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BILL NO. 1-21-25-3

SUMMARY - An ordinance to adopt Clark County Air Quality Regulation Section 121 to codify reasonably available control technology determinations for certain major stationary sources in the ozone moderate nonattainment boundary.

ORDINANCE NO. 5216
(of Clark County, Nevada)

AN ORDINANCE TO ADOPT CLARK COUNTY AIR QUALITY REGULATION SECTION 121, "REASONABLY AVAILABLE CONTROL TECHNOLOGY DETERMINATIONS FOR SPECIFIC MAJOR STATIONARY SOURCES IN THE 2015 8-HOUR OZONE NAAQS MODERATE NONATTAINMENT AREA HA 212," TO CODIFY THE REASONABLY AVAILABLE CONTROL TECHNOLOGY DETERMINATIONS FOR CERTAIN MAJOR STATIONARY SOURCES THAT MAY CAUSE OR CONTRIBUTE TO EMISSIONS OF NITROGEN OXIDES OR VOLATILE ORGANIC COMPOUNDS WITHIN THE OZONE MODERATE NONATTAINMENT BOUNDARY; AND PROVIDING FOR OTHER MATTERS PROPERLY RELATED THERETO.

NOW, THEREFORE, THE CLARK COUNTY BOARD OF COUNTY COMMISSIONERS DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Clark County Air Quality Regulation Section 121, "Reasonably Available Control Technology Determinations for Specific Major Stationary Sources in the 2015 8-Hour Ozone NAAQS Moderate Nonattainment Area HA 212," is hereby adopted as reflected in Exhibit 1, attached hereto.

SECTION 2. If any section of this ordinance, or portion thereof, is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not invalidate the remaining parts of this ordinance.

SECTION 3. All ordinances, parts of ordinances, chapters, sections, subsections, clauses, phrases, or sentences contained in the Clark County Code in conflict herewith are hereby repealed.

SECTION 4. This ordinance shall take effect and be in force from and after its passage and the publication thereof by title only, together with the names of the County Commissioners

voting for or against its passage, in a newspaper published in and having a general circulation in Clark County, Nevada, at least once a week for a period of two (2) weeks.

PROPOSED on the 21st day of January, 2025.

PROPOSED BY: Commissioner Tick Segerblom

PASSED on the 4th day of February, 2025.

AYES: Tick Segerblom

William McCurdy II

April Becker

James B. Gibson

Justin Jones

Marilyn K. Kirkpatrick

Michael Naft

NAYS: None

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ABSTAINING: None

ABSENT: None

BOARD OF COUNTY COMMISSIONERS
CLARK COUNTY, NEVADA

By: 
Tick Segerblom (Feb 10, 2025 09:02 PST)
TICK SEGERBLOM, Chair

ATTEST:


LYNN GOYA, County Clerk

This ordinance shall be in force and effect from and after
the 19th day of February, 2025.

EXHIBIT 1

SECTION 120: REASONABLY AVAILABLE CONTROL TECHNOLOGY DETERMINATIONS FOR SPECIFIC MAJOR STATIONARY SOURCES IN THE 2015 8-HOUR OZONE NAAQS MODERATE NONATTAINMENT AREA HA 212

121.1	Purpose.....	1
121.2	Applicability	1
121.3	Definitions	2
121.4	General Conditions	3
121.5	Nevada Energy—Clark Generating Station (Source ID: 00007).....	4
121.5.1	RACT Control Requirements.....	4
121.5.2	RACT Monitoring Requirements	5
121.5.3	RACT Recordkeeping and Reporting Requirements.....	5
121.6	Calnev Pipe Line—Las Vegas Terminal (Source ID: 00013).....	6
121.6.1	RACT Control Requirements.....	6
121.6.2	RACT Monitoring Requirements	8
121.6.3	RACT Testing Requirements	9
121.6.4	RACT Recordkeeping and Reporting Requirements.....	9
121.7	Nellis Air Force Base (Source ID: 00114)	9
121.7.1	RACT Control Requirements.....	9
121.7.2	RACT Monitoring, Recordkeeping, and Reporting Requirements	10
121.8	Caesars Entertainment (Source ID: 00257)	10
121.8.1	RACT Control Requirements.....	10
121.8.2	RACT Testing Requirements	12
121.8.3	RACT Monitoring, Recordkeeping, and Reporting Requirements	12
121.9	Saguaro Power Company (Source ID: 00393).....	12
121.9.1	RACT Control Requirements.....	12
121.9.2	RACT Monitoring Requirements	13
121.9.3	RACT Testing Requirements	13
121.9.4	RACT Recordkeeping and Reporting Requirements.....	13
121.10	Nevada Energy—Sun Peak Generating Station (Source ID: 00423)	14
121.10.1	RACT Control Requirements.....	14
121.10.2	RACT Monitoring Requirements	15
121.10.3	RACT Recordkeeping and Reporting Requirements.....	15
121.11	MGM Resorts International (Source ID: 00825)	16
121.11.1	RACT Control Requirements.....	16
121.11.2	RACT Testing Requirements	18
121.11.3	RACT Monitoring, Recordkeeping, and Reporting Requirements	18

EXHIBIT 1

<u>121.12</u>	<u>Switch—West Campus (Source ID: 16304)</u>	<u>19</u>
<u>121.12.1</u>	<u>RACT Control Requirements</u>	<u>19</u>
<u>121.12.2</u>	<u>RACT Monitoring, Recordkeeping, and Reporting Requirements</u>	<u>19</u>

<u>ATTACHMENT 1</u>	<u>20</u>
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LIST OF TABLES

<u>Table 1.</u>	<u>Seal Control Requirements</u>	<u>6</u>
<u>Table 2.</u>	<u>Emergency Engine Equipment and Regulatory Requirements</u>	<u>11</u>
<u>Table 3.</u>	<u>Emergency Engine Equipment and Regulatory Requirements: MGM Resorts</u>	<u>17</u>

120.1 PURPOSE

- (a) Section 121 establishes and implements Reasonably Available Control Technology (RACT) requirements for existing major stationary sources of nitrogen oxide (NO_x) and/or volatile organic compounds (VOC) as required by Section 182(b)(2) of the Clean Air Act (Act) under Title 42, Section 7511a of the U.S. Code (42 U.S.C. 7511a).

120.2 APPLICABILITY

- (a) Section 121 applies to owners or operators of major stationary sources:
- (1) That are existing major sources for NO_x and/or VOC, as defined in Section 12.3.2;
 - (2) That are located in Hydrographic Area (HA) 212 (Las Vegas Valley);
 - (3) That are affected sources that contain affected units, as defined in Section 121.3; and
 - (4) For which a case-by-case RACT analysis was conducted after EPA reclassified HA 212 to moderate nonattainment status for ozone.
- (b) Except as provided in paragraphs (1) and (2) of this section, once Section 121 RACT requirements have been implemented, the modification or reconstruction of an affected unit at an affected source will require an evaluation (or re-evaluation) of RACT for that unit. The affected source shall conduct this evaluation according to current Clark County RACT methodology, and the evaluation shall involve the whole unit, not just the modification. The only exceptions are:
- (1) Any emissions units that are, or will be (because of a modification or reconstruction), subject to Lowest Achievable Emissions Rate (LAER) for NO_x and/or VOC.
 - (2) Modifications to or reconstruction of an emission unit that shall not cause its potential to emit (PTE) of NO_x and/or VOC to exceed 5 tons per year (tpy).
- (c) A requirement to comply with Section 121 does not exempt a stationary source from any other control technology requirements, including any preconstruction review RACT requirements under Sections 12.1, "Permit Requirements for Minor Sources," and 12.4, "Authority to Construct Application and Permit Requirements for Part 70 Sources," as well as any CTG RACT requirements in other Clark County Air Quality Regulations (AQRs). This may result in more than one RACT

determination; if so, each RACT determination shall be included in the resulting permit as a separate limitation unless the owner or operator demonstrates that compliance with one RACT (usually the most stringent) also demonstrates compliance with one or more of the other RACT determinations for that affected unit under all scenarios (i.e., under all levels of operation, with all types of raw materials and/or fuels, etc.), and the Control Officer approves.

120.3 DEFINITIONS

Unless the context requires otherwise, the following terms shall have the meanings set forth below for the purposes of this section. When a term is not defined, it shall have the meaning provided in Sections 0, 12.0–12.5, or 12.11 of the AQRs, Chapter 445B of the Nevada Revised Statutes (NRS), the Act, or common usage, in that order of priority.

“Affected source” means a major stationary source required to comply with major source RACT for NO_x and/or VOC under Section 121.

“Affected unit” means any existing emission unit at an affected source, as defined in Section 121, to which major source RACT applies.

1. For the purposes of Section 121, insignificant activities, as determined in Section 12.5, shall not be considered affected units. Also for the purposes of Section 121, no activities with a PTE greater than 2 tons per year of NO_x or VOC individually—with no threshold for a combination of pollutants—shall be eligible to be determined insignificant activities.

“Compliance certification” means a document submitted by a Responsible Official certifying compliance with the terms and conditions of an operating permit. It must include the identification of each permit term or condition the certification is based on, the method used for determining compliance, whether that method provided continuous data, any other material information, and compliance status. It must also identify each permit deviation during the certification period.

“Control Techniques Guidelines Reasonably Available Control Technology” (CTG RACT) means an AQR that implements RACT (including emissions limitations and, if applicable, work practice standards) for stationary sources in accordance with the CTGs issued by the Administrator under Section 108 of the Act (42 U.S.C. 7408), as required by Section 182(b)(2)(A) of the Act (42 U.S.C. 7511a).

“Emissions inventory report” means a report that includes the actual quantity of emissions from each permitted emissions unit along with the total calculated actual emissions from the entire source for the reporting period.

“Existing major stationary source” or “existing major source,” for the purposes of Section 121, means a stationary source that is defined in Section 12.3.2 as a major source for NO_x and/or VOC and began actual construction before January 5, 2023.

“Good combustion practices” (GCP) means operating an emission unit to maximize its energy output or thermal efficiency while maintaining optimized oxygen levels to assure complete combustion. Where GCP in a permit conflicts with manufacturer recommendations, the owner or operator shall follow the GCP in the permit.

“Good maintenance practices” (GMP) means maintenance of an emission unit in a manner that minimizes air pollution emissions. Where GMP in a permit conflicts with manufacturer recommendations, the owner or operator shall follow the GMP in the permit.

“Injection timing retardation” (ITR) means changing the timing so that fuel ignition happens later to reduce the maximum combustion temperature and pressure, which decreases NO_x formation.

“Major source RACT” means the RACT required by Section 182(b)(1)(A)(ii)(II) of the Act (42 U.S.C. 7511a) for existing major sources of NO_x and/or VOC in ozone nonattainment areas classified as moderate or higher. It differs from CTG RACT, which applies only to VOC emissions from emission units and activities for which EPA has published a CTG document. It also differs from RACT for preconstruction review for a new emission unit, which generally applies only to new sources and modifications to existing sources under Sections 12.1 and 12.4 of the AQRs.

“Quality assurance/quality control (QA/QC) procedure” or “QA procedure” means a procedure that includes the continuous emission monitoring system (CEMS) description, calibration checks, preventative maintenance, data recording and calculations, accuracy audits, and corrective action plan for malfunctions.

“Reasonably Available Control Technology” (RACT) means the lowest emissions limitation an affected unit is capable of meeting by applying control technology that is reasonably available, considering technological and economic feasibility.

“Relative Accuracy Test Audit” (RATA) means a test procedure consisting of at least nine test runs, in which the accuracy of the concentrations measured by a CEMS is evaluated by comparison against concurrent measurements made with a reference method. Relative accuracy tests repeated on a regular, on-going basis are referred to as relative accuracy test audits or RATAs.

120.4 **GENERAL CONDITIONS**

- (a) Affected units subject to Section 121 are identified by emission unit (EU) numbers and described in Attachment 1.
- (b) Affected sources subject to Section 121 are identified by source identification (ID) number.
- (c) Owners or operators of a stationary source subject to Section 121 shall comply with the major source RACT requirements of Section 121 for all affected units.

