

CLARK COUNTY
DEPARTMENT OF AIR QUALITY
4701 West Russell Road, Suite 200, Las Vegas, Nevada 89118-2231
Part 70 Operating Permit
Source: 391
Issued in accordance with the
Clark County Air Quality Regulations (AQR)

ISSUED TO: NEVADA COGENERATION ASSOCIATES #2

SOURCE LOCATION:

8000 East Lake Mead Boulevard
Las Vegas, Nevada 89124
T20S, R64E, Section 7
Hydrographic Basin Number: 215

COMPANY ADDRESS:

6895 East Lake Mead Boulevard
Suite 6 #107
Las Vegas, NV 89156

NATURE OF BUSINESS:

SIC Code 4931: Electric Cogeneration
NAICS 221112: Fossil Fuel Electric Power Generation

RESPONSIBLE OFFICIAL:

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Permit Issuance Date: March 14, 2016
Revision Date: January 3, 2017

Expiration Date: March 13, 2021

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



Richard Beckstead
Permitting Manager, Clark County Department of Air Quality

EXECUTIVE SUMMARY

Nevada Cogeneration Associates #2 (NCA #2) is a topping cycle cogeneration plant that falls under SIC Code SIC Code 4931: Electric Cogeneration and NAICS Code 221112: Fossil Fuel Electric Power Generation. The source is located in hydrographic area 215 (Black Mountains Area) and is a major stationary source for NO_x and CO and is minor source for PM₁₀, PM_{2.5}, SO₂ and VOC pollutants. The source also emits pollutants that are categorized as greenhouse gasses. The Black Mountains hydrographic area is classified as attainment for all criteria air pollutants. The potential electrical generating capacity exceeds 250 MMBtu/hr. As a result, the source is a categorical source, as defined by AQR 12.2.2(j)(1).

NCA #2 has a generation capacity of 85 megawatts of electricity. The source operates three natural gas-fired turbine generator packages that exhaust into HRSG units, each equipped with a 77 MMBtu/hr supplemental duct burner. A nominal 29.74 MW steam turbine generator is operated to produce electrical power. Other operating emission units include a diesel-powered emergency generator, a diesel-powered emergency fire pump, a diesel-powered water pump, and a two-cell cooling tower. This Part 70 Operating Permit is issued based on the renewal application submitted on May 29, 2015.

The following table summarizes the source PTE for each regulated air pollutant for all emission units addressed by this Part 70 OP:

Source-wide PTE (tons per year)¹

Pollutants	PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC
PTE Totals	67.37	60.99	170.48	141.80	9.17	26.44

¹ The values in this table are not source-wide emission limits.

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

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I. ACRONYMS

Table I-1: Acronyms and Abbreviations

Term	
Air Quality	Clark County Department of Air Quality
AQR	Clark County Air Quality Regulations
ATC/OP	Authority to Construct/Operating Permit
BACT	Best Available Control Technology
CAAA	Clean Air Act, as amended
CEMS	Continuous Emissions Monitoring System
CFC	Chlorofluorocarbon
CFR	United States Code of Federal Regulations
CO	Carbon Monoxide
CTG	Combustion Turbine-Generator
DLN	Dry Low-NO _x
EPA	United States Environmental Protection Agency
EU	Emission Unit
HAP	Hazardous Air Pollutant
HCFC	Hydrochlorofluorocarbon
HHV	Higher Heating Value
HP	Horse Power
HRSG	Heat Recovery Steam Generator
kW	kilowatt
LHV	Lower Heating Value
MMBtu	Millions of British Thermal Units
M/N	Model Number
MW	Megawatt
NAICS	North American Industry Classification System
NO _x	Nitrogen Oxides
NRS	Nevada Revised Statutes
OP	Operating Permit
PM _{2.5}	Particulate Matter less than 2.5 microns
PM ₁₀	Particulate Matter less than 10 microns
ppm	Parts per Million
ppmvd	Parts per Million, Volumetric Dry
PTE	Potential to Emit
RATA	Relative Accuracy Test Audits
SCC	Source Classification Codes
scf	Standard Cubic Feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
S/N	Serial Number
SO ₂	Sulfur Dioxide
ULN	Ultra Low-NO _x
VOC	Volatile Organic Compound

