



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

PART 70 OPERATING PERMIT TECHNICAL SUPPORT DOCUMENT (STATEMENT of BASIS)

**APPLICATION FOR:
Renewal**

**SUBMITTED BY:
Trinity Consultants.**

FOR:
Nevada Power Company – Sun Peak Generating Station
Source: 00423

LOCATION:
6360 Vegas Valley Drive
Las Vegas, Nevada 89142

SIC code 4911, "Electric Services"
NAICS code 221112, "Fossil Fuel Electric Power Generation"

Application Received: February 4, 2025

TSD Date: January 27, 2026

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 was designated moderate nonattainment area on January 5, 2023, for the 2015 ozone NAAQS. No new requirements were imposed. Hydrographic Area 212 was designated a serious nonattainment area for ozone on January 21, 2025. Clark County has drafted or imposed new requirements to address this designation.

Sun Peak is a Title V major stationary source for NO_x; a synthetic minor source for PM₁₀, PM_{2.5}, CO, SO₂, VOC, and minor for all other pollutants. It is also a source of 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, 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.

Table 1: Source-wide Potential to Emit

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	H ₂ S	Pb	GHG ¹
PTE (Tons/Year)	10.97	10.97	249.11	33.10	49.37	7.23	3.70	0	0	176,237
Major Source Thresholds (Title V)	100	100	50	100	100	50	10/25 ²			
Major Stationary Source Thresholds (PSD)	250	250		250	250		10/25 ²			
Major Stationary Source Threshold (Nonattainment)			50			50				

¹Expressed as metric tons of CO₂e.

²Ten tons for any individual hazardous air pollutant, or 25 tons for the combination of all hazardous air pollutants.

DAQ issued a Title V renewal on November 5, 2020. There was a significant revision issued July 18, 2023. DAQ received a renewal application on February 4, 2025. 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 (CO₂, CH₄, N₂O, SF₆, etc.), and the TSD includes these PTEs for informational purposes.

DAQ has received delegated authority from the U.S. Environmental Protection Agency to implement the requirements of the Part 70 OP. Based on the information submitted by the applicant, supplemental information provided to the application, and a technical review performed by DAQ staff, the Part 70 OP renewal is proposed.

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I. ACRONYMS

Table I-1: List of Acronyms

Acronym	Term
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
CEMS	continuous emissions monitoring system
CF	control factor
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CD	control device
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
EF	emissions factor
EPA	U.S. Environmental Protection Agency
EU	emission unit
GHG	greenhouse gas
HA	Hydrographic Area
HAP	hazardous air pollutant
hp	Horsepower
kW	Kilowatts
MMBtu/hr	Million British Thermal Units per Hour
NAAQS	National Ambient Air Quality Standard
NAICS	North American Industry Classification System
NO _x	nitrogen oxide(s)
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
PSD	prevention of significant deterioration
PTE	potential to emit
RACT	Reasonably Achievable Control Technology
RATA	relative accuracy test audit
SCC	Source Classification Code
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SOP	standard operating procedure
VOC	volatile organic compound

II. SOURCE DESCRIPTION

A. DESCRIPTION OF SOURCE

Sun Peak Generating Station (Sun Peak) is an electrical power generating station located at 6360 Vegas Valley Drive in Las Vegas, Nevada. The source is situated in Hydrographic Area 212 (Las Vegas Valley). Las Vegas Valley is currently designated serious nonattainment area for the 2015 ozone NAAQS. Sun Peak is a Title V major stationary source for NO_x. The generating station operates three GE Frame PG 7111-EA, 84.5 MW stationary turbines in the simple cycle mode. Natural gas is the primary fuel fired by the turbines though they have the ability to fire diesel fuel. NO_x emissions for EU: A01 - A03 are controlled by use of a water injection system. Continuous emissions monitoring systems (CEMS) for O₂, NO_x and CO are installed on all turbines.

B. ALTERNATE OPERATING SCENARIO(S)

The turbines are permitted to combust natural gas or #2 diesel oil.

C. PERMITTING HISTORY

This is a renewal of the Part 70 OP issued on November 5, 2020. The application was received on February 4, 2025. The following represents permitting activities prior to this permitting action since the last renewal:

Table II-C-1: Permit History

Issue Date	Description	Summary
11/05/2020	Part 70 OP Renewal	Revise notification requirements for testing/tuning, add PTE table for the generator, and update compliance demonstration conditions.
12/15/2020	Administrative Revision	Revise notification requirements for testing/tuning to allow a shorter notification time.
11/17/2021	Reopen for Cause	Add requirement for an annual emissions statement for NO _x and VOC pollutants in compliance with Section 182(a)(3)(B) of the Clean Air Act.
3/10/2022	Prior Notification	Allow the installation of wet compression on the turbines' air inlets.
7/18/2023	Part 70 OP Significant Revision Application	Add an annual heat input limit and increase the hourly heat input limit.
6/22/2023	Notice and Go	Notification that the emergency engine was removed from the source.