120.5 **NEVADA ENERGY—CLARK GENERATING STATION (SOURCE ID: 00007)**

120.5.1 **RACT Control Requirements**

The owner or operator shall implement the following RACT controls.

(a) For Unit 4 (EU: A00704D):

- (1) NO_x emissions shall be limited to an emissions rate of 120 ppm at 15% O₂, excluding startup and shutdown.
- (2) VOC emissions shall be limited to an emissions rate of 21.6 lb/hr, excluding startup and shutdown.
- (3) The unit shall be determined compliant in accordance with GCP, operated and maintained using GCP, to include operating the unit in accordance with the manufacturer's O&M manual.

(b) For Units 5–8 (EUs: A00701A, A00702B, A00705, A00708):

- (1) NO_x emissions shall be limited to an emission rate of 5 ppm at 15% O₂, excluding startup and shutdown.
- (2) NO_x emissions shall be limited to an emissions rate of 75 parts per million by volume, dry (ppmvd) at 15% O₂ during startup and shutdown operations.
- (3) VOC emissions shall be limited to an emission rate of 5.0 lb/hr, excluding startup and shutdown operations.
- (4) The units shall be determined to be compliant using the existing continuous emission monitoring system (CEMS) on each one.
- (5) The units shall be operated and maintained using GCP during startup, shutdown, and other non-normal operations, to include operating the units in accordance with the manufacturer's O&M manual.

(c) For Units 11-22 (EU: A27-A38):

- (1) NO_x emissions shall be limited to an emission rate of 5 ppm at 15% O₂, excluding startup and shutdown.
- (2) NO_x emissions shall be limited to an emissions rate of 96 ppmvd at 15% O₂ during startup and shutdown.
- (3) VOC emissions shall be limited to an emissions rate of 1.49 lb/hr, excluding startup and shutdown.

- (4) The units shall be determined to be compliant using the existing continuous emission monitoring system (CEMS) on each one.
- (5) The units shall be operated and maintained using GCP during startup, shutdown, and other non-normal operations, to include operating the units in accordance with the manufacturer's O&M manual.

120.5.2 RACT Monitoring Requirements

- (a) For all emission units, the owner or operator shall:
 - (1) Monitor the occurrences and durations of startup/shutdown cycles; and
 - (2) Demonstrate compliance with NO_x emissions limits.
- (b) For Units 5–8 (EUs: A00701A, A00702B, A00705, and A00708) and Units 11–22 (Peaker units, EUs: A27–A38):
 - (1) Install, calibrate, maintain, operate, and certify CEMS for NO_x;
 - (2) Require periodic audit procedures and QA/QC procedures for the CEMS;
 - (3) Conduct RATA of the NO_x CEMS; and
 - (4) Monitor CEMS NO_x data.

120.5.3 RACT Recordkeeping and Reporting Requirements

For all emission units, the owner or operator shall:

- (a) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (b) Maintain records of hours of operation for the turbine generators;
- (c) For Units 5–8 (EUs: A00701A, A00702B, A00705, and A00708) and Units 11–22 (Peaker units, EUs: A27–A38) maintain records of the:
 - (1) QA/QC procedure;
 - (2) CEMS audit and calibration results, along with any corrective actions taken;
 - (3) Time, duration, nature, and probable cause of any CEMS downtime, and of any corrective actions taken;

- (4) CEMS NO_x data; and
- (5) Date, time, and duration of each startup and shutdown.
- (d) Submit an annual emissions inventory report; and
- (e) Submit an annual compliance certification.

120.6 CALNEV PIPE LINE—LAS VEGAS TERMINAL (SOURCE ID: 00013)

120.6.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) For the storage tanks listed in Table 1, the owner or operator shall:
 - (1) Operate and maintain all according to the seal control requirements in the table; and
 - (2) Operate all in compliance with applicable federal regulations incorporated by reference in AQRs 13.3 and 14.2, as identified in the table.

Table 1. Seal Control Requirements

<u>EU</u>	<u>Site Tank Number</u>	<u>Seal Control Requirements</u>	<u>Applicable Requirement(s)¹</u>
<u>A01</u>	<u>530</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A02</u>	<u>531</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A03</u>	<u>532</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A04</u>	<u>533</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A05</u>	<u>534</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A06</u>	<u>535</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A07</u>	<u>536</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A08</u>	<u>537</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A09</u>	<u>538</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A10</u>	<u>539</u>	<u>External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A23</u>	<u>510</u>	<u>External Floating Roof with primary seal</u>	<u>N/A</u>
<u>A24</u>	<u>511</u>	<u>External Floating Roof with primary seal</u>	<u>N/A</u>
<u>A11</u>	<u>540</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A13</u>	<u>524</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A16</u>	<u>545</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u> <u>AQR 14.2</u>
<u>A17</u>	<u>546</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u> <u>AQR 14.2</u>
<u>A21</u>	<u>547</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u> <u>AQR 14.2</u>

<u>EU</u>	<u>Site Tank Number</u>	<u>Seal Control Requirements</u>	<u>Applicable Requirement(s)¹</u>
<u>A27</u>	<u>501</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>N/A</u>
<u>A28</u>	<u>523</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A29</u>	<u>544</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u> <u>AQR 14.2</u>
<u>A47</u>	<u>550</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A48</u>	<u>551</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A56</u>	<u>513</u>	<u>Internal Floating Roof with primary and secondary seals</u>	<u>N/A</u>
<u>A14</u>	<u>542</u>	<u>Internal Floating Roof with primary seal</u>	<u>N/A</u>
<u>A15</u>	<u>543</u>	<u>Internal Floating Roof with primary seal</u>	<u>N/A</u>
<u>A12</u>	<u>541</u>	<u>Domed External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A45</u>	<u>548</u>	<u>Domed External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A46</u>	<u>549</u>	<u>Domed External Floating Roof with primary and secondary seals</u>	<u>AQR 13.3</u>
<u>A19</u>	<u>525</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A20</u>	<u>526</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A22</u>	<u>512</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A25</u>	<u>ASA Conductivity Improver</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A26</u>	<u>500 AIA</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A30</u>	<u>533 A</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A31</u>	<u>537 A</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A32</u>	<u>541 A</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A33</u>	<u>541 B</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A34</u>	<u>542 D</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A35</u>	<u>542 A</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A36</u>	<u>531 A</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A37</u>	<u>542 C</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A38</u>	<u>537 B</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A39</u>	<u>531 B</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A53</u>	<u>548 B</u>	<u>Fixed Roof</u>	<u>N/A</u>
<u>A54</u>	<u>548 A</u>	<u>Fixed Roof</u>	<u>N/A</u>

¹ [Some tanks may not have an applicable requirement due to construction year, tank size, and/or product stored.](#)

- [\(b\)](#) [The owner or operator shall operate the loading racks \(EU: B01\):](#)
- [\(1\)](#) [With a vapor recovery unit \(VRU\) \(EU: B02\) during loading;](#)
 - [\(2\)](#) [With a flare \(EU: B10\) as backup if the VRU is inoperable; and](#)
 - [\(3\)](#) [In compliance with tanker loading requirements to minimize leaks, spills, and fugitive emissions.](#)

- (c) The owner or operator shall operate and maintain the soil vapor extraction and groundwater treatment system (EU: SR04):
 - (1) Using a control device capable of 98.5% VOC destruction efficiency;
 - (2) Using only propane as the auxiliary fuel;
 - (3) At a temperature specified by the manufacturer; and
 - (4) In accordance with the manufacturer's O&M manual.
- (d) The owner or operator shall operate the vapor-phase carbon adsorber (Fluidized Bed Reactor) such that it demonstrates a minimum control efficiency of 95% or a maximum outlet VOC emissions concentration of 100 parts per million volume (ppmv).

120.6.2 RACT Monitoring Requirements

The owner or operator shall:

- (a) Visually inspect and monitor all storage tanks listed in Table 1 for throughput volume;
- (b) Monitor the loading racks (EU: B01) for throughput;
- (c) For the VRU (EU: B02):
 - (1) Install, calibrate, maintain, operate, and certify the CEMS for VOC;
 - (2) Require QA procedures for the CEMS;
 - (3) Conduct a RATA of the VOC CEMS;
 - (4) Monitor CEMS VOC data; and
 - (5) Demonstrate compliance with VOC emissions limits.
- (d) For fugitive components (EU: B06):
 - (1) Monitor for leaks; and
 - (2) Inspect daily for leaks (e.g., by sight, sound, and/or smell).
- (e) Monitor the flare (EU: B10) and visually inspect flame quality; and
- (f) Monitor the soil vapor extraction and groundwater treatment system (EU: SR04) for use of auxiliary fuel.

120.6.3 RACT Testing Requirements

The owner or operator shall:

- (a) Conduct subsequent performance testing every five years (EUs: B02 and SR04) after the initial performance test;
- (b) Conduct a performance test when a combustion unit is operated for either the soil vapor extraction or the groundwater treatment system (EU: SR04); and
- (c) Determine compliance with emissions limitations (EUs: B02 and SR04).

120.6.4 RACT Recordkeeping and Reporting Requirements

The owner or operator shall:

- (a) Maintain records of hours of operation for the flare (EU: B10);
- (b) For the VRU (EU: B02), maintain records of:
 - (1) QA procedures;
 - (2) CEMS audit and calibration results, along with any corrective actions taken;
 - (3) The time, duration, nature, and probable cause of any CEMS downtime, and of any corrective actions taken; and
 - (4) CEMS VOC data.
- (c) Submit performance test reports;
- (d) Submit an annual emissions inventory report; and
- (e) Submit an annual compliance certification.

120.7 NELLIS AIR FORCE BASE (SOURCE ID: 00114)

120.7.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) The owner or operator shall operate and maintain the continuous-duty engine (EU: A032):
 - (1) With a turbocharger and ITR;

- (2) In compliance with the emissions limits and requirements of federal regulations incorporated by reference in AQR 14.2; and
- (3) Using GCP and GMP, to include operating the units in accordance with the manufacturer's operations and maintenance (O&M) manual.
- (b) The owner and operator shall operate and maintain the emergency engines (EUs: G009, G010, G032, G033, G041, and G176):
 - (1) With turbochargers and aftercoolers; and
 - (2) Using GCP and GMP, to include operating the units in accordance with the manufacturer's O&M manual.
- (c) The owner or operator shall operate and maintain the aircraft engine test cells (EUs: N001 and N002) using GCP and GMP, to include operating the units in accordance with the manufacturer's O&M manual.

120.7.2 RACT Monitoring, Recordkeeping, and Reporting Requirements

The owner or operator shall:

- (a) Monitor and record the hours of operation of each engine;
- (b) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (a) Submit an annual emissions inventory report; and
- (b) Submit an annual compliance certification.

120.8 CAESARS ENTERTAINMENT (SOURCE ID: 00257)

120.8.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) The owner or operator shall operate and maintain the emergency engines listed in Table 2:
 - (1) With turbochargers and aftercoolers, as identified in the table;
 - (2) In compliance with the emissions limits and requirements of federal regulations incorporated by reference in AQR 14.2, as identified in the table; and
 - (3) Using GCP and GMP, to include operating the units in accordance with the manufacturer's O&M manual.