II. GENERAL CONDITIONS

A. General Requirements

1. The Permittee shall comply with all conditions of the Part 70 Operating Permit. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations, Nevada law, and the Clean Air Act and is grounds for the following: enforcement action; permit termination; revocation and re-issuance; revision; or denial of a permit 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 not be affected and shall remain valid. *[AQR 12.5.2.6(f)]*
3. The Permittee shall pay all permit fees pursuant to AQR Section 18. *[AQR 12.5.2.6(h)]*
4. The permit does not convey any 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 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 4.3.3; AQR 4.9; AQR 12.5.2.8(b)]*
6. The Permittee shall allow the Control Officer, upon presentation of credentials to: *[AQR 4.3 and 12.5.2.8(b)]*
 - a. Have access to 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 devices such as cameras or video equipment.
7. Any Permittee who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit. A responsible official shall certify the additional information consistent with the requirements of AQR Section 12.5.2.4. *[AQR 12.5.2.2]*
8. The Permittee who has been issued a permit under Section 12.5 shall post such permit in a location which is clearly visible and accessible to the facility's employees and representatives of the department. *[AQR 12.5.2.6(m)]*

B. Modification, Revision, 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 ATC Permit from the Control Officer *[AQR 12.4.1.1(a)]*
2. The permit may be revised, revoked, reopened and reissued, or terminated for cause. 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. 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 that a complete application need not be received before a Part 70 general permit is issued pursuant to Section 12.5.2.20; and
 - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of Section 12.5
4. 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, which would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR 60.12]*
5. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*
6. 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)]*
7. For purposes of permit renewal, a timely application is a complete application that is submitted at least six (6) months and not greater than eighteen (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)]*

C. Reporting/Notifications/Providing Information Requirements

1. The Permittee shall submit all compliance certifications to EPA and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
2. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or AQRs shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification 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)]*
3. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for 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 required to be kept by the permit, or, for information claimed to be confidential, the Permittee

may furnish such records directly to the Administrator along with a claim of confidentiality. [AQR 12.5.2.6(g)(5)]

4. Upon request of the Control Officer, the Permittee shall provide such information or analyses as will disclose the nature, extent, quantity or degree of air contaminants which are or may be discharged by such source, and type or nature of control equipment in use, and the Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to such report, the Control Officer may designate an authorized agent to make an independent study and report as to the nature, extent, quantity or degree of any air contaminants which are or may be discharged from the source. An authorized agent so designated is authorized to inspect any article, machine, equipment, or other contrivance necessary to make the inspection and report. [AQR 4.4]
5. The Permittee shall submit annual emissions inventory reports based on the following: [AQR 18.6.1]
 - a. The annual emissions inventory must be submitted to Air Quality by March 31 of each calendar year; and
 - b. The report shall include the emission factors and calculations used to determine the emissions from each permitted emission unit, even when an emission unit is not operated.

D. Compliance Requirements

1. The Permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [AQR 12.5.2.6(g)(2)]
2. Any person who violates any provision of the AQR, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry or monitoring activities or any requirements by Air Quality is guilty of a civil offense and shall pay 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]
3. Any person aggrieved by an order issued pursuant to AQR Section 9.1 is entitled to review as provided in Chapter 233B of NRS. [AQR 9.12]
4. The Permittee shall comply with the requirements of 40 CFR 61, Subpart M, of the National Emission Standard for Asbestos for all demolition and renovation projects. [AQR 13.1(b)(8)]
5. The Permittee shall certify compliance with terms and conditions contained in the OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. [AQR 12.5.2.8(e)]
6. 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 Administrator at USEPA Region IX (Director, Air and Toxics Divisions, 75 Hawthorne Street., San Francisco, California 94105). A compliance certification for each calendar year will be due on January 30th 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. The methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR 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 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 subsection II.D.6(b). 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 is required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
7. The Permittee shall report to the Control Officer (4701 West Russell Road, Suite – 200, Las Vegas, NV 89118) any startup, shutdown, malfunction, emergency or deviation which cause emissions of regulated air pollutants in excess of any limits set by regulation or by this permit. The report shall be in two parts as specified below: *[AQR 12.5.2.6(d)(4)(B) and AQR 25.6.1]*
 - a. within twenty-four (24) hours of the time the Permittee learns of the excess emissions, the report shall be communicated by phone (702) 455-5942, fax (702) 383-9994, or email: airquality@clarkcountynv.gov; and
 - b. within seventy-two (72) hours of the notification required by paragraph (a) above, the detailed written report containing the information required by AQR Section 25.6.3 shall be submitted.
8. The Permittee shall report to the Control Officer with the semi-annual monitoring report 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)]*
9. The owner or operator of any source required to obtain a permit under Section 12 shall report to the Control Officer emissions that are in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health, safety or the environment as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered, with a written report submitted within two (2) days of the occurrence. *[AQR 25.6.2]*

