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PART 70 OPERATING PERMIT

SOURCE ID: 00329

Las Vegas Generating Station 1701 East Alexander Road North Las Vegas, Nevada 89030

ISSUED ON: December 19, 2023

EXPIRES ON: December 18, 2028

Current action: Renewal

Issued to:

Nevada Power Company, dba NV Energy 6226 West Sahara Avenue Las Vegas, Nevada 89146

Responsible Official: Jason Hammons Vice President, Generation 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, Permitting Manager

EXECUTIVE SUMMARY

Las Vegas Generating Station (LVGS) is a synthetic minor source for NOx, and a minor source for PM₁₀, CO, SO₂, VOC, and HAP. However, the source will continue to be classified as a Part 70 source and issued a Title V permit. The source is identified as a source for greenhouse gases (GHG). The source is under SIC 4911, "Electric Services" and NAICS 221112, "Fossil Fuel Electric Power Generation" and is located on 1701 East Alexander Road in North Las Vegas, Nevada, in the Las Vegas Valley airshed, Hydrographic Area 212 (the Las Vegas Valley). Hydrographic Area 212 is currently designated as an attainment area for all regulated air pollutants except ozone, for which it was classified as a moderate nonattainment area on January 5, 2023.

LVGS operates five turbine generator packages with stationary combustion turbines, one with a heat recovery steam generator (HRSG) and four with once-through steam generators (OTSG). There is no supplemental firing (no duct burners). LVGS is classified as a categorical stationary source, as defined by AQR 12.2.2(j)(1). In addition, LVGS operates three steam turbines, two cooling towers, and a diesel fire pump. There are no emissions associated with the HRSG, OTSG, or the steam turbines.

The following table summarizes the source's potential to emit (PTE) of each regulated air pollutant from all emission units addressed by this Part 70 Operating Permit.

Pollutant	PM 10	PM _{2.5}	NOx	со	SO ₂	VOCs	HAPs ¹	Pb	H₂S	GHG ²
Source Totals	55.10	55.10	94.66	50.03	5.38	35.56	4.85	0.00	0.00	1,102,822.60

Table 1: Source-wide Potential to Emit (tons per year)

¹ A major source is defined as 10 tons for any individual HAP or 25 tons for combination of all HAPs.

² Metric tons per year of carbon dioxide equivalent. GHG = greenhouse gas pollutants.

A Part 70 Operating Permit (Part 70 OP) renewal application was received on April 14, 2022. Based on information submitted by the applicant and a technical review performed by DAQ staff, DAQ proposes issuance of this renewal to the Part 70 Operating Permit to LVGS.

DAQ will continue to require sources to estimate their GHG potential to emit in terms of each individual pollutant (CO₂, CH₄, N₂O, SF₆ etc.) during subsequent permitting actions and the corresponding TSDs include these PTEs for informational purposes.

Pursuant to AQR 12.5, all terms and conditions in Sections 1 through 9 of this permit, and all attachments, 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
AOS	Alternative operating scenario
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
CAAA	Clean Air Act, as amended
CEMS	Continuous Emissions Monitoring System
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
СО	carbon monoxide
CO ₂	carbon dioxide
CD	control device
CTG	Combustion Turbine-Generator
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DLN	Dry Low-NO _x
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
HCFC	hydrochlorofluorocarbon
HHV	higher heating value
hp	horsepower
HRSG	heat recovery steam generator
kW	Kilowatts
LHV	lower heating value
MMBtu/hr	Millions of British Thermal Units per Hour
M/N	model number
MW	megawatt
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
OTSG	Once Through Steam Generator
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PSD	Prevention of Significant Deterioration
PTE	potential to emit

Acronym	Term
QA/QC	quality assurance/quality control
RATA	relative accuracy test audit
SIP	State Implementation Plan
SIC	Standard Industrial Classification
SO ₂	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. [AQR 12.5.2.3]

