

4701 W. Russell Rd Suite 200 Las Vegas, NV 89118-2231 Phone (702) 455-5942 Fax (702) 383-9994

# **PART 70 OPERATING PERMIT**

# **SOURCE ID: 00423**

Sun Peak Generating Station 6360 Vegas Valley Drive Las Vegas, Nevada 89142

**ISSUED ON:** November 5, 2020

**EXPIRES ON:** November 4, 2025

Revised on: July 18, 2023

# **Current action: Significant Revision**

Issued to:	Responsible Official:
Nevada Power Company, dba NV Energy	Jason Hammons
P.O. Box 98910	Vice President, Generation
Las Vegas, Nevada 89151	PHONE: (702) 402-8225
	EMAIL: Jason.hammons@nvenergy.com

NATURE OF BUSINESS: SIC code 4911, "Electric Services" NAICS code 221112, "Fossil Fuel Electric Power Generation"

Issued by the Clark County Department of Environment and Sustainability/Division of Air Quality in accordance with Section 12.5 of the Clark County Air Quality Regulations.

Santosh Mathew, Acting Permitting Manager

### **EXECUTIVE SUMMARY**

NV Energy's Sun Peak Generating Station (Sun Peak) is an electrical power generating station located at 6360 Vegas Valley Drive in Las Vegas, Nevada. The legal description of the source location is as follows: portions of Township 21S, Range 62E, Section 10 in Las Vegas Valley, County of Clark, State of Nevada. The source is situated in Hydrographic Area 212 (Las Vegas Valley). Las Vegas Valley is currently designated attainment for all regulated pollutants except ozone. Hydrographic Area 212 has been designated moderate nonattainment area on January 5, 2023, for the 2015 ozone NAAQS.

Sun Peak is a Title V major stationary source for  $NO_x$ ; a synthetic minor source for  $SO_2$ , and minor for all other pollutants. It is also a major stationary source for GHG emissions. It is also an affected source under the Acid Rain Rules. The generating station operates three GE Frame PG 7111-EA, 84.5 MW stationary turbines in the simple cycle mode, one 81-hp diesel-powered emergency generator, and one 54,064,081-gallon aboveground diesel storage tank. Sun Peak is not a categorical stationary source.

The turbines are subject to the requirements of 40 CFR Part 60, Subparts A and GG, and the facility is subject to 40 CFR Parts 72 and 75, and 40 CFR Part 63, Subpart ZZZZ.

The source potential to emit (PTE) is shown in the table below.

F	Pollutant	<b>PM</b> 10	<b>PM</b> <sub>2.5</sub>	NOx	СО	SO <sub>2</sub>	VOC	HAP	H <sub>2</sub> S	Pb	GHG <sup>1</sup>
Т	ons/Year	11.00	11.00	249.42	33.17	49.39	7.26	3.71	0	0	176,237

#### Table 1: Source-wide Potential to Emit

<sup>1</sup>Expressed as metric tons of CO<sub>2</sub>e.

DAQ issued a Title V renewal on November 5, 2020. There have been no equipment or operational changes since the last Part 70 Operating Permit. DAQ received a significant revision application on August 24, 2022. Based on information submitted by the applicant and a technical review performed by DAQ staff, DAQ is issuing a revised Part 70 Operating Permit to Nevada Power Company, dba NV Energy.

DAQ will continue to require permittees to estimate their GHG potential to emit in terms of each individual pollutant (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, SF<sub>6</sub>, etc.), and the TSD includes these PTEs for informational purposes.

Pursuant to AQR 12.5.2, all terms and conditions in Sections 1 through 9 of this permit are federally enforceable unless explicitly denoted otherwise.

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# Common Acronyms and Abbreviations (These terms may be seen in the permit)

Acronym	Term
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CD	control device
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
dscf	dry standard cubic feet
dscm	dry standard cubic meter
EPA	U.S. Environmental Protection Agency
EU	emission unit
g/gr	gram
HAP	hazardous air pollutant
HOO	Hearing Officer Order
hp	horsepower
kW	kilowatts
MMBtu/hr	Millions of British Thermal Units per Hour
MSP	Minor Source Permit
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	nitrogen oxides
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standard
NSR	New Source Review
OP	Operating Permit
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PSD	Prevention of Significant Deterioration
PTE	potential to emit
SIP	State Implementation Plan
SIC	Standard Industrial Classification
SO <sub>2</sub>	sulfur dioxide
TDS	Total Dissolved Solids
U.S.C.	United States Code
VEE	Visible Emissions Evaluation
VOC	volatile organic compound

# 1.0 EQUIPMENT

## **1.1 EMISSION UNITS**

The stationary source covered by this Part 70 Operating Permit (Part 70 OP) consists of the emission units and associated appurtenances summarized in Table 1-1. [ATC Mod 1: July 10,1997, Title V OP Revision: January 21, 2016, and AQR 12.5.2.3]

EU	Description	Rating	Make	Model #	
A01	Gas-Fired Turbine (#3); Simple Cycle; natural gas fired; MEQ = 11.20	84.5 MW	General Electric	PG7111-EA	
AUT	Gas-Fired Turbine (#3); Simple Cycle; #2 diesel oil fired; MEQ = 7.05	04.5 10100		PG/TT-EA	
A02	Gas-Fired Turbine (#4); Simple Cycle; natural gas fired; MEQ = 11.20		General Electric	PG7111-EA	
A02	Gas-Fired Turbine (#4); Simple Cycle; #2 diesel oil fired; MEQ = 7.05	84.5 MW		FORTHER	
A03	Gas-Fired Turbine (#5); Simple Cycle; natural gas fired; MEQ = 11.20	84.5 MW	General Electric	PG7111-EA	
100	Gas-Fired Turbine (#5); Simple Cycle; #2 diesel oil fired; MEQ = 7.05				
B01 Emergency Genset Diesel Engine; DOM: 1991		nergency Genset 50 kW		P60DS S/N: 10039	
		81 hp	Perkins	T4.236 S/N: U414484U	
T01	Diesel Tank, AST	5,064,081- gallon capacity	Chicago Bridge and Iron Co.		

Table 1-1: List of Emission Units

# **1.2 INSIGNIFICANT ACTIVITIES**

The units in Table 1-2 are present at this source, but are insignificant activities pursuant to AQR 12.5.2.5. The emissions from these units or activities, when added to the PTE of the source, will not make the source major for any additional pollutant.