E. Performance Testing Requirements

1. Upon request of the Control Officer, the Permittee shall test or have tests performed to determine the emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of that allowed by the Air Quality regulations is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.5]*
2. Upon request of the Control Officer, the Permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.6]*

3. The Permittee shall submit for approval a performance testing protocol which contains testing, reporting, and notification schedules, test protocols, and anticipated test dates to the Control Officer (4701 West Russell Road, Suite 200, Las Vegas, Nevada 89118) not less than 45, nor more than 90 days prior to the anticipated date of the performance test, unless otherwise specified in Section III.D. [AQR 12.5.2.8]
4. The Permittee shall submit to EPA for approval any alternative test methods that are not already approved by EPA, to demonstrate compliance with a requirement under 40 CFR Part 60. [40 CFR 60.8(b)]
5. The Permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days from the end of the performance test. [12.5.2.8]

III. EMISSION UNITS AND APPLICABLE REQUIREMENTS

A. Emission Units

1. The stationary source covered by this Part 70 OP is defined to consist of the emission units and associated appurtenances summarized in Table III-A-1. [AQR 12.5.2.3]

Table III-A-1: List of Emission Units

EU	Description	Rating	Make	Model #	Serial #
A001	Turbine Generator Package #1	22.2 MW 285 MMBtu/hr	General Electric	LM-2500 PE MG5602	260156-1
A001a	Supplemental Duct Burner	77 MMBtu/hr	Coen		BM ALPHA
A002	Turbine Generator Package #2	22.2 MW 285 MMBtu/hr	General Electric	LM-2500 PE MG5602	260156-2
A002a	Supplemental Duct Burner	77 MMBtu/hr	Coen		BM BRAVO
A003	Turbine Generator Package #3	22.2 MW 285 MMBtu/hr	General Electric	LM-2500 PE MG5602	260156-3
A003a	Supplemental Duct Burner	77 MMBtu/hr	Coen		BM CHARLIE
A004	Diesel Emergency Fire Pump	315 hp	Detroit	DDFPL6AT	469408
A005	Diesel Emergency Generator	440 hp	Caterpillar	10647312	06A0466677
A006a	Cooling Tower, Cell 1	26,600 gpm total	Ecodyne	2CFF60595L2610- 20	DO0-15664-A
A006b	Cooling Tower, Cell 2				
A007	Diesel-Fired Water Pump	80 hp	John Deere	4045DF150B	T04045D819214
A009	Aboveground Storage Tank; Gasoline	1,000 Gallons	Air Boy		

B. Emission Limitations and Standards

1. Emission Limits

- a. The Permittee shall allow neither the actual nor allowable emissions from each emission unit to exceed the calculated PTE listed in Tables III-B-1 for any consecutive 12-month total. Tons per year emission limits for each emission unit include startup and shutdown emissions. [NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]

Table III-B-1: Emission Unit PTE, Including Startup and Shutdowns (tons per year)

EU	PM ₁₀	PM _{2.5}	NO _x (SCR) ²	NO _x (no SCR)	CO	SO ₂	VOC
A001 & A001a ¹	17.00	17.00	40.77	14.13	46.71	3.03	8.75
A002 & A002a ¹	17.00	17.00	40.77	14.13	46.71	3.03	8.75
A003 & A003a ¹	17.00	17.00	40.77	14.13	46.71	3.03	8.75
A004	0.33	0.33		3.33	1.16	0.01	0.07
A005	0.07	0.07		2.07	0.40	0.01	0.03
A006a & A006b	15.96	9.58		0	0	0	0
A007	0.01	0.01		0.38	0.11	0.06	0.03
A009	0	0		0	0	0	0.06

¹ Limits based on a 3-hour averaging period.

- b. The Permittee shall allow neither the actual nor allowable emissions from each emission unit to exceed the calculated emission rates listed in Tables III-B-2 during normal operation (exclude startup and shutdown). *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*

Table III-B-2: Emission Unit PTE, Excluding Startup and Shutdowns (pounds per hour)¹

EU	PM ₁₀	PM _{2.5}	NO _x (SCR)	NO _x (no SCR)	CO	SO ₂	VOC
A001, A001a	3.88	3.88	10.30	21.50	10.70	0.69	2.00
A002, A002a	3.88	3.88	10.30	21.50	10.70	0.69	2.00
A003, A003a	3.88	3.88	10.30	21.50	10.70	0.69	2.00

¹ Limits based on a 3-hour averaging period.

