Statement of Basis

Tier I Operating Permit No. T1-2016.0023
Project ID 61703

Avista Corporation
Rathdrum, Idaho

Facility ID 055-00040

Final

March 8, 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

1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE 3

2. INTRODUCTION AND APPLICABILITY 4

3. FACILITY INFORMATION 6

4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY 7

5. EMISSIONS UNITS, PROCESS DESCRIPTION, AND EMISSIONS INVENTORY 8

6. EMISSIONS LIMITS AND MRRR 10

7. REGULATORY REVIEW 23

8. PUBLIC COMMENT 23

9. EPA REVIEW OF PROPOSED PERMIT 24

APPENDIX A - EMISSIONS INVENTORY

1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

ASTM	American Society for Testing and Materials
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	continuous emission monitoring systems
CFR	Code of Federal Regulations
cft	cubic feet
CGA	cylinder gas audits
CMS	continuous monitoring systems
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
COMS	continuous opacity monitoring systems
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
hr/yr	hours per consecutive 12-calendar-month period
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
MMscf	million standard cubic feet
MRRR	Monitoring, Recordkeeping and Reporting Requirements
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
O_2	oxygen
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
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIP	State Implementation Plan
SO_2	sulfur dioxide
T/yr	tons per consecutive 12 calendar month period
T1	Tier I operating permit
U.S.C.	United States Code
VOC	volatile organic compound
vp	vapor pressure

2. INTRODUCTION AND APPLICABILITY

Avista Corporation's Rathdrum facility consists of two General Electric Model PG7111EA Frame 7 combustion gas turbine package power plants. Each turbine package can produce approximately 83.5 megawatts of electricity at full load operating conditions. The turbines operate on a simple cycle basis and are fueled exclusively by pipeline-quality natural gas. Avista does not store or use backup fuels at the Rathdrum facility. Avista constructed the project to provide electricity on an as-needed basis to offsite consumers during peak power demands.

Because the facility was designed to provide electricity on an intermittent basis, Avista does not generally operate the turbines on a continual basis. When the need arises, the turbines (one or both) are started up, brought up to full load (base load), and maintained at full load until they are shut down. The duration of operation of the turbines depends on the demand.

Avista Corporation (Avista) is located at 5999 W. Boekel Rd. in Rathdrum. 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_x and CO above the major source threshold of 100 tons-per-year and has the potential to emit over 100,000 tons-per-year CO_2 equivalent of greenhouse gas pollutants. At the time of this permitting action, the facility is not a major source of HAP emissions. As a major facility, Avista is required to apply for a Tier I operating permit pursuant to IDAPA 58.01.01.301. The application for a Tier I operating permit must contain a certification from Avista 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 Avista.

The format of this Statement of Basis follows that of the permit with the exception of the facility's information discussed first followed by the scope, the applicable requirements and permit shield, and finally the general provisions.

Avista's 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 each permit condition follows the permit condition.

Sections 4 – Emissions Unit/Source Name

The emissions unit-specific sections of the permit contain the applicable requirements that specially 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. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with each applicable requirement immediately follows the applicable requirement.

Section 5 – 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 6 – Title IV Acid Rain Permit

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, this permit section is written pursuant to IDAPA 58.01.01.300.

Section 7 – 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 sources. These conditions have been reviewed by EPA and contain all terms required by IDAPA 58.01.01 et al as well as requirements from other air quality laws 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 the rule or permit, the rule or permit shall govern.

3. FACILITY INFORMATION

3.1 Facility Permitting History

Tier I Operating Permit History - Previous 5-year permit term April 22, 2011 to April 22, 2016

The following information is the permitting history of this Tier I facility during the previous five-year permit term, which was from to April 22, 2011 to April 22, 2016. 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 3.1 PREVIOUS TERM PERMITTING HISTORY

Issue Date	Project Number	Project	Status	History Explanation
April 22, 2011	T1-2010.0149 PROJ 60620	T1 renewal.	S	Replaced T1-2008.0140. Replaced by T1-2016.0023 PROJ 61703.
March 8, 2017	T1-2016.0023 PROJ 61703	T1 renewal.	A	Replaced T1-2010.0149 PROJ 60620.