Description
Mobile Combustion Sources
Station Maintenance Activities
Genset Diesel Tank, AST, 55 gallons
Maintenance Shop Activities (parts washers, sand blasters, etc.)
Steam Cleaning Operations
3 Lube Oil Vents and Sumps

# **1.3 NONROAD ENGINES**

Pursuant to Title 40, Part 1068.30 of the Code of Federal Regulations (40 CFR Part 1068.30), nonroad engines that are portable or transportable (i.e., not used on self-propelled equipment) shall not remain at a location for more than 12 consecutive months; otherwise, the engine(s) will constitute a stationary reciprocating internal combustion engine (RICE) and be subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and/or 40 CFR Part 60, Subpart JJJJ. Stationary RICE shall be permitted as emission units upon commencing operation at this stationary source.

Records of location changes for portable or transportable nonroad engines shall be maintained, and shall be made available to the Control Officer upon request. These records are not required for engines owned and operated by a contractor for maintenance and construction activities as long as records are maintained demonstrating that such work took place at the stationary source for periods of less than 12 consecutive months.

Nonroad engines used on self-propelled equipment do not have this 12-month limitation or the associated recordkeeping requirements.

# 2.0 CONTROLS

### 2.1 CONTROL DEVICES

1. The permittee shall operate the controls as indicated in Table 2-1, in accordance with manufacturer's specifications and good operating practices such that NO<sub>X</sub> emission limits are met. [NSR ATC Modification 1, Revision 2, Condition IV-B-2 (04/29/2010)]

#### Table 2-1: Summary of Add-On Control Devices

Affected EU	Device Туре
A01, A02, and A03	Water injection system

## 2.2 CONTROL REQUIREMENTS

### **Turbines**

- 1. The permittee shall operate a water injection system on each of the stationary gas turbine units (EUs: A01, A02, and A03) in accordance with manufacturer's specifications and good operating practices such that NOx emission limits are met. [NSR ATC Modification 1, Revision 2, Condition IV-B-2 (04/29/2010)]
- 2. The permittee shall use natural gas fuel with sulfur content not exceeding a 12-month consecutive period average of 0.5 grains/100 dscf. [NSR ATC Modification 1, Revision 2, Condition IV-B-4 (04/29/2010)]
- 3. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR Part 60.11(d)]
- 4. 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)]

#### Diesel Engines

- 5. The diesel emergency generator (EU: B01) is subject to the provisions of 40 CFR Part 63, Subpart ZZZZ and shall comply with the following requirements:
  - i. Change the oil and filter every 500 hours of operation or annually whichever comes first;
  - ii. Inspect air cleaner every 1,000 hours of operation or annually whichever comes first; and

- iii. Inspect all hoses and belts every 500 hours of operation or annually whichever comes first and replace if needed.
- 6. The permittee shall operate and maintain the diesel emergency generator (EU: B01) in accordance with the manufacturer's written emission-related instructions. [40 CFR Part 43 Subpart ZZZZ]

#### <u>Other</u>

7. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. [AQR 40; and AQR 43]

# 3.0 LIMITATIONS AND STANDARDS

### **3.1 OPERATIONAL LIMITS**

#### **Turbines**

- 1. The permittee shall limit the heat input for the three stationary gas turbines, based on the LHV of the fuel, to 2,947,464 MMBtu per year for natural gas (EUs: A01, A02, and A03). [NSR ATC Modification 1, Revision 2, Condition IV-A-3(a) (04/29/2010) and Application for Part 70 OP Significant Revision (08/24/2022)] (Note: the 2,947,464 MMBtu per year is based on 846 MMBtu per hour and 3,484 hours per year)
- 2. The permittee shall limit the heat input for each stationary gas turbine, based on the LHV of the fuel, to 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)]
- 3. 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)]
- 4. 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)]
- 5. The permittee shall limit operation of the three stationary gas turbines combined (EUs: A01, A02, and A03), including testing and tuning, to 3,484 hours in any consecutive 12-month period when operating solely on natural gas. [*Title V OP Revision: January 21, 2016, and AQR 12.5.2.6*]
- 6. The permittee shall limit operation of the three stationary gas turbines combined (EUs: A01, A02, and A03), including testing and tuning, to 2,194 hours per any consecutive 12-month period when operating solely on #2 diesel oil. [*Title V OP Revision: January 21, 201,6 and AQR 12.5.2.6*]
- 7. 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 3,484 hours per any consecutive 12-month period (EUs: A01, A02, and A03). [Title V OP Revision: January 21, 2016, and AQR 12.5.2.6]
- 8. Startup shall be defined as the period beginning with ignition and lasting for a duration not to exceed 30 minutes. [*Title V Operating Permit,* (8/24/2018)]
- 9. Shutdown means the period immediately preceding the cessation of firing of a turbine, not to exceed 60 minutes. *[Title V Operating Permit, (8/24/2018)]*
- 10. Testing/tuning is defined as planned operation outside applicable normal, startup, or shutdown emission limitations for the purposes of data collection, diagnostics, or operational adjustment. [*Title V Operating Permit*, (8/24/2018)]

11. The permittee shall limit testing/tuning to 600 minutes per calendar year per turbine (EUs: A01, A02, and A03). [*Title V Operating Permit*, (8/24/2018)]

#### Emergency Generator

- 12. The permittee shall limit the operation of the emergency generator (EU: B01) to 250 hours per year for testing, maintenance and emergency use. (voluntary limit) [AQR 12.5.2.6]
- 13. The permittee shall limit the operation of the emergency generator (EU: B01) for testing and maintenance purposes to 100 hours/year. The permittee may operate the emergency generator up to 50 hours/year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. Except as provided below (3.a–e inclusive), the emergency generator cannot be used for peak shavings or nonemergency demand response, or to generate income for a facility by supplying power to an electric grid or to otherwise supply power as part of a financial arrangement with another entity: [40 *CFR Part* 63.6640]
  - a. The engine is dispatched by the local balancing authority and/or local transmission and distribution operator.
  - b. The dispatch is intended to mitigate local transmission and/or distribution limitations to avert potential voltage collapse or line overloads that could lead to interruption of power supply in a local area or region.
  - c. The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines.
  - d. The power is provided only to the facility itself or to support the local transmission and distribution system.
  - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for the dispatching engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