- c. The Permittee shall allow neither the actual nor allowable emissions from each emission unit to exceed the calculated emission rates listed in Tables III-B-3. Pound-per-hour limits and ppm limits are normal operation (exclude startup and shutdown) limits only. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*

Table III-B-3: Emission Limitations Excluding Startup and Shutdown in ppmvd @ 15% O₂

	PM ₁₀	NO _x	CO	VOC
With SCR	3.88 lb/hr	12 ppmvd	23 ppmvd	0.0077 lb/MMBtu
Without SCR	3.88 lb/hr	25 ppmvd	23 ppmvd	0.0028 lb/MMBtu

¹ Limits based on a 3-hour averaging period.

- d. The Permittee shall demonstrate compliance with the annual emission limits by including startup emissions using the emission rates in Table III-B-4 when CEMS data is not available.

Table III-B-4: Startup Emissions per EU (pounds per hour)^{1,2}

EU	PM ₁₀	NO _x (SCR)	NO _x (no SCR)	CO	SO _x	VOC
A001, A001a	3.88	13.31	21.50	32.69	0.69	2.75
A002, A002a	3.88	13.31	21.50	32.69	0.69	2.75
A003, A003a	3.88	13.31	21.50	32.69	0.69	2.75

¹ Pounds per hour emissions for turbine units #1-3 are based on 40 minutes startup and 20 minutes of normal operation (with duct burner firing).

² NO_x, CO, and VOC emission factors were provided by the manufacturer.

- e. The Permittee shall demonstrate compliance with the annual emission limits by including shutdown emissions using the emission rates in Table III-B-5 when CEMS data is not available.

Table III-B-5: Shutdown Emissions per EU (pounds per hour)^{1,2}

EU	PM ₁₀	NO _x (SCR)	NO _x (no SCR)	CO	SO _x	VOC
A001, A001a	3.88	11.01	21.50	17.33	0.69	2.32
A002, A002a	3.88	11.01	21.50	17.33	0.69	2.32
A003, A003a	3.88	11.01	21.50	17.33	0.69	2.32

¹ Pounds per hour emissions for turbine units #1-3 are based on 8 minutes shutdown and 52 minutes of normal operation (with duct burner firing).

² NO_x, CO, and VOC emission factors were provided by the manufacturer.

- f. The Permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20 percent opacity for a period of more than 6 consecutive minutes. *[AQR 26.1.1]*
- g. The Permittee shall not allow NO_x emissions from the stack of each turbine to exceed 25 ppmvd @ 15 percent oxygen as measured on a 3-hour rolling average during periods when the SCR is not operational. *[1999 EPA Consent Decree and NSR ATC/OP 391, Modification 7, Revision 1 (10/17/07)]*
- h. The Permittee shall not allow NO_x emissions from the stack of each turbine to exceed 12 ppmvd @ 15 percent oxygen as measured on a 3-hour rolling average during all times when the SCRs are in use. *[1999 EPA Consent Decree and NSR ATC/OP 391, Modification 7, Revision 1 (10/17/07)]*

2. Operational Limits

- a. The Permittee shall limit operation of each turbine package (EUs: A001, A002, and A003) to a maximum heat input rating of 285 MMBtu/hr, based on an LHV at 67° F the natural gas limits listed in Table III-B-5: *[NSR ATC/OP 391, Modification 7, Revision 1 (10/17/07)]*
- b. As part of being an exempt facility from the Acid Rain Program, the Permittee shall limit supply of each turbine unit to no more than 219,000 MW-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- c. A shut-down period shall not exceed one (1) hour immediately following the initiation of a combustion gas turbine shutdown. A shutdown ends when combustion ceases in the gas turbine or upon initiation of a new startup, if combustion during the preceding shutdown has not terminated. A NO_x emission exceedance event resulting from a loss of NO_x steam injection that is caused by upsets in process gas export will be treated as a shutdown and, if the affected gas turbine(s) do not completely shut down within one (1) hour, the time immediately following such an upset in export gas shall be treated as a start-up period and reported as a start-up event. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- d. Startup is defined as the period of no more than two (2) hours immediately following the starting of the combustion gas turbine. The Permittee shall limit startups of the turbines to 300 events per month, and the total cumulative start-up time shall not exceed 450 hours per calendar year for the facility. *[1999 EPA Consent Decree and NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- e. The Permittee shall limit each startup period to 120 minutes. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- f. The Permittee shall limit the heat input for each duct burner to 77 MMBtu/hour (EU: A001a, A002a, and A003a). *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*