Underlying Permit History - Includes every underlying permit issued to this facility

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 3.2 PTC PERMITTING HISTORY

Issue Date	Project Number	Project	Status	History Explanation
May 21, 1993	P-930103	Initial PTC two gas turbines.	S	Replaced by P-990054.
August 4, 1999	P-990054	Revised PTC to combine operating hour and emission limits for both turbines.	S	Replaced P-930103. Replaced by P-000127.
September 7, 2001	P-000127	Revised PTC to increase hours of operation and annual emission limits.	A	Replaced P-990054.

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

October 2, 2015	DEQ received an application.
November 16, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review.
November 18, 2016	DEQ determined that the application was complete.
November 18, 2016	DEQ made available the draft permit and statement of basis for applicant review.
December 12, 2016 – January 11, 2017	DEQ provided a public comment period on the proposed action.
January 20, 2017	DEQ provided the proposed permit and statement of basis for EPA review.
March 8, 2017	DEQ issued the final permit and statement of basis.

5. EMISSIONS UNITS, PROCESS DESCRIPTION, 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 its permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 Process No. 1 – GENERAL ELECTRIC COMBUSTION TURBINES NO. 1 AND NO. 2

Table 5.1 lists the emissions units and control devices associated with the General Electric Combustion Turbines.

Table 5.1 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit Description		Control Equipment
Unit 1 – Combustion Turbine		Dry Low NO_x Combustor
Manufacturer:	General Electric	
Model:	PG711EA	
Installed:	1994	
Rated Capacity:	83.5 MW	
Fuel:	Natural gas	
Maximum hourly fuel usage:	942,670 scf/hr	
Fuel usage:	31,764 MMscf/yr	
Unit 2 – Combustion Turbine		Dry Low NO_x Combustor
Manufacturer:	General Electric	
Model:	PG711EA	
Installed:	1994	
Rated Capacity:	83.5 MW	
Fuel:	Natural gas	
Maximum hourly fuel usage:	942,670 scf/hr	
Fuel usage:	31,764 MMscf/yr	

5.2 Insignificant Emissions Units Based on Size or Production Rate

No emissions unit or activity subject to an applicable requirement may qualify as an insignificant emissions unit or activity. As required by IDAPA 58.01.01.317.01.b, insignificant emissions units (IEU's) based on size or production rate must be listed in the permit application. Table 5.2 lists the IEU's identified in the permit application. Also summarized is the regulatory authority or justification for each IEU.

Table 5.2 INSIGNIFICANT EMISSION UNITS AND REGULATORY AUTHORITY/JUSTIFICATION

Emissions Unit / Activity	Regulatory Authority / Justification
Operation, loading and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than two hundred sixty (260) gallon capacity (35 cft), heated only to the minimum extent to avoid solidification if necessary.	IDAPA 58.01.01.317.01.b.i.1
Operation, loading and unloading of storage tanks, not greater than one thousand one hundred (1,100) gallon capacity, with lids or other appropriate closure, not for use with HAPs, maximum (max.) vp 550 mm Hg.	IDAPA 58.01.01.317.01.b.i.2
Operation, loading and unloading of storage tanks, not greater than ten thousand (10,000) gallon capacity, with lids or other appropriate closure, vp not greater than 80 mm Hg at 21C.	IDAPA 58.01.01.317.01.b.i.3
Operation, loading and unloading storage of butane, propane, or liquefied petroleum gas (LPG), storage tanks, vessel capacity under forty thousand (40,000) gallons.	IDAPA 58.01.01.317.01.b.i.4
Combustion source less than five million (5,000,000) Btu/hr, exclusively using natural gas, butane, propane, and/or LPG.	IDAPA 58.01.01.317.01.b.i.5
Combustion source, less than five hundred thousand (500,000) Btu/hr, using any commercial fuel containing less than four-tenths percent (.4%) by weight sulfur for coal or less than one percent (1%) by weight sulfur for other fuels.	IDAPA 58.01.01.317.01.b.i.6
Combustion source, of less than one million (1,000,000) Btu/hr, if using kerosene, No. 1 or No. 2 fuel oil.	IDAPA 58.01.01.317.01.b.i.7
Welding using not more than one (1) ton per day of welding rod.	IDAPA 58.01.01.317.01.b.i.9
Water cooling towers and ponds, not using chromium-based corrosion inhibitors, not used with barometric jets or condensers, not greater than ten thousand (10,000) gpm, not in direct contact with gaseous or liquid process streams containing regulated air pollutants.	IDAPA 58.01.01.317.01.b.i.13
Surface coating, using less than two (2) gallons per day.	IDAPA 58.01.01.317.01.b.i.17
Space heaters and hot water heaters using natural gas, propane or kerosene and generating less than five million (5,000,000) Btu/hr.	IDAPA 58.01.01.317.01.b.i.18
Surface coating, aqueous solution or suspension containing less than one percent (1%) volatile organic compounds.	IDAPA 58.01.01.317.01.b.i.25
Cleaning and stripping activities and equipment, using solutions having less than one percent (1%) volatile organic compounds.	IDAPA 58.01.01.317.01.b.i.26
An emission unit or activity with emissions less than or equal to ten percent (10%) of the levels contained in Section 006 of the definition of significant and no more than one (1) ton per year of any hazardous air pollutant.	IDAPA 58.01.01.317.01.b.i.30