#### Diesel Storage Tank

14. The permittee shall limit the diesel throughput through the diesel storage tank (EU: T01) to 50,400,000 gallons per year. [AQR 12.5.2.6]

### **3.2 EMISSION LIMITS**

1. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table 3-1 on a consecutive 12-month total, except for emission units intended only for use in emergencies. The actual combined emissions of turbines shall include startups, shutdowns, and testing/tuning emissions. [Title V OP Revision: January 21, 2016; Application for Part 70 OP Significant Revision (08/24/2022), and AQR 12.5.2.6(a)]

EU	Condition	<b>PM</b> 10	PM <sub>2.5</sub>	NOx	СО	SO <sub>2</sub>	VOC	HAP	H₂S	Pb
A01	3,484 hrs/yr									
A02	(Natural	9.96 <sup>1</sup>	9.96 <sup>1</sup>	249.11 1	33.10 <sup>1</sup>	1.02 <sup>1</sup>	3.59 <sup>1</sup>	0.35 <sup>1</sup>	0 <sup>1</sup>	0 <sup>1</sup>
A03	Gas)									
A01										
A02	2,194 hrs/yr (Diesel)	10.98 <sup>2</sup>	10.98 <sup>2</sup>	249.02 2	20.85 <sup>2</sup>	49.37 <sup>2</sup>	4.94 <sup>2</sup>	3.55 <sup>2</sup>	0 <sup>2</sup>	0 <sup>2</sup>
A03										
B01	250 hrs/yr	0.02	0.02	0.32	0.07	0.02	0.03	0.01	0	0
T01	50,400,000 gal/yr	0.00	0.00	0.00	0.00	0.00	2.29	0.15	0	0

Table 3-1: Emission Unit PTE (tons per year)

<sup>1</sup> Emission limits are based on 3,484 hours per any consecutive 12-month period for all three turbine units combined using natural gas.

<sup>2</sup> Emission limits are based on 2,194 hours per any consecutive 12-month period for all three turbine units combined.

### <u>Turbines</u>

2. The permittee shall not allow the actual emissions from each emission unit to exceed the emission rates listed in Table 3-2. Pound-per-hour limits are normal operation limits only, unless otherwise indicated. Neither NOx nor CO emissions for the stationary gas turbine units shall exceed any three-hour rolling average period as determined by the CEMS. [NSR ATC Modification 1, Revision 2 (04/29/10) and Application for Part 70 OP Significant Revision (08/24/2022)]

Table 3-2: Turbine Units Emission Rate Limitations, Exclusions as Shown (pounds per hour)<sup>1</sup>

EU	Fuel	<b>PM</b> 10	<b>PM</b> <sub>2.5</sub>	NO <sub>x</sub> <sup>2</sup>	CO <sup>3</sup>	SO <sub>2</sub>	VOC
A01	Natural Gas	5.72	5.72	143.00	19.00	0.58	2.06
AUT	#2 Diesel Oil	10.00	10.00	227.00	19.00	45.00	4.50
A02	Natural Gas	5.72	5.72	143.00	19.00	0.58	2.06
AUZ	#2 Diesel Oil	10.00	10.00	227.00	19.00	45.00	4.50
402	Natural Gas	5.72	5.72	143.00	19.00	0.58	2.06
A03	#2 Diesel Oil	10.00	10.00	227.00	19.00	45.00	4.50

<sup>1</sup>NOx and CO limits are based on a three-hour average from CEMS. PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and VOC limits are based on maximum heat input of 967 MMBtu/hr at 25 <sup>o</sup>F.

<sup>2</sup>NOx limit is excluded for testing/tuning events.

<sup>3</sup>CO limit is excluded for startups, shutdowns, and testing/tuning events.

3. The permittee shall not allow actual emissions from each emission unit to exceed the emission concentrations listed in Table 3-3. The emission limits are normal operation (excludes startup, shutdown, and testing/tuning) limits only. [NSR ATC Modification 1, Revision 2 (04/29/10)]

EU O2		NO <sub>x</sub> (j	opmvd)	CO (ppmvd)		
EU	Standard	ndard 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	

# Table 3-3: Turbine Units Emission Concentration Limitations, Excluding Startups, Shutdowns, and Testing/Tuning<sup>1</sup>

<sup>1</sup> On a three-hour average basis.

4. The permittee shall not allow the actual emissions from each emission unit to exceed the applicable emission standard of 40 CFR Part 60, Subpart GG, listed in Table 3-4. [40 CFR Part 60.332]

#### Table 3-4: Turbine Units Applicable Subpart GG Standard, 4-hour Rolling Average

EU	NOx (ppmvd @ 15% O <sub>2</sub> )
Each of A01, A02, A03	94

5. The permittee shall not allow actual emissions from each emission unit to exceed the emission rates listed in Table 3-5 during periods of startup, shutdown, and testing/turning, as determined by CEMS.

# Table 3-5: Turbine Units Emission Rate Limitations Using Natural Gas Combustion During Startup, Shutdown, and Testing/Tuning (pounds per hour)

EU	Description	СО
	Startup	350.00
Each of A01, A02, A03	Shutdown	350.00
	Testing/Tuning	400.00

<u>Other</u>

6. 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. [AQR 26.1]

# 4.0 COMPLIANCE DEMONSTRATION REQUIREMENTS

### 4.1 MONITORING

#### *Visible Emissions [AQR 12.5.2.6(d) & AQR 12.5.2.8]*

- 1. The Responsible Official shall sign and adhere to the *Visible Emissions Check Guidebook* and keep a copy of the signed guide on-site at all times.
- 2. The permittee shall perform at least one visual emissions observation on a plant-wide level each quarter. Quarterly visual observations shall include the stationary gas turbines (EUs: A01, A02, and A03) while burning diesel fuel to demonstrate compliance with the opacity limit. If any of the stationary gas turbines (EUs: A01, A02, and A03) do not operate diesel fuel during the calendar quarter, then no observation of that unit shall be required.
- 3. The permittee shall conduct a visual emissions check at least quarterly on the diesel-fired emergency generator (B01).
- 4. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name.
- 5. If a plume appears to exceed the opacity standard, the permittee shall do one of the following:
  - a. Immediately correct the perceived exceedance, then record the first and last name of the person who performed the emissions check, the date the check was performed, the unit(s) observed, and the results of the observation; or
  - b. Call a certified Visible Emissions Evaluation (VEE) reader to perform a U.S. Environmental Protection Agency (EPA) Method 9 evaluation.
    - i. For sources required to have a certified reader on-site, the reader shall start Method 9 observations within 15 minutes of the initial observation. For all other sources, the reader shall start Method 9 observations within 30 minutes of the initial observation.
    - ii. If no opacity exceedance is observed, the certified VEE reader shall record the first and last name of the person who performed the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each emission unit that was initially perceived to have exceeded the opacity limit, and the record shall also indicate:
      - (1) The cause of the perceived exceedance;
      - (2) The color of the emissions; and
      - (3) Whether the emissions were light or heavy.

