Tier I permit). By using an AP-42 PM emissions factor for natural gas combustion, the volume of flue gas created by the combustion of one million British thermal units of natural gas, the heat content of natural gas, and elevation corrections, it can be shown that combustion of natural gas will not result in an exceedance of the grain-loading standard. Consequently, since this source is not reasonably expected to exceed the applicable standard, no further demonstration of compliance is required in the permit (i.e., monitoring requirements have not been included in the permit).

Permit Condition 4.9 of the Tier I permit requires the permittee to monitor and record the amount of natural gas combusted in the turbine in cubic feet per hour. Permit Condition 4.12 requires the permittee to comply with the fuel sulfur and nitrogen monitoring provisions of 40 CFR Part 60.334(h) and 40 CFR
Part 75, Appendix D. These monitoring provisions are sufficient to assess compliance with the provisions of Permit Condition 4.7.

**Permit Condition 4.6 – NO\textsubscript{x} CEMS Requirement**

As previously discussed, the permittee is required to operate a NO\textsubscript{x} CEMS under the Acid Rain Program. This facility is also required to operate a NO\textsubscript{x} CEMS in order to demonstrate compliance with the annual, facility-wide NO\textsubscript{x} emissions limit of 249.0 T/yr. Additionally, Permit Condition 3.7 of PTC No. P-050002 contains a requirement to operate the NO\textsubscript{x} CEMS. This requirement appears as Permit Condition 4.6 in the Tier I operating permit.

**MRRR – (Permit Conditions 4.8, 4.10, and 4.13, 4.14-4.17, 9.26)**

Monitoring requirements relative to the Acid Rain Program requirements for the NO\textsubscript{x} CEMS appear in Permit Condition 4.10 of the Tier I permit, and additional monitoring requirements for the NO\textsubscript{x} CEMS appear in Permit Condition 4.13.

Several specific reporting requirements from the Acid Rain Program and/or PTC No. P-050002 are contained as Permit Conditions 4.14 through 4.17 of the Tier I operating permit.

**Permit Condition 4.7 – CO CEMS Requirement**

As previously discussed, the permittee must operate a CO CEMS to demonstrate compliance with the annual, facility-wide CO emissions limit of 249.0 T/yr. The requirement was contained as Permit Condition 3.8 in PTC No. P-050002, and appears as Permit Condition 4.7 in the Tier I operating permit. Monitoring requirements for the CO CEMS appear in Permit Conditions 4.11 and 4.13 of the Tier I permit.

**MRRR – (Permit Conditions 4.8, 4.11, 4.13, 4.14 – 4.17, 9.26)**

The general reporting requirement contained in 9.26 of the Tier I permit also applies to the CO CEMS monitoring data; however, several specific reporting requirements from PTC No. P-050002 also appear in the Tier I permit as Permit Conditions 4.14 through 4.17.

Because the Combustion Turbine is operated on an intermittent and infrequent basis to meet peak electrical loads, Idaho Power has requested reduced RATA and CGA testing frequencies during any calendar quarter in which the unit is operated less than 168 unit operating hours. DEQ has approved the frequency and span requests consistent with relevant EPA guidance, and to avoid starting the unit only for the purposes of testing. These approvals have been included in Permit Condition 4.11.

**Permit Condition 4.8 – Emissions Rate Quantification Requirements**

Permit Condition 3.9 of PTC No. P-050002 requires that the permittee quantify the turbine exhaust flowrate by use of the methodologies prescribed by Method 19 in 40 CFR 60, Appendix A. This permit condition appears as Permit Condition 4.8 in the Tier I operating permit.

**MRRR – (Permit Conditions 4.13)**

The associated monitoring requirement is contained within the monitoring provisions of Permit Condition 4.13.

**Emissions Unit No. 2**

**Permit Condition 5.1 – NO\textsubscript{x} and CO Emissions Limits**

Permit Condition 4.3 of PTC No. P-050002 establishes annual NO\textsubscript{x} and CO emissions limits for the fuel heater. These emissions limits appear as Permit Condition 5.1 in the Tier I permit.