- g. The Permittee shall limit the operation of the fire pump (EU: A004) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency 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 60.4211]*
- h. The Permittee shall limit the operation of the emergency generator (EU: A005) for testing and maintenance purposes to 100 hours per year. The Permittee may operate the emergency generator up to 50 hours per year for nonemergency situations, but those hours count towards the 100 hours provided for testing and maintenance. The 50 hours per year for nonemergency situations cannot be used for peak shavings or demand response, except as provided in 40 CFR 63.6640(f)(4). *[40 CFR 63.6640]*
- i. The Permittee shall limit operation of the water pump (EU: A007) to 720 hours per any consecutive 12-month period. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- j. The Permittee shall limit the throughput of all gasoline products to 9,000 gallons per any consecutive 12-month period (EU: A009) *[NSR ATC/OP 391, Modification 7, Revision 1 (10/17/07)]*

3. Emission Controls

- a. The Permittee shall operate the Selective Catalytic Reduction (SCR) systems installed on the gas turbine units (EU: A001 through A003) a minimum of 85 percent of the plant operating hours calculated over a 12-month rolling period with an allowance of no more than 15 percent downtime due to low-temperature excursions. Low-temperature excursions are defined as temporary temperature drops below 570°F. The Permittee shall determine the operating hours by averaging across the three (3) units at the source. *[1999 EPA Consent Decree and NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- b. The Permittee shall continuously operate steam injection as long as the temperature in a gas turbine's associated heat recovery steam generator remains at or above 550°F or the pressure of the recovery boiler remains at or above 410 pounds per square inch as measured by a calibrated gauge (psig). *[1999 EPA Consent Decree and NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- c. The Permittee shall commence ammonia injection during startup and within five (5) minutes after the SCR inlet's temperature reaches 570°F. The Permittee shall control the ammonia flow using the continuous monitoring system which will limit NO_x to 12 ppmvd @ 15 percent O₂, on a 3-hour rolling average. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- d. The Permittee shall maintain and operate the oxidation catalysts for the control of CO on each of the turbine units and shall maintain and operate in accordance with manufacturer's specifications (EUs: A001 through A003). The Permittee shall operate the catalysts at all times the associated turbine units are operating, excluding periods of startup and shutdown. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- e. The Permittee shall control SO₂ exhaust emissions from each combined cycle system (EUs: A001 through A003) by exclusively using of pipeline quality natural gas (8,000 ppmv or 0.8 percent sulfur) in accordance with the Federal Energy Regulatory Commission, and good combustion practice. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- f. The Permittee shall control PM₁₀ exhaust emissions from each combined cycle system (EUs: A001 through A003) by properly maintaining the inlet air filters preceding each turbine as recommended by the manufacturer and good operating practice. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- g. The Permittee shall operate the fire pump with a turbocharger and aftercooler (EU: A004). *[NSR ATC/OP 391, Modification 6, (02/26/02)]*

- h. The Permittee shall operate the emergency generator with a turbocharger and aftercooler (EU: A005). *[NSR ATC/OP 391, Modification 6(02/26/02)]*
- i. The Permittee shall combust only low sulfur diesel fuel in the fire pump (EU: A004), the emergency generator (EU: A005), and the water pump (EU: A007). *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- j. The Permittee shall operate the cooling tower (EUs: A006a and A006b) with drift eliminators that limit the tower drift rate to 0.0007 percent of the circulating water flow rate. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- k. The Permittee shall limit the total dissolved solids (TDS) concentration in the cooling tower process water at or below 57,750 ppm at all times. The annual average TDS concentration shall not exceed 38,500 ppm on a 12-month rolling average. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
- l. The Permittee shall operate and maintain the cooling tower in accordance with the manufacturer's specifications (EU: A006a and A006b).
- m. The Permittee shall maintain the emergency generator and fire pump (EUs: A004 and A005) as follows, unless the manufacturer's specifications are more stringent: *[40 CFR 63.6603(b)]*
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iv. the Permittee may utilize an oil analysis program as described in Subpart 63.6625(i) in order to extend the specified oil change requirement and can petition the Control Officer pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.
- n. The Permittee shall maintain the water pump (EU: A007) as follows, unless the manufacturer's specifications are more stringent: *[40 CFR 63.6603(b)]*
 - i. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaners every 1,000 hours of operation or annually, whichever comes first;
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iv. the Permittee may utilize an oil analysis program as described in Subpart 63.6625(i) in order to extend the specified oil change requirement and can petition the Control Officer pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.
- o. The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following *[40 CFR 63.11116]*:
 - i. minimize gasoline spills;
 - ii. clean up spills as expeditiously as practicable;
 - iii. cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - iv. minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators;
 - v. the Permittee shall have records documenting gasoline throughput within 24 hours of a request of the Control Officer; and