5.3 Non-applicable Requirements for Which a Permit Shield is Requested

No permit shield has been requested for any specific non-applicable requirement.

5.4 Emissions Inventory

Table 5.3 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.

The documentation provided by the applicant for the emissions inventory and emission factors is provided as Appendix A - Emissions Inventory to this statement of basis.

Table 5.3 EMISSIONS INVENTORY - POTENTIAL TO EMIT (T/yr)

Source Description	$PM/PM_{10}/PM_{2.5}$ T/yr	NO_x T/yr	SO_2 T/yr	CO T/yr	VOC T/yr	HAP T/yr	GHG CO_2e T/yr
Combustion turbines	59	235.5	19.8	240	15.2	8.4	953,280
Total Emissions	59	235.5	19.8	240	15.2	8.4	953,280

6. EMISSIONS LIMITS AND MRRR

This section contains the applicable requirements for this major facility. Where applicable, monitoring, recordkeeping and reporting requirements (MRRR) follow the applicable requirement and state how compliance with the applicable requirement is to be demonstrated.

This section is divided into several subsections. The first subsection lists the requirements that apply facility wide. The next subsection lists the emissions units- and emissions activities-specific applicable requirements. The final subsection contains the general provisions that apply to all major facilities subject to Idaho DEQ's Tier I operating permit requirements.

This section contains the following subsections:

- Facility-Wide Conditions;
- General Electric Combustion Turbine Emission Limits; and
- Tier I Operating Permit General Provisions.

MRRR

Immediately following each applicable requirement (permit condition) is the periodic monitoring regime upon which compliance with the underlying applicable requirement is demonstrated. A periodic monitoring regime consists of monitoring, recordkeeping and reporting requirements for each applicable requirement. If an applicable requirement does not include sufficient monitoring, recordkeeping and reporting 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. This is known as gap filling. In addition to the specific MRRR described under each permit condition, generally applicable facility-wide conditions and general provisions may also be required, such as monitoring, recordkeeping, performance testing, reporting, and certification requirements.

The discussion of each permit condition includes the legal and factual basis for the permit condition. If a permit condition was changed due to facility draft or public comments, a description of why and how the condition was changed 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.

6.1 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 3.10 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 – 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.
- Coal containing greater than 1.0% sulfur by weight.
- DEQ may approve an exemption from these fuel sulfur content requirements (IDAPA 58.01.01.725.01–725.04) if the permittee demonstrates that, through control measures or other means, SO_2 emissions are equal to or less than those resulting from the combustion of fuels complying with these limitations.

[IDAPA 58.01.01.725, 3/29/10]

MRRR - (Permit Condition 3.16)

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

[IDAPA 58.01.01.322.06, 5/1/94]

Permit Condition 3.17 – Open Burning

The permittee shall comply with the *Rules for Control of Open Burning*, IDAPA 58.01.01.600-623.

[IDAPA 58.01.01.600-623, 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 3.18 - Asbestos

The permittee shall comply with all applicable portions of 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

[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 3.19 - 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 3.20 - 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 3.21 – NSPS General Provisions

This facility is subject to NSPS Subpart GG, and is therefore required to comply with applicable General Provisions.

[40 CFR 60, 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 3.22 - 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 3.23 through 3.26 – 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 Condition 3.26)

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 3.27 – 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]

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 3.28 – 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]

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.

6.2 Emissions Unit No. 1 – General Electric Combustion Turbine Specific Emissions Limits and MRR

Permit Condition 4.1

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 percent opacity as determined by procedures contained in the IDAPA 58.01.01.625 (Rules for the Control of Air Pollution in Idaho).