Table 2. Emergency Engine Equipment and Regulatory Requirements

<u>EU</u>	<u>Equipment</u>		<u>Applicable Requirement AQR 14.2</u>
	<u>Turbocharger</u>	<u>Aftercooler</u>	
<u>CP13</u>	X	X	=
<u>CP14</u>	X	X	=
<u>CP15</u>	X	X	=
<u>CP16</u>	X	X	=
<u>CP17</u>	X	X	=
<u>CP28</u>	X	X	X
<u>CP29</u>	X	X	X
<u>PA17</u>	X	X	=
<u>PA18</u>	X	X	=
<u>IP08</u>	X	X	=
<u>IP09</u>	X	X	=
<u>PH10</u>	X	X	=
<u>PH11</u>	X	X	=
<u>PH12</u>	X	X	=
<u>PH13</u>	X	X	X
<u>LI06</u>	X	X	=
<u>LI07</u>	X	X	=
<u>HA13</u>	X	=	=
<u>HA14</u>	X	X	=
<u>HA18</u>	X	X	=
<u>FL09</u>	X	X	=
<u>FL10</u>	X	X	=
<u>BA04</u>	X	X	=
<u>BA05</u>	X	X	=
<u>BA11</u>	X	X	=
<u>BA12</u>	X	X	=
<u>CR07</u>	X	X	X

(b) The owner or operator shall operate and maintain all boilers (EUs: CP01–CP05) using GCP and GMP, to include operating the units in accordance with the manufacturer’s O&M manual, and:

- (1) Ensure EUs: CP01 and CP02 are operated and maintained with burners that have a manufacturer’s maximum emissions concentration of 29 ppm NO_x, corrected to 3% oxygen.
- (2) Ensure EUs: CP03, CP04, and CP05 are operated and maintained with burners that have a manufacturer’s maximum emissions concentration of 30 ppm NO_x, corrected to 3% oxygen.

120.8.2 RACT Testing Requirements

The owner or operator shall:

- (a) Conduct a burner efficiency test on each boiler (EUs: CP01–CP05);
- (b) Conduct a performance test on each boiler once every five years (EUs: CP01–CP05); and
- (c) Determine compliance with emissions limitations (EUs: CP01–CP05).

120.8.3 RACT Monitoring, Recordkeeping, and Reporting Requirements

The owner or operator shall:

- (a) Monitor and maintain records of the hours of operation of each engine;
- (b) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (c) Maintain records of each burner efficiency test result;
- (d) Maintain records of performance test results;
- (e) Submit performance test reports;
- (f) Submit an annual emissions inventory report; and
- (g) Submit an annual compliance certification.

120.9 SAGUARO POWER COMPANY (SOURCE ID: 00393)

120.9.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) The owner or operator shall, for the turbine generator (EUs: A01 and A02), including duct burners (EUs: F05, F05a, F06, and F06a):
 - (1) Limit NO_x emissions to 10 ppmvd at 15% O₂, excluding startup and shutdown;
 - (2) Limit NO_x emissions to an emissions rate of 66 lb/hr during startup and shutdown; and
 - (3) Operate and maintain the units using GCP during startup, shutdown, and other non-normal operations, to include operating the units in accordance with the manufacturer's O&M manual.

(b) The owner and operator shall operate and maintain the auxiliary boilers #1 and #2 (EUs: A05 and A06) using GCP during startup, shutdown, and other non-normal operations, to include operating the unit in accordance with the manufacturer's O&M manual, and:

(1) Limit NO_x emissions from EU: A05 to 12 ppmvd at 3% O₂, excluding startup and shutdown operations; and

(2) Limit NO_x emissions from EU: A06 to 30 ppmvd at 3% O₂ excluding startup and shutdown operations.

120.9.2 RACT Monitoring Requirements

The owner or operator shall:

(a) For the turbine generators (EUs: A01–A02) and auxiliary boiler #1 (EU: A05):

(1) Install, calibrate, maintain, operate, and certify CEMS for NO_x;

(2) Require periodic audit procedures and QA/QC procedures for the CEMS;

(3) Conduct RATA of the NO_x CEMS;

(4) Monitor CEMS NO_x data;

(5) Monitor the occurrences and durations of startup/shutdown cycles; and

(6) Demonstrate compliance with NO_x emissions limits.

(b) Monitor the hours of operation of the auxiliary boiler #2 (EU: A06).

120.9.3 RACT Testing Requirements

After initial performance testing, the owner or operator shall:

(a) Conduct a burner efficiency test on each boiler (EUs: A05 and A06);

(b) Conduct a subsequent performance test on the boiler (EU: A06) every five years; and

(c) Determine compliance with emissions limitations (EU: A05 and A06).

120.9.4 RACT Recordkeeping and Reporting Requirements

The owner or operator shall:

- (a) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (b) Maintain records of the date, time, and duration of each startup and shutdown cycle of each turbine generator and auxiliary boiler;
- (c) Maintain records of the quantity of combined fuel input of natural gas, along with hydrogen fuel if applicable for the auxiliary boiler #1 (EU: A05);
- (d) Maintain records of hours of operation and quantity of natural gas fuel input for the auxiliary boiler #2 (EU: A06);
- (e) Maintain records of each burner efficiency test result;
- (f) Maintain records of performance test results;
- (g) For the stationary gas turbines (EUs: A01 and A02) and auxiliary boiler #1 (EU: A05) maintain records of:
 - (1) QA/QC procedure;
 - (2) CEMS audit and calibration results, along with any corrective actions taken;
 - (3) The time, duration, nature, and probable cause of any CEMS downtime, and of any corrective actions taken; and
 - (4) CEMS VOC and NO_x data.
- (h) Submit performance test reports;
- (i) Submit an annual emissions inventory report; and
- (j) Submit an annual compliance certification.

120.10 NEVADA ENERGY—SUN PEAK GENERATING STATION (SOURCE ID: 00423)

120.10.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls for Units 3–5 (EUs: A01–A03):

- (a) Limit NO_x emissions to an emissions rate of 42 ppm at 15% O₂ while burning natural gas fuel, excluding startup and shutdown;
- (b) Limit NO_x emissions to an emissions rate of 65 ppmvd at 15% O₂ while burning #2 diesel fuel, excluding startup and shutdown;

- (c) Limit NO_x emissions to an emissions rate of 94 ppmvd at 15% O₂ while burning natural gas fuel during startup and shutdown;
- (d) Limit NO_x emissions to an emission rate of 227 lb/hr while burning #2 diesel fuel during startup and shutdown;
- (e) The units shall be determined to be compliant using the existing CEMS on each one; and
- (f) Operate and maintain the units in accordance with GCP during startup, shutdown, and other non-normal operations, to include operating the units in accordance with the manufacturer's O&M manual.

120.10.2 RACT Monitoring Requirements

The owner or operator shall:

- (a) Install, calibrate, maintain, operate, and certify CEMS for NO_x;
- (b) Require periodic audit procedures and QA/QC procedures for the CEMS;
- (c) Conduct RATA of the NO_x CEMS;
- (d) Monitor CEMS NO_x data;
- (e) Monitor the occurrences and durations of startup/shutdown cycles; and
- (f) Demonstrate compliance with NO_x emissions limits.

120.10.3 RACT Recordkeeping and Reporting Requirements

The owner or operator shall:

- (a) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (b) Maintain records of hours of operation for the turbine generators;
- (c) Maintain records of the date, time, and duration of each startup and shutdown cycle of each turbine generator;
- (d) For the turbine generators, maintain records of:
 - (1) QA/QC procedure;
 - (2) CEMS audit and calibration results, along with any corrective actions taken;

- (3) The time, duration, nature, and probable cause of any CEMS downtime, and of any corrective actions taken; and
 - (4) CEMS NO_x data.
- (e) Submit an annual emissions inventory report; and
- (f) Submit an annual compliance certification.

120.11 MGM RESORTS INTERNATIONAL (SOURCE ID: 00825)

120.11.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) The owner or operator shall operate and maintain the boilers (EUs: MG13 and MG14):
 - (1) With burners that have a manufacturer's maximum emissions concentration of 40 ppmv NO_x, corrected to 3% oxygen;
 - (2) Using only pipeline-quality natural gas; and
 - (3) Using GCP and GMP, to include operating the units in accordance with the manufacturer's O&M manual.
- (b) The owner or operator shall operate and maintain the emergency engines listed in Table 3:
 - (1) With turbochargers and aftercoolers, as identified in the table;
 - (2) In compliance with the emissions limits and requirements of federal regulations incorporated by reference in AQR 14.2, as identified in the table; and
 - (3) Using GCP and GMP, to include operating the units in accordance with the manufacturer's O&M manual.

Table 3. Emergency Engine Equipment and Regulatory Requirements: MGM Resorts

<u>EU</u>	<u>Equipment</u>		<u>Applicable Requirement: AQR 14.2</u>
	<u>Turbocharger</u>	<u>Aftercooler</u>	
<u>MG17</u>	X	X	=
<u>MG18</u>	X	X	=
<u>MG19</u>	X	X	=
<u>MG20</u>	X	X	=
<u>MG21</u>	X	X	=
<u>MG22</u>	X	X	=
<u>MG23</u>	X	X	=
<u>MC019</u>	X	X	=
<u>MC020</u>	X	X	=
<u>MB061</u>	X	X	=
<u>MB062</u>	X	X	=
<u>MB063</u>	X	X	=
<u>MB066</u>	X	X	=
<u>MB067</u>	X	X	=
<u>MB093</u>	X	X	=
<u>EX007</u>	X	<u>Not required</u>	=
<u>EX008</u>	X	<u>Not required</u>	=
<u>EX009</u>	X	<u>Not required</u>	=
<u>EX010</u>	X	<u>Not required</u>	=
<u>BE80</u>	X	X	=
<u>BE81</u>	X	X	=
<u>BE82</u>	X	X	=
<u>BE83</u>	X	X	=
<u>BE84</u>	X	X	=
<u>BE85</u>	X	X	=
<u>BE86</u>	X	X	=
<u>BE87</u>	X	X	=
<u>BE88</u>	X	X	=
<u>LX009</u>	X	X	=
<u>LX010</u>	X	X	=
<u>LX011</u>	X	X	=
<u>LX024</u>	X	X	X
<u>LX025</u>	X	X	X
<u>NY27</u>	X	<u>Not required</u>	=
<u>NY28</u>	X	<u>Not required</u>	=
<u>NY29</u>	X	<u>Not required</u>	=
<u>CC009</u>	X	X	=
<u>CC010</u>	X	X	=

<u>EU</u>	<u>Equipment</u>		<u>Applicable Requirement: AQR 14.2</u>
	<u>Turbocharger</u>	<u>Aftercooler</u>	
<u>CC011</u>	<u>X</u>	<u>X</u>	<u>=</u>
<u>CC012</u>	<u>X</u>	<u>X</u>	<u>=</u>
<u>CC013</u>	<u>X</u>	<u>X</u>	<u>=</u>
<u>CC014</u>	<u>X</u>	<u>X</u>	<u>=</u>
<u>CC015</u>	<u>X</u>	<u>X</u>	<u>=</u>
<u>TBA15</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>TBB15</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>TM01</u>	<u>Not required</u>	<u>Not required</u>	<u>X</u>

120.11.2 RACT Testing Requirements

The owner or operator shall:

- (a) Conduct a burner efficiency test on each boiler (EUs: MG13 and MG14);
- (b) Conduct a performance test on each boiler once every five years (EUs: MG13 and MG14); and
- (c) Determine compliance with emissions limitations (EUs: MG13 and MG14).

120.11.3 RACT Monitoring, Recordkeeping, and Reporting Requirements

The owner or operator shall:

- (a) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;
- (b) For each boiler:
 - (1) Monitor and maintain records of the hours of operation;
 - (2) Monitor, maintain records of, and report the natural gas consumption of each one;
 - (3) Maintain records of burner efficiency test results; and
 - (4) Maintain records of performance test results.
- (c) Monitor and maintain records of hours of operation for the engines listed in Table 3;
- (d) Submit performance test reports;

- (e) Submit an annual emissions inventory report; and
- (f) Submit an annual compliance certification.

120.12 SWITCH—WEST CAMPUS (SOURCE ID: 16304)

120.12.1 RACT Control Requirements

The owner or operator shall implement the following RACT controls.

- (a) The owner or operator shall operate and maintain the engines (EUs: A02–A29; A32–A34; C01–C24; G01–G24; E01–E18; J01–J19; and L01–L02):
 - (1) With turbochargers and aftercoolers, except EU: J19;
 - (2) In compliance with the emissions limits and requirements of federal regulations incorporated by reference in AQR 14.2; and
 - (3) In accordance with the manufacturer's O&M manual.

