

**CLARK COUNTY**  
**DEPARTMENT OF AIR QUALITY AND**  
**ENVIRONMENTAL MANAGEMENT**  
*500 South Grand Central Parkway, Box 555210, Las Vegas, Nevada 89155*  
**Part 70 Operating Permit**  
**Source: 423**  
Issued in accordance with the  
Clark County Air Quality Regulations (AQR)

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**ISSUED TO:**      **Nevada Sun-Peak, LP**

**SOURCE LOCATION:**  
6360 Vegas Valley Drive  
Las Vegas, Nevada 89142  
T21S, R62E, Section 10  
Hydrographic Basin Number 212

**COMPANY ADDRESS:**  
9590 Prototype Court, Suite 200  
Reno, Nevada 89521

**NATURE OF BUSINESS:**  
SIC 4911: Electric Services  
NAICS: 221112: Fossil Fuel Electric Power Generation

**RESPONSIBLE OFFICIAL:**  
Name:                Robert Graben  
Title:                Site Manager  
Phone:                (702) 457-0797, ext. 21  
Fax Number:        (702) 457-2043

**Permit Issuance Date:**      **October 6, 2010**      **Expiration Date:**      **October 5, 2015**

**ISSUED BY: CLARK COUNTY DEPARTMENT OF AIR QUALITY AND ENVIRONMENTAL  
MANAGEMENT**



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Tina Gingras  
Assistant Director, Clark County DAQEM

## EXECUTIVE SUMMARY

Nevada Sun-Peak, LP is an electrical power generating peaking plant located at 6360 Vegas Valley Drive, Las Vegas, Nevada 89142 in the Las Vegas Valley airshed, hydrographic basin number 212 which is designated as basic nonattainment for PM<sub>10</sub>, CO, and ozone and attainment for all other regulated pollutants.

Nevada Sun-Peak, LP operates three GE Frame PG 7111-EA, 84.5 MW stationary gas turbines in the simple cycle mode (EUs: A01, A02 and A03) which, through combustion, of fuel produce PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC and HAP emissions. The source also has a lubricating oil system associated with each stationary gas turbine (existing EU: A04 and new, as of this permitting action, EUs: A05 and A06) which provide a constant supply of oil to bearings, gears and other stationary gas turbine components requiring lubrication. These "lube oil vents" generate a minimal amount of VOC emissions. Each stationary gas turbine is permitted to fire on natural gas or diesel fuel oil. All processes at the site are grouped under SIC 4911 – Electric Services and NAICS 221112 – Fossil Fuel Electric Power Generation.

Nevada Sun-Peak, LP is a major source for NO<sub>x</sub> and is a minor source for PM<sub>10</sub>, CO, SO<sub>2</sub>, VOC and HAP. The stationary gas turbines are subject to the requirements of 40 CFR 60, Subparts A and GG.

The following table summarizes the source potential to emit for each regulated air pollutant from all emission units:

<b>PM<sub>10</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>HAP</b>
<b>11.01</b>	<b>249.90</b>	<b>33.21</b>	<b>49.50</b>	<b>5.04</b>	<b>4.92</b>

All general and specific conditions in the permit are federally enforceable unless explicitly denoted otherwise. [AQR 12.5.2/AQR 19.4.2]

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## I. ACRONYMS

**Table I-1: List of Acronyms**

<b>Acronym</b>	<b>Term</b>
AQR	Clark County Air Quality Regulations
ATC	Authority to Construct
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CTG	Combustion Turbine-Generator
DAQEM	Clark County Department of Air Quality & Environmental Management
DLN	Dry Low-NO <sub>x</sub>
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HHV	Higher Heating Value
HP	Horse Power
kW	kilowatt
LHV	Lower Heating Value
MMBtu	Millions of British Thermal Units
M/N	Model Number
MW	Megawatt
NAICS	North American Industry Classification System
NO <sub>x</sub>	Nitrogen Oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
PM <sub>10</sub>	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PTE	Potential to Emit
QA/AC	Quality Assurance/Quality Control
RATA	Relative Accuracy Test Audits
RMP	Risk Management Plan
SCC	Source Classification Codes
scf	Standard Cubic Feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO <sub>2</sub>	Sulfur Dioxide
SO <sub>x</sub>	Sulfur Oxides
TCS	Toxic Chemical Substance
ULN	Ultra Low-NO <sub>x</sub>
VOC	Volatile Organic Compound