- vi. the Permittee must comply with the requirements of the 40 CFR 63, Subpart CCCCCC by January 10, 2011.

C. Monitoring

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 turbine unit in accordance with 40 CFR 75, Appendix B and 40 CFR 60.13, as applicable (EUs: A001 through A003). Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: *[EPA Consent Decree, 2/99, AQR 12.5.2.6(d)]*
 - a. exhaust gas concentrations (in ppm) of NO_x, CO, and diluent O₂ for all turbine units (EUs: A001 through A003) at least once every 15 minutes when required by 40 CFR 60 or 40 CFR 75, as appropriate;
 - b. exhaust gas flow rate (by direct or indirect methods);
 - c. fuel flow rate;
 - d. hours of operation;
 - e. three-hour rolling averages of each NO_x and CO concentrations;
 - f. hourly, daily, and quarterly accumulated mass emissions (in pounds) of NO_x and CO; and
 - g. hours of downtime of the CEMS;
 - h. catalyst inlet temperature at each SCR unit; and
 - i. temperature and pressure of each heat recovery boiler which produces steam.
2. The Permittee shall follow a written quality control program plan for the CEMS dated August 2008 that describes in detail complete, step-by-step procedures and operations contained in 40 CFR 75, Appendix B, Part 1 (Quality Control Program). The requirements of 40 CFR 75, Appendix B, and Section 2.3.4 (Bias Adjustment Factor) do not apply to this source. *[EPA Final Consent Decree, February 9, 1999]*
3. The Permittee shall conduct periodic audits and implement QA/QC procedures for CEMS conforming to the provisions of 40 CFR 75, Appendix B. *[EPA Final Consent Decree, February 9, 1999]*
4. The Permittee shall conduct RATA of the CO, NO_x, and diluents O₂ CEMS at least annually. *[AQR 12.5.2.6(d)]*
5. The Permittee shall monitor incidents of "out of control" periods of the CEMS. For each calendar quarter, each CEMS shall not have total "out-of-control" periods, as defined in 40 CFR 75, Appendix B, greater than two percent (2%) of the time its associated HRSG is in operation. *[NSR ATC/OP 391, Modification 6,(02/26/02)]*
6. The Permittee shall verify the natural gas sulfur content at least semiannually. Verifications shall be based on reports or written data from the gas supplier or by sampling and analysis. *[AQR 12.5.2.6(d)]*
7. The Permittee shall perform visual emissions checks each calendar quarter on a plant-wide level for each emission unit. The quarterly visual checks shall include the diesel engines (EUs: A004, A005, and A007) while operating, not necessarily simultaneously, to demonstrate compliance with the opacity limit. If any of the diesel engines do not operate during the calendar quarter, then no observation of that unit shall be required. If visible emissions are observed that appear to exceed the opacity limit, then corrective actions shall be taken to minimize the emissions and where practical the opacity of emissions shall be visually determined in accordance with 40 CFR 60 Appendix A: Reference Method 9. *[AQR 12.5.2.6(d)]*

8. The Permittee shall monitor daily the TDS in the cooling tower circulating water daily. The Permittee shall use the conductivity measurements for TDS monitoring or equivalent method approved in advance by the Control Officer. *[AQR 12.5.2.6(d)]*
9. If the daily test for TDS ppm is within 10 percent of exceeding the allowable concentrations (51,975 ppm), a second test must be completed within the 24-hour period. If the second test result is below 57,750 ppm, the two (2) tests shall be averaged together for the daily report in order to determine permit compliance. At no time shall the TDS test result exceed 57,750 ppm. *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
10. The Permittee shall install and monitor a nonresettable hour meter on the diesel-powered water pump (EU: A007). *[NSR ATC/OP 391, Modification 7, Revision 1(10/17/07)]*
11. The Permittee shall install and monitor a nonresettable hour meter on the diesel-powered fire pump and emergency generator (EUs: A004 and A005). *[AQR 12.5.2.6(d)]*
12. The Permittee shall monitor the sulfur content, and cetane index or aromatic content of the fuel burned in the diesel-powered emergency fire pump and generator by retaining a copy of vendor fuel specifications (EUs: A004 and A005). *[AQR 12.5.2.6(a)]*