- iii. If an opacity exceedance is observed, the certified VEE reader shall take immediate action to correct the exceedance. The reader shall then record the first and last name of the person performing the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each reading identified, and the record shall also indicate:
  - (1) The cause of the exceedance;
  - (2) The color of the emissions;
  - (3) Whether the emissions were light or heavy;
  - (4) The duration of the emissions; and
  - (5) The corrective actions taken to resolve the exceedance.
- 6. Any scenario of visible emissions noncompliance can and may lead to enforcement action.

### *Turbines* [AQR 12.5.2.6(d) & AQR 12.5.2.8]

- 7. For the turbine units (EUs: A01, A02, and A03), the permittee shall report all emissions recorded by CEMS in clock-hour increments. Any clock hour that contains any part of a startup event shall be subject to the startup hourly limit. Any clock hour that contains any part of a shutdown event shall be subject to the shutdown hourly limit. Any clock hour that contains any part of a testing/tuning event shall be subject to the testing/tuning emission limits, regardless of any other operating modes in the hour. [*Title V Operating Permit*, (8/24/2018)]
- 8. The permittee shall verify compliance with the SO<sub>2</sub> emission limitations specified in the 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 by either the permittee or the 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" (see ASTM D4057). [40 CFR Part 60.334(h)(4)(i)(1)]
- 9. When operating natural gas, the permittee shall verify compliance with the SO<sub>2</sub> emission limitations specified in the permit by utilizing fuel that meets the definition of natural gas per 40 CFR Part 60.331(u) and by ensuring that the maximum total sulfur content of the fuel is 0.5 grains/100 scf or less, in accordance with 40 CFR 72.2, pipeline natural gas. [AQR 12.5.2.6(a)]

### CEMS [AQR 12.5.2.6(d) & AQR 12.5.2.8]

10. 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 both 40 CFR Part 60 and 40 CFR Part 75. 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)]

- 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 mass emissions of NO<sub>x</sub> and CO; and
- g. Hours of downtime of the CEMS.
- 11. The permittee shall maintain and adhere to the latest QAP for all CEMS submitted to and approved by DAQ, which shall include auditing and reporting schedules, design specifications, and other quality assurance requirements for each CEMS. [40 CFR Part 75]
- 12. The permittee shall conduct periodic audit procedures and QA/QC procedures for CEMS conforming to the provisions of 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B, as applicable. [AQR 12.5.2.6(d)]
- 13. The permittee shall conduct RATA of the CO, NOx, and diluent O<sub>2</sub> or CO<sub>2</sub> CEMS at least annually, or the frequency specified in 40 CFR 60 and 75, as applicable. [AQR 12.5.2.6(d)]

### Engines [AQR 12.5.2.6(d) & AQR 12.5.2.8]

- 14. The permittee shall operate the emergency generator (EU: B01) with a nonresettable hour meter and monitor the duration of operation for testing, maintenance, and nonemergency operation, and separately for emergencies. [ $AQR \ 12.5.2.6(d)$ ]
- 15. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency generator (EU: B01) by retaining a copy of vendor fuel specifications. [40 CFR 63.6604(b)]

### Diesel Tank [AQR 12.5.2.6(d) & AQR 12.5.2.8]

16. The permittee shall monitor monthly the quantity of diesel fuel processed (EU: T01).

### 4.2 TESTING

1. At the Control Officer's request, the permittee shall test (or have tests performed) to determine emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of those allowed by the AQRs 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 4.2]

- 2. At the Control Officer's request, 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 4.2]
- 3. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains testing, reporting, and notification schedules, test protocols, and anticipated test dates no less than 45 days, but no more than 90 days, before the anticipated date of the performance test unless otherwise specified in this permit. [AQR 12.5.2.8]
- 4. The permittee shall submit to EPA for approval any alternative test methods EPA has not already approved to demonstrate compliance with a requirement under 40 CFR Part 60. [40 *CFR Part* 60.8(*b*)]
- 5. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subpart A, and *Clark County Department of Air Quality Guideline for Source Testing (9/19/2019)*. Performance testing shall be the instrument for determining initial and subsequent compliance with the emission limitations set forth in Tables 3-2 and 3-3 of this permit. [AQR 12.5.2.8(a)]
- 6. The following EPA methods shall be used for performance testing for turbines (EUs: A01, A02, and A03) when burning natural gas. [Application for Part 70 OP Significant Revision (08/24/2022) and AQR 12.5.2.6(d)]

Table 4-1: Performance Testing Requirements for Stationary Gas Turbines

Test Point	Pollutant	Method (40 CFR Part 60, Appendix A)
Exhaust Outlet Stack	PM <sub>10</sub>	Method 5 and 202, or 201A and 202
Exhaust Outlet Stack	VOC	Method 18, 25, and/or 25A
Stack Gas Parameters		EPA Methods 1, 2, 3, 4

- a. Initial performance tests shall be conducted within 180 days after the issuance of the significant revision of the operating permit.
- b. The subsequent performance tests shall be conducted upon written notification from the Control Officer.
- 7. The following EPA methods should be used for performance testing for turbines (EUs: A01, A02, and A03) when burning fuel oil. [AQR 12.5.2.6(d)]

#### Table 4-2: Performance Testing Requirements for Stationary Turbines

Test Point	Pollutant	Method (40 CFR Part 60, Appendix A)
Exhaust Outlet Stack	<b>PM</b> 10	Method 5 and 202, or 201A and 202
Exhaust Outlet Stack	VOC	Method 18, 25, and/or 25A
Exhaust Outlet Stack	Opacity	EPA Method 9
Stack Gas Parameters		EPA Methods 1, 2, 3, 4

a. The permittee, when combusting #2 diesel oil in the turbines (EUs: A01, A02, and A03), 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)]