120.12.2 RACT Monitoring, Recordkeeping, and Reporting Requirements

The owner or operator shall:

- (a) Monitor and maintain records of hours of operation of each engine;
- (b) Monitor each engine for average NO_x emissions;
- (c) Submit an annual emissions inventory report; and
- (d) Submit an annual compliance certification.

EXHIBIT 1

ATTACHMENT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>NV Energy: Clark Generating Station (Source ID: 00007)</u>				
<u>A00704D (UNIT 4)</u>	<u>60 MW</u>	<u>General Electric</u>	<u>7B (7000)</u>	<u>N/A</u>
<u>A00701A (UNIT 5)</u>	<u>85 MW</u>	<u>Westinghouse</u>	<u>501B6</u>	<u>N/A</u>
<u>A00702B (UNIT 6)</u>	<u>85 MW</u>	<u>Westinghouse</u>	<u>501B6</u>	<u>N/A</u>
<u>A00705 (UNIT 7)</u>	<u>85 MW</u>	<u>Westinghouse</u>	<u>501B6</u>	<u>N/A</u>
<u>A00708 (UNIT 8)</u>	<u>85 MW</u>	<u>Westinghouse</u>	<u>501B6</u>	<u>N/A</u>
<u>A27 (UNIT 11)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A28 (UNIT 12)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A29 (UNIT 13)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A30 (UNIT 14)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A31 (UNIT 15)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A32 (UNIT 16)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A33 (UNIT 17)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A34 (UNIT 18)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A35 (UNIT 19)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A36 (UNIT 20)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A37 (UNIT 21)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>A38 (UNIT 22)</u>	<u>57.9 MW</u>	<u>Pratt & Whitney</u>	<u>FT8-3 Swift Pac</u>	<u>N/A</u>
<u>CalNev Pipe Line (Source ID: 00013)</u>				
<u>A01</u>	<u>11,200 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A02</u>	<u>12,890 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A03</u>	<u>8,080 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A04</u>	<u>11,330 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A05</u>	<u>8,080 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A06</u>	<u>8,080 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A07</u>	<u>17,550 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A08</u>	<u>22,250 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A09</u>	<u>11,330 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A10</u>	<u>11,330 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A11</u>	<u>16,320 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A12</u>	<u>25,100 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A13</u>	<u>18,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A14</u>	<u>45,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A15</u>	<u>35,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A16</u>	<u>37,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A17</u>	<u>40,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A19</u>	<u>50,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A20</u>	<u>50,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A21</u>	<u>50,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>A22</u>	<u>50,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A23</u>	<u>40,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A24</u>	<u>40,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A25</u>	<u>1.3 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A26</u>	<u>252 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A27</u>	<u>4,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A28</u>	<u>10,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A29</u>	<u>11,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A30</u>	<u>252 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A31</u>	<u>464 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A32</u>	<u>380 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A33</u>	<u>380 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A34</u>	<u>215 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A35</u>	<u>143 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A36</u>	<u>143 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A37</u>	<u>12 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A38</u>	<u>447 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A39</u>	<u>119 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A45</u>	<u>12,890 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A46</u>	<u>12,890 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A47</u>	<u>20,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A48</u>	<u>10,100 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A53</u>	<u>238 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A54</u>	<u>238 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>A56</u>	<u>50,000 bbl</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>B01 (Loading Rack)</u>	<u>35,379,927 bbl per year</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>B02 (VRU)</u>	<u>N/A</u>	<u>John Zink</u>	<u>N/A</u>	<u>N/A</u>
<u>B06 (Piping and Fittings)</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>B10 (Flare)</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>SR04 (SVE/GW treatment)</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Nellis Air Force Base (Source ID: 00114)</u>				
<u>A032</u>	<u>250 bhp</u>	<u>Cummins</u>	<u>M11</u>	<u>60425136</u>
<u>G009</u>	<u>1635 bhp</u>	<u>Mitsubishi</u>	<u>PS6</u>	<u>12588</u>
<u>G010</u>	<u>1350 bhp</u>	<u>Cummins</u>	<u>QST30-G3</u>	<u>37205939</u>
<u>G032</u>	<u>1586 bhp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z04351</u>
<u>G033</u>	<u>1586 bhp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z04354</u>
<u>G041</u>	<u>1220 bhp</u>	<u>Cummins</u>	<u>KTA38-G3</u>	<u>33120700</u>
<u>G176</u>	<u>2220 bhp</u>	<u>Cummins</u>	<u>GKS50-G4NR2</u>	<u>TPD</u>
<u>N001</u>	<u>N/A</u>	<u>Custom Bldg</u>	<u>N/A</u>	<u>N/A</u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>N002</u>	<u>N/A</u>	<u>Custom Bldg</u>	<u>N/A</u>	<u>N/A</u>
<u>Caesars Entertainment (Source ID: 00257)</u>				
<u>CP01</u>	<u>35.40 MMBtu/hr</u>	<u>Hurst</u>	<u>S4-G-800-150</u>	<u>S4000-150-18</u>
<u>CP02</u>	<u>35.40 MMBtu/hr</u>	<u>Hurst</u>	<u>S4-G-800-150</u>	<u>S4000-150-19</u>
<u>CP03</u>	<u>33.475 MMBtu/hr</u>	<u>Burnham</u>	<u>3P80050GBNM</u>	<u>12524</u>
<u>CP04</u>	<u>33.475 MMBtu/hr</u>	<u>Burnham</u>	<u>3P80050GBNM</u>	<u>12164</u>
<u>CP05</u>	<u>33.475 MMBtu/hr</u>	<u>Burnham</u>	<u>3P80050GBNM</u>	<u>12238</u>
<u>CP13</u>	<u>2,876 hp</u>	<u>Caterpillar</u>	<u>3516</u>	<u>8DM00558</u>
<u>CP14</u>	<u>2,876 hp</u>	<u>Caterpillar</u>	<u>3516</u>	<u>6HN00154</u>
<u>CP15</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516</u>	<u>25Z05223</u>
<u>CP16</u>	<u>1,818 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z06413</u>
<u>CP17</u>	<u>2,876 hp</u>	<u>Caterpillar</u>	<u>3516</u>	<u>6HN00199</u>
<u>CP28</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516CDITA</u>	<u>SBJ00672</u>
<u>CP29</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516CDITA</u>	<u>SBJ00673</u>
<u>PA17</u>	<u>2,816 hp</u>	<u>Cummins</u>	<u>CW73-G</u>	<u>66300058</u>
<u>PA18</u>	<u>2,816</u>	<u>Cummins</u>	<u>CW73-G</u>	<u>66300040</u>
<u>IP08</u>	<u>755 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>81Z04033</u>
<u>IP09</u>	<u>890 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>81Z08595</u>
<u>PH10</u>	<u>2,550 hp</u>	<u>MTU/Detroit Diesel</u>	<u>T1637K16</u>	<u>5272000427</u>
<u>PH11</u>	<u>2,550 hp</u>	<u>MTU/Detroit Diesel</u>	<u>T1637K16</u>	<u>5272000397</u>
<u>PH12</u>	<u>2,550 hp</u>	<u>MTU/Detroit Diesel</u>	<u>T1637K16</u>	<u>5272000421</u>
<u>PH13</u>	<u>2,560 hp</u>	<u>MTU/Detroit Diesel</u>	<u>T1238A36</u>	<u>5262003725</u>
<u>LI06</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ01461</u>
<u>LI07</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ01460</u>
<u>HA13</u>	<u>1,232 hp</u>	<u>Caterpillar</u>	<u>81637416</u>	<u>16VF007962</u>
<u>HA14</u>	<u>890 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>81Z09924</u>
<u>HA18</u>	<u>1,180 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>2WJ00740</u>
<u>FL09</u>	<u>1,109 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>2WJ02570</u>
<u>FL10</u>	<u>1,109 hp</u>	<u>Caterpillar</u>	<u>3412</u>	<u>2WJ02570</u>
<u>BA04</u>	<u>1,340 hp</u>	<u>Detroit Diesel</u>	<u>9163-7305</u>	<u>16E0006591</u>
<u>BA05</u>	<u>1,340 hp</u>	<u>Detroit Diesel</u>	<u>9163-7305</u>	<u>16E0006592</u>
<u>BA11</u>	<u>1,340 hp</u>	<u>Detroit Diesel</u>	<u>7243-7406</u>	<u>24VA001710</u>
<u>BA12</u>	<u>1,340 hp</u>	<u>Detroit Diesel</u>	<u>7243-7406</u>	<u>24VA001728</u>
<u>CR07</u>	<u>2,206 hp</u>	<u>Caterpillar</u>	<u>3512C</u>	<u>EBG01274</u>
<u>Saguaro Power Company (Source ID: 00393)</u>				
<u>A01</u>	<u>35 MW</u>	<u>General Electric</u>	<u>PG6541B</u>	<u>295525</u>
<u>A02</u>	<u>35 MW</u>	<u>General Electric</u>	<u>PG6541B</u>	<u>295524</u>
<u>A05</u>	<u>218 MMBtu/hr</u>	<u>Indeck/Volcano</u>	<u>0-7-2000</u>	<u>N/A</u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>A06</u>	<u>86 MMBtu/hr</u>	<u>Nebraska</u>	<u>NOS 2A/S-55</u>	<u>032-88</u>
<u>F05 w/ A01</u>	<u>25 MMBtu/hr</u>	<u>John Zink</u>	<u>LDR-11-LE</u>	<u>S82733</u>
<u>F05a w/ A01</u>	<u>25 MMBtu/hr</u>	<u>John Zink</u>	<u>LDR-11-LE</u>	<u>S82733</u>
<u>F06 w/ A02</u>	<u>25 MMBtu/hr</u>	<u>John Zink</u>	<u>LDR-11-LE</u>	<u>S82733</u>
<u>F06a w/ A02</u>	<u>25 MMBtu/hr</u>	<u>John Zink</u>	<u>LDR-11-LE</u>	<u>S82733</u>
<u>NV Energy: Sun Peak Generating Station (Source ID: 00423)</u>				
<u>A01 (Unit 3)</u>	<u>84.5 MW</u>	<u>General Electric</u>	<u>PG7111-EA</u>	<u>N/A</u>
<u>A02 (Unit 4)</u>	<u>84.5 MW</u>	<u>General Electric</u>	<u>PG7111-EA</u>	<u>N/A</u>
<u>A03 (Unit 5)</u>	<u>84.5 MW</u>	<u>General Electric</u>	<u>PG7111-EA</u>	<u>N/A</u>
<u>MGM Resorts International (Source ID: 00825)</u>				
<u>MG13</u>	<u>32.66 MMBtu/hr</u>	<u>Cleaver Brooks</u>	<u>CBLE700-800-200</u>	<u>OL097510</u>
<u>MG14</u>	<u>32.66 MMBtu/hr</u>	<u>Cleaver Brooks</u>	<u>CBLE700-800-200</u>	<u>OL096895</u>
<u>MG17</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02910</u>
<u>MG18</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02931</u>
<u>MG19</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02927</u>
<u>MG20</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02913</u>
<u>MG21</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02929</u>
<u>MG22</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02932</u>
<u>MG23</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02916</u>
<u>MC019</u>	<u>2,172 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>6WN00081</u>
<u>MC020</u>	<u>2,172 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>6WN00082</u>
<u>MB061</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516 DITA</u>	<u>25Z06027</u>
<u>MB062</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516 DITA</u>	<u>25Z02994</u>
<u>MB063</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516 DITA</u>	<u>25Z03002</u>
<u>MB066</u>	<u>2,518 hp</u>	<u>Caterpillar</u>	<u>3516 DITA</u>	<u>3NS00234</u>
<u>MB067</u>	<u>2,220 hp</u>	<u>Cummins</u>	<u>KTA50-G9</u>	<u>33146939</u>
<u>MB093</u>	<u>2,172 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>1GZ01339</u>
<u>EX007</u>	<u>1,592 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z02774</u>
<u>EX008</u>	<u>1,592 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z02784</u>
<u>EX009</u>	<u>1,592 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z02770</u>
<u>EX010</u>	<u>1,592 hp</u>	<u>Caterpillar</u>	<u>3512</u>	<u>24Z02753</u>
<u>BE80</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05330</u>
<u>BE81</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05335</u>
<u>BE82</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05333</u>
<u>BE83</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05332</u>
<u>BE84</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05339</u>
<u>BE85</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05338</u>
<u>BE86</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>25Z05340</u>
<u>BE87</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>1LZ00545</u>
<u>BE88</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3416</u>	<u>1LZ00546</u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>LX009</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z03005</u>
<u>LX010</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02998</u>
<u>LX011</u>	<u>2,168 hp</u>	<u>Caterpillar</u>	<u>3516TA</u>	<u>25Z02999</u>
<u>LX024</u>	<u>2,206 hp</u>	<u>Caterpillar</u>	<u>3512C</u>	<u>EGB00199</u>
<u>LX025</u>	<u>2,206 hp</u>	<u>Caterpillar</u>	<u>3512C</u>	<u>EGB00203</u>
<u>NY27</u>	<u>1,818 hp</u>	<u>Caterpillar</u>	<u>3512TA</u>	<u>24Z06937</u>
<u>NY28</u>	<u>1,818 hp</u>	<u>Caterpillar</u>	<u>3512TA</u>	<u>24Z06932</u>
<u>NY29</u>	<u>1,818 hp</u>	<u>Caterpillar</u>	<u>3512TA</u>	<u>24Z06931</u>
<u>CC009</u>	<u>3,622 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBK00196</u>
<u>CC010</u>	<u>3,622 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBK00197</u>
<u>CC011</u>	<u>3,622 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBK00198</u>
<u>CC012</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ00378</u>
<u>CC013</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ00379</u>
<u>CC014</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ00380</u>
<u>CC015</u>	<u>2,937 hp</u>	<u>Caterpillar</u>	<u>3516C</u>	<u>SBJ00382</u>
<u>TBA15</u>	<u>1,180 hp</u>	<u>Caterpillar</u>	<u>3412CTA</u>	<u>1EZ07104</u>
<u>TBB15</u>	<u>2,520 hp</u>	<u>Caterpillar</u>	<u>3516 BTA</u>	<u>GZR00237</u>
<u>TM01</u>	<u>3,701 hp</u>	<u>Caterpillar</u>	<u>3516DITA</u>	<u>DD501118</u>
<u>Switch–West Campus (Source ID: 16304)</u>				
<u>A02</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250 DSEC</u>	<u>2185979</u>
<u>A03</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>744RSL5163</u>	<u>WA-6006372-1219</u>
<u>A04</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250 DSEC</u>	<u>2185985</u>
<u>A05</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250 DSEC</u>	<u>2183861</u>
<u>A06</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250 DSEC</u>	<u>2183870</u>
<u>A07</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250RXC6DT2</u>	<u>176196-1-2-0608</u>
<u>A08</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250RXC6DT2</u>	<u>175966-1-2-0608</u>
<u>A09</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>2250RXC6DT2</u>	<u>175966-1-3-0608</u>
<u>A10</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>330055-1-2-0311</u>
<u>A11</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>330055-1-3-0311</u>
<u>A12</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>330055-1-1-0311</u>
<u>A13</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>333726-1-1-0811</u>
<u>A14</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>333726-2-2-0811</u>
<u>A15</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>333726-2-1-0811</u>
<u>A16</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250RXC6DT2</u>	<u>334657-1-1-0811</u>
<u>A17</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250RXC6DT2</u>	<u>341530-1-1-0112</u>
<u>A18</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>341565-1-3-0212</u>
<u>A19</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369767-1-1-0214</u>
<u>A20</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>341565-1-1-0212</u>
<u>A21</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>346646-1-0512</u>
<u>A22</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348117-1-3-0812</u>
<u>A23</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348117-1-1-1112</u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>A24</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>356251-1-4-0213</u>
<u>A25</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>346646-1-2-0512</u>
<u>A26</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348117-1-2-0812</u>
<u>A27</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>36251-1-1-0213</u>
<u>A28</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>356251-1-2-0213</u>
<u>A29</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>356251-1-3-0213</u>
<u>A32</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369338-1-3-0114</u>
<u>A33</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369338-1-1-0114</u>
<u>A34</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369338-1-2-0114</u>
<u>C01</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348116-1-1-0712</u>
<u>C02</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348116-1-2-0712</u>
<u>C03</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>348116-1-3-0712</u>
<u>C04</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>360838-1-3-0713</u>
<u>C05</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>360838-1-1-0713</u>
<u>C06</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>360838-1-2-0713</u>
<u>C07</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>365276-1-1-1013</u>
<u>C08</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>365276-1-2-1013</u>
<u>C09</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>365276-1-3-1013</u>
<u>C10</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369877-1-10514</u>
<u>C11</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369877-1-1-0614</u>
<u>C12</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369877-1-2-0614</u>
<u>C13</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>370421-1-1-0514</u>
<u>C14</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>370421-1-2-0514</u>
<u>C15</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>370421-1-3-0514</u>
<u>C16</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>341565-1-2-0212</u>
<u>C17</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369767-1-3-0214</u>
<u>C18</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>2250LXC6DT2</u>	<u>369767-1-2-0214</u>
<u>C19</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500170</u>
<u>C20</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500168</u>
<u>C21</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500169</u>
<u>C22</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500326</u>
<u>C23</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500327</u>
<u>C24</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>16V4000DS2250</u>	<u>95030500325</u>
<u>G01</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500461</u>
<u>G02</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500157</u>
<u>G03</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500463</u>
<u>G04</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500158</u>
<u>G05</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500494</u>
<u>G06</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500159</u>
<u>G07</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500628</u>
<u>G08</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500331</u>