**MRRR – (Permit Condition 5.4)**

For compliance assessment purposes, the emissions limits in Permit Condition 5.1 will not be exceeded so long as the permittee complies with the volumetric gas combustion limits established in Permit Condition 5.4 of the Tier I permit. Consequently, the monitoring provisions for Permit Condition 5.4 also serve as the monitoring provision for Permit Condition 5.1.
Permit Condition 5.2 – PM Emissions Limit

Permit Condition 5.4 of PTC No. P-050002 requires the fuel heater to comply with the PM emissions limit established by IDAPA 58.01.01.676 (i.e., the fuel-burning equipment standard). Since the PTC contains this requirement, it is an applicable requirement in accordance with IDAPA 58.01.01.008.03.b and has been included in the Tier I permit as Permit Condition 5.2.

MRRR – (Permit Condition 5.3)

The fuel heater is only allowed to combust natural gas (refer to Permit Condition 5.3). By using an AP-42 PM emissions factor for natural gas combustion, the volume of flue gas created from combustion of one million British thermal units of natural gas, the heat content of natural gas, and elevation corrections, it can be shown that combustion of natural gas will not exceed the grain-loading standard. Consequently, since this source is not reasonably expected to exceed the applicable standard, no further demonstration of compliance is required in the permit (i.e., monitoring requirements have not been included in the permit).

Permit Condition 5.3 – Fuel Restrictions

Permit Condition 4.5 of PTC No. P-050002 restricts fuel for the fuel heater to natural gas with a sulfur content of 0.02 gr/dscf or less. This PTC condition appears as Permit Condition 5.3 in the Tier I permit. Permit Condition 4.11 of the Tier I permit requires the permittee to comply with the fuel sulfur and nitrogen monitoring provisions of 40 CFR Part 60.334(h) and 40 CFR Part 75, Appendix D, for the combustion turbine.

MRRR – (Permit Condition 5.3)

The combustion turbine operates on natural gas directly from the Northwest Williams pipeline, whereas the fuel heater operates on natural gas from a separate supply from Intermountain Gas Company. Intermountain Gas Company’s gas is supplied from the Williams pipeline, and therefore, should have the same quality, so these monitoring requirements also serve to monitor the fuel combusted within the fuel heater. The monitoring is sufficient for both units.

Permit Condition 5.4 – Fuel Combustion Rate Restriction

Permit Condition 4.6 of PTC No. P-050002 restricts volume of natural gas combusted in the fuel heater to 16,878,613 cubic feet in any consecutive 12-month period. This permit condition appears as Permit Condition 5.4 in the Tier I permit.

MRRR – (Permit Condition 5.5)

The fuel firing restriction serves to make the annual emissions limits for NOx and CO (refer to Permit Condition 5.1 of the Tier I permit) federally enforceable.

Emissions Unit No. 3

The generator was issued an exemption from the requirement to obtain a permit to construct, No. X-2008.0196, on December 29, 2008, based on the following information:

- Emergency standby IC engine
- Operated on No. 2 diesel
- Operating hours not to exceed 500 hours per year
- Manufacturer: Cummins
- Engine model: QSX15-G9 Nonroad 2
- Genset model: 350DFEG
- Maximum HP rating: 755 bhp
- Maximum kW rating: 350 kW
- Manufacture date: 2007
• Fuel: diesel

Permit Condition 6.1
In accordance with 40 CFR 60.4207, the permittee must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. The requirement is that non-road diesel fuel is subject to the following per-gallon standards:

(1) Sulfur content.
   (i) 15 ppm maximum for NR diesel fuel.

(2) Cetane index or aromatic content, as follows:
   (i) A minimum cetane index of 40; or
   (ii) A maximum aromatic content of 35 volume percent.

MRRR – (Permit Condition 3.23)
Permit Condition 3.23 evaluates compliance with Permit Condition 5.1.

Permit Condition 6.2
In accordance with 40 CFR 60.4211(a), the permittee must do all of the following, except as permitted under 40 CFR 60.4211 (g):

(40 CFR 60.4211(g) begins as follows: If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: (continues in regulation))

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

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

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

MRRR – (Permit Condition 3.23)
Permit Condition 3.23 evaluates compliance with Permit Condition 6.2.

Permit Condition 6.3
In accordance with 40 CFR 60.4211(f), the emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in 40 CFR 60 Subpart III, is prohibited.