- b. The permittee, when combusting #2 diesel oil in the turbines (EUs: A01, A02, and A03), shall conduct initial source testing for the PM10 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)]
- 8. The Control Officer will consider approving the permittee's request for alternative performance test methods EPA has already approved, if proposed in writing in the performance test protocols. [AQR 12.5.2.8(a)]
- 9. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days of the end of the test. [AQR 12.5.2.8]
- 10. The permittee of any stationary source that fails to demonstrate compliance with emissions standards or limitations during any performance test shall submit a compliance plan to the Control Officer within 90 days of the end of the performance test. [AQR 10.1 and AQR 12.5.2.8(a)]
- 11. The Control Officer may require additional performance testing when operating conditions appear inadequate to demonstrate compliance with the emissions and/or limitations in this permit. [AQR 12.5.2.8(a)]

# 4.3 **RECORDKEEPING**

- 1. The permittee shall keep records of all inspections, maintenance, and repairs, as required by this permit. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 2. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR Part 60.7; 40 CFR Part 60, Subpart GG; 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 72.9(f); 40 CFR Part 75; and any other applicable regulations.
- 3. All records, logs, etc., or copies thereof, shall be kept on-site for a minimum of five years from the date the measurement, or data was entered. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 4. Records and data required by this permit to be maintained by the permittee may be audited at any time by a third party selected by the Control Officer. [AQR 4.1]
- 4.3.1 <u>Records and Data</u>
- 5. At a minimum, the permittee shall create and maintain the records identified in Section 4.3.1, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation. [AQR 12.5.2.6(d) and AQR 12.5.2.8]

- 6. The permittee shall maintain the following records for reporting: [AQR 12.5.2.6(d) and AQR 12.5.2.8]
  - a. The magnitude and duration of excess emissions, notifications, monitoring system performance, malfunctions, and corrective actions, taken as required by 40 CFR Part 60.7;
  - b. The magnitude and duration of emissions during testing/tuning that result in emissions greater than the emission limits in Tables 3-4 and 3-5 of this permit, as well as the cause of the testing/tuning;
  - c. CEMS audit results or accuracy checks, and corrective actions, as required by 40 CFR Part 60, 40 CFR Part 75, and the CEMS QAP;
  - d. Monthly, consecutive 12-month total of NO<sub>x</sub> and CO mass emissions based on CEMS, including startup, shutdown, testing/tuning, and normal operations in tons;
  - e. Monthly, consecutive 12-month total hours of operation for the turbines (EUs: A01 through A03);
  - f. Annual hours of operation of the emergency generator for testing, maintenance, and nonemergency use (EU: B01);
  - g. Date and duration of operation of the emergency generator for emergency use, including documentation justifying use during the emergency (EU: B01);
  - h. Monthly, consecutive 12-month total quantity of natural gas consumed in each gas turbine;
  - i. Monthly, consecutive 12-month total quantity of #2 diesel oil consumed in each gas turbine; and
  - j. Monthly, consecutive 12-month total quantity of gallons of diesel fuel processed (EU: T01).
  - k. Deviations from permit requirements resulting in excess emissions (report as required by Section 4.4); and
  - 1. Deviations from permit requirements not resulting in excess emissions (report semiannually).
- 7. The permittee shall maintain the following records on-site: [AQR 12.5.2.6(d) and AQR 12.5.2.8]
  - a. A log showing at least the dates and time when visible emissions observations are taken and the steps taken to make any needed corrections to bring opacity into compliance  $[AQR \ 12.5.2.6];$
  - b. Summary of CEMS records collected by the automated data acquisition and handling system required by Section 4.1 of this permit;

- c. All CEMS information required by 40 CFR Part 75, including a CEMS monitoring plan, as well as time, duration, nature, and probable cause of any CEMS downtime and corrective actions taken;
- d. Dates, times, and duration of each turbine startup, shutdown, and testing/tuning event;
- e. Annual copies of all reports, compliance certifications, other submissions, and all records made or required under the Acid Rain Program;
- f. Copies of all documents used to complete an Acid Rain permit application, and any other submission under the Acid Rain Program to demonstrate compliance with the program requirements;
- g. Certificates of representation for the designated representative and the alternative designated representative that meet all requirements of 40 CFR Part 72.24;
- h. Records of location changes for nonroad engines, if applicable;
- i. Results of performance testing;
- j. Results of RATA auditing;
- k. Records of emergency generator inspection/maintenance;
- 1. Sulfur content and cetane index or aromatic content of diesel fuel used to power the emergency generator (EU: B01), as certified by the supplier;
- m. Documentation verifying sulfur content of diesel fuel used for turbines; and
- n. Documentation verifying sulfur content of the natural gas used for turbines.
- 8. The permittee shall include in each record above, where applicable, the date and time the monitoring or measurement was taken, the person performing the monitoring or measurement, and the emission unit or location where the monitoring or measurement was performed. Each record must also contain the action taken to correct any deficiencies, when applicable. [AQR 12.4.3.4(a)(10)]

### 4.4 **REPORTING AND NOTIFICATIONS**

- 1. The permittee shall certify compliance with the terms and conditions contained in this Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance.  $[AQR \ 12.5.2.8(e)]$
- 2. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the Region 9 Administrator (Director, Air and Radiation Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year, and shall include the following: [AQR 12.5.2.8(e)]
  - a. The identification of each term or condition of the permit that is the basis of the certification;

- b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. These methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and
- c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in (b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance was required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
- 3. The permittee shall report to the Control Officer any startup, shutdown, malfunction, emergency, or deviation that causes emissions of regulated air pollutants in excess of any limits set by regulations or this permit. The report shall be in two parts, as specified below:  $[AQR \ 12.5.2.6(d)(4)(B); AQR \ 25.6.1]$ 
  - a. Within 24 hours of the time the permittee learns of the excess emissions, the permittee shall notify DAQ by phone at (702) 455-5942, by fax at (702) 383-9994, or by email at <u>airquality@clarkcountynv.gov</u>.
  - b. Within 72 hours of the notification required by paragraph (a) above, the permittee shall submit a detailed written report to DAQ containing the information required by AQR 25.6.3.
- 4. With the semiannual monitoring report, the permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. [AQR 12.5.2.6(d)(4)(B)]
- 5. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health and safety or the environment as soon as possible, but no later than 12 hours after the deviation is discovered, and submit a written report within two days of the occurrence. [AQR 25.6.2]
- 6. The permittee shall submit all compliance certifications to the U.S. Environmental Protection Agency (EPA) and to the Control Officer. [AQR 12.5.2.8(e)(4)]
- 7. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or the AQRs, shall contain a certification by a Responsible Official, with an original signature, of truth, accuracy, and completeness. This certification, and any other required under AQR 12.5, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [AQR 12.5.2.6(l)]