## **II. GENERAL CONDITIONS**

### **A. General Requirements**

1. The Permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act (Act) and is grounds for enforcement action; for permit termination, revocation and reissuance or modification; or for denial of a permit renewal application. *[AQR 12.5.2.6(g)(1)/AQR 19.4.1.6.a]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid. *[AQR 12.5.2.6(f)/AQR 19.4.1.5]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. Failure to pay Part 70 permit fees may result in citations or suspensions or revocation of the Part 70 Permit. *[AQR 12.5.2.6(h)/AQR 19.4.1.7]*
4. The permit does not convey any property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)/AQR 19.4.1.6.d]*
5. The Permittee shall not hinder, obstruct, delay, resist, interfere with, or attempt to interfere with the Control Officer, or any individual to whom authority has been duly delegated for the performance of any duty by the AQR. *[AQR 5.1]*
6. The Permittee owning, operating, or in control of any equipment or property who shall cause, permit, or participate in any violation of the AQR shall be individually and collectively liable to any penalty or punishment imposed by and under the AQR. *[AQR 8.1]*
7. The Permittee shall continue to comply with applicable requirements for which the Permittee is in compliance. *[AQR 12.5.2.3(j)(2)(A)/AQR 19.3.3.8.b]*
8. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. *[AQR 12.5.2.2/AQR 19.3.2]*
9. The Permittee may request confidential treatment of any records in accordance with AQR Section 19. Emission data, standards or limitations [all terms as defined in 40 CFR 2.301(a)] or other information as specified in 40 CFR 2.301 shall not be considered eligible for confidential treatment. The Administrator and the Control Officer shall each retain the authority to determine whether information is eligible for confidential treatment on a case-by-case basis. *[AQR 12.5.2.6(g)(5)/AQR 19.3.1.3 and 40 CFR 2.301]*

### **B. Modification, Revision, Renewal Requirements**

1. The Permittee shall not make a modification, as defined in AQR Section 0, to the existing source prior to receiving an ATC from the Control Officer. *[AQR 12.4]*
2. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for the permit modification, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *[AQR 12.5.2.6(g)(3)/AQR 19.4.1.6.c]*
3. Any request for a permit revision must comply with the requirements of AQR Section 12.5. *[AQR 12.5.2]*
4. The Permittee shall not build, erect, install or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 60.12]*

5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [AQR 12.5.2.6(i)/AQR 19.4.1.11]
6. For purposes of permit renewal, the Permittee shall submit a timely and complete application. A timely application is one submitted between six (6) months and 18 months prior to the date of permit expiration. [AQR 12.5.2.1/AQR 19.3.1.1.c]
7. Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with AQR Subsections 19.3.1.1.c and 19.5.2 in which case the permit shall not expire and all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or denied. [AQR 12.5.2.11/AQR 19.5.3.2]

**C. Reporting/Notifications/Providing Information Requirements**

1. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Control Officer along with a claim of confidentiality. [AQR 12.5.2.6(g)(5)/AQR 19.4.1.6]
2. The Permittee shall allow the Control Officer or an authorized representative, upon presentation of credentials:
  - a. entry upon the Permittee's premises where the source is located, or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
  - b. access to inspect and copy, at reasonable times, any records that must be kept under conditions of the permit;
  - c. access to inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - d. access to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [AQR 4.3 and 12.5.2.8(b)/19.4.3.2]
3. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]