MRRR – (Permit Condition 3.23)
Permit Condition 3.23 evaluates compliance with Permit Condition 6.3.
General Provisions
Unless expressly stated, there are no MRRR for the general provisions.

General Compliance, Duty to Comply
The permittee must comply with the terms and conditions of the permit.

[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]

General Compliance, Need to Halt or Reduce Activity Not a Defense
The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action.

[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]

General Compliance, Duty to Supplement or Correct Application
The permittee must promptly submit such supplementary facts or corrected information upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening, Additional Requirements, Material Mistakes, Etc.
This term lists the instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements.

[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]

Reopening, Permitting Actions
This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If the permittee files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance.

[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights
This permit does not convey any property rights of any sort, or any exclusive privilege.

[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests
The permittee must furnish, within a reasonable time to DEQ, any information, including records required by the permit, that is requested in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Information Requests, Confidential Business Information
Upon request, the permittee must furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.

[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability
If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]
Changes Requiring Permit Revision or Notice

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 under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee must comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15), and 70.7(d), (e)]

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, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. State and local only requirements are not required under the CAA and are not enforceable by EPA or by citizens.

[IDAPA 58.01.01.322.15.j, 5/1/94; IDAPA 58.01.01.322.15.k, 3/23/98;
Idaho Code §39-108; 40 CFR 70.6(b)(1), (2)]

Inspection and Entry

Upon presentation of credentials, the facility shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee’s premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Applicable Requirements

The permittee must continue to comply with all applicable requirements and must comply with new requirements on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

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.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification

All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]
Renewal

The permittee 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. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

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, provided that:

- Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
  - DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
- The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- Nothing in this permit shall alter or affect the following:
  - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
  - The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
  - The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

[IDaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.m, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 3/19/99; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

- For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- 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.
- 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.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00; 40 CFR 70.6(c)(3) and (4)]

**Periodic Compliance Certification**

The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as specified.

- Compliance certifications for all emissions units shall be submitted annually unless otherwise specified;
- All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

**False Statements**

The permittee may not 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.

[IDAPA 58.01.01.125, 3/23/98]

**No Tampering**

The permittee may not render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

**Semiannual Monitoring Reports.**

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 as specified.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.e, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

**Reporting Deviations and Excess Emissions**

Each and every applicable requirement, including MRRR, is subject to prompt deviation reporting. Deviations due to excess emissions must be reported in accordance Sections 130-136. All instances of deviation from Tier I operating permit requirements must be included in the deviation reports. The reports must describe the probable cause of the deviation and any corrective action or preventative measures taken. Deviation reports must be submitted at least every six months unless the permit specifies a different time period as required by IDAPA 58.01.01.322.08.c. Examples of deviations include, but are not limited to, the following:

- Any situation in which an emissions unit fails to meet a permit term or condition
- Emission control device does not meet a required operating condition
- Observations or collected data that demonstrate noncompliance with an emissions standard
- Failure to comply with a permit term that requires a report

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

**Permit Revision Not Required, Emissions Trading**

No permit revision will 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.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]
Emergency

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.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

7. REGULATORY REVIEW

7.1 Attainment Designation (40 CFR 81.313)

The facility is located in Elmore County which is designated as attainment or unclassifiable for PM_{10}, PM_{2.5}, CO, NO_{2}, SO_{x}, and Ozone. Reference 40 CFR 81.313.

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

This facility is a Title V source because the emissions exceed the Title V major source threshold for NO_{x} and CO.

7.3 PSD Classification (40 CFR 52.21)

This facility’s estimated potential emissions exceeded the PSD major source threshold for NO_{x} and for CO with the addition of an emergency generator which occurred during the previous Tier I operating permit term.

7.4 NSPS Applicability (40 CFR 60)

Subpart GG

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.

Subpart KKKK

The provisions of 40 CFR 60.4300, Subpart KKKK, are only applicable to the Bennett Mountain facility if the facility modifies or reconstructs the combustion turbine after February 18, 2005. Refer to 40 CFR 60.4305.

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 do not constitute an applicable requirement for purposes of the Tier I operating permit at this time and are not included or addressed within the permit.

Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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. This generator will be used for emergency operation whenever station power is interrupted. The generator was manufactured in 2007. The operating hours are logged from a non-resettable hour meter. The engine displacement is 2.48 liters per cylinder.

§ 60.4200 (a) The provisions of this subpart are applicable to ... owners ... of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

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

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

This rule applies to the emergency generator because it was constructed after July 11, 2005.

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

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

This engine is certified. No testing is required in accordance with Table 8 of this regulation.

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

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

The engine is certified, and no testing is required to demonstrate compliance.

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

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

This applies and a permit condition was written.

40 FR 80.510(b) is as follows:

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

(1) Sulfur content.
(i) 15 ppm maximum for NR diesel fuel.
(ii) 500 ppm maximum for LM diesel fuel.

(2) Cetane index or aromatic content, as follows:
(i) A minimum cetane index of 40; or
(ii) A maximum aromatic content of 35 volume percent.
§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

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

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

The generator has a non-resettable hour meter.

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

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

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

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

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

These requirements were incorporated into the permit.

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b) ... you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

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

No testing is required for certified engines.

(f) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.
This was incorporated into the permit. (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

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

This applies, but was not incorporated into the permit because these modifications were not proposed by the applicant in the application.

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

No testing is required because this is a certified engine.

...

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

...

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

This section does not apply because the rating on the generator is greater than 175 HP and was installed prior to 2011. According to Table 5, this section of the rule does not apply.

...

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

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

Table 8 to Subpart III—Applicability of General Provisions to Subpart III

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

<table>
<thead>
<tr>
<th>General Provisions citation</th>
<th>Subject of citation</th>
<th>Applies to subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.1</td>
<td>General applicability of the General Provisions</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§60.2</td>
<td>Definitions</td>
<td>Yes</td>
<td>Additional terms defined in §60.4219.</td>
</tr>
<tr>
<td>§60.3</td>
<td>Units and abbreviations</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
<th>Applicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>§60.4</td>
<td>Address</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.5</td>
<td>Determination of construction or modification</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.6</td>
<td>Review of plans</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.7</td>
<td>Notification and Recordkeeping</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.8</td>
<td>Performance tests</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.9</td>
<td>Availability of information</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.10</td>
<td>State Authority</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.11</td>
<td>Compliance with standards and maintenance</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>requirements</td>
<td></td>
</tr>
<tr>
<td>§60.12</td>
<td>Circumvention</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.13</td>
<td>Monitoring requirements</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.14</td>
<td>Modification</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.15</td>
<td>Reconstruction</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.16</td>
<td>Priority list</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.17</td>
<td>Incorporations by reference</td>
<td>Yes</td>
</tr>
<tr>
<td>§60.18</td>
<td>General control device requirements</td>
<td>No</td>
</tr>
<tr>
<td>§60.19</td>
<td>General notification and reporting requirements</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Except that §60.7 only applies as specified in §60.4214(a).
Except that §60.8 only applies to stationary CI ICE with a displacement of ≥30 liters per cylinder and engines that are not certified.
Requirements are specified in subpart IIII.
Except that §60.13 only applies to stationary CI ICE with a displacement of ≥30 liters per cylinder.

This applies.

7.5 **NESHAP Applicability (40 CFR 61)**
No NESHAP applies to this facility.

7.6 **MACT Applicability (40 CFR 63)**

Subpart YYYY

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.
Subpart ZZZZ

This subpart applies, but the requirements are met by complying with Subpart III, in accordance with 40 CFR 63.6590(c):

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

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

Also:

40 CFR 60.6590(a)(2)(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

The generator was built in 2007, so it is a new stationary RICE. It is located at a non-major HAP facility, so it is at an area source of HAPs.

7.7 CAM Applicability (40 CFR 64)

The turbine uses a low-NOx combustor which is not subject to CAM because it does not meet the definition of “control device” at 40 CFR 64.1, as follows: For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics.

7.8 Acid Rain Permit (40 CFR 72-75)

This facility is subject to the Acid Rain Program requirements of Parts 72 through 78. The combustion turbine is an affected unit in accordance with 40 CFR 72.6(a)(3)(i) and is therefore subject to the Acid Rain Program.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from November 30 – December 30, 2016. During this time, comments were submitted in response to DEQ’s proposed action.