D. Testing

1. The Permittee shall follow performance testing requirements of 40 CFR 60 Subpart A; 40 CFR 60 Subpart GG; and Air Quality's "Guideline on Source Testing". *[AQR 12.5.2.6(d) and 40 CFR 60.335]*
2. The Control Officer may require additional performance testing when operating conditions appear to be inadequate to demonstrate compliance with the limitations in this permit. *[AQR 4.5]*

E. Record Keeping

1. The Permittee shall maintain records on site that require semiannual reporting and include, at a minimum: *[AQR 12.5.2.6(d)]*
 - a. the magnitude and duration of excess emissions, permit deviations, notifications, monitoring system performance, malfunctions, and corrective actions taken, as required by 40 CFR 60.7;

Turbine/Duct Burner Units (EUs: A001 through A003):

- b. dates and hours of operation for each turbine (EUs: A001 through A003);
- c. calculated NO_x and CO emissions from CEMS;
- d. each CEMS "out-of-control" period, as defined in 40 CFR 75, Appendix B;
- e. time, duration, nature, and probable cause of any CEMS downtime and corrective actions taken;
- f. monthly and rolling, 12-month total quantity of natural gas consumed in each gas turbine;
- g. dates, times, and duration of each startup and shutdown event for each turbine (EUs: A001 through A003);

IC Engines (EUs: A004, A005 and A007):

- h. dates and hours of operation for the diesel-powered water pump (EU: A007);
- i. date and duration of operation of the diesel-powered emergency generator and fire pump for testing, maintenance, and non-emergency use (EUs: A004 and A005);

- j. date and duration of operation of the diesel-powered emergency generator and fire pump for emergency use, including documentation justifying use during the emergency (EUs: A004 and A005);

Cooling Tower (EUs: A006a and A006b):

- k. daily TDS test results of the cooling tower, averaged monthly per consecutive 12-month period;

Gasoline Dispensing (EU: A009):

- l. monthly and consecutive 12-month total of gasoline throughput [40 CFR 63.11116(b)].
2. The Permittee shall maintain records on site that include, at a minimum: [AQR 12.5.2.6(d)]
 - a. sulfur content of natural gas;
 - b. sulfur content of diesel fuel as certified by the supplier with each fuel delivery;
 - c. log of visual emissions checks;
 - d. results of performance tests conducted within the last five (5) years;
 - e. certificates of representation for the designated representative and the alternate designated representative that meet all requirements of 40 CFR 72.24;
 - f. all CEMS and/or PEMS information required by the CEMS and/or PEMS monitoring plan as specified in 40 CFR 75 Subpart F;
 - g. manufacturer's operation specifications for SCR and Oxidation Catalyst controls; and
 - h. quality assurance plan approved by the Control Officer. The quality assurance plan shall contain auditing schedules, reporting schedules, and design specifications for the CEMS. The CEMS shall conform to all provisions of 40 CFR 60.13, 40 CFR 60 Subpart GG, and 40 CFR 75. [AQR 12.5.2.6(d)]
 3. For all inspections, visible emission checks, and testing required under monitoring, logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (where required). [AQR 12.5.2.6(d)]
 4. Records and data required by this operating permit to be maintained by Permittee may, at the Permittee's expense, be audited at any time by a third party selected by the Control Officer. [AQR 4.4 and AQR 12.5.2.8]
 5. All records and logs, or a copy thereof, shall be kept on-site for a minimum of five (5) years from the date the measurement was taken or data was entered and shall be made available to Air Quality upon request. [AQR 12.5.2.6(d)]
 6. The Control Officer reserves the right to require additional requirements concerning records and record keeping for this source. [AQR 12.5.2.6(d)]