EXHIBIT 1

<u><i>EU</i></u>	<u><i>Rating</i></u>	<u><i>Manufacturer</i></u>	<u><i>Model</i></u>	<u><i>Serial Number</i></u>
<u><i>G09</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500631</i></u>
<u><i>G10</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500330</i></u>
<u><i>G11</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500634</i></u>
<u><i>G12</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500332</i></u>
<u><i>G13</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500256</i></u>
<u><i>G14</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500483</i></u>
<u><i>G15</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500255</i></u>
<u><i>G16</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500484</i></u>
<u><i>G17</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500249</i></u>
<u><i>G18</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500485</i></u>
<u><i>G19</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500557</i></u>
<u><i>G20</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500626</i></u>
<u><i>G21</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500555</i></u>
<u><i>G22</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500624</i></u>
<u><i>G23</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500625</i></u>
<u><i>G24</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500698</i></u>
<u><i>E01</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500632</i></u>
<u><i>E02</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500493</i></u>
<u><i>E03</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500627</i></u>
<u><i>E04</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500462</i></u>
<u><i>E05</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500633</i></u>
<u><i>E06</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500492</i></u>
<u><i>E07</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500703</i></u>
<u><i>E08</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500701</i></u>
<u><i>E09</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500700</i></u>
<u><i>E10</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500702</i></u>
<u><i>E11</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500766</i></u>
<u><i>E12</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500699</i></u>
<u><i>E13</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501092</i></u>
<u><i>E14</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501091</i></u>
<u><i>E15</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501098</i></u>
<u><i>E16</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501065</i></u>
<u><i>E17</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501068</i></u>
<u><i>E18</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030501064</i></u>
<u><i>J01</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500919</i></u>
<u><i>J02</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500920</i></u>
<u><i>J03</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500921</i></u>
<u><i>J04</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500926</i></u>
<u><i>J05</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500925</i></u>
<u><i>J06</i></u>	<u><i>3,353 hp</i></u>	<u><i>Marathon Electric</i></u>	<u><i>MTU16V4000DS2250</i></u>	<u><i>95030500927</i></u>
<u><i>J07</i></u>	<u><i>3,353 hp</i></u>	<u><i>Detroit Diesel</i></u>	<u><i>16V4000G83</i></u>	<u><i>5482000210</i></u>

EXHIBIT 1

<u>EU</u>	<u>Rating</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>
<u>J08</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>N/A</u>	<u>5482000191</u>
<u>J09</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G83</u>	<u>5482000209</u>
<u>J10</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>N/A</u>	<u>5482000192</u>
<u>J11</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G83</u>	<u>5482000208</u>
<u>J12</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>N/A</u>	<u>5482000190</u>
<u>J13</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G83</u>	<u>5482000212</u>
<u>J14</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G83</u>	<u>5482000211</u>
<u>J15</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G83</u>	<u>5482000207</u>
<u>J16</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G24S</u>	<u>5482000244</u>
<u>J17</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G24S</u>	<u>5482000246</u>
<u>J18</u>	<u>3,353 hp</u>	<u>Detroit Diesel</u>	<u>16V4000G24S</u>	<u>5482000245</u>
<u>J19</u>	<u>125 hp</u>	<u>John Deere</u>	<u>6068HFC48</u>	<u>PE6068N007610</u>
<u>L01</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500548</u>
<u>L02</u>	<u>3,353 hp</u>	<u>Marathon Electric</u>	<u>MTU16V4000DS2250</u>	<u>95030500549</u>

bbl = barrels (1 barrel = 42 gallons); bhp = brake horsepower; hp = horsepower; MMBtu/hr =Millions of British thermal units per hour; MW = megawatt.

TECHNICAL SUPPORT DOCUMENT FOR A NEW AIR QUALITY REGULATION SECTION 121, “REASONABLY AVAILABLE CONTROL TECHNOLOGY DETERMINATION FOR SPECIFIC MAJOR STATIONARY SOURCES IN THE 2015 8-HOUR OZONE NAAQS MODERATE NONATTAINMENT AREA HA 212”

Background

On October 26, 2015, the U.S. Environmental Protection Agency (EPA) revised the primary and secondary ozone 8-hour National Ambient Air Quality Standard (NAAQS) from 0.075 parts per million (ppm) to 0.070 ppm. On January 5, 2023, EPA issued a final rule reclassifying Hydrographic Area (HA) 212 (Las Vegas Valley) as a moderate nonattainment area for the 2015 ozone NAAQS (88 FR 775) and requiring the area to achieve attainment by August 3, 2024.

Sections 182(b)(2), (c), and (f) of the Clean Air Act (Act) require ozone nonattainment areas to implement reasonably available control technology (RACT) emission standards for major sources of ozone precursors: nitrogen oxides (NO_x) and volatile organic compounds (VOC). Section 182(c) of the Act requires areas classified as moderate or higher nonattainment for ozone to submit a state implementation plan (SIP) that includes a RACT analysis for major stationary sources.

In August 2022, the Department of Environment and Sustainability, Division of Air Quality (DAQ) requested that certain major sources in HA 212 voluntarily submit RACT demonstrations to include with the moderate ozone nonattainment SIP. DAQ advised sources to submit RACT analysis information on each emission unit with a potential to emit (PTE) equal to or greater than 5 tons per year (tpy) of NO_x and/or VOC. In a few cases, DAQ asked a source to evaluate RACT for a group of similar emission units (e.g., storage tanks, emergency backup generators) even when the individual units fell below the 5-tpy threshold. This approach assured that each RACT analysis addressed major contributions to each source’s PTE. The RACT analysis concluded with control measures to be implemented by each source, which were then used to draft AQR 121. AQR 121, therefore, establishes emission control provisions that are required per Section 182(c) of the Act for major sources of NO_x and VOC. Once approved by the Board, AQR 121 will be included with the 2015 moderate ozone nonattainment SIP.

Summary of RACT Analysis

RACT analyses were conducted for emission units at the eight major stationary sources in HA 212. Due to the limited number of major sources in HA 212’s emissions inventory, DAQ determined that conducting a case-by-case analysis for each existing major stationary source was the most appropriate course for determining RACT. Through a review of the 2017 National Emissions Inventory (NEI) and major source (40 CFR Part 70) operating permits (OPs), DAQ identified the sources (Table 1) that could be subject to major source NO_x or VOC RACT requirements. In determining the suitability of a given control option for RACT, DAQ was guided by the cost-effectiveness values it had approved in past control technology determinations, the cost-effectiveness guidance provided by EPA, and the cost thresholds other states found acceptable. DAQ used a cost-effectiveness threshold of \$5,500/ton, which was among the highest in a survey of state agencies (San Diego Air Pollution Control District 2020).