D. CURRENT PERMITTING ACTION

This is a renewal of the Part 70 OP. The permittee is requesting the following changes:

1. Removal of the 81 hp diesel generator (EU: B01) and associated diesel tank. This request has been addressed.
2. Removal of initial performance testing requirement for the turbines because the testing has been completed. This requirement was a one-time test to confirm the changes included in the recent significant revision.

As part of this renewal, DAQ is including RACT demonstration conditions and citations required by AQR 121 as a result of the area's reclassification to moderate ozone nonattainment.

III. EMISSIONS INFORMATION

A. EMISSION UNITS LIST

Table III-A-1 lists the emission units covered by this Part 70 OP. There are no changes to the EU list based on this revision.

Table III-A-1: Summary of Emission Units

EU	Description	Rating	Make	Model #	SCC
A01	Gas-Fired Turbine (#3); Simple Cycle; natural gas fired; MEQ = 11.20	84.5 MW	General Electric	PG7111-EA	20100201
	Gas-Fired Turbine (#3); Simple Cycle; #2 diesel oil fired; MEQ = 7.05				
A02	Gas-Fired Turbine (#4); Simple Cycle; natural gas fired; MEQ = 11.20	84.5 MW	General Electric	PG7111-EA	20100201
	Gas-Fired Turbine (#4); Simple Cycle; #2 diesel oil fired; MEQ = 7.05				
A03	Gas-Fired Turbine (#5); Simple Cycle; natural gas fired; MEQ = 11.20	84.5 MW	General Electric	PG7111-EA	20100201
	Gas-Fired Turbine (#5); Simple Cycle; #2 diesel oil fired; MEQ = 7.05				
T01	Diesel Tank, AST	5,064,081-gallon capacity	Chicago Bridge and Iron Co.		30600802

The following units or activities listed in Table III-A-2 are present at this source, but are deemed insignificant. There are no changes to the insignificant activities list based on this revision.

Table III-A-2: Insignificant Activities

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

B. SOURCE-WIDE PTE

Table III-B-1: Source-wide PTE (tons per year)

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	H ₂ S	Pb	GHG ¹
Tons/Year	10.97	10.97	249.11	33.10	49.37	7.23	3.70	0	0	176,237

¹Expressed as metric tons of CO₂e.

C. EMISSIONS CALCULATIONS

The applicability emissions were reduced by this permitting action. Sun Peak is a Title V major stationary source for NO_x; a synthetic minor source for PM₁₀, PM_{2.5}, CO, SO₂, VOC, and minor for all other pollutants.

Table III-C-1 summarizes the applicability emissions. The source still requires a permit.

Table III-C-1: Applicability Emissions (tons per year)

	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOCs	HAPs
Previous Applicability	131.85	131.85	298.41	249.80	591.34	86.61	3.71
Engine Removal	-0.02	-0.02	-0.32	-0.07	-0.02	-0.03	-0.01
New Applicability	131.83	131.83	289.09	249.73	591.32	86.58	3.70

Table III-C-2 summarizes the PTE of individual EUs.

Table III-C-2: Source-wide PTE (tons per year)

EU	Condition	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	H ₂ S	Pb
A01	3,484 hrs/yr (Natural Gas)	9.96 ¹	9.96 ¹	249.11 ¹	33.10 ¹	1.02 ¹	3.59 ¹	0.35 ¹	0 ¹	0 ¹
A02										
A03										
A01	2,194 hrs/yr (Diesel)	10.98 ²	10.98 ²	249.02 ²	20.85 ²	49.37 ²	4.94 ²	3.55 ²	0 ²	0 ²
A02										
A03										
T01	50,400,000 gal/yr	0.00	0.00	0.00	0.00	0.00	2.29	0.15	0	0

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

²Emission limits are based on 2,194 hours per any consecutive 12-month period for all three turbine units combined using diesel.

Table III-C-3 summarizes the emissions increase associated with this renewal.