**D. Compliance Requirements**

1. The Permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit. [AQR 12.5.2.6(g)(2)/AQR 19.4.1.6.b]

2. Any person who violates any provision of this Operating Permit, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by DAQEM is guilty of a civil offense and shall pay civil penalty levied by the Air Pollution Control Hearing Board/Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. [AQR 9.1]
3. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review as provided in Chapter 233B of NRS. [AQR 9.12]
4. The Permittee of any stationary source or emission unit that fails to demonstrate compliance with the emissions standards or limitations shall submit a compliance plan to the Control Officer pursuant to AQR Section 10. [AQR 10.1]
5. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. [AQR 13.1.7]
6. Requirements for compliance certification with terms and conditions contained in the Operating Permit, including emission limitations, standards, or work practices, are as follows:
  - a. the Permittee shall submit compliance certifications annually in writing to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) and the Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each year will be due 30 days after the Operating Permit issuance anniversary date;
  - b. compliance shall be determined in accordance with the requirements detailed in AQR, record of periodic monitoring, or any credible evidence; and
  - c. the compliance certification shall include:
    - i. identification of each term or condition of the permit that is the basis of the certification;
    - ii. the Permittee's compliance status and whether compliance was continuous or intermittent;
    - iii. methods used in determining the compliance status of the source currently and over the reporting period consistent with AQR; and
    - iv. other specific information required by the Control Officer to determine the compliance status of the source. [AQR 12.5.2.8(e)(3)/AQR 19.4.3.5]
7. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1]
  - a. The annual emissions inventory shall be submitted to DAQEM no later than March 31 after the reporting year.
  - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.
8. The Permittee shall report to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) any upset, breakdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below [AQR 25.2]:
  - a. within one (1) hour of the onset of the event, the report shall be communicated by phone (702) 455-5942, or by fax (702) 383-9994.
  - b. as soon as practicable but not exceeding ten (10) calendar days from the onset of the event, the detailed written report shall be submitted. Such reports shall include the probable cause of the excess emissions, emission calculations and any corrective actions taken.

9. The Permittee shall report to the Control Officer deviations that do not result in excess emission, with the quarterly reports. Such reports shall include the probable cause of deviations and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)/AQR 19.4.1.3]
10. The Permittee shall include a certification of truth, accuracy, and completeness by a responsible official when submitting any application form, report, or compliance certification pursuant to this Operating Permit. This certification and any other certification required shall state, "Based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." This statement shall be followed by the signature and printed name of the responsible official certifying compliance and the date of signature. [AQR 12.5.2.6(l)/AQR 19.3.4]

**E. Performance Testing Requirements**

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the DAQEM regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. [AQR 4.5]
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. [AQR 4.6]
3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (500 Grand Central Parkway, Box 555210, Las Vegas, NV 89155) not less than 45 nor more than 90 days prior to the anticipated date of the performance test. [12.5.2.8]
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA. [40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [12.5.2.8]
6. The Control Officer may require additional or more frequent performance testing. [AQR 4.5]

### III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

#### A. Emission Units

1. The stationary source covered by this Part 70 OP is defined to consist of the emission units and associated appurtenances summarized in Table III-A-1. *[NSR ATC Modification 1, Revision 2, Section IV-A (04/29/2010)]*

**Table III-A-1: List of Emission Units**

EU	Description	Rating	Make	Model #	Serial #
A01	Stationary Gas Turbine #3; natural gas fired; MEQ = 33.71	84.5 MW	General Electric	PG7111-EA	295657
	Stationary Gas Turbine #3; #2 diesel oil fired; MEQ = 21.24				
A02	Stationary Gas Turbine #4; natural gas fired; MEQ = 33.71	84.5 MW	General Electric	PG7111-EA	295658
	Stationary Gas Turbine #4; #2 diesel oil fired; MEQ = 21.24				
A03	Stationary Gas Turbine #5; natural gas fired; MEQ = 33.71	84.5 MW	General Electric	PG7111-EA	295659
	Stationary Gas Turbine #5; #2 diesel oil fired; MEQ = 21.24				
A04	Lube Oil Vent (Stationary Gas Turbine #3)	---	---	---	---
A05	Lube Oil Vent (Stationary Gas Turbine #4)	---	---	---	---
A06	Lube Oil Vent (Stationary Gas Turbine #5)	---	---	---	---