9. EPA REVIEW OF PROPOSED PERMIT

As required by IDAPA 58.01.01.366, DEQ provided the proposed permit to EPA Region 10 for review on January 3, 2017 via e-mail, and no comments were received.
Appendix A - Emissions Inventory
<table>
<thead>
<tr>
<th>Emissions Data</th>
<th>Emissions</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>lb/hr (a)</td>
<td>Ton/yr (b)</td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>100.00</td>
<td>248.16</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>41</td>
<td>248.29</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>2.8</td>
<td>12.26</td>
<td></td>
</tr>
<tr>
<td>SOx (as SO2)</td>
<td>1.1</td>
<td>4.82</td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>10</td>
<td>43.80</td>
<td></td>
</tr>
</tbody>
</table>

(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

<table>
<thead>
<tr>
<th>Emission</th>
<th>Emission Factor lb/MMscf (a)</th>
<th>Emissions lb/hr (b)</th>
<th>Ton/yr (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>100</td>
<td>0.44</td>
<td>0.84</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>0.366</td>
<td>0.71</td>
</tr>
<tr>
<td>VOC</td>
<td></td>
<td>0.0479</td>
<td>0.21</td>
</tr>
<tr>
<td>SOx (as SO2)</td>
<td></td>
<td>0.0261</td>
<td>0.11</td>
</tr>
<tr>
<td>PM10</td>
<td></td>
<td>0.0331</td>
<td>0.14</td>
</tr>
</tbody>
</table>

(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

<table>
<thead>
<tr>
<th>Emissions Unit</th>
<th>Rated Output (bhp)</th>
<th>Annual Hours of Operation (hrs/yr)</th>
<th>Criteria Pollutant</th>
<th>Emissions Factors (g/bhp-hr)</th>
<th>Hourly Emissions (lb/hr)</th>
<th>Annual Emissions (ton/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency standby IC engine</td>
<td>755</td>
<td>500</td>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>0.15</td>
<td>0.25</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>0.0055</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>4.8</td>
<td>7.99</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>2.6</td>
<td>4.33</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VOC&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.319</td>
<td>0.53</td>
<td>0.13</td>
</tr>
</tbody>
</table>

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<sub>10</sub>, NO<sub>x</sub>, 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<sub>2</sub> (with a sulfur content of 0.0015% by weight for ULSD) and VOC.
## COMBUSTION CALCULATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Entry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Nominal Heat Duty, MBTU/hr</td>
<td>8.65</td>
<td>0</td>
<td>500</td>
</tr>
<tr>
<td>Total Actual Heat Duty, MBTU/hr</td>
<td>7.65</td>
<td>0</td>
<td>500</td>
</tr>
<tr>
<td>Thermal Efficiency, %</td>
<td>40</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Stack Gas Temperature, °F</td>
<td>1600</td>
<td>0</td>
<td>2000</td>
</tr>
<tr>
<td>Stack Gaseous, Index:</td>
<td></td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Number of Flue Tubes:</td>
<td>1</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow in Fuel Rats, cu.ft./hr:</td>
<td>3.92</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Air to Fuel Ratio, cu.ft./cu.ft.</td>
<td>16.47</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Fuel Gas HHV, BTU/SCF</td>
<td>1000</td>
<td>700</td>
<td>1200</td>
</tr>
<tr>
<td>Calculated Values (Total Emissions Data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Gas Usage, SCF/hr</td>
<td>4395.1412</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel Gas Generated, SCF/hr</td>
<td>6662.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual Fuel Gas Rate (including excess air), ACFR/hr:</td>
<td>142153.4915</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stack Cross Sectional Area, eq.ft.</td>
<td>3.154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual Stack Gas Velocity, ft/sec</td>
<td>12.683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur Oxidized, lb/hr</td>
<td>0.062143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen Oxides, lb/hr</td>
<td>0.4557143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide, lb/hr</td>
<td>0.356</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particulates (fine dust), lb/hr</td>
<td>0.0683985</td>
<td></td>
<td></td>
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<tr>
<td>Particulates (condensable), lb/hr</td>
<td>0.0598977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organic Compounds, lb/hr</td>
<td>0.0472986</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** SO2 is based on 0.2 gmp/h baseline sulfur 150 SCF of fuel