MRRR – (Permit Condition 4.7)

The permittee shall conduct a quarterly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. Sources that are monitored using a continuous opacity monitoring system (COMS) are not required to comply with this permit condition. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either

a) take appropriate corrective action as expeditiously as practicable to eliminate the visible emissions. Within 24 hours of the initial see/no see evaluation and after the corrective action, the permittee shall conduct a see/no see evaluation of the emissions point in question. If the visible emissions are not eliminated, the permittee shall comply with b).

or

b) perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20%, as measured using Method 9, for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136.

The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each 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.

Permit Condition 4.2

Emissions of PM and particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM_{10}) from the facility's two turbines shall not exceed 14 pounds per hour; 59 tons per any consecutive 12 months.

MRRR – (Permit Conditions 4.10, 4.11, and 4.18)

- The maximum annual hours of operation of the facility's two turbines shall not exceed 16,848 hours in a calendar year.
- The permittee shall monitor and record the hours of operation and hourly usage of natural gas from each of the turbines.
- The permittee shall record the hours of operation for each turbine in a monthly report to be kept onsite for a five-year minimum period and made available to DEQ representatives upon request.
- The permittee shall report the hourly turbine operation and fuel usage data acquired by the monitoring required by Permit Condition 4.12 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.3

Emissions of NO_x from the facility's two turbines shall not exceed 104 pounds per hour; 235.5 tons per any consecutive 12 months.

MRRR – (Permit Conditions 4.12 and 4.17)

- The permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for monitoring and recording stack gas concentrations and the pound per hour emission rate of NO_x from each turbine. The CEMS shall conform to the NO_x CEM requirements of 40 CFR 75 including measuring the concentration of oxygen.
- The permittee shall report the CEM data acquired by the monitoring required by Permit Condition 4.12 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.4

Emissions of volatile organic compounds (VOC) from the facility's two turbines shall not exceed 3.6 pounds per hour; 15.2 tons per any consecutive 12 months.

MRRR – (Permit Conditions 4.10, 4.11, and 4.18)

- The maximum annual hours of operation of the facility's two turbines shall not exceed 16,848 hours in a calendar year.
- The permittee shall monitor and record the hours of operation and hourly usage of natural gas from each of the turbines.
- The permittee shall record the hours of operation for each turbine in a monthly report to be kept onsite for a five-year minimum period and made available to DEQ representatives upon request.
- The permittee shall report the hourly turbine operation and fuel usage data acquired by the monitoring required by Permit Condition 4.11 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.5

Emissions of sulfur dioxide (SO_2) from the facility's two turbines shall not exceed 6 pounds per hour; 19.8 tons per any consecutive 12 months.

MRRR – (Permit Conditions 4.10, 4.11, 4.18)

- The maximum annual hours of operation of the facility's two turbines shall not exceed 16,848 hours in a calendar year.
- The permittee shall monitor and record the hours of operation and hourly usage of natural gas from each of the turbines.
- The permittee shall record the hours of operation for each turbine in a monthly report to be kept onsite for a five-year minimum period and made available to DEQ representatives upon request.
- The permittee shall report the hourly turbine operation and fuel usage data acquired by the monitoring required by Permit Condition 4.12 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.6

Emissions of carbon monoxide (CO) from the facility's two turbines shall not exceed 106 pounds per hour; 240 tons per any consecutive 12 months.

MRRR – (Permit Conditions 4.15 and 4.16)

- The permittee shall install, calibrate, maintain, and operate a CEMS for the monitoring and recording of stack gas concentrations and hourly emission rates of CO from each turbine. The CO CEMS shall meet all specifications and requirements of the most recent Quality Assurance Plan which covers the CO CEMS. The permittee shall make available the most recent Quality Assurance Plan in either hard copy or electronic format to DEQ representatives upon request.

- In addition to the specifications and requirements of the current Quality Assurance Plan, the permittee shall use the following audit procedures to evaluate the effectiveness of quality control and quality assurance procedures and the quality of data produced by the CO CEMS. The CO CEMS must be audited via a Relative Accuracy Test Audit (RATA) or cylinder gas audit (CGA) at least once each operating quarter. Successive quarterly audits shall occur no closer than two months apart. An operating quarter is defined as a calendar quarter in which there are at least 168 unit operating hours (i.e., a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour).
- The permittee must conduct a RATA in accordance with Section 5.1.1 of Appendix F of 40 CFR 60 and Performance Specification 4, 4A, or 4B of Appendix B of 40 CFR 60 at least once every four operating quarters.
- The permittee may audit the CEMS via a cylinder gas audit conducted in accordance with Section 5.1.2 of Appendix F of 40 CFR 60 in three of four operating quarters, but in no more than three operating quarters in succession.
- The permittee shall report the CEM data acquired by the monitoring required by Permit Condition 4.16 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.7