Table 1. Major Sources in the HA 212 Ozone Nonattainment Area

Source ID	Source Name	Total Source PTE (tpy)	2017 NEI Emissions (tpy)	2017 NEI Emissions (tpd)
NO_x Major Sources				
7	Clark Generating Station	2465.9	115.40	0.32
114	Nellis Air Force Base (NAFB)	199.0 ¹	19.81	0.05
257	Caesars Consolidated Properties	370.1	19.9	0.05
393	Saguaro Power Company	164.1	102.79	0.28
423	Sun Peak Generating Station	249.4	15.89	0.04
825	MGM Resorts International	757.05	65.07	0.18
16304	Switch, Ltd.	246.18	33.23	0.09
VOC Major Sources				
7	Clark Generating Station	216.5	14.12	0.04
13	Calnev Pipe Line LLC	187.4	59.31	0.16

¹ NAFB's most recent ATC permit (06/25/24) states that NO_x PTE is now 209.44 tpy.

By emission unit type, there were 199 generators, all but 1 emergency generators; 9 natural gas-fired boilers, including 2 auxiliary boilers at a power plant; 16 simple cycle turbines; 6 combined cycle turbines; 2 aircraft engine test cells (hush houses); and 1 petroleum storage terminal with VOC emissions from storage tanks, a vapor recovery system, loading racks, remediation equipment (for treating contaminated soil), and fugitive emissions from numerous points within the system (e.g., valves, flanges, etc.). NO_x RACT was conducted for all emission units except the Calnev Pipe Line terminal, which had only VOC RACT emission units. Five turbines at Clark Generating Station were evaluated for both VOC RACT and NO_x RACT.

For all emission units evaluated, DAQ determined RACT was the current level of control. Most of the sources had existing permitted limitations or practices that represented RACT; for those that did not, DAQ set emissions limitations based on existing control equipment. With few exceptions, the existing monitoring, reporting, and recordkeeping provisions in the permits ensure compliance with RACT-level limits; the DAQ analysis identified new or revised monitoring, reporting, and recordkeeping provisions as needed to ensure compliance, including during startup, shutdown, and maintenance (SSM).

The NO_x and/or VOC RACT analyses conducted for each applicable emissions unit demonstrated that no additional controls existed that were both technically feasible and cost-effective, so controls (and, in most cases, compliance monitoring) in the sources' current permits were determined to be RACT. The principal reason the RACT analyses resulted in determinations that no additional control was cost-effective is that most emission units are already well-controlled because of former best available control technology (BACT) and existing RACT requirements in the Clark County Air Quality Regulation (AQR) Section 12 series. The reduction in emissions from installing more stringent controls, by either adding to or replacing the existing controls, would be small, and a small reduction in emissions usually results in a high cost-effectiveness value.

For example, the seven natural gas-fired boilers at Caesars and MGM Resorts International (MGMRI) are already restricted to around 30 ppm of NO_x, a relatively low emissions rate. Current technologies are available to reduce emissions to as low as 9 ppm, but this level of control would

not achieve much additional emissions reduction: Caesars' CP01 boiler emissions rate limit, currently about 35 ppm of NO_x at 3% O₂, could be reduced to as low as 10 ppm, but the reduction in actual emissions would be only 1.08 tpy. When looking at the cost to upgrade emissions controls, such relatively small reductions are not generally cost-effective.

AQR 121, "Reasonably Available Control Technology Determination for Specific Major Stationary Sources in the 2015 8-Hour Ozone NAAQS Moderate Nonattainment Area HA 212"

Applicability

AQR 121 applies to owners or operators of existing stationary sources that are (1) defined under AQR 12.3.2 as major sources for NO_x and/or VOC; (2) located in HA 212 within Clark County, Nevada; (3) affected sources with affected units as defined in AQR 121.3; and (4) major sources for which case-by-case RACT analysis was conducted after the EPA Administrator reclassified HA 212 as a moderate nonattainment area for ozone.

The designation of HA 212 to moderate nonattainment triggered RACT analyses and determinations for certain major stationary sources. Once the RACT requirements of AQR 121 have been implemented, any modification or reconstruction of an affected unit at an affected source will require an evaluation (or reevaluation) of RACT for that unit (AQR 121.2(b)). The only exceptions will be emissions units that are or will be (because of a modification or reconstruction) subject to the Lowest Achievable Emissions Rate (LAER) for NO_x and/or VOC and modifications to/reconstructions of an emission unit that do not cause its NO_x and/or VOC PTE to exceed 5 tpy. An affected source subject to AQR 121 requirements will not be exempt from any other control technology requirements. This may include, but is not limited to, permitting requirements or preconstruction review RACT requirements under AQRs 12.1, "Permit Requirements for Minor Sources," and 12.4, "Authority to Construct Application and Permit Requirements for Part 70 Sources."

Nevada Energy - Clark Generating Station (Source ID: 00007)

Analyzed emission units at Clark Generating Station (CGS) consisted of thirteen simple cycle combustion turbines (CTs) (Unit 4 (EU: A00704D) and Units 11–22 (EUs: A27-A38)) and four combined cycle units (Units 5–8 (EUs: A00701A, A00702B, A00705, A00708)). All turbines were subject to RACT for NO_x and VOC.

For the NO_x RACT evaluation, DAQ considered the use of selective catalytic reduction (SCR), water injection, and good combustion practices (GCP) for Unit 4 (EU: A00704D). For Units 5-8 (EUs: A00701A, A00702B, A00705, A00708), DAQ considered the installation of SCR with the existing dry-low NO_x combustors (DLNC); for Units 11–22 (EU: A27-A38), DAQ considered the installation of DLNC along with the current use of SCR and water injection. For the VOC RACT evaluation, DAQ considered the use of oxidation catalyst controls and GCP for Units 4 (EU: A00704D) and 5–8 (EUs: A00701A, A00702B, A00705, A00708); Units 11–22 (EU: A27-A38) are already equipped with oxidation catalyst controls. All other control technologies were considered technically infeasible.

The evaluation showed no cost-effective control options for NO_x or VOC for any of these except Unit 4 (EU: A00704D). The proposed NO_x RACT for Unit 4 (EU: A00704D) was an emission

limit of 120 ppmvd @ 15% O₂ based on the use of GCP for all periods of operation; for all other units, DAQ determined the current NO_x limits represented RACT based on the use of existing control equipment and compliance determination procedures. EPA required that emissions limits be applicable to startup, shutdown, and normal operations.

For VOC RACT, DAQ determined that RACT for Unit 4 (EU: A00704D) was an emission limit of 21.6 lb/hr based on GCP. For Units 5–8 (EUs: A00701A, A00702B, A00705, A00708) and 11–22 (EU: A27-A38), DAQ determined the existing VOC limits represent RACT based on the existing control configuration and compliance determination procedures. Therefore, VOC limits were taken from the Part 70 OP: 5.0 lb/hr for Units 5–8 (EUs: A00701A, A00702B, A00705, A00708) and 1.49 lb/hr for Units 11–22 (EU: A27-A38). These were in place when the units were granted authorization to construct. The original RACT analysis did not include VOC emission limits for Units 11–22 (EU: A27-A38); however, EPA did a preliminary review of AQR 121 and required the them to be included for all turbines.

DAQ determined that GCP would also apply to startup and shutdown operations as part of the NO_x and VOC determinations for all applicable units. DAQ included a requirement to develop a best operating practices guideline with adequate reporting and recordkeeping procedures to ensure that each affected unit maintains compliance with the good operating practices work practice standard.

The monitoring, recordkeeping and reporting requirements are provisions related to the RACT control requirements. The source is required to monitor the startup and shutdown cycles, comply with NO_x limitations, install, calibrate, maintain, operate, and certify continuous emissions monitoring system (CEMS) for NO_x, require audit and QA/QC procedures for CEMS, monitor CEMS data for NO_x, and conduct Relative Accuracy Test Audits (RATA) of the CEMS. Recordkeeping and reporting requirements include maintaining records on inspections, repairs, and maintenance, records of hours of operation for the turbines, and records of the CEMS. General reporting requirements also include submitting an annual emissions inventory report and an annual compliance certification.

Calnev Pipe Line – Las Vegas Terminal (Source ID: 00013)

Calnev Pipe Line, LLC (Calnev), a Kinder Morgan subsidiary, owns and operates a petroleum products distribution terminal facility in HA 212. The Las Vegas Terminal's (LVT's) operations include receiving petroleum fuel products via pipeline or truck and transferring gasoline, diesel, and biodiesel from storage tanks into trucks via loading racks.

LVT had a VOC PTE of 187.4 tpy and actual VOC emissions of 59.31 tpy in 2017. Most of the individual units have a PTE below 5 tpy, but DAQ asked that LVT address at least a majority of the emission units that contribute to its VOC PTE. Since its NO_x PTE is below the major source applicability threshold, LVT is subject to major source VOC RACT, but not NO_x RACT.

LVT grouped individual emission units so the group PTE exceeded 5 tpy, then conducted RACT analyses on these groups: (1) storage tanks (total PTE of 61.3 tpy VOC),¹ (2) a vapor recovery unit

¹ Table 3-1, LVT RACT Analysis. No tank has a PTE of 5 tpy or more.

(14.5 tpy VOC),² (3) loading racks (65.7 tpy VOC),³ (4) a remediation system (37.7 tpy VOC),⁴ and (5) fugitive components, such as valves, flanges, fittings, and pump seals (6.6 tpy VOC). For each of these units or groups, DAQ conducted a RACT analysis and determined existing controls and compliance measures (specified in the Part 70 OP) constitute RACT. Therefore, no decrease in emissions will result from this determination.

Storage Tanks

LVT included 17 fixed roof tanks (FRT) (EUs: A19-A20; A22; A25-A26; A30-A39; A53-A54); 21 internal floating roof tanks (IFR) (EUs: A11; A13-A18; A21; A27-A29; A47-A48; A56-A61; B04; 12 external floating roof tanks (EFR) (EUs: A01-A10; A23-A24); and three domed external floating roof tanks (DEFR) (EUs: A12; A45-A46) in the analysis. Except for EU: D01, a small 5.9-barrel (about 250-gallon) tank, and consistent with LVT's RACT analysis, DAQ did not include tanks below 1,000 gallons in the RACT analysis after determining that it would not be cost-effective to impose emission controls on these units. All storage tanks are required to operate in accordance with the applicable seal controls (i.e., primary seals, secondary seals, or fixed roof). RACT monitoring requirements of the storage tanks include visual inspection and monitoring the storage tanks for throughput volume. General reporting requirements also include submitting an annual emissions inventory report and an annual compliance certification.

On September 17, 2024, the Board of County Commissioners amended the AQRs to authorize the incorporation by reference of the delegated standards of 40 CFR Part 60, Subparts K, Ka, Kb, XX, and XXa (NSPS) via AQR 14.2, and those of 40 CFR Part 63, Subpart BBBBBB (NESHAPs) via AQR 13.3 into the Nevada SIP. Another ordinance is proposed to amend AQR 14.2 to include the requirements of 40 CFR Part 60, Subpart IIII.

Table 2 shows the applicable requirements of each tank based on year, capacity, and/or product stored capabilities. Most tanks are subject to the requirements of AQR 13.3 because of the product's stored capabilities (gasoline, diesel/biodiesel, denatured ethanol, transmix, aviation gasoline and jet fuel). Storage tanks constructed before 1973 are not subject to AQR 14.2 unless a later modification would trigger the requirements. A storage tank may not be subject to AQR 14.2 if the tank size is less than 40,000 gallons. Storage tanks that meet the construction year, capacity, and/or stored product capabilities may not be subject to AQR 14.2 because the product stored vapor pressure is less than 3.5 kilopascals (kPa).