**REFERENCE:** U.S. Environmental Protection Agency, "Compilation of Air Pollutant Emission Factors", July 1989, Tables 1.4-1 to 1.4-3
Bennett Mountain
Facility HAP Emission Calculations

### Combustion Turbine

<table>
<thead>
<tr>
<th>CT Heat Input Rate</th>
<th>1788 mmBtu/hr (LHV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Operation</td>
<td>8760 hr/yr</td>
</tr>
</tbody>
</table>

#### Emission Factors - from Natural Gas-Fired Stationary Gas Turbines (lb/mmBtu)

<table>
<thead>
<tr>
<th>Table 3.1-3</th>
<th>1,3-butadiene</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Benzene</th>
<th>Ethylbenzene</th>
<th>Formaldehyde</th>
<th>Naphthalene</th>
<th>Propylene Oxide</th>
<th>Toluene</th>
<th>Xylenes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emission Factor</strong></td>
<td>lb/mmBtu</td>
<td>4.30E-07</td>
<td>4.02E-05</td>
<td>6.40E-06</td>
<td>1.20E-05</td>
<td>3.20E-05</td>
<td>7.20E-04</td>
<td>1.50E-06</td>
<td>2.90E-05</td>
<td>1.30E-04</td>
</tr>
<tr>
<td><strong>CT Emissions</strong></td>
<td>lb/hr</td>
<td>7.7E-04</td>
<td>7.25E-02</td>
<td>1.1E-02</td>
<td>2.1E-02</td>
<td>5.7E-02</td>
<td>1.3E+00</td>
<td>2.3E-03</td>
<td>5.2E-02</td>
<td>1.3E-01</td>
</tr>
<tr>
<td><strong>CT Emissions</strong></td>
<td>Ton/yr</td>
<td>3.41E-03</td>
<td>3.1E-01</td>
<td>5.0E-02</td>
<td>9.45E-02</td>
<td>2.55E-01</td>
<td>5.6E+00</td>
<td>1.0E-02</td>
<td>2.3E-01</td>
<td>1.0E+00</td>
</tr>
</tbody>
</table>

### Fuel Gas Heater

<table>
<thead>
<tr>
<th>H3 Heat Input Rate</th>
<th>3.6 mmBtu/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Operation</td>
<td>8760 hr/yr</td>
</tr>
</tbody>
</table>

#### Emission Factors - From Natural Gas Combustion (lb/mmBtu)

<table>
<thead>
<tr>
<th>Table 1.4-3</th>
<th>Benzene</th>
<th>Formaldehyde</th>
<th>Naphthalene</th>
<th>Toluene</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emission Factor</strong></td>
<td>lb/mmBtu</td>
<td>2.10E-03</td>
<td>7.30E-02</td>
<td>6.10E-04</td>
</tr>
<tr>
<td><strong>H3 Emissions</strong></td>
<td>lb/hr</td>
<td>7.58E-03</td>
<td>2.70E-01</td>
<td>2.22E-03</td>
</tr>
<tr>
<td><strong>H3 Emissions</strong></td>
<td>Ton/yr</td>
<td>3.31E-02</td>
<td>1.18E+00</td>
<td>9.62E-03</td>
</tr>
</tbody>
</table>

### Emergency Diesel Generator

<table>
<thead>
<tr>
<th>EDG Heat Input Rate</th>
<th>3.402 MMBtu/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Operation</td>
<td>500 hr/yr</td>
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</tbody>
</table>