As required by 40 CFR 60.332(a)(1), the permittee shall not cause to be discharged to the atmosphere from any gas turbine, any gases which contain NO_x in excess of:

$$STD = 0.0075 * \frac{(14.4)}{Y} + F$$

Where:

STD = allowable ISO corrected (if required as given in 60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour), or the actual measured heat rate based on the lower heating value of fuel as measured at the actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO_x emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of 40 CFR 60.332.

MRRR – (Permit Conditions 4.12, 4.14, and 4.17)

- The permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for monitoring and recording stack gas concentrations and the pound per hour emission rate of NO_x from each turbine. The CEMS shall conform to the NO_x CEM requirements of 40 CFR 75 including measuring the concentration of oxygen.
- The following permit conditions pertain to the fuel monitoring requirements of 40 CFR 60 Subpart GG.
- The permittee shall monitor the nitrogen content of the fuel combusted in the turbine, if the permittee claims an allowance for fuel bound nitrogen to establish a NO_x emissions limit per the equation in Permit Condition 3.8. The nitrogen content of the fuel shall be determined using methods described in 60.335(b)(9) or an approved alternative. The permittee is not required to monitor fuel bound nitrogen; however, the permittee cannot claim an allowance for fuel bound nitrogen without monitoring data collected in accordance 60.335(b)(9) or an approved alternative.
- The permittee shall report the CEM data acquired by the monitoring required by Permit Condition 4.12 and 4.14 to DEQ and the EPA in a calendar quarterly report to be received no later than 30 days after each calendar quarter.

Permit Condition 4.8

Emissions of SO_2 from each of the turbines shall not exceed 0.015 percent by volume of exhaust gas at 15 percent oxygen and on a dry basis, or the permittee shall not burn fuel which contains sulfur in excess of 0.8 percent by weight.

MRRR – (Permit Condition 4.13)

The permittee shall use one of the following information sources to demonstrate compliance with the SO_2 standard established in Permit Condition 4.8. The gas quality characteristics for fuel combusted in either combustion turbine shall be specified in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel. The characteristics shall specify the maximum total sulfur content of the fuel is 20.0 grains per 100 standard cubic foot or less. The permittee shall make available the current, valid purchase contract, tariff sheet or transportation contract in either hard copy or electronic format to DEQ representatives upon request.

Permit Condition 4.9

Each of the turbines shall be exclusively fired by natural gas only.

MRRR

No specific monitoring is required for this condition beyond that which is required for other fuel-specific standards (e.g., Permit Conditions 4.1 through 4.8). 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.

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.c, 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 Kootenai 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)

Avista's potential to emit of NO_x and CO each exceed the major source threshold amount, so a Title V operating permit is required.

7.3 PSD Classification (40 CFR 52.21)

The emissions from the facility are less than 250 T/yr of each of the applicable pollutants. The facility is not a designated facility and is not located in a non-attainment area. Therefore, PSD does not apply.

7.4 NSPS Applicability (40 CFR 60)

Subpart GG is applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr that commenced construction after October 3, 1977. This facility's turbines' peak input load is approximately 860 MMBtu/hr each and were installed in 1994. Therefore, Subpart GG is applicable to this facility. This subpart has been addressed and permit conditions written in previous permit actions. The subpart has not been updated since the previous version of this Tier I operating permit was issued, so no changes to the permit conditions are required.

Subparts K and Ka apply to vessels with volumes greater than 40 cubic meters. The permit application indicates that all storage vessels at the facility used to store petroleum and volatile organic liquids have a capacity of less than or equal to 40 cubic meters. Therefore, Subparts K and Ka do not apply to this facility.

7.5 NESHAP Applicability (40 CFR 61)

No NESHAP applies to this facility.

7.6 MACT Applicability (40 CFR 63)

No MACT applies to this facility. Subpart YYYY applies only to facilities that are major for HAPs, and this facility is not major for HAPs.

7.7 CAM Applicability (40 CFR 64)

The dry low NO_x combustor does not meet the definition of a control device as specified in 40 CFR 64.1, so CAM does not apply to this facility.