Table 2. Storage Tank Applicable Requirements

EU	Site Tank Number	Construction Year	Capacity (gallons)	Product Stored	Applicable Requirement(s)
A01	530	1960	476,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A02	531	1961	541,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)

² The vapor recovery unit is itself a control device that LVT says is considered BACT.

³ There are 15 loading racks. Most of the 65.7 tpy PTE is from gasoline dispensing. Assuming each rack has the same PTE, $65.7/15 = 4.38$ tpy per rack, less than the 5 tpy PTE threshold for RACT review.

⁴ This system is also considered BACT, per LVT.

EU	Site Tank Number	Construction Year	Capacity (gallons)	Product Stored	Applicable Requirement(s)
A03	532	1961	339,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A04	533	1960	476,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A05	534	1961	339,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A06	535	1961	339,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A07	536	1961	737,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A08	537	1961	935,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A09	538	1961	476,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A10	539	1961	476,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A23	510	1961	1,680,000	JP-8, Diesel, and Biodiesel	N/A
A24	511	1961	1,680,000	JP-8, Diesel, and Biodiesel	N/A
A11	540	1961	709,600	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A13	524	1961	846,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A16	545	1991	1,470,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB) AQR 14.2(c)(3) (40 CFR Part 60, Subpart K _b)
A17	546	1995	1,680,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB) AQR 14.2(c)(3) (40 CFR Part 60, Subpart K _b)
A21	547	1995	1,680,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB) AQR 14.2(c)(3) (40 CFR Part 60, Subpart K _b)
A27	501	1961	1,680,000	Denatured Ethanol	N/A
A28	523	1961	393,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)

EU	Site Tank Number	Construction Year	Capacity (gallons)	Product Stored	Applicable Requirement(s)
A29	544	1978	462,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB) AQR 14.2(c)(2) (40 CFR Part 60, Subpart Ka)
A47	550	1971	840,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A48	551	1961	424,200	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A56	513	2002	2,100,000	Jet A, Diesel, and Biodiesel	N/A
A14	542	1970	1,975,000	Diesel and Biodiesel	N/A
A15	543	1970	1,470,000	Diesel and Biodiesel	N/A
A12	541	1961	1,055,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A45	548	1961	541,400	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A46	549	1961	541,000	Gasoline, Diesel/Biodiesel, Denatured Ethanol, Transmix, Aviation Gasoline and Jet Fuel	AQR 13.3(c)(1) (40 CFR Part 51, Subpart BBBBBB)
A19	525	1982	1,890,000	Diesel and Biodiesel	N/A
A20	526	1988	2,015,000	Diesel and Biodiesel	N/A
A22	512	1995	2,100,000	JP-8, Diesel, and Biodiesel	N/A
A25	ASA Conductivity Improver	2002	55	Jet Fuel Additive	N/A
A26	500 AIA	1962	10,700	Jet Fuel Additive	N/A
A30	533 A	1987	10,700	Gasoline Additive	N/A
A31	537 A	1961	19,600	Gasoline Additive	N/A
A32	541 A	1990	16,100	Gasoline Additive	N/A
A33	541 B	1990	16,100	Gasoline Additive	N/A
A34	542 D	1982	9,000	Gasoline Additive	N/A
A35	542 A	1994	6,000	Gasoline Additive	N/A
A36	531 A	1961	6,000	Gasoline Additive	N/A
A37	542 C	1988	500	Gasoline Additive	N/A
A38	537 B	1961	20,000	Gasoline Additive	N/A
A39	531 B	1961	4,900	Gasoline Additive	N/A
A53	548 B	1991	11,300	Gasoline Additive	N/A
A54	548 A	1991	10,000	Gasoline Additive	N/A

Loading Racks and Vapor Recovery System

The 15 LVT loading racks (EU: B01) have a total permitted throughput of 35,379,927 barrels/yr. Gasoline and diesel are loaded directly into trucks, while biodiesel, ethanol, and additives are blended during loading. Emissions are controlled by a collection system (98.7% capture efficiency) that captures vapor from the empty trucks as they are loaded; approximately 65 tpy of VOC are fugitive emissions not captured by the recovery system. The captured emissions are routed to a high-efficiency adsorption-absorption John Zink Vapor Recovery Unit (VRU) (EU: B02) with an estimated 99.7% efficiency; the approximately 4,893 tpy treated by the VRU is reduced to about 14 tpy of VOC emissions. LVT operates a flare (EU: B10) as backup if the VRU is unable to operate.

LVT does not mention any RACT/BACT/LAER Clearinghouse (RBLC) searches for VOC controls for loading racks, so DAQ conducted an independent search to identify potentially available control technologies. A review of the 1977 CTG⁵ for loading terminals indicates that a vapor control system (EU: B02) with a flare (EU: B10) as backup is considered RACT. The CTG mentions three systems (compression-refrigeration-absorption, refrigeration, and thermal oxidation), but the adsorption-absorption system appears to be different (DAQ found a 1976 patent on such a system). The best system the CTG mentioned was thermal oxidation (99+% efficiency). DAQ finds the John Zinc VRU (EU: B02) at LVT, at 99.7% efficiency on captured VOC and with the backup flare (EU: B10), would qualify as RACT.⁶

The bulk of emissions from the loading rack are fugitive (65.7048 tpy, of which 64.37 tpy is from gasoline loading). The CTG indicates that fugitive emissions occur during truck filling as a result of faulty seals, overfilling, and other leakage (vapor capture efficiency is 98.70%), but does not address additional control measures for fugitive emissions from loading. For some sources, VOC fugitive emissions reductions from improving operating and maintenance practices may be feasible, but LVT's system is already subject to the NSPS requirements in 40 CFR Part 60, Subpart XX, "Standards of Performance for Bulk Gasoline Terminals" (permit condition III.B.3). This includes using the John Zinc VRU system (EU: B02) during loading, keeping the gauge pressure to the delivery tank at no more than 4,500 pascals during loading, and operating so the pressure vacuum vents do not open if the system pressure is less than 4,500 pascals. Permit conditions III.B.3.q–u specify tanker loading requirements and measures to minimize vapor releases by minimizing gasoline spills, cleaning up spills as expeditiously as possible, covering all open gasoline containers with a gasketed seal when not in use, and minimizing gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices. DAQ identified no additional measures after conducting a literature search, so finds that RACT for the fugitive emissions from the loading racks (EU: B01) consists of the requirements already in place. The requirements include operating the loading racks (EU: B01) with a VRU (EU: B02) during loading and using a flare (EU: B10) as backup if the VRU is inoperable. All operations are required to follow the tanker loading requirements to minimize leaks, spills, and fugitive emissions.

⁵ EPA-450/2-77-026, "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals." See also: "Control Techniques for Volatile Organic Emissions from Stationary Sources." May 1978.

⁶ The Part 70 permit specifies that the control system be maintained and operated per the manufacturer's specifications (Condition III.B.3.n).

Monitoring requirements include monitoring the loading rack (EU: B01) for throughput volume; installing, calibrating, maintaining, operating, and certifying CEMS for VOC, requiring audit and QA/QC procedures for CEMS, monitoring CEMS data for VOC, conducting RATA of the CEMS, and demonstrating compliance with VOC emissions limits for the VRU (EU: B02); and visually inspecting the flare (EU: B10) and the flame quality. Testing requirements include performance testing of the VRU (EU: B02) every five years and determining compliance with emissions limitations. Recordkeeping and reporting requirements include maintaining hours of operation for the flare (EU: B10) and maintaining records of CEMS for the VRU (EU: B02).

Remediation Systems

LVT has a soil vapor extraction (SVE) system (EU: SR04) to treat historical contamination of soil. The SVE consists of carbon beds and a fluidized bed reactor (FBR) for 95+% control of the VOC. LVT used a control efficiency of 98.5% for the cost-effectiveness calculations regardless of the system in use. Both SVE (EU: SR04) and FBR are highly efficient combustion devices that burn most of the VOC in the extracted gas. LVT currently operates its FBR system in a manner that achieves the same level of emission reductions allowable for the SVE (EU: SR04) combustion system. Accordingly, DAQ concludes that these technologies, as applied based on contaminate treatment conditions, are equally effective. Replacing these systems with a different control technology, even if one of the other technologies had a control efficiency greater than the current system efficiency of 98.5%, would yield few additional emissions reductions from the estimated 37.57 tpy. DAQ concludes that replacing the existing control systems with a different control technology is not economically reasonable for RACT; therefore, the existing control system is RACT. The requirements include operation and maintenance of the SVE (EU: SR04) using a control device; using only propane as the fuel; and operation and maintenance at a temperature specified by the manufacturer and in accordance with the manufacturer's operations and maintenance (O&M) manual. VOC emissions for the FBR are limited to a minimum control efficiency of 95% or a maximum concentration of 100 ppmv. Monitoring of the SVE (EU: SR04) includes monitoring for use of auxiliary fuel. Testing requirements include conducting a performance test every five years, conducting a performance test when the combustion unit is operated, and determining compliance with emission limitations.

Nellis Air Force Base (Source ID: 00114)

The emission units analyzed at NAFB consisted of 9 diesel generators (EUs: A032, G009, G010, G032, G033, G041, G176, N001, and N002); 6 are emergency generators (EUs: G009, G010, G032, G033, G041, and G176) and a hush house (EUs: N001, and N002) with two aircraft engine test cells. Eighteen control technologies were considered in the analyses of the generators; only SCR was considered for the hush house.

The permit for the generators already requires GCP and GMP; turbocharging; injection timing retardation for A032; and aftercoolers for all but the nonemergency generator (EU: A032). No other technologies were considered cost-effective. For the hush house (EUs: N001 and N002), only SCR appears to have been addressed as a control technology. Information on SCR costs, feasibility, and even the level of control was unavailable, but given the nature of the unit (intermittent testing of aircraft engines), DAQ concluded that SCR is not cost-effective. Therefore, the AQR 121 RACT requirements used for the NAFB units consist of existing control technologies; emissions limits; monitoring, reporting, and recordkeeping; and startup, shutdown, and malfunction provisions already required in the NAFB Part 70 OP.

The monitoring, recordkeeping, and reporting requirements are provisions related to the RACT control requirements. The source is required to monitor the operational hours of each engine. Recordkeeping requirements include maintaining records on inspections, repairs, and maintenance, as well as records of hours of operation for the turbine. General reporting requirements include submitting an annual emissions inventory report and an annual compliance certification.

Caesars Entertainment (Source ID: 00257)

Caesars Entertainment, Inc. (“Caesars”) owns a number of properties with boilers and emergency generators. DAQ identified and evaluated 23 boiler control technologies. For the five boilers (EUs: CP01–CP05) reviewed for RACT, only one control technology (in addition to what is already required) appeared cost-effective: switching to ceramic fiber burners, which would have reduced emissions from 30 ppm (corrected to 3% O₂) down to 15 ppm and possibly saved fuel and reduced maintenance. However, Caesars’ boilers are all around 30 MMBtu/hr in size and ceramic fiber burner applications, according to several manufacturers, are available only up to about 16 MMBtu/hr.⁷

Further research indicates that metal mesh burners, like ceramic burners, are ultra-low NO_x burners (ULNB) and can reduce emissions substantially—in this case, down to 9 to 15 ppm. The metal mesh burners are suitable for larger boilers (up to over 100 MM Btu/hr), but the cost is much higher (an estimated \$250,000, since metal mesh burners are custom-designed and built for each boiler make and model) and there are no fuel savings, so the metal mesh burner technology is not considered cost-effective for these boilers.

Therefore, DAQ finds that ceramic fiber burners are not available for these emissions units and that metal mesh burners are not cost-effective. The existing controls with GCP and GMP, and operating the unit following the manufacturer’s O&M manual, therefore constitute RACT for these boilers. RACT requirements also include that boilers CP01 and CP02 be operated and maintained at a maximum emissions concentration of 29 ppm NO_x, corrected to 3% O₂, and that boilers CP03–CP05 be operated and maintained at a maximum emissions concentration of 30 ppm NO_x, corrected to 3% O₂.