EU	Description	Rating	Manufacturer	Model Number	Serial Number
A01	Turbine Generator Package Unit 1, Natural Gas-fired; SCR and Oxidation Catalyst	480 MMBtu/hr; 44 MW	General Electric	LM-6000	260245
A02	Two-cell mechanical draft cooling tower, 6,000 ppm TDS, 0.005% drift loss	14,200 gpm	GEA	TD-3630-2- 2422CF	
A03	Turbine Generator Package Unit 2, Natural Gas-fired; SCR and Oxidation Catalyst	480 MMBtu/hr; 44 MW	General Electric	LM-6000	310891
A04	Turbine Generator Package Unit 3, Natural Gas-fired; SCR and Oxidation Catalyst	480 MMBtu/hr; 44 MW	General Electric	LM-6000	311668
A05	Turbine Generator Package Unit 4, Natural Gas-fired; SCR and Oxidation Catalyst	480 MMBtu/hr; 44 MW	General Electric	LM-6000	311724
A06	Turbine Generator Package Unit 5, Natural Gas-fired; SCR and Oxidation Catalyst	480 MMBtu/hr; 44 MW	General Electric	LM-6000	312189
A07	10-cell mechanical draft cooling tower, 6,000 ppm TDS, 0.001% drift loss	78,248 gpm	GEA	363028-10I- 22-WCF	
C01	Diesel-fired Fire Pump DOM: 1996	121 hp	Caterpillar	3208	90N74714

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.

Table 1-2: Summary of Insignificant Activities

Mobile combustion sources
Station maintenance activities
Maintenance shop activities (parts washers, sand blasters, welders, etc)
Steam cleaning operations
10,085 gallon aqueous ammonia pressure vessel
Fire pump diesel tank
Oil/water separator
137 gallon used oil tank
Portable gas-fired pump
Lube oil sumps and vents

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 at all times any affected emission unit is operating unless otherwise noted. [NSR ATC Modification 3, Revision 5, (05/20/09) and AQR 12.5.2.6(a)]

Table 2-1: Summary of Add-On Control Devices	Table	2-1:	Summary	/ of	Add-On	Control	Devices
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Affected EU	Device Type	Manufacturer	Model No.	Pollutant
A01, A03, A04, A05, and A06	SCR ¹			NOx
A01, A03, A04, A05, and A06	CO Oxidation Catalyst ¹			со
A01, A03, A04, A05, and A06	Water Injection			NOx

¹Control device is operated all times any affected emission unit is operating excluding periods of startup, shutdown, and testing/tuning.

2.2 CONTROL REQUIREMENTS

Turbines

- 1. The permittee shall, under all conditions, operate the source in a manner consistent with good air pollution control practice for minimizing emissions as required by 40 CFR 60.11. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 2. The permittee shall maintain and operate the SCR in the five turbine units (EUs: A01 and A03 through A06) in accordance with the manufacturer's operations and maintenance (O&M) manual for emissions-related components and good operating practice. The SCR shall be operated at all times the associated turbine unit is operating, excluding startup, shutdown, and testing/tuning. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09) and Part 70 OP (06/19/2020); Authority: AQR 12.5.2.6(a)]
- 3. The permittee shall operate the SCR such that the NO_X emissions do not exceed the limitations listed in Tables 3-1, 3-2, or 3-3. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 4. The permittee shall maintain and operate the CO oxidation catalyst in the five turbine units (EUs: A01 and A03 through A06) in accordance with manufacturer's O&M manual for emissions-related components and good operating practice. The oxidation catalysts shall be operated at all times the associated turbine unit is operating, excluding startup, shutdown, and testing/tuning. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09) and Part 70 OP (06/19/2020); Authority: AQR 12.5.2.6(a)]
- 5. The permittee shall maintain and operate a water injection system on turbine generation packages 1 through 5 (EUs: A01 and A03 through A06). The water injection system shall be operated in accordance with the manufacturer's O&M manual for emissions-related components and good operating practice. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]