7.8 Acid Rain Permit (40 CFR 72-75)

Avista is subject to the acid rain permitting requirements of 40 CFR 72 through 40 CFR 75. The facility has a Phase II acid rain permit.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from December 12, 2016 – January 11, 2017. 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 20, 2017 via e-mail. No comments were received.

Appendix A - Emissions Inventory

Table 3-1

ESTIMATED MAXIMUM HOURLY AND ANNUAL AVERAGE CRITERIA POLLUTANT AND CO_2e EMISSION RATES FROM RATHDRUM COMBUSTION TURBINES

Pollutant	Hourly Emission Rate (lb/hr)	Annual Emission Rate (ton/yr)
NO_X	104	235.5
CO	106	240
SO_2	6.0	19.8
PM	14	59
PM_{10}	14	59
$PM_{2.5}$	14	59
VOC	3.6	15.2
CO_2e	-	953,280

Note: Maximum hourly emission rates expected during winter (30 degrees F inlet temperature). Emissions are for both turbines combined.

Table 3-2

ESTIMATED ANNUAL AVERAGE TOXIC AIR POLLUTANT EMISSIONS FROM RATHDRUM COMBUSTION TURBINES

Toxic Air Pollutant	Annual Emission Rate (lb/yr)	Annual Emission Rate (ton/yr)
1,3-Butadiene	7	0.0
Acetaldehyde	648	0.3
Acrolein	104	0.1
Benzene	194	0.1
Ethyl benzene	518	0.3
Formaldehyde	11,502	5.8
Naphthalene	21	0.0
PAH	36	0.0
Propylene Oxide	470	0.2
Toluene	2,106	1.1
Xylenes	1,037	0.5
Total	*16,642*	*8.3*

Note: Emissions are for both turbines combined.
Sum of individual emission rates may not add up to the total due to rounding.

WASHINGTON WATER POWER

ESTIMATED PERFORMANCE - PG7111(EA)

LOAD CONDITION		BASE
AMBIENT TEMP.	deg F	30.
OUTPUT	kW	83250.*
HEAT RATE (LHV)	Btu/kWh	10350.*
HEAT CONS. (LHV) $X10^6$	Btu/h	861.6
EXHAUST FLOW $X10^3$	lb/h	2317.0
EXHAUST TEMP	Deg F.	956.
EXHAUST HEAT $X10^6$	Btu/h	543.9

NOX	ppmvd @ 15% O_2	15.*
NOX AS NO_2	lb/h	52.
CO	ppmvd	25.*
CO	lb/h	53.
UHC	ppmvw	7.
UHC	lb/h	9.
PART	lb/h	7.0*
VOC	ppmvw	1.4*

* Guarantee values as described in Section 5 and test methods in Section 15.

EXHAUST ANALYSIS	% VOL.
ARGON	0.91
NITROGEN	75.37
OXYGEN	14.05
CARBON DIOXIDE	3.21
WATER	6.46

SITE CONDITIONS
****

ELEVATION	-	ft	2235
SITE PRESSURE	-	psia	13.57
INLET LOSS	-	in. Water	2.5
EXHAUST LOSS	-	in. Water	5.5
RELATIVE HUMIDITY	-	%	80
FUEL TYPE	-		CUST GAS
FUEL LHV	-	Btu/lb	19937
APPLICATION	-		7A6 Air Cooled Generator
COMBUSTION SYSTEM	-		DRY LOW NOX

Emission information based on GE recommended measurement methods.
NOx emissions are corrected to 15% O_2 without heat rate correction and are not corrected to ISO reference conditions per 40CFR 60.335(a)(1)(i).
NOx levels shown will be controlled by algorithms within the Speedtronic control system.

No bleed heat on this project.

AVISTA UTILITIES - RATHDRUM COMBUSTION TURBINE PROJECT
GHG EMISSIONS FROM NATURAL GAS FIRING

GE Turbines Unit 1 & Unit 2
Natural Gas Fuel

Number of Turbines	2		
Total Annual Hours Operation	16,848	Hours	

Operational Information

Natural Gas Heating Value	1026	Btu/SCF	(from Table C-1 of 40 CFR 98)
Natural Gas Use (per turbine)	942,670	SCF/hr	
Heat Input (per turbine)	967.18	MMBtu/hr	