- 8. The permittee shall furnish to the Control Officer, in writing and within a reasonable time, any information that the Control Officer may request to determine whether cause exists for revising, 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 that the permit requires keeping. The permittee may furnish records deemed confidential directly to the Administrator, along with a claim of confidentiality. [AQR 12.5.2.6(g)(5)]
- 9. At the Control Officer's request, the permittee shall provide any information or analyses that will disclose the nature, extent, quantity, or degree of air contaminants that are or may be discharged by the source, and the type or nature of control equipment in use. The Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to this report, the Control Officer may designate an authorized agent to make an independent study and report on the nature, extent, quantity, or degree of any air contaminants that are or may be discharged from the source. An agent so designated may examine any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.1]
- 10. The permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1 and AQR 12.5.2.4]
  - a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Saturday or Sunday, or on a Nevada or federal holiday, the submittal shall be due on the next regularly scheduled business day);
  - b. The calculated actual annual emissions from each emission unit shall be reported even if there was no activity, along with the total calculated actual annual emissions for the source based on the emissions calculation methodology used to establish the potential to emit (PTE) in the permit or an equivalent method approved by the Control Officer prior to submittal; and
  - c. As the first page of text, a signed certification containing the sentence: "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete." This statement shall be signed and dated by a Responsible Official of the company (a sample form is available from DAQ).
- 11. Stationary sources that emit 25 tons or more of nitrogen oxide (NOX) and/or emit 25 tons or more of volatile organic compounds (VOC) from their emission units, insignificant activities, and exempt activities during a calendar year shall submit an annual emissions statement for both pollutants. Emissions statements must include actual annual NOX and VOC emissions from all activities, including emission units, insignificant activities and exempt activities. Emissions statements are separate from, and additional to, the calculated annual emissions reported each year for all regulated air pollutants (aka Emissions Inventory). [AQR 12.9.1]
- 12. The permittee shall submit to the Control Officer, within 15 days after commencing operation, any outstanding identification and/or description that was not previously available for new emission unit(s), as noted in this permit with "TBD." (Use this condition if there is emission unit information in the permit that is incomplete and noted with "TBD.")

- 13. The permittee shall notify DAQ of a testing/tuning event no less than 24 hours prior to the event, unless DAQ agrees to a shorter notification time. [AQR 12.5.2.6(d)]
- 14. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Parts 72 and 75. [40 CFR Part 72.9(f)]
- 15. The permittee shall comply with all applicable notification and reporting requirements of 40 CFR Part 60.7; 40 CFR Part 60, Subpart GG; 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 72.9(f); and 40 CFR Part 75. [AQR 12.5.2.6(d)]
- 16. The permittee shall submit semiannual monitoring reports to DAQ. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 17. The following requirements apply to semiannual reports: [AQR 12.5.2.6(d) and AQR 12.5.2.8]
  - a. The report shall include item listed in Section 4.3.6.
  - b. The report shall be based on a calendar semiannual period, which includes partial reporting periods.
  - c. The report shall be received by DAQ within 30 calendar days after the semiannual period.
- 18. Regardless of the date of issuance of this OP, the source shall comply with the schedule for report submissions outlined in Table 4-3. [AQR 12.5.2.6(d) and AQR 12.5.2.8]

Required Report	Applicable Period	Due Date	
Semiannual report for 1 <sup>st</sup> six-month period	January, February, March, April, May, June	July 30 each year <sup>1</sup>	
Semiannual report for 2 <sup>nd</sup> six-month period; any additional annual records required	July, August, September, October, November, December	January 30 each year <sup>1</sup>	
Annual Compliance Certification	Calendar year	January 30 each year <sup>1</sup>	
Annual Emissions Inventory Report	Calendar year	March 31 each year <sup>1</sup>	
Annual Emissions Statement <sup>2</sup>	Calendar year	March 31 each year <sup>1</sup>	
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 24 hours of the permittee learns of the event	
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of when permittee learns of event	
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 72 hours of the notification	
Deviation Report without Excess Emissions	As required	Along with semiannual reports <sup>1</sup>	

Required Report	Applicable Period	Due Date
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date <sup>1</sup>
Performance Testing	As required	Within 60 days of end of test <sup>1</sup>
RATA Protocol	As required	No less than 21 days, but no more than 90 days, before the anticipated test date <sup>1</sup>
RATA	As required	Within 60 days of end of test <sup>1</sup>

<sup>1</sup> If the due date falls on a federal or Nevada holiday, or on any day the office is not normally open for business, the submittal is due on the next regularly scheduled business day.

<sup>2</sup> Required only for stationary sources that emit 25 tons or more of nitrogen oxide (NO<sub>x</sub>) and/or emit 25 tons or more of volatile organic compounds (VOC) during a calendar year.

19. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit emission limits, applicable permit requirements, and requirements of applicable federal regulations. [AQR 4.1]

# 4.5 MITIGATION

The source has no federal offset requirements. [AQR 12.7]

# 5.0 PERMIT SHIELD

#### Permit Shield

1. The source has requested a permit shield for applicable regulations in the following regulations (Table 5-1). [AQR 12.5.2.9]

#### Table 5-1: Applicable Requirements Related to Permit Shield

Citation	Title	Permit Condition
40 CFR Part 60, Subpart GG (AQR 14.1(b) (40))	"Standards of Performance for Stationary Gas Turbines"	Condition 3.2.2 (SO <sub>2</sub> limits. See Table 5-2 for streamlined limits)

2. Compliance with the terms contained in this permit shall be deemed compliance with the applicable requirements (Tables 5-2 and 5-3) in effect on the date of permit issuance. [AQR 12.5.2.9]

### **Streamlining**

#### Table 5-2: Streamlined Requirements Related to Permit Shield (Natural Gas-Fired)

				Value	Compa	rison	Avera	aging Com	parison	
Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Std Value in Units of Permit Limit	Permit Limit Value	Permit Limit Equal or More Stringent	Std Averagin g Period	Permit Limit Averaging Period	Permit Limit Equal or More Stringent	Shield Statement
				Tur	bine Ur	nits (Natura	al Gas)			
60.333 (GG)	SO <sub>2</sub>	0.015% by volume @15% O2	0.58 Ibs/hr	650 <sup>1</sup>	0.58	Yes	4 hour	1 hour	Yes	Permit limit more stringent than standard, because of a prior controls analysis based on both concentration and averaging time.; Therefore, facility should be shielded from standard.