- 6. The permittee shall control SO₂ exhaust emissions from each stationary gas turbine (EUs: A01 and A03 through A06) by the exclusive use of pipeline quality natural gas as defined by the Federal Energy Regulatory Commission (0.75 grains/100 dscf of sulfur) and good combustion practice. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 7. The permittee shall control PM₁₀ exhaust emissions from each stationary gas turbine by properly maintaining the inlet air filters preceding each turbine as recommended by the manufacturer and good operating practice (EUs: A01 and A03 through A06). [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]

Fire Pump

- 8. The permittee shall operate and maintain the diesel fire pump (EU: C01) in accordance with the manufacturer's O&M manual for emissions-related components. [Origin: Title V Operating Permit, (09/09/14); Authority: AQR 12.5.2.6(a)]
- 9. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume in the emergency fire pump (EU: C01). [Origin: Application for Renewal (04/14/2022), Authority: 40 CFR 63.6604(b)]

Cooling Towers

- 10. The permittee shall maintain the GEA cooling tower drift rate at or below 0.005 percent of the circulating water flow rate (EU: A02). [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 11. The permittee shall maintain total dissolved solids (TDS) concentration in the cooling tower process water at or below 6,000 ppm (based on a 30-day average) (EU: A02). [Origin: Title V Operating Permit, (07/25/13); Authority: AQR 12.5.2.6(a)]
- 12. The permittee shall maintain the cooling tower drift rate at or below 0.001 percent of the circulating water flow rate (EU: A07). [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 13. The permittee shall maintain total dissolved solids (TDS) concentration in the cooling tower process water at or below 6,000 ppm (based on a 30-day average) (EU: A07). [Origin: Title V Operating Permit, (07/25/13); Authority: AQR 12.5.2.6(a)]
- 14. The permittee shall maintain and operate all cooling towers per manufacturer's O&M manual for emissions-related components and good operating practice. No chromium-containing compounds shall be used in the cooling tower process water. [Origin: Title V Operating Permit, (11/01/06); Authority: AQR 12.5.2.6(a)]

<u>Other</u>

15. 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]

16. 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. [AQR 12.5.2.6(a)]

3.0 LIMITATIONS AND STANDARDS

3.1 OPERATIONAL LIMITS

Turbines

- 1. The permittee shall limit the operation of turbine generation packages 2 through 5 (EUs: A03 through A06) to 30,480 hours in any consecutive 12-month period. [Origin: Title V Operating Permit, (05/14/12); Authority: AQR 12.5.2.6(a)]
- 2. The permittee shall limit the heat input of each of the turbine generation packages (EUs: A01 and A03 through A06) to 480 MMBtu/hr based on the HHV of natural gas, corrected to standard conditions. [Origin: Title V Operating Permit, (05/14/12); Authority: AQR 12.5.2.6(a)]
- 3. The permittee shall limit total annual startups and shutdowns for turbine generation packages 2 through 5 (EUs: A03 through A06) to 792 occurrences per unit in any consecutive 12-month period. Each startup shall constitute one occurrence and each shutdown shall constitute one occurrence. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 4. Startup shall be defined as the period beginning with first fire on fuel, not to exceed 120 consecutive minutes. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 5. A shutdown is defined as the period immediately preceding the cessation of firing of the gas turbine, not to exceed 60 consecutive minutes. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 6. Testing/tuning is defined as planned operation outside of normal emission limitations for the purposes of data collection, diagnostics, or operational adjustment. [Part 70 OP (06/19/2020)]
- 7. The permittee shall limit all testing/tuning to a cumulative total of 600 minutes per calendar year per turbine (EUs: A01 and A03 through A06). [Part 70 OP (06/19/2020)]