#### B. Emission Limitations and Standards

##### 1. Emission Limits

- a. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Tables III-B-1 and III-B-2. Tons-per-rolling 12-months emission limits of each emission unit include startup and shutdown emissions. *[NSR ATC Modification 1, Revision 2 (04/29/2010)]*

**Table III-B-1: Emission Unit PTE, Including Startup and Shutdowns for Natural Gas Combustion (tons per rolling 12-months)**

EU	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC
A01	8.73 <sup>1</sup>	249.90 <sup>1</sup>	33.21 <sup>1</sup>	0.30 <sup>1</sup>	3.15 <sup>1</sup>
A02					
A03					
A04	0.00	0.00	0.00	0.00	0.01
A05	0.00	0.00	0.00	0.00	0.01
A06	0.00	0.00	0.00	0.00	0.01

<sup>1</sup> Emission limitations based on 3,495 hours per any rolling 12-month period for all three stationary gas turbines combined.

**Table III-B-2: Emission Unit PTE, Including Startup and Shutdowns for #2 Diesel Oil Combustion (tons per rolling 12-months)**

EU	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC
A01	11.01 <sup>1</sup>	249.90 <sup>1</sup>	20.91 <sup>1</sup>	49.50 <sup>1</sup>	5.01 <sup>1</sup>
A02					
A03					
A04	0.00	0.00	0.00	0.00	0.01
A05	0.00	0.00	0.00	0.00	0.01
A06	0.00	0.00	0.00	0.00	0.01

<sup>1</sup> Emission limitations based on 2,202 hours per any rolling 12-month period for all three stationary gas turbines combined.

- b. The Permittee shall not allow actual emissions from each emission unit to exceed the PTE listed in Table III-B-3. Pound-per-hour limits are normal operation (excluding startup and shutdown) limits only. NO<sub>x</sub> and CO for the stationary gas turbines shall not be exceeded for any three (3)-hour rolling average period as determined by CEMS. [NSR ATC Modification 1, Revision 2 (04/29/2010)]

**Table III-B-3: Emission Unit PTE, Excluding Startups and Shutdowns (pounds per hour)**

EU	Fuel	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC
A01	Natural Gas	5.00	143.00	19.00	0.17	1.80
	#2 Diesel Oil	10.00	227.00	19.00	45.00	4.50
A02	Natural Gas	5.00	143.00	19.00	0.17	1.80
	#2 Diesel Oil	10.00	227.00	19.00	45.00	4.50
A03	Natural Gas	5.00	143.00	19.00	0.17	1.80
	#2 Diesel Oil	10.00	227.00	19.00	45.00	4.50

<sup>1</sup> The exclusion for startups and shutdowns apply only to CO. No other emission exclusions apply in this table.

- c. The Permittee shall not allow actual emissions from each emission unit to exceed the concentrations listed in Table III-B-4. The emission limits are normal operation (excluding startup and shutdown) limits only. [NSR ATC Modification 1, Revision 2 (04/29/2010)]

**Table III-B-4: Emission Concentrations Excluding Startup and Shutdown (three-hour averaging period)**

EU	O <sub>2</sub> Standard	NO <sub>x</sub> (ppmvd)		CO (ppmvd)	
		Natural Gas	#2 Diesel Oil	Natural Gas	#2 Diesel Oil
A01	15%	42	65	10	10
A02	15%	42	65	10	10
A03	15%	42	65	10	10

- d. Startup and shutdown PTEs are listed in Table III-B-5. The Permittee shall include actual emissions in the annual mass emission reporting. Estimated tonnages of startup and shutdown emissions are included in the operational PTE in Table III-B-1 or Table III-B-2.