Reporting

1. All report submissions shall be addressed to the attention of the Control Officer. [AQR 12.5.2.8(e)(4)]
2. All reports shall contain the following: [AQR 12.5.2.6(d)]
 - a. a certification statement on the first page, i.e., "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document is true, accurate and complete." (A sample form is available from Air Quality); and
 - b. a certification signature from a responsible official of the company and the date certification.
3. The Permittee shall submit semi-annual reports to the Control Officer. [AQR 12.5.2.6(d)]

4. The following requirements apply to semiannual reports: [AQR 12.5.2.6(d)]
 - a. The report shall include a semiannual summary of each item listed in Section III-E-1.
 - b. The report shall include semiannual summaries of any permit deviations, their probable cause, and corrective or preventative actions taken.
 - c. The report shall be based on a calendar quarter, which includes partial calendar quarters.
 - d. The report shall be submitted to Air Quality within 30 calendar days after the calendar quarter.
5. Regardless of the date of issuance of this permit, the source shall comply with the schedule for report submissions outlined in Table III-F-1 [AQR 12.5.2.6(d)]:

Table III-F-1: Required Report Submission Dates

Required Report	Applicable Period	Due Date
Semiannual Report for 1st 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 Report	Calendar Year	January 30 each year ¹
Annual Emission Inventory Report	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
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
Performance Testing	As Required	Within 60 days from the end of the test. ¹

¹ If the due date falls on a Saturday, Sunday or a Federal or Nevada holiday, then the submittal is due on the next regularly scheduled business day.

6. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit conditions, permit requirements, and requirements of applicable federal regulations. [AQR 4.4 and AQR 12.5.2.6(d)]

IV. IMITIGATION

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

V. ACID RAIN REQUIREMENTS

1. The source is a cogeneration facility and is exempted based on the applicability criteria defined in Part 72.6(b)(4)(ii). [40 CFR 72.6(b)(4)(ii)]

VI. OTHER REQUIREMENTS

1. The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a CFC or HCFC compound

as a working fluid, unless such fluid has been approved for sale in such use by the Administrator. The Permittee shall keep record of all paperwork relevant to the applicable requirements of 40 CFR 82 on site. [40 CFR 82]

ATTACHMENT 1

APPLICABLE REGULATIONS

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE:

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

Citation	Title
AQR Section 0	Definitions
AQR Section 1	Definitions
AQR Section 2	Air Pollution Control Board
AQR Section 4	Control Officer
AQR Section 5	Interference with Control Officer
AQR Section 6	Injunctive Relief
AQR Section 8	Persons Liable for Penalties – Punishment: Defense
AQR Section 9	Civil Penalties
AQR Section 10	Compliance Schedule
AQR Section 12.2	Permit Requirements for Major Sources in Attainment Areas
AQR Section 12.4	Authority to Construct Application and Permit Requirements for Part 70 Sources
AQR Section 12.5	Part 70 Operating Permit Requirements (July 1, 2010)
AQR Section 12.9	Annual Emissions Inventory Requirement
AQR Section 12.10	Continuous Monitoring Requirements for Stationary Sources
AQR Section 13.2(b)(82)	National Emission Standards for Stationary RICE
AQR Section 14.1.(b)40	Standards of Performance for New Stationary Sources (NSPS) – Standards of Performance for Gas Turbines
AQR Section 17	Dust Control Permit and Construction Activities
AQR Section 18	Permit and Technical Service Fees
AQR Section 21	Acid Rain Permits
AQR Section 22	Acid Rain Continuous Emissions Monitoring
AQR Section 25	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention
AQR Section 81	Provisions of Regulations Severable
AQR Section 90	Fugitive Dust from Open Areas and Vacant Lots
AQR Section 91	Fugitive Dust from Unpaved Roads, Unpaved Alleys, and Unpaved Easement Roads
AQR Section 92	Fugitive Dust from Unpaved Parking Lots, Material Handling and Storage Yards, and Vehicle and Equipment Storage Yards

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

Citation	Title
40 CFR 52.21	Prevention of Significant Deterioration (PSD)
40 CFR 52.1470	SIP Rules
40 CFR 60, Subpart A	Standards of Performance for New Stationary Sources (NSPS) – General Provisions
40 CFR 60, Subpart GG	Standards of Performance for New Stationary Sources (NSPS) – Stationary Gas Turbines
40 CFR 60	Appendix A, Method 9 or equivalent, (Opacity)
40 CFR 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 70	Federally Mandated Operating Permits
40 CFR 82	Protection of Stratospheric Ozone
40 CFR 98	Greenhouse Gas Reporting