Fire Pump

- 8. The permittee shall limit operation of the diesel fire pump (EU: C01) for testing and maintenance purposes to 100 hours per year. The permittee may operate the fire pump up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. [40 CFR 63.6640(f)]
- 9. The permittee shall limit the operation of the emergency fire pump (EU: C01) for testing and maintenance purposes to 100 hours per year. The permittee may operate the fire pump up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. [40 CFR Part 60, Subpart IIII (60.4211(f)) and 40 CFR Part 63.6640(f)]

Cooling Towers

- 10. The permittee shall limit maximum water flow of the cooling tower (EU: A02) to 14,200 gallons per minute. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 11. The permittee shall limit maximum water flow of the cooling tower (EU: A07) to 78,248 gallons per minute. [Origin: Title V Operating Permit, (07/25/13); Authority AQR 12.5.2.6(a)]

3.2 EMISSION LIMITS

<u>Turbines</u>

- 1. The permittee shall not allow the actual emissions from each emission unit to exceed the calculated PTE listed in Table 3-1 during any consecutive 12-month period. Tons-per-year emission limits of each emission unit include startup, shutdown, and testing/tuning emissions. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09) and Part 70 OP (09/09/2014); Authority: AQR 12.5.2.6(a)]
- 2. The permittee shall not allow the actual CO emissions for any one-hour averaging period as determined by the CEMS, excluding any startup, shutdown, and testing/tuning periods as defined, to exceed the hourly emission limits for turbine generation packages 1 through 5 (EUs: A01 and A03 through A06) in Table 3-2. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]
- 3. The permittee shall not allow the actual NO_X emissions for any three-hour averaging period as determined by the CEMS, excluding any startup, shutdown, and testing/tuning periods as defined, to exceed the hourly emission limits for turbine generation packages 1 through 5 (EUs: A01 and A03 through A06) in Table 3-2. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]

, ,							
EU	PM 10	PM2.5	NOx	СО	SO ₂	VOCs	HAPs
A01	7.70	7.70	48.00	22.00	0.80	5.00	1.09
A02	4.39	4.39	0.00	0.00	0.00	0.00	0.00
A03							
A04	20.10	29.10	45 70	27.02	4 57	20.49	2.76
A05	30.10	30.10	40.72	27.03	4.57	30.40	3.76
A06							
A07	4.84	4.84	0.00	0.00	0.00	0.00	0.00

Table 3-1: Emission Unit PTE, Including Startup, Shutdown, and Testing/Tuning (tons per year)¹

¹ Annual limits for turbines are based upon 66 °F. Annual startup and shutdown emissions are included.

Table 3-2: Enforceable Emissions Limitations (lb/hr)¹, Excluding Startup, Shutdown, and Testing/Tuning

EU	NO _x ²	CO ³
A01	14.00	9.00
A03	3.15	1.92
A04	3.15	1.92
A05	3.15	1.92
A06	3.15	1.92

¹ Hourly limits are based on 36 °F.

² Limit for NO_x is for any three-hour averaging period.

³ Limits for CO are for any one-hour averaging period.

4. The permittee shall operate turbine generation packages 1 through 5 (EUs: A01 and A03 through A06) not to emit more than the listed emission limits for NOx or CO, as defined in Table 3-3, excluding any startup, shutdown, and testing/tuning. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(a)]

Table 3-3: Enforceable Emissions Limitations (ppmvd), Excluding Startup, Shutdown, and Testing/Tuning

EU	Description	NOx ²	CO ³
A01 ¹	Unit 1 w/ SCR	10	10
A031	Unit 2 w/ SCR	2.0	2.0
A04 ¹	Unit 3 w/ SCR	2.0	2.0
A05 ¹	Unit 4 w/ SCR	2.0	2.0
A06 ¹	Unit 5 w/ SCR	2.0	2.0

¹ Limitations in ppmvd @ 15 percent O₂.

 2 Limit for NO_x is for any three-hour averaging period.

³ Limit for CO is for any one-hour averaging period.