Table III-C-3: Emissions Increase Calculation and Significance Evaluation (tons per year)

	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOCs	HAPs
Previous PTE	11.00	11.00	249.42	33.17	49.39	7.26	3.71
Proposed PTE	10.97	10.97	249.11	33.10	49.37	7.23	3.70
Difference	-0.03	-0.03	-0.31	-0.07	-0.02	-0.03	-0.01
AQR 12.4.2.1(d) Significant levels	7.5	5.00	20	50	20	20	-

Significant Levels AQR 12.2.2(uu)/12.3.2(dd)	15	10	40	100	40	40	-
Emissions > AQR 12.4.2.1(d) Significant levels	No						
Emissions > AQR 12.2.2(uu) Significant Levels	No						

The emission increase for any pollutant did not exceed any significant levels. Therefore, a control technology analysis is not triggered under AQR 12.4.

D. OPERATIONAL LIMITS

The operational limits previously established are not changing with this action. No new operational limits are required by this permitting action. AQR 121 conditions have been added with this revision.

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.

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.

The permittee shall limit operation of each stationary gas turbine.

The permittee shall combust only natural gas or #2 diesel oil in each of the stationary gas turbine units (EUs: A01, A02, and A03).

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.

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.

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.

Startup shall be defined as the period beginning with ignition and lasting for a duration not to exceed 30 minutes.

Shutdown means the period immediately preceding the cessation of firing of a turbine, not to exceed 60 minutes.

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.

The permittee shall limit testing/tuning to 600 minutes per calendar year per turbine (EUs: A01, A02, and A03).

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

E. CONTROL TECHNOLOGY

All previous control equipment and measures for turbines (EUs: A01, A02, and A03), and the diesel tank (EU: T01) remain in effect. No new controls are required by this permitting action. AQR 121 conditions have been added with this revision.

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 NO_x emission limits are met.

The permittee shall use natural gas fuel with sulfur content not exceeding a 12-month consecutive period average of 0.5 grains/100 dscf.

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.

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.

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.

F. MONITORING

All existing monitoring requirements from the last permit remain in effect. No new monitoring requirements have been added with this permitting action. AQR 121 conditions have been added with this revision.

The permittee shall monitor for visible emissions.

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.

The permittee shall verify compliance with the SO₂ 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"

When operating natural gas, the permittee shall verify compliance with the SO₂ 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.

1. To demonstrate continuous direct compliance with all emission limitations for NO_x and CO specified in this permit, the permittee shall install, calibrate, maintain, operate, and certify CEMS for NO_x, CO, and O₂ 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:

Exhaust gas concentrations of NO_x, CO, and diluent O₂ for all turbine units (EUs: A01, A02, and A03);

Exhaust gas flow rate (by direct or indirect methods);

Fuel flow rate and type;

Hours of operation;

3-hour rolling averages for each NO_x and CO concentration;

Hourly mass emissions of NO_x and CO;

The occurrences and durations of startup/shutdown cycles; and

Hours of downtime of the CEMS.

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.

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.

The permittee shall conduct RATA of the CO, NO_x, and diluent O₂ or CO₂ CEMS at least annually, or the frequency specified in 40 CFR 60 and 75, as applicable.

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

CAM applicability, CAM Units, CAM methodology

The Compliance Assurance Monitoring (CAM) program is codified in 40 CFR Part 64. CAM requirements apply to any pollutant specific emissions unit with uncontrolled potential emissions above the major source threshold (100 tons/year) that uses a control device to achieve compliance with an emission limitation or standard. The CAM Rule is not applicable to any pollutants for the emission units at the facility due to the lack of control devices, except for NO_x for the combustion turbines. NO_x emissions are controlled by water injection which is exempt due to the presence of

Part 70 permit required CEMS. Therefore, none of the emission units at Sun Peak is subject to CAM.

PERFORMANCE TESTING

The previous permit required performance testing for PM₁₀, VOC and opacity when combusting fuel oil. The initial performance testing required by the previous significant revision has been completed. Subsequent performance tests shall be conducted upon written notification from the Control Officer.

IV. REGULATORY REVIEW

A. LOCAL REGULATORY REQUIREMENTS

DAQ has determined that the following public laws, statutes, and associated regulations are applicable:

- AQR 12.4, “Authority to Construct Application and Permit Requirements for Part 70 sources”
- AQR 12.5, “Part 70 Operating Permit Requirements”
- AQR 26, “Emission of Visible Air Contaminants”
- AQR 40, “Prohibitions of Nuisance”
- 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”
- AQR 120, “Reasonably Available Control Technology Demonstration and Determination Requirements for Major Stationary Sources in Ozone Nonattainment Areas”
- AQR 121, “Reasonably Available Control Technology Determinations for Specific Major Stationary Sources in the 2015 8-Hour Ozone NAAQS Moderate Nonattainment Area HA 212

B. FEDERALLY APPLICABLE REGULATIONS

Prevention of Significant Deterioration.