**Table III-B-5: Startup and Shutdown Emissions per Stationary Gas Turbine for Natural Gas Combustion<sup>1</sup>**

EU	Description	Units	PM <sub>10</sub>	NO <sub>x</sub>	CO	SO <sub>2</sub>	VOC
A01, A02, A03	Startup	pounds/event	5.00	143.00	8.50	0.17	1.80
		pounds/hr	5.00	143.00	17.00	0.17	1.80
	Shutdown	pounds/event	5.00	143.00	10.40	0.17	1.80
		pounds/hr	5.00	143.00	69.10	0.17	1.80

- e. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[NSR ATC Modification 1, Revision 2, Condition IV-A-2(a) (04/29/2010)]*

## **2. Production Limits**

- a. The Permittee shall limit the heat input for each stationary gas turbine, based on the lower heating value (LHV) of the fuel, to 846 MMBtu per hour for natural gas and 833 MMBtu per hour for #2 diesel oil (EUs: A01, A02 and A03). *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(a) (04/29/2010)]*
- b. The Permittee shall limit operation of each stationary gas turbine (EUs: A01, A02 and A03) to 12 hours per day. *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(b) (04/29/2010)]*
- c. The Permittee shall limit operation of the three stationary gas turbines combined (EUs: A01, A02 and A03) to 3,495 hours per rolling 12-months when operating on natural gas. *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(c) (04/29/2010)]*
- d. The Permittee shall limit operation of the three stationary gas turbines combined (EUs: A01, A02 and A03) to 2,202 hours per rolling 12-months when operating on #2 diesel oil. *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(d) (04/29/2010)]*
- e. If both fuels (natural gas and #2 diesel oil) are used during the year, the Permittee shall limit the total hours firing on natural gas plus 1.59 times the hours firing on #2 diesel oil to 3,495 hours per rolling 12-months (EUs: A01, A02 and A03). *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(e) (04/29/2010)]*
- f. The startup or shutdown periods shall last no more than one hour. If multiple startups of any single stationary gas turbine occur on any day, the cumulative startup periods shall not exceed a total of two hours. *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(f) (04/29/2010)]*
- g. Startup shall be defined as the period beginning when the fuel flow rate is greater than 3,600 pounds per hour for natural gas or 1,440 pounds per hour for #2 diesel oil and ending when the stationary gas turbine has reached a continuous and stable operating level. Shutdown means the period beginning when the stationary gas turbine output is 50 MW and ending when combustion has ceased. *[NSR ATC Modification 1, Revision 2, Condition IV-A-3(g) (04/29/2010)]*

## **3. Emission Controls**

- a. The Permittee shall operate a water injection system to control NO<sub>x</sub> on each of the stationary gas turbine units when firing either natural gas or #2 diesel oil (EUs: A01, A02 and A03). *[NSR ATC Modification 1, Revision 2, Condition IV-B-1 (04/29/2010)]*
- b. The Permittee shall operate each water injection system in accordance with manufacturer's specifications and good operating practices. Water injection will coincide with initiating flow of gas to each of the stationary gas turbine units (EUs: A01, A02 and A03). *[NSR ATC Modification 1, Revision 2, Condition IV-B-2 (04/29/2010)]*
- c. The Permittee shall combust only natural gas or #2 diesel oil in each of the stationary gas turbine units (EUs: A01, A02 and A03). *[NSR ATC Modification 1, Revision 2, Condition IV-B-3 (04/29/2010)]*
- d. The Permittee shall use natural gas fuel with sulfur content not exceeding a rolling 12-month average of 0.5 grains/100 dscf. *[NSR ATC Modification 1, Revision 2, Condition IV-B-4 (04/29/2010)]*
- e. The Permittee shall use low sulfur (<0.05 percent) #2 diesel oil in each of the stationary gas turbines (EUs: A01, A02 and A03). *[AQR 29.1]*