5. The permittee shall operate turbine generation packages 1 through 5 (EUs: A01 and A03 through A06) not to emit more than the applicable Subpart GG standards for NO_x, as defined in Table 3-4. [40 CFR 60.332]

Table 3-4: Applicable Subpart GG Standards, 4-hour Rolling Average

EU	NO _x STD in ppmvd @ 15% O ₂
A01	86
A03	105
A04	105
A05	105
A06	105

6. The permittee shall comply with the emission limits in Table 3-5 during periods of Testing/Tuning. [Part 70 OP (06/19/2020)]

Table 3-5: Enforceable Emissions Limitations for CO During Testing/Tuning (lb/hr)

EU	СО
A01	30
A03	30
A04	30
A05	30
A06	30

<u>Other</u>

7. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than six 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 conduct a quarterly visual emissions check for visible emissions from the fire pump (EU: C01), consistent with the Visible Emissions Check Guidebook, while it is in operation. If the unit is not operating frequently enough for quarterly observations, then observations shall be conducted while the unit is operating.
- 3. 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.
- 4. 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 VEE reader to perform an 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.
- 5. Any scenario of visible emissions noncompliance can and may lead to enforcement action.

CEMS [AQR 12.5.2.6(d) & AQR 12.5.2.8]

- 6. To demonstrate continuous, direct compliance with the emission limitations for NO_x and CO, the permittee shall install, calibrate, maintain, operate, and certify CEMS on Units 1 through 5 (EUs: A01 and A03 through A06). The system shall include an automated data acquisition and handling system. The CEMS shall monitor and record at least the following data in addition to meeting the requirements of 40 CFR 60 Subpart GG and 40 CFR 75: [AQR 12.5.2.6(d) and 40 CFR 75]
 - a. hours of operation;
 - b. electrical load;
 - c. fuel consumption and type;
 - d. water injection rate;
 - e. exhaust gas flow rate (by direct or indirect methods);
 - f. exhaust gas concentration of NOx, CO and O₂;
 - g. one-hour average CO concentrations;
 - h. three-hour average NO_X concentration;
 - i. the mass flow rate of NO_X and CO;
 - j. daily and quarterly accumulated mass emissions of NOx and CO; and
 - k. hours of downtime for CEMS.
- 7. For Units 1 through 5 (EUs: A01 and A03 through A06), all emissions recorded by CEMS shall be reported in clock-hour increments. Any clock-hour that contains any part of a testing/tuning event shall be subject to the testing/tuning limits. [*Part 70 OP (06/19/2020)*]
- 8. CEMS for Units 1 through 5 (EU: A01 and A03 through A06) shall be initially certified and tested pursuant to 40 CFR 75, Appendix A: CEMS Specifications and Test Procedures and 40 CFR 60 Appendices B and F. This condition was met on January 1, 2002, August 16, 2002, August 16, 2002, September 22, 2002, and September 27, 2002, for Units 1 through 5 (EUs: A01 and A03 through A06) respectively. Subsequent CEMS certifications for Units 1 through 5 must be conducted with representative sampling of the stack. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(d)]
- 9. CEMS certification and recertification procedures shall be met as required in 40 CFR 75.20 for Units 1 through 5 (EUs: A01 and A03 through A06). *[40 CFR 75.20]*
- CEMS QA/QC procedures shall conform to the provisions of 40 CFR 75 Appendix B for Units 1 through 5 (EUs: A01 and A03 through A06). [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(d)]