The facility is located in Las Vegas Valley, which is currently designated attainment for all regulated pollutants except ozone. Hydrographic Area 212 was designated moderate nonattainment area on January 5, 2023, for the 2015 ozone NAAQS. No new requirements were imposed. Hydrographic Area 212 was designated a serious nonattainment area for ozone on January 21, 2025. Clark County has drafted or imposed new regulations to address this designation.

Nonattainment New Source Review.

Permitting requirements under CCAQR Section 12.3 are triggered if a facility proposes a major modification to an existing major stationary source for a NSR pollutant designated as nonattainment or upon construction of a new project which itself exceeds major stationary source thresholds, for each nonattainment pollutant. The facility is located in Hydrographic Area 212 which is designated as moderate nonattainment for the 2015 8-hour ozone standard. No new requirements were imposed. Hydrographic Area 212 was designated a serious nonattainment area for ozone on January 21, 2025. Clark County has drafted or imposed new regulations to address this designation.

CCAQR Section 12.3.1.6 includes requirements for projects that (1) are not part of a major modification, (2) may result in a significant emissions increase, and (3) the source used the actual-to-projected-actual test for determining major modification applicability. NV Energy will comply with the requirements of this section, including Section 12.3.1.6(c) and (e). NV Energy will monitor and record emissions and submit the required reports, if necessary.

New Source Performance Standards

NSPS require new, modified, or reconstructed sources to control emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions. Moreover, any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, unless specifically excluded.

NSPS Subpart A — General Provisions

All affected sources subject to source-specific NSPS are subject to the general provisions of NSPS Subpart A unless specifically excluded by the source-specific NSPS. Subpart A requires initial notification, performance testing, recordkeeping and monitoring, provides reference methods, and mandates general control device requirements for all other subparts as applicable.

NSPS Subpart GG — Stationary Gas turbines

NSPS Subpart GG applies to all stationary gas turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr based on the lower heating value of the fuel fired. The subpart applies to units for which construction, reconstruction, or modification commenced after October 3, 1977. EUs A01-A03 were constructed after October 3, 1977, and as a result are subject to the requirements of NSPS Subpart GG. NV Energy will continue to comply with the requirements of NSPS Subpart GG and there are no new requirements as a result of the project, NV Energy expects continued compliance with NSPS Subpart GG post-project.

NSPS Subpart KKKK – Stationary Combustion Turbines

NSPS Subpart KKKK is applicable to stationary combustion turbines with a heat input greater than or equal to 10 MMBtu/hr (based on higher heating value of the fuel) that commenced construction, modification, or reconstruction after February 18, 2005. The three simple cycle turbines, EUs A01 – A03, were constructed prior to February 18, 2005, and as discussed in this TSD will not undergo an NSPS modification as part of the project.

Per 40 CFR 60.14, a modification is defined as: "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies. Upon modification, an existing facility shall become an affected facility for each-pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere." A physical change or change in the method of operation may meet the definition of modification only if that change also increases the hourly emissions of any pollutant.

However, per 40 CFR 60.14(e)(2), "an increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility" is not considered as a modification. Since the facility currently restricts the fuel usage on the turbines to meet the hourly heat input requirements of the permit, any actual increase in hourly heat input as a result of the project can be achieved without a capital expenditure at the facility and therefore does not result in an NSPS modification. Consequently, the turbines will not become an affected facility subject to the requirements of NSPS Subpart KKKK following the project.

NSPS Subpart TTTT —Greenhouse Gas Emissions for Electric Generating Units

NSPS Subpart TTTT is applicable to any steam generating: unit, integrated gasification combined cycle facility (IGGC), or stationary combustion turbine that: commences construction after January 8, 2014, or any steam generating unit or IGCC that commences modification after June 18, 2014, with a base load rating greater than 250 MMBtu/hr of fossil fuels and serves a generator capable of selling greater than 25 MW of electricity. The simple-cycle turbines were constructed before January 8, 2014, and since these turbines are not "steam generating units" or "IGCCs" they are not subject to the modification applicability date. Consequently, EUs A01 - A03 will not become subject to the requirements of NSPS Subpart TTTT following the project.

National Emission Standards for Hazardous Air Pollutants

NESHAP are emission standards for HAP and are applicable to major and area sources of HAP. A HAP major source is defined as having potential emissions in excess of 25 tpy for total HAP and/or potential emissions in excess of 10 tpy for any individual HAP. An area source is a stationary source that is not a major source. The facility is an area source of HAP.