#### Emission Factors for Large Uncontrolled Stationary Diesel Engines (lb/mmBtu)

<table>
<thead>
<tr>
<th>Table 3.4-3</th>
<th>Benzene</th>
<th>Toluene</th>
<th>Xylenes</th>
<th>Formaldehyde</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Ethylbenzene</th>
<th>Formaldehyde</th>
<th>Naphthalene</th>
<th>Propylene Oxide</th>
<th>Toluene</th>
<th>Xylenes</th>
<th>Total HAPs all units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emission Factor</strong></td>
<td>lb/mmBtu</td>
<td>7.79E-04</td>
<td>2.81E-04</td>
<td>1.93E-04</td>
<td>7.89E-05</td>
<td>2.52E-05</td>
<td>7.98E-06</td>
<td>1.30E-04</td>
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<tr>
<td><strong>EDG Emissions</strong></td>
<td>lb/hr</td>
<td>2.64E-03</td>
<td>9.56E-04</td>
<td>6.57E-04</td>
<td>2.68E-04</td>
<td>8.57E-05</td>
<td>2.68E-01</td>
<td>4.42E-04</td>
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<tr>
<td><strong>EDG Emissions</strong></td>
<td>Ton/yr</td>
<td>6.60E-04</td>
<td>2.39E-04</td>
<td>1.64E-04</td>
<td>6.71E-05</td>
<td>2.14E-05</td>
<td>6.70E-06</td>
<td>1.11E-04</td>
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</table>

### Facility Total

<table>
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<tr>
<th>1,3-butadiene</th>
<th>Acetaldehyde</th>
<th>Acrolein</th>
<th>Benzene</th>
<th>Ethylbenzene</th>
<th>Formaldehyde</th>
<th>Naphthalene</th>
<th>Propylene Oxide</th>
<th>Toluene</th>
<th>Xylenes</th>
<th>Total HAPs all units</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb/hr</td>
<td>7.7E-04</td>
<td>7.18E-02</td>
<td>1.1E-02</td>
<td>3.17E-02</td>
<td>5.7E-02</td>
<td>1.54E+00</td>
<td>5.0E-03</td>
<td>5.2E-02</td>
<td>2.5E-01</td>
<td>1.15E-01</td>
</tr>
<tr>
<td>Ton/yr</td>
<td>3.45E-03</td>
<td>3.13E-01</td>
<td>5.0E-02</td>
<td>1.3E-01</td>
<td>2.5E-01</td>
<td>6.7E+00</td>
<td>1.99E-01</td>
<td>2.3E-01</td>
<td>1.07E+00</td>
<td>5.0E-01</td>
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<td>3.31E+00</td>
</tr>
</tbody>
</table>
Appendix B - Facility Comments for Draft Permit
Dear Mr. Lewis,

I have reviewed the draft permit and I have the following comments:

- Permit Condition 4.1 – Can we identify the averaging period as 4hrs? Some of our other permits identify the averaging period. Including the averaging period helps define the compliance point.
- Permit Condition 4.13 – Can you clarify the phrase “after turbine startup”? It is unclear if this refers to initial turbine startup (commissioning) or each individual turbine start.
- Permit Condition 4.17 and 4.18 - Do you have any standard language that clarifies what can be submitted electronically versus what must be submitted hardcopy? For example, the bulk of the monitoring plan is electronically maintained and submitted in ECMPs. Additionally, recertification tests are also reported in ECMPS. Do we need to generate and submit a hardcopy in addition to loading the information into ECMPS or does information reported in ECMPS fulfill the reporting requirement? ECMPS reporting covers the NOx CEMS, but does not cover the CO CEMS. These conditions reference PTC and 40 CFR Part 75.

Jeremy Jensen
Mechanical Engineer
Idaho Power Company
Power Production
Phone 208-388-5843
Cell 208-695-9213
e-mail jjensen1@idahopower.com

From: Morrie.Lewis@deq.idaho.gov
Sent: Monday, November 07, 2016 4:55 PM
To: Jensen, Jeremy <jjensen1@idahopower.com>
Cc: Williams, Mike <MWilliams@idahopower.com>
Subject: [EXTERNAL] Idaho Power Company - Bennett Mountain, Project No. T1-2016.0036 PROJ 61748, facility draft permit

Dear Mr. Jensen:

The attached files have been saved in PDF format and constitute the official transmittal. Please reply to this email to verify receipt, and please let me know any questions, comments, or concerns.

Sincerely,

Morrie Lewis
Air Quality Permit Analyst
Idaho Department of Environmental Quality
1410 North Hilton Street
Boise, Idaho 83706-1255
Phone: (208) 373-0495 Fax: (208) 373-0340
Morrie.Lewis@deq.idaho.gov