- 11. Any exceedance of the hourly or annual NOx and/or CO emission limitations as determined by the CEMS shall be considered a violation of the emission limit imposed and may result in enforcement action. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(d)]
- 12. The permittee shall conduct RATA of the NO_X, CO, and O₂ CEMS at least annually unless otherwise provided for in 40 CFR 75, Appendix B, for NO_X and 40 CFR 60, Appendix F, for CO. [AQR 12.5.2.6(d)]
- 13. The permittee has installed Method 1 multipoint CEMS probes to meet requirements of 40 CFR 60 Appendix B. As long as multipoint probes are installed and maintained according to manufacturer instructions, no stratification is assumed and the stratification testing is not required (EUs: A03 through A06). [Origin: Title V Operating Permit, (12/30/10); Authority: AQR 12.5.2.6(d)]
- 14. Required periodic audit procedures shall conform to the provisions of 40 CFR 60 Appendix F and 40 CFR 75 Appendix B. For linearity and RATA testing schedules and linearity ranges the permittee shall follow 40 CRF 75 Appendix B. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(d)]
- 15. The permittee shall maintain and adhere to the latest quality assurance plan for all CEMS, submitted to and approved by the Department of Environment and Sustainability, Division of Air Quality that includes auditing schedules, reporting schedules, design specifications, and other quality assurance requirements for each CEMS. [Origin: NSR ATC Modification 3, Revision 5, (05/20/09); Authority: AQR 12.5.2.6(d)]

Turbines

- 16. The permittee shall monitor the normal operation for Units 2 through 5 (EUs: A03 through A06). [AQR 12.5.2.6(d)]
- 17. The permittee shall monitor monthly occurrences and duration of startups and shutdowns for Units 2 through 5 (EUs: A03 through A06). [AQR 12.5.2.6(d)]
- 18. The permittee shall monitor the duration of testing/tuning events for each turbine unit (EUs: A01 and A03 through A06). [AQR 12.5.2.6(d)]
- 19. The permittee shall verify the natural gas sulfur content at least annually and verifications shall be based on reports or written data from the gas supplier or by sampling and analysis. [AQR 12.5.2.6(d)]

Fire Pump

- 20. The permittee shall operate the diesel-fired fire pump engine (EU: C01) with a nonresettable hour meter and monitor the duration of operation for testing and maintenance, and separately for emergencies. [AQR 12.5.2.6(d)]
- 21. The permittee shall monitor the sulfur content and cetane index or aromatic content of the fuel burned in the emergency fire pump (EU: C01) by retaining a copy of vendor fuel specifications. [40 CFR 63.6604(b)]

Cooling Towers

- 22. During periods of cooling towers operation (EU: A02 and A07), the permittee shall monitor TDS in the tower circulating water at least monthly. [AQR 12.5.2.6(d)]
- 23. The permittee shall use a conductivity method, or an equivalent method approved in advance by the Control Officer, to monitor TDS. [AQR 12.5.2.6(d)]

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 60, Subparts A and GG; 40 CFR 72; 40 CFR 75, Title IV-Acid Rain Regulations; and the *Clark County Department of Air Quality Guideline for Source Testing* (9/19/2019). [AQR 12.5.2.6(d) and 40 CFR 60.335]
- 6. The permittee shall conduct initial performance tests for NO_x and CO on each of the turbine package units (EUs: A01 and A03 through A06) to demonstrate compliance with the emission limitations. Table 4-1 summarizes NO_x and CO performance test methods for turbine package units. This condition was met on May 22, 1998, for Unit 1 (EU: A01) and January 20, 2003, for Units 2 through 5 (EUs: A03 through A06). [*AQR* 12.5.2.6(*d*)]

EU	Test Point	Pollutant	Method	Frequency
		NOx	EPA Method 7E	
A01, A03,	Turbine/HRSG/OTSG	СО	EPA Method 10	Initial
and A06	Exhaust Outlet Stack	_	EPA Methods, 1, 2, 3 or 3A, 4, or Method 19	inital