NESHAP Subpart A - General Provisions

Any source subject to a NESHAP is also subject to the general provisions of NESHAP Subpart A, unless specifically excluded. Subpart A requires initial notification and performance testing, recordkeeping, monitoring, provides reference methods, and mandates general control device requirements for all other subparts as applicable.

NESHAP Subpart YYYY — Stationary Combustion Turbines

NESHAP Subpart YYYY applies to stationary combustion turbines located at sources that are major sources of HAP emissions. Since the facility is an area source of HAP, the combustion turbines at the facility are not subject to NESHAP Subpart YYYY.

40 CFR Parts 72, 73, and 75 – Acid Rain

The source is an existing acid rain applicable source (Part 72) and therefore, subject to acid rain allowance for SO₂ (Part 73) and continuous emissions Monitoring requirements (Part 75). No new requirements have been triggered with this project.

V. COMPLIANCE

A. COMPLIANCE HISTORY

The permittee submitted an annual compliance evaluation on January 8, 2025. There are currently no enforcement actions against this source.

B. COMPLIANCE CERTIFICATION

Records shall be kept for all limitations specified in the permit.

Requirements for reporting remain the same as prior Part 70 OPs or ATCs.

VI. EMISSION REDUCTION CREDITS (OFFSETS)

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

VII. MODELING

A. INCREMENT ANALYSIS

DAQ modeled the source using AERMOD to track the increment consumption. Stack data submitted by the applicant was supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table VII-A-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

Table VII-A-1: PSD Increment Consumption

Pollutant	Averaging Period	Source's PSD Increment Consumption ($\mu\text{g}/\text{m}^3$)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
SO ₂	3-hour	13.59 ¹	676700	4001600
SO ₂	24-hour	4.75 ¹	677100	4001800
SO ₂	Annual	0.58	676900	4001700
NO _x	Annual	0.24	676900	4001700

¹Highest Second High Concentration.

B. PRECONSTRUCTION MODELING

No preconstruction monitoring or modeling is required with this permitting action.

VIII. ENVIRONMENTAL JUSTICE

The Sun Peak Generating Station is located in Las Vegas hydrographic area 212. The nearest residences are located just outside the facility boundary. However, the emission decrease from the proposed renewal of the source permit is below any significant levels. Therefore, an EJ Screen analysis was not performed for this project.

IX. PERMIT SHIELD

The source has requested a permit shield for applicable requirements under 40 CFR Subpart GG.

X. STREAMLINING

Table X-1: Streamlined Requirements Related to Permit Shield (Natural Gas-Fired)

Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Value Comparison			Averaging Comparison			Shield Statement
				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	
Turbine Units (Natural Gas)										
60.333 (GG)	SO ₂	0.015% by volume @15% O ₂	0.58 lbs/hr	650 ¹	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.

¹Heat input used to calculate SO₂ standard value (in units of the permit limit) is the maximum capacity of 967 MMBtu/hr.

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

Regulation (40 CFR)	Pollutant	Regulatory Standard	Permit Limit	Value Comparison			Averaging Comparison			Shield Statement
				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	
Turbines (#2 Diesel Oil)										
60.333 (GG)	SO ₂	0.015% by volume @15% O ₂	45.0 lbs/hr	650 ¹	45.0	Yes	4 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.
AQR 28	PM	0.216 lb/MMBtu ²	10.0 lbs/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.

¹Heat input used to calculate SO₂ standard value (in units of the permit limit) is the maximum capacity of 833 MMBtu/hr.

²Based on AQR 28.2.2 equation Y=1.02*X^{0.231}, where Y = allowable rate of EMISSION in pounds per million BTU and X = maximum heat input in millions of BTU per hour.

XI. PUBLIC PARTICIPATION

Under AQR 12.5.2.17, the public participation requirement is triggered for an OP renewal.

XII. ATTACHMENTS

Emission Unit PTE (tons per year)

EU	Condition	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A01-A03	Natural Gas	9.96	9.96	249.11	33.10	1.01	3.59	0.35
A01-A03	Diesel	10.97	10.97	249.02	20.84	49.37	4.94	3.55
T01	50,400,000 gal/yr	0	0	0	0	0	2.29	0.15

Source PTE (tons per year)

EU	Condition	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A01-A03	Highest from Gas/Diesel	10.97	10.97	249.11	33.10	49.37	4.94	3.55
T01	50,400,000 gal/yr	0	0	0	0	0	2.29	0.15
Source Totals		10.97	10.97	249.11	33.10	49.37	7.23	3.70