- f. The Permittee shall, under all conditions, maintain and operate the source in a manner consistent with good air pollution control practice for minimizing emissions *[NSR ATC Modification 1, Revision 2, Condition IV-B-5 (04/29/2010)]*
- g. The Permittee shall comply with the control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. *[NSR ATC Modification 1, Revision 2, Condition IV-B-6 (04/29/2010)]*

### **C. Monitoring**

1. To demonstrate continuous direct compliance with all emission limitations for NO<sub>x</sub> and CO specified in this permit, the Permittee shall install, calibrate, maintain, operate, and certify CEMS for NO<sub>x</sub>, CO, and O<sub>2</sub> on each stationary gas turbine unit in accordance with 40 CFR 60. Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: *[AQR 12.5.2.6(d)/AQR 19.4.1.3(a)]*
  - a. exhaust gas concentrations of NO<sub>x</sub>, CO, and diluent O<sub>2</sub> for all turbine units (EUs: A01, A02 and A03);
  - b. exhaust gas flow rate (by direct or indirect methods);
  - c. fuel flow rate and type;
  - d. hours of operation;
  - e. 3-hour rolling averages for each NO<sub>x</sub> and CO concentration;
  - f. Hourly, daily and quarterly accumulated mass emissions of NO<sub>x</sub> and CO; and
  - g. hours of downtime of the CEMS.
2. The Quality Assurance Plan for all CEMS required by this permit has been submitted to and accepted by the Control Officer. This QA plan is binding and consistent with the regulations. The QA Plan contains auditing schedules, reporting schedules, and design specifications for the CEMS system. The CEMS shall conform to all provisions of 40 CFR 60.13 and 40 CFR 60 Subpart GG. Audit procedures shall conform to the provisions of 40 CFR 60 Appendix F. *[EPA Final Consent Decree, February 9, 1999]*
3. The Permittee shall conduct RATA of the CO, NO<sub>x</sub>, and diluent O<sub>2</sub> or CO<sub>2</sub> CEMS at least annually. *[AQR 12.5.2.6(d)/AQR 19.4.1.3(a)]*
4. The Permittee shall perform at least one visual emissions observation on a plant-wide level each week. Weekly visual observations shall include the stationary gas turbines (EUs: A01, A02 and A03) while operating to demonstrate compliance with the opacity limit. If visible emissions that appear to exceed the opacity limit(s) are observed, then corrective actions shall be taken to minimize the emissions and, if practicable, the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. *[AQR 12.5.2.6(d)/AQR 19.4.1.3(a)]*
5. The Permittee shall verify compliance with the SO<sub>2</sub> emission limitations specified in permit upon each delivery of diesel oil. Samples of the fuel received shall be taken from either the supplier's diesel oil storage or shipment containers, or the Permittee's diesel oil storage tank. Oil sampling may be performed either by the Permittee or fuel supplier according to either the single tank composite sampling procedure or the all-levels sampling procedure in Standard Practice for Manual Sampling of Petroleum and Petroleum Products. *[40 CFR 60.334(h)(4)(i)(1)]* .
6. The Permittee shall verify compliance with the SO<sub>2</sub> emission limitations specified in permit, when operating natural gas, by utilizing fuel which meets the definition of natural gas per 40 CFR 60.331(u) and demonstrating, through a current valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less. *[40 CFR 60.334(h)(3)(ii)]*