<sup>1</sup>Heat input used to calculate SO<sub>2</sub> standard value (in units of the permit limit) is the maximum capacity of 967 MMBtu/hr.

#### Table 5-3: Streamlined Requirements Related to Permit Shield (#2 Diesel Oil-Fired)

				Value	Compa	rison	Avera	ging Com	parison	
Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Standard Value, in Units of the Permit Limit	Permit Limit Value	Is the Permit Limit Equal or More Stringent	Std Averaging Period	Permit Limit Averaging Period	Is the Permit Limit Equal or More Stringent	Shield Statement
				ſ	urbines	s (#2 Diese	l Oil)			
60.333 (GG)	SO <sub>2</sub>	0.015% by volume @15% O <sub>2</sub>	45.0 Ibs/hr	650 <sup>1</sup>	45.0	Yes	4 hour	1 hour	Yes	The permit limit is more stringent than the standard, because

				Value	Compa	rison	Avera	ging Com	parison	
Regulation (40 CFR)	Pollutant	Regulatory Standard	Limit	Standard Value, in Units of the Permit Limit	Permit Limit Value	Is the Permit Limit Equal or More Stringent	Std Averaging Period	Permit Limit Averaging Period	Is the Permit Limit Equal or More Stringent	Shield Statement
										of a prior controls analysis, based on both concentration and averaging time. Therefore, the facility should be shielded from the standard.
AQR 28	PM	0.216 Ib/MMBtu <sup>2</sup>	10.0 Ibs/hr	179.71	10.0	Yes	1 hour	1 hour	Yes	The permit limit is more stringent than the standard, because of a prior controls analysis, based on both concentration and averaging time. Therefore, the facility should be shielded from the standard.

<sup>1</sup>Heat input used to calculate SO<sub>2</sub> standard value (in units of the permit limit) is the maximum capacity of 833 MMBtu/hr.

<sup>2</sup>Based on AQR 28.2.2 equation Y=1.02\*X<sup>-0.231</sup>, where Y = allowable rate of EMISSION in pounds per million BTU and X = maximum heat input in millions of BTU per hour.

# 6.0 ACID RAIN REQUIREMENTS

- 1. In accordance with the provisions of Title IV of the Clean Air Act and 40 CFR Parts 72 through 77, an Acid Rain Permit was issued to Sun Peak Generating Station, Las Vegas, Nevada.
- 2. All terms and conditions of the Acid Rain Permit are enforceable by DAQ and EPA under the Clean Air Act. [40 CFR Part 72]
- 3. The permittee shall comply with all the applicable requirements of the Acid Rain Permit application located in Attachment 9.2. [40 CFR Part 72.30]
- 4. This Acid Rain Permit incorporates the definitions of terms in 40 CFR Part 72.2.
- 5. This Acid Rain Permit is valid for a term of five years from the date of issuance unless a timely and complete renewal application is submitted to DAQ. [40 CFR Part 72.69]
- 6. A timely renewal application for an Acid Rain Permit is an application that is received at least six months prior to the permit expiration date. [40 CFR Part 72.30]
- 7. Emissions from this source shall not exceed any allowances that the source lawfully holds under Title IV of the Act or its regulations. [AQR 12.5.2.6 and 40 CFR Part 70.6(a)(4)]
- 8. Where an applicable requirement of the Act is more stringent than an applicable requirement of Title IV regulations, both provisions shall be incorporated into the permit and shall be enforceable. [40 CFR Part 70.6(a)(1)(ii)]

# 7.0 OTHER REQUIREMENTS

- 1. Any person who violates any provision of the AQRs, 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 from DAQ is guilty of a civil offense and shall pay a civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. [AQR 9.1; NRS 445B.640]
- 2. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review, as provided in Chapter 233B of the NRS. [AQR 9.12]
- 3. The permittee shall comply with the requirements of Title 40, Part 61 of the Code of Federal Regulations (40 CFR Part 61), Subpart M—the National Emission Standard for Asbestos—for all demolition and renovation projects. [AQR 13.1(b)(8)]
- 4. 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 Class I or Class II ozone-depleting substance or any nonexempt substitute refrigerant as a working fluid, unless such fluid has been approved for sale in such use by the EPA Administrator. The permittee shall keep records of all paperwork relevant to the applicable requirements of 40 CFR Part 82 on-site. [40 CFR Part 82]
- 5. A risk management plan is required for the storing, handling and use of an applicable "Highly Hazardous Chemical" pursuant to 40 CFR Part 68. The permittee shall submit revisions of the risk management plan to the appropriate authority and a copy to DAQ. [40 CFR Part 68.150(b)(3)]

# 8.0 ADMINISTRATIVE REQUIREMENTS

### 8.1 GENERAL

- 1. The permittee shall comply with all conditions of the Part 70 OP. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations (AQRs), Nevada law, and the Clean Air Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a renewal application. [AQR 12.5.2.6(g)(1)]
- 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 be unaffected and remain valid. [AQR 12.5.2.6(f)]
- 3. The permittee shall pay all permit fees pursuant to AQR 18. [AQR 12.5.2.6(h)]
- 4. This permit does not convey property rights of any sort, or any exclusive privilege. [AQR 12.5.2.6(g)(4)]
- 5. The permittee agrees to allow inspection of the premises to which this permit relates by any authorized representative of the Control Officer at any time during the permittee's hours of operation without prior notice. The permittee shall not obstruct, hamper, or interfere with any such inspection. [AQR 4.1; AQR 5.1.1; and AQR 12.5.2.8(b)]
- 6. The permittee shall allow the Control Officer, upon presentation of credentials, to: [AQR 4.1 and AQR 12.5.2.8(b)]
  - a. Access and copy any records that must be kept under the conditions of the permit;
  - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
  - d. Document alleged violations using such devices as cameras or video equipment.
- 7. Any permittee who fails to submit relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit the needed supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. A Responsible Official shall certify the additional information consistent with the requirements of AQR 12.5.2.4. [AQR 12.5.2.2]
- 8. Anyone issued a permit under AQR 12.5 shall post it in a location where it is clearly visible and accessible to facility employees and DAQ representatives. [AQR 12.5.2.6(m)]