GHG	Emission[a] Factor kg/MMBtu)	Max Hourly Emissions Per Turbine (kg/hr)	Max Hourly Facility Emissions (kg/hr)	Total Annual Facility Emissions (ton/yr)	Global[b] Warming Potential	Total Annual CO_2e Facility Emissions (ton/yr)
Carbon Dioxide (CO_2)	53.02	5.13E+04	1.03E+05	952,346	1	952,346
Methane (CH_4)	1.0E-03	9.67E-01	1.93E+00	18	21	377
Nitrus Oxide (N_2O)	1.0E-04	9.67E-02	1.93E-01	1.8	310	557
Carbon Dioxide Equivalents (CO_2e)	-	-	-	-	-	**953,280**

Notes: [a] Emission factors from 40 CFR 98, Tables C-1 & C-2

[b] Global warming potentials (100-year time horizon) from 40 CFR 98, Table A-1.

AVISTA UTILITIES - RATHDRUM COMBUSTION TURBINE PROJECT
TOXIC AIR POLLUTANT EMISSIONS FROM NATURAL GAS FIRING

GE Turbines Unit 1 & Unit 2
Natural Gas Fuel

Number of Turbines	2	
Total Annual Hours Operation	16,848	Hours

Operational Information

Natural Gas Heating Value	1020	Btu/SCF
Natural Gas Use (per turbine)	942,670	SCF/hr
Heat Input (per turbine)	961.52	MMBtu/hr

Toxic Air Pollutant	Emission[a] Factor (lb/MMBtu)	Max Hourly Emissions Per Turbine (lb/hr)	Max Hourly Facility Emissions (lb/hr)	Total Annual Facility Emissions (lb/yr)	Total Annual Facility Emissions (ton/yr)
1,3-Butadiene	4.30E-07	4.13E-04	8.27E-04	7	0.0
Acetaldehyde	4.00E-05	3.85E-02	7.69E-02	648	0.3
Acrolein	6.40E-06	6.15E-03	1.23E-02	104	0.1
Benzene	1.20E-05	1.15E-02	2.31E-02	194	0.1
Ethylbenzene	3.20E-05	3.08E-02	6.15E-02	518	0.3
Formaldehyde	7.10E-04	6.83E-01	1.37E+00	11,502	5.8
Naphthalene	1.30E-06	1.25E-03	2.50E-03	21	0.0
PAH	2.20E-06	2.12E-03	4.23E-03	36	0.0
Propylene Oxide	2.90E-05	2.79E-02	5.58E-02	470	0.2
Toluene	1.30E-04	1.25E-01	2.50E-01	2,106	1.1
Xylenes	6.40E-05	6.15E-02	1.23E-01	1,037	0.5
Total				16,642	8.4

Notes: [a] Emission factor from EPA AP-42 Section 3.1-Stationary Gas Turbines (4/00), Table 3.1-3.

Rathdrum Combustion Turbine Project
Fugitive Particulate Matter (PM and PM10) Emissions
Paved Road Travel

Number of days with precipitation > 0.01 in. = 0 <--- enter data

Vehicle Information

Vehicle Type	Roadway Type	Average Vehicle Weight (tons)	Annual Operation (day/yr)	Total Annual Trips	Avg Trips/ Per Day	One-Way Travel Dist. (ft)	Total Daily VMT (mi)	Annual VMT (mi)
Pickup Truck	Paved	3	365	730	2	750	0.284	104
Passenger Vech	Paved	2	365	2,190	6	250	0.284	104

Category	Silt Loading
Limited Access Road Silt Loading (g/m2)	0.015

Notes: VMT = vehicle miles traveled.
Emission Factors from AP-42 Section 13.2.1 (Paved Roads (1/11)

PM Emissions

Category	Uncontrolled Emission Factor (lb/VMT)	Annual Average Traffic (VMT/yr)	Average Annual PM emissions (ton/yr)
Industrial Paved Road - Pickup Truck	0.0007	104	3.83E-05
Industrial Paved Road - Passenger Vehicle	0.0005	104	2.53E-05
Roadway PM Totals:			**6.36E-05**

PM10 Emissions

Category	Uncontrolled Emission Factor (lb/VMT)	Annual Average Traffic (VMT/yr)	Average Annual PM emissions (ton/yr)
Industrial Paved Road - Pickup Truck	0.00015	104	7.66E-06
Industrial Paved Road - Passenger Vehicle	0.00010	104	5.06E-06
Roadway PM10 Totals:			**1.27E-05**