**D. Testing**

1. The following EPA Methods should be used for performance testing. [AQR 12.5.2.6(d)/AQR 19.4.3.1]

**Table III-D-1: Performance Testing Requirements for Stationary Gas Turbines**

Test Point	Pollutant	Method (40 CFR 60, Appendix A)
Exhaust Outlet Stack	PM <sub>10</sub>	Method 5
Exhaust Outlet Stack	VOC	Method 25A
Exhaust Outlet Stack	NO <sub>x</sub>	Chemiluminescence Analyzer (EPA Method 7E) or Method 20
Exhaust Outlet Stack	CO	EPA Method 10 analyzer
Exhaust Outlet Stack	Opacity	EPA Method 9
Stack Gas Parameters	---	EPA Methods 1, 2, 3, 4

2. Performance tests on each stationary gas turbine for NO<sub>x</sub> and CO when firing natural gas shall be conducted once every five years (EUs: A01, A02 and A03). [NSR ATC Modification 1, Revision 2, Condition IV-D-4 (04/29/2010)]
3. The Permittee, when firing #2 diesel oil shall conduct Method 9 visible emissions testing on each stationary gas turbine after 500 aggregate hours of operation from all three stationary gas turbines combined and shall conduct subsequent performance tests after each aggregation of 500 hours of operation thereafter. Initial and subsequent performance tests shall be conducted within 60 days of reaching 500 aggregate hours of operation. [NSR ATC Modification 1, Revision 2, Condition IV-D-5 (04/29/2010)]
4. The Permittee, when firing #2 diesel oil shall conduct initial source testing for the PM<sub>10</sub> and VOC emission limits for each stationary gas turbine using Methods 5 and 25A, respectively after an aggregate of 750 hours of #2 diesel oil combustion in each emission unit. Thereafter, testing shall be repeated after every 750 hours of #2 diesel oil firing in each stationary gas turbine. Initial and subsequent performance testing shall be conducted within 60 days of reaching 750 aggregate hours of operation. [NSR ATC Modification 1, Revision 2, Condition IV-D-6 (04/29/2010)]

**E. Record Keeping**

1. The Permittee shall maintain records on site that include, at a minimum: [AQR 12.5.2.6(d)/AQR 19.4.1.3(b)]
  - a. summary of items required by Condition III-C-1;
  - b. CEMS audit results or accuracy checks, RATA, corrective actions, etc., as required by 40 CFR 60 and the CEMS quality assurance plan;
  - c. daily hours of operation of each stationary gas turbine for #2 diesel oil and natural gas separately;
  - d. dates, times and duration of each startup and shutdown cycle;
  - e. hourly and annual (12-month rolling average) emissions per stationary gas turbine;
  - f. the magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions, corrective actions taken, etc. as required by 40 CFR 60.7;
  - g. daily, monthly, quarterly and annual quantity of natural gas and #2 diesel oil consumed in each stationary gas turbine;
  - h. sulfur content of #2 diesel oil as determined by Condition III-C-5;
  - i. sulfur content of natural gas as determined by Condition III-C-6;

- j. a log showing at least the dates and time when visible emission checks are performed and the steps taken to make any needed corrections to bring opacity into compliance; and
  - k. results of all performance testing.
2. Records and data required by this Operating Permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [AQR 4.4 and 12.5.2.8/19.4.3.2]
  3. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to DAQEM upon request. [AQR 12.5.2.6(d)/AQR 19.4.1.3(b)]
  4. The Control Officer reserves the right to require additional requirements concerning records and record keeping for this source. [AQR 12.5.2.6(d)/AQR 19.4.1.3(b)]

**F. Reporting**

1. All report submissions shall be addressed to the attention of the Control Officer. [AQR 12.5.2.8(e)(4), 21.4 and 22.4]
2. All reports shall contain the following: [AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]
  - a. a certification statement on the first page, i.e., "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate and complete." (A sample form is available from DAQEM); and
  - b. a certification signature from a responsible official of the company and the date of certification.
3. The Permittee shall submit reports to DAQEM: [AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]
  - a. The report shall include a quarterly summary of each item listed in Section III-E-1(a through g).
  - b. The report shall be based on a calendar quarter, which includes partial calendar quarters.
  - c. The report shall be received by DAQEM within 30 calendar days after the calendar quarter. Regardless of the date of issuance of this Operating Permit, the source shall comply with the schedule for report submissions outlined in Table III-F-1:

**Table III-F-1: Required Submission Dates for Various Reports**

Required Report	Applicable Period	Due Date <sup>1</sup>
Quarterly Report for 1 <sup>st</sup> Calendar Quarter	January, February, March	April 30 each year
Quarterly Report for 2 <sup>nd</sup> Calendar Quarter	April, May, June	July 30 each year
Quarterly Report for 3 <sup>rd</sup> Calendar Quarter	July, August, September	October 30 each year
Quarterly Report for 4 <sup>th</sup> Calendar Quarter, Any additional annual records required.	October, November, December	January 30 each year
Annual Compliance Certification Report	12 Months	30 days after the Operating Permit issuance anniversary date
Annual Emission Inventory Report	Calendar Year	March 31 each year
Excess Emission Notification	As Required	Within one (1) hour of the onset of the event
Excess Emission Report	As Required	As soon as practicable but not to exceed ten (10) calendar days from onset of the event
Deviation Report	As Required	Along with quarterly reports

Required Report	Applicable Period	Due Date <sup>1</sup>
Performance Testing	As Required	Within 60 days from the end of the test

<sup>1</sup> Each report shall be received by DAQEM on or before the due date listed. If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

4. Pursuant to AQR Section 25, any upset/breakdowns or emergencies resulting in excess emissions of air pollutants shall be reported to the Control Officer at DAQEM within one (1) hour of the onset of the occurrence. (Phone: (702) 455-5942, Fax: (702) 383-9994). [AQR 12.5.2.6(d)/AQR 19.4.1.3]
5. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. [AQR 4.4 and AQR 12.5.2.6(d)/AQR 19.4.1.3(c)]

**G. Mitigation**

1. The source has no federal offset requirements. [AQR 59.1.1]

**IV. OTHER REQUIREMENTS**

1. The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a CFC or HCFC compound as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. [40 CFR 82]

## ATTACHMENT 1 APPLICABLE REGULATIONS

### REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

1. NRS, Chapter 445B.
2. Applicable AQR Sections:

Citation	Title
AQR Section 0	Definitions
AQR Section 4	Control Officer
AQR Section 5	Interference with Control Officer
AQR Section 8	Persons Liable for Penalties – Punishment: Defense
AQR Section 9	Civil Penalties
AQR Section 10	Compliance Schedule
AQR Section 11	Ambient Air Quality Standards
AQR Section 12	Preconstruction Review for New or Modified Stationary Sources
AQR Section 12.5	Part 70 Operating Permit Requirements (July 1, 2010)
AQR Section 14.1.56	Standards of Performance for New Stationary Sources (NSPS) – Standards of Performance for Gas Turbines
AQR Section 17	Dust Control Permit for Construction Activities Including Surface Grading and Trenching
AQR Section 18	Permit and Technical Service Fees
AQR Section 19	40 CFR Part 70 Operating Permits
AQR Section 21	Acid Rain Continuous Emissions Monitoring
AQR Section 22	Acid Rain Permits
AQR Section 24	Sampling and Testing - Records and Reports
AQR Section 25	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 29	Sulfur Contents of Fuel Oil
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 55	Preconstruction review for New or Modified Stationary Sources in the 8-Hour Ozone Nonattainment Area
AQR Section 60	Evaporation and Leakage
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

3. CAAA, Authority: 42 U.S.C. § 7401, et seq.
4. Applicable 40 CFR Subsections:

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60, Subpart GG	Standards of Performance for New Stationary Sources (NSPS) – Stationary Gas Turbines
40 CFR 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR 70	Federally Mandated Operating Permits
40 CFR 82	Protection of Stratospheric Ozone