Table 4-1: Performance Testing Requirements for Turbine Package Units

- 7. The permittee may use a legally authorized alternative test method approved by EPA or Clark County DAQ. [AQR 12.5.2.8(a)]
- 8. 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]
- 9. 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)]
- 10. 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 72; 40 CFR Part 75, Subpart F; and any other applicable regulations). [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 3. A quality assurance plan approved by the Control Officer shall contain auditing schedules and design specifications for the CEMS. The CEMS shall conform to all provisions of 40 CFR Part 60.13; 40 CFR Part 60, Subparts GG; and 40 CFR Part 75, as applicable. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 4. The permittee shall include in each record, 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 12.5.2.6(d)]
- 5. 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]
- 6. 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]
- 7. At a minimum, the permittee shall create and maintain the records identified in Conditions 4.3.8 and 9, 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]
- 8. The permittee shall maintain the following records onsite that require semiannual reporting and include, at a minimum: [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 Part CFR 60.7;
- b. The number of occurrences and the duration of each testing/tuning event, as well as the reason for the testing/tuning;

Turbines (EUs: A01 and A03 through A06)

- c. monthly and consecutive 12-month total hours of operation for each turbine including startups and shutdowns;
- d. monthly and consecutive 12-month total quantities of natural gas consumed in each stationary gas turbine;
- e. dates and description of maintenance on each turbine package, including serial numbers when turbine is exchanged with spare turbine;

<u>CEMS</u>

- f. CEMS audit results, RATA, corrective actions, etc., as required by 40 CFR 60, Appendix F, and the CEMS Quality Assurance Plan;
- g. quarterly CEMS summary of NOx and CO emissions;
- h. CEMS audit results or accuracy checks, corrective actions, etc., as required by 40 CFR 60, Appendix F and the CEMS QA Plan;
- i. Time, duration, nature, and probable cause of any CEMS downtime and corrective actions taken;

Fire Pump (EUs: C01)

- j. Records of fire pump inspection/maintenance;
- k. Sulfur content and cetane index or aromatic content of diesel fuel used to power the fire pump, as certified by the supplier;
- 1. Monthly hours of operation of the fire pump for testing and maintenance purposes, and separately for operation during emergency;
- m. Monthly hours of operation of the fire pump engines for operation during emergency;

Cooling Towers (EUs: A02 and A07)

n. monthly TDS test results of the cooling towers;

<u>Emissions</u>

- o. Deviations from permit requirements resulting in excess emissions (report as required by Section 4.4); and
- p. Deviations from permit requirements not resulting in excess emissions (report semiannually);

- q. Annual emissions calculated for each emission unit and the entire source (reported annually).
- 9. The permittee shall maintain the following records on-site: [AQR 12.5.2.6(d) and AQR 12.5.2.8]

Turbines (EUs: A01 and A03 through A06)

- a. Documentation verifying sulfur content of natural gas;
- b. Manufacturer's O&M manual for SCR and Oxidation Catalyst controls;

CEMS

- c. All CEMS information required by the CEMS Quality Assurance Plan which shall contain auditing schedules, reporting schedules, and design specifications for the CEMS. The CEMS shall conform to applicable provisions of 40 CFR Part 60, Subpart GG and 40 CFR Part 75 (the QA Plan has been approved by the Control Officer) as specified in 40 CFR 75 Subpart F and Monitoring Section of this permit;
- d. Each NO_x and O₂ "out-of-control" period as defined in 40 CFR Part 75, Appendix B, and CO "out-of-control" period as defined in 40 CFR Part 60, Appendix F;
- e. CEMS audit results, RATA, corrective actions, etc., as required by 40 CFR 60 and the CEMS quality assurance plan;
- f. Certificates of representation for the designated representative and the alternative designated representative that meet all requirements of 40 CFR Part 72.24;

Nonroad Engines

g. Records of location changes for nonroad engines, if applicable.

<u>Other</u>

- h. Log of visible emissions checks on the fire pump (EU: C01);
- i. Annual copies of all reports, compliance certifications, other submissions and all records made or required under the Acid Rain Program;
- j. 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; and
- k. Summary of results of all performance testing, if applicable.