9. 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 in order to maintain compliance with the conditions of this permit. [AQR 12.5.2.6(g)(2)]

### 8.2 MODIFICATION, REVISION, AND RENEWAL REQUIREMENTS

- 1. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct (ATC) from the Control Officer. [AQR 12.4.1.1(a)]
- 2. The permit may be revised, revoked, reopened and reissued, or terminated for cause by the Control Officer. The filing of a request by the permittee for a permit revision, 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)]
- 3. The permit shall be reopened under any of the following circumstances and when all applicable requirements pursuant to AQR 12.5.2.15 are met: [AQR 12.5.2.15(a)]
  - a. New applicable requirements become applicable to a stationary source considered "major" (per the definition in AQR 12.2, AQR 12.3, or 40 CFR Part 70.3(a)(1)) with a remaining permit term of three or more years;
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the Acid Rain Program;
  - c. The Control Officer or U.S. Environmental Protection Agency (EPA) determines that the permit contains a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. The EPA Administrator or the Control Officer determines that the permit must be revised or revoked to assure compliance with applicable requirements.
- 4. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: [AQR 12.5.2.10(a)]
  - a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal (except a complete application need not be received before a Part 70 general permit is issued pursuant to AQR 12.5.2.20); and
  - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of AQR 12.5.
- 5. The permittee shall not build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of an applicable requirement. [AQR 80.1 and 40 CFR Part 60.12]
- 6. 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)]

- 7. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. [AQR 12.5.2.11(b)]
- 8. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. [AQR 12.5.2.1(a)(2)]

# 9.0 ATTACHMENTS

# 9.1 APPLICABLE REGULATIONS

#### **Requirements Specifically Identified as Applicable**

- 1. NRS, Chapter 445B.
- 2. Applicable AQRs listed in Table 9-1.

#### Table 9-1: Applicable Clark County AQRs

Citation	Title
AQR 00	"Definitions"
AQR 04	"Control Officer"
AQR 05	"Interference with Control Officer"
AQR 08	"Persons Liable for Penalties – Punishment: Defense"
AQR 09	"Civil Penalties"
AQR 12.0	"Applicability and General Requirements"
AQR 12.4	"Authority to Construct Application and Permit Requirements for Part 70 Sources"
AQR 12.5	"Part 70 Operating Permit Requirements"
AQR 12.9	"Annual Emissions Inventory Requirement"
AQR 13.2(b)(1)	"Subpart A - General Provisions"
AQR 13.2(b)(82)	"Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"
AQR 14.1(b)(1)	"Subpart A – General Provisions"
AQR 14.1(b)(40)	"Subpart GG – Standards of Performance for Gas Turbines"
AQR 18	"Permit and Technical Service Fees"
AQR 25	"Affirmative Defense for Excess Emissions due to Malfunctions, Startup, and Shutdown"
AQR 26	"Emission of Visible Air Contaminants"
AQR 28	"Fuel Burning Equipment"
AQR 40	"Prohibitions of Nuisance Conditions"
AQR 41	"Fugitive Dust", AQR 41.1.2 only
AQR 42	"Open Burning"
AQR 43	"Odors in the Ambient Air"
AQR 70	"Emergency Procedures"
AQR 80	"Circumvention"
AQR 92	"Fugitive Dust from Unpaved Parking Lots and Storage Areas"
AQR 94	"Permitting and Dust Control for Construction Activities"

3. Clean Air Act Amendments (42 U.S.C. § 7401, et seq.)

4. Applicable 40 CFR sections are listed in Table 9-2.

Table	9-2:	Federal	Standards
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Citation	Title	
40 CFR Part 52.21	"Prevention of significant deterioration of air quality"	
40 CFR Part 52.1470	"Approval and Promulgation of Implementation Plans, Subpart DD— Nevada"	
40 CFR Part 60, Subpart A	"General Provisions"	
40 CFR Part 60, Subpart GG	"Standards of Performance for Stationary Gas Turbines"	
40 CFR Part 60	Appendix A, Method 9 or equivalent, (Opacity)	
40 CFR Part 60, Appendix A-3	"Test Methods 4 through 5I" (PM in g/dscm)	
40 CFR Part 60, Appendix A-4	"Test Methods 6 through 10B" (opacity)	
40 CFR Part 63, Subpart A	"General Provisions"	
40 CFR Part 63, Subpart ZZZZ	"National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"	
40 CFR Part 70	"State Operating Permit Programs"	
40 CFR Part 72	"Acid Rain Programs"	
40 CFR Part 75	"Continuous Emissions Monitoring"	
40 CFR Part 82	"Protection of Stratospheric Ozone"	

# 9.2 ACID RAIN PERMIT



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258 Approval expires 12/31/2021

# **Acid Rain Permit Application**

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

This submission is: new revised for ARP permit renewal

STEP 1

Identify the facility name,	Sun Peak Generating Station	NV	54854
State, and plant (ORIS) code.	Facility (Source) Name	State	Plant Code

STEP 2

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

 $\sim$ 

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
3	Yes
4	Yes
5	Yes
	Yes
	Yes
	Yes
	Yes
·····	Yes
	Yes

Acid Rain - Page

#### Sun Peak Generating Station Facility (Source) Name (from STEP 1)

STEP 3

#### Permit Requirements

Read the standard requirements.

- The designated representative of each affected source and each affected unit at the source shall:
   Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR
  - part 72 in accordance with the deadlines specified in 40 CFR 72.30; and (ii) Submit in a timely manner any supplemental information that the permitting authority
  - determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
   (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

#### Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

- (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

#### Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Acid Rain - Page 3

#### Sun Peak Generating Station Facility (Source) Name (from STEP 1)

#### STEP 3, Cont'd.

#### Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### <u>Liability</u>

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

#### Acid Rain - Page 4

# Sun Peak Generating Station

Facility (Source) Name (from STEP 1)

#### STEP 3, Cont'd. Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

#### STEP 4 Certification

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

Name Dariusz Rekowski	
Signature la fla	Date 02/06/2020