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 airquality@clarkcountynv.gov.
 - 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 (NO_X) 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 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)]
- 13. The permittee shall submit semiannual monitoring reports to DAQ. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- 14. 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 Condition 4.3.8 that require semiannual reporting.
 - 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.
- 15. Regardless of the date of issuance of this OP, the source shall comply with the schedule for report submissions outlined in Table 4-2. [AQR 12.5.2.6(d) and AQR 12.5.2.8]

Required Report	Applicable Period	Due Date
Semiannual report for 1 st six-month period	January, February, March, April, May, June	July 30 each year ¹
Semiannual report for 2 nd six-month period; any additional annual records required	July, August, September, October, November, December	January 30 each year ¹
Annual Compliance Certification	Calendar year	January 30 each year ¹
Annual Emissions Inventory Report	Calendar year	March 31 each year ¹
Annual Emissions Statement ²	Calendar year	March 31 each year ¹
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 ¹

 Table 4-2: Required Submission Dates for Various Reports

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 ¹
Performance Testing	As required	Within 60 days of end of test ¹
RATA Protocol	As required	No less than 21 days, but no more than 90 days, before the anticipated test date ¹
RATA Results	As required	Within 45 days of end of test for Part 75 sources or within 60 days for all others ¹

¹If 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.

² Required only for stationary sources that emit 25 tons or more of nitrogen oxide (NO_x) and/or emit 25 tons or more of volatile organic compounds (VOC) during a calendar year.

16. 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 60.333 [40 CFR Part 60, Subpart GG]	NSPS – Stationary Gas Turbines (Standard for Sulfur Dioxide)	3.2.5

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

					Value	Comp	arison	40	vg. Perio comparis	od on
EU	Regulation (40 CFR)	Pollutant	Reg. Std.	Permit Limit	Std Value in Units of Permit Limit	Permit Limit Value	Is Permit Limit Equal or More Stringent?	Std. Avg. Period	Permit Limit	Permit Limit Equal or More Stringent?
A01/A 03/A0 4/A05/ A06	60.333 (GG)	SO ₂	0.8% sulfur by weight (8,000 ppmv)	0.75 grains sulfur per 100 scf	280	0.75	Yes	4-hour	Rolling 12- month	Yes

Table 5-2: Streamlined Requirements Related to Permit Shield

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 Las Vegas Generating Station, North 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 Section 10. [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 10	"Compliance Schedules"	
AQR 11	"Ambient Air Quality Standards"	
AQR 12.0	"Applicability and General Requirements"	
AQR 12.2	"Permit Requirements For Major Sources in Attainment Areas"	
AQE 12.3	"Permit Requirements For Major Sources in Nonattainment Areas"	
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 Stationary Gas and Combustion Turbines"	
AQR 18	"Permit and Technical Service Fees"	
AQR 21	"Acid Rain Continuous Emissions Monitoring"	
AQR 22	"Acid Rain Permits"	
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"	

- 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: Applicable CFRs

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 New Stationary Sources Stationary Gas Turbines"	
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 Permits Regulation"	
40 CFR Part 73	"Acid Rain Sulfur Dioxide Allowance System"	
40 CFR Part 75	"Acid Rain Continuous Emission Monitoring"	
40 CFR Part 82	"Protection of Stratospheric Ozone"	
40 CFR Part 1068, Subpart A	"General Compliance Provisions for Highway, Stationary, and Nonroad Programs"	

10.0 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 I for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code

Las Vegas Generating Station	NV	10761	
Facility (Source) Name	State	Plant Code	

STEP 2

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

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

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Las Vegas Generating Station

Facility (Source) Name (from STEP 1)

STEP 3 Permit Requirements

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:

 (i) 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
 - 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
 - (i) 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 Aci.
- (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.

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Las Vegas 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:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (i) 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.
 - 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.

Liability

- (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.

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Las Vegas 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 Ted Gretz	
Signature Ted Cum	Date 04-12-22