Caesars properties also host 27 emergency generators (EUs: CP13 -CP17; CP28-CP29; PA17-PA18; IP08-IP09; PH10-PH13; LI06-LI07; HA13-14; HA18; FL09-FL10; BA04-BA05; BA11-BA12; CR07) subject to RACT review. The diesel generators are rated from 600 to 2,100 kW, and are limited to 100 hours of operation per year for testing and maintenance and up to 50 hours per year for nonemergency situations (which count toward the 100 hours). All the engines are turbocharged, and all but one engine (EU: HA13) are aftercooled. Of the 18 control technologies evaluated, only the existing controls (turbocharging, GCP/GMP, and aftercooler) were determined

⁷ The highest annual emissions from the five boilers from 2019 to 2021 is 10.89 tpy NO_x; ceramic burners, had they been applied to these boilers, would have reduced that to 5.445 tpy, reducing NO_x by the same amount (5.445 tpy). The burners have the benefit of increasing efficiency and saving fuel, which makes them more cost-effective. For example, the cost-effectiveness (CE) for CP02 with 2.74 tpy actual emissions (without considering fuel savings) is \$3,895/ton, which is cost-effective, while the CE for CP04 with 1.08 tpy is \$9,881/ton, which is not. However, a 5% fuel savings, assuming the lowest hours of operation (446.6 for CP01 in 2021), would be \$6,815/year, which would result in a CE of -\$1,080 to -\$2,739/year (depending on the unit), which is cost-effective. The reduction in actual emissions from equipping the boilers with ceramic burners (had ceramic burners been available for that size boiler) would have been 5.445 tpy NO_x.

to be cost-effective. DAQ concludes that these existing controls constitute RACT for these emergency diesel generators.

The Caesars Part 70 OP includes compliance and monitoring requirements to ensure these conditions are met; DAQ concludes these constitute adequate monitoring, reporting, and recordkeeping to ensure RACT compliance. The boilers require efficiency and performance testing. Monitoring, recordkeeping, and reporting requirements include monitoring the operation hours for each engine; maintaining records of test results and records of inspections, maintenance, and repairs; and submitting test reports, emission inventory reports, and compliance certifications.

Saguaro Power Company (Source ID: 00393)

The emission units analyzed at Saguaro Power Company (Saguaro) consisted of two natural gas/oil-fired combined cycle units (EUs: A01 and A02) and two natural gas-fired auxiliary boilers (EUs: A05 and A06). All turbines and boilers were subject only to a RACT evaluation for NO_x, since VOC emissions for these units were below the RACT applicability threshold. There were no other sources at the facility with NO_x or VOC emissions above the applicability threshold.

The turbines (EUs: A01 and A02) are currently equipped with steam injection and SCR for NO_x control. RACT controls also apply for the supplemental duct burners (EUs: F05, F05a, F06, and F06a) because their PTE for NO_x is combined with EUs: A01 and A02. Potential control technologies that were evaluated included DLNC and SCR catalyst replacement. All other options were considered technically infeasible. The cost evaluation was conducted based on actual emissions data. The evaluation showed that there were no cost-effective control options for either unit. Thus, DAQ determined that the current NO_x limits represented RACT based on existing controls and compliance determination procedures. The turbines (EUs: A01 and A02) and supplemental duct burners (EUs: F05, F05a, F06, and F06a) are limited for NO_x emissions to 10 ppmvd at 15% O₂, excluding startup and shutdown, and 66 lb/hr during startup and shutdown.

Both boilers (EUs: A05 and A06) are equipped with LNB; the Unit 5 (EU: A05) boiler is also equipped with FGR. DAQ evaluated an extensive list of potential NO_x control technologies for Unit 5 (EU: A05), and all but a few were considered technically infeasible. DAQ lacked sufficient information to determine feasibility for certain combustion-related technologies, including LNB, staged combustion, excess air reduction, and gas flow modifiers; however, none of these options would be considered cost-effective, regardless of whether they were deemed technically feasible. Therefore, DAQ concluded the current NO_x limit represented RACT based on existing controls and compliance determination procedures. RACT requirements for Unit 5 (EU: A05) include limiting NO_x to emissions concentrations of 12 ppmvd at 3% O₂, excluding startup and shutdown.

DAQ also evaluated an extensive list of potential control technologies for Unit 6 (EU: A06), but only the following were considered technically feasible: LNB upgrade with FGR, installation of a ceramic fiber burner, installation of a forced internal recirculation burner, and fuel-induced recirculation, although further evaluation would be required to confirm the feasibility of the burner replacements and use of fuel-induced recirculation. Based on the cost evaluation, DAQ concluded there were no cost-effective upgrades for this unit. Therefore, the current NO_x limit represented RACT based on existing controls and compliance determination methods. RACT requirements for Unit 6 (EU: A06) include limiting NO_x to emissions concentrations of 30 ppmvd at 3% O₂, excluding startup and shutdown.

Finally, DAQ requires the use of GCP as RACT for all units during startup and shutdown operations, along with any additional requirements (such as operating the units in accordance with the manufacturer's O&M manual).

The monitoring, testing, recordkeeping, and reporting requirements are provisions related to the RACT control requirements. The source is required to monitor the startup and shutdown cycles; comply with NO_x limitations; install, calibrate, maintain, operate, and certify CEMS for NO_x; require audit and QA/QC procedures for the CEMS; monitor CEMS data for NO_x; monitor the hours of operation of Unit 6 (EU: A06); and conduct RATA of the CEMS. The boilers require performance testing and burner efficiency testing, and compliance with emissions limitations must be determined. Recordkeeping and reporting requirements include maintaining records on inspections, repairs, and maintenance; maintaining records of fuel quantity; maintaining records of startup and shutdown for boilers; maintaining records of testing; maintaining records of hours of operation for the boilers; and maintaining records of the CEMS. General reporting requirements also include submitting an annual emissions inventory report, performance test reports, and an annual compliance certification.

Nevada Energy - Sun Peak Generating Station (Source ID: 00423)

The emission units at Sun Peak (SPGS) consisted of three natural gas-fired, simple cycle CTs: Units 3–5 (EUs: A01–A03). All units were subject only to a RACT evaluation for NO_x; VOC RACT did not apply because VOC emissions for each unit were below the RACT applicability threshold. There were no other sources of NO_x or VOC emissions above the applicability threshold.

All turbines are currently equipped with water injection for NO_x control. Potential upgrade options that were evaluated included SCR, DLNC, and the combination of SCR with DLNC for all units. All other options were considered technically infeasible. The cost evaluation was conducted based on actual emissions data due to limited operation of each unit. The evaluation showed that there were no cost-effective control options for any of the units. Therefore, DAQ determined the current NO_x limits represented RACT based on existing controls and compliance determination procedures. Limit requirements are for burning natural gas and diesel fuels. For natural gas fuel, emission limits include 42 ppm at 15% O₂ (excluding startup and shutdown) and 94 ppmvd at 15% O₂ during startup and shutdown. For diesel fuel, emission limits include 65 ppmvd at 15% O₂ (excluding startup and shutdown) and 227 lb/hr during startup and shutdown. All units are required to use CEMS and be operated and maintained in accordance with GCP and the manufacturer's O&M manual.

The monitoring, recordkeeping, and reporting requirements are provisions related to the RACT control requirements. The source is required to monitor the startup and shutdown cycles; comply with NO_x limitations; install, calibrate, maintain, operate, and certify CEMS for NO_x; require audit and QA/QC procedures for CEMS; monitor CEMS data for NO_x; and conduct RATA of the CEMS. Recordkeeping and reporting requirements include maintaining records on inspections, repairs, and maintenance, maintaining records of hours of operation for the turbines, and maintaining records of the CEMS. General reporting requirements also include submitting an annual emissions inventory report and an annual compliance certification.

MGM Resorts International (Source ID: 00825)

MGM Resorts International (MGMRI) is currently a major source of NO_x, with a source-wide PTE of 757.05 tpy, but it reported only 65.07 tpy of actual NO_x emissions in 2017. The emission units include two natural gas-fired boilers (EUs: MG13 and MG14), each with a capacity of 32.66 MMBtu/hr, and 46 diesel-fired emergency generators ranging from 1,100 to 3,700 horsepower.

DAQ evaluated 23 boiler control technologies; only ceramic fiber burners appeared to be potentially feasible as additional RACT. However, the MGMRI boilers are all around 30 MMBtu/hr in size and ceramic fiber burner applications, according to several manufacturers, are available only up to about 16 MMBtu/hr.

Further research indicates that metal mesh burners, like ceramic burners, are ultra-low NO_x burners (ULNB) and can reduce emissions substantially—in this case, down to 9 to 15 ppm. The metal mesh burners are suitable for larger boilers up to over 100 MM Btu/hr, but the cost is much higher (an estimated \$250,000, since metal mesh burners are custom-designed and built for each boiler make and model) and there are no fuel savings, so the metal mesh burner technology is not considered cost-effective for these boilers.

Upon determining that ceramic fiber burners are not available for these emissions units and that metal mesh burners are not cost-effective, DAQ concluded that the existing controls constitute RACT for these boilers. RACT requirements include for boilers MG13 and MG14 to be operated and maintained at a maximum emissions concentration of 40 ppmv NO_x, corrected to 3% O₂; using only pipeline-quality natural gas; using GCP and GMP; and operating the units in accordance with the manufacturer's O&M manual.

All 46 of the emergency engines (EUs: MG17-MG23; MC019-MC020; MB061-MB063; MB066-MB067; MB093; EX007-EX010; BE80-BE88; LX009-LX011; LX024-LX025; NY27-NY29; CC009-CC015; TBA15; TBB15; TM01) are required to follow the manufacturer's O&M guidance, which is generally accepted as constituting GCP. In addition, this Part 70 OP requires that all units have turbochargers and aftercoolers except EX007-EX010 and NY27-NY29, which are turbocharged only, and TM01, which has neither a turbocharger nor an aftercooler. TM01 is the only unit for which the OP does not explicitly require turbocharging or aftercooler, but it is also the only unit specifically mentioned as subject to EPA's Tier Certification. The unit's manufactured control technology must comply with the applicable NSPS, thereby meeting the requirements of this certification and satisfying the definition of RACT. In addition, five emergency engines (EUs: LX024-LX025; TBA15; TBB15; TM01) are required to comply with AQR 14.2(c)(6) (40 CFR Part 60, Subpart IIII), which is a federal regulation for stationary internal combustion engines that DAQ has adopted by reference.

DAQ has determined that the current control techniques (i.e., GCP/GMP, turbochargers, and aftercoolers, except as noted above) constitute RACT for all the units reviewed. RACT for EU: TM01, in addition to GCP/GMP, includes meeting EPA Tier Certification requirements, including emissions limits. MGMRI's Part 70 OP includes compliance and monitoring requirements to ensure these conditions are met; DAQ concludes these constitute adequate monitoring, reporting, and recordkeeping to ensure RACT compliance. The boilers require efficiency and performance testing. Monitoring, recordkeeping, and reporting requirements include monitoring the operation hours for each engine; maintaining records of test results and records of inspections, maintenance, and repairs; and submitting test reports, emission inventory reports, and compliance certification.

Switch – West Campus (Source ID: 00825)

No individual Switch, Ltd emission unit has a PTE above 5 tpy NO_x, but the 117 large (3,353 horsepower/2,503 kilowatt) emergency diesel generators (EUs: A02–A29; A32–A34; C01–C24; G01–G24; E01–E18; J01–J19; and L01–L02) still were reviewed in the RACT analysis. The Switch Part 70 OP requires that the source have turbochargers and aftercoolers on all emergency generators (except EU: J19), follow the manufacturer’s O&M guidance, and ensure all 117 units comply with the emissions limitations and federal requirements that are incorporated by reference in AQR 14.2(c)(6) (40 CFR Part 60, Subpart III). DAQ concludes these requirements are RACT. Switch’s Part 70 OP includes compliance and monitoring requirements to ensure these conditions are met, for instance, monitor and maintain records of engine operating hours; monitor each engine for average NO_x emissions; submit emission inventory reports; and compliance certification.

Comment Received (11/22–12/6/2024) and DAQ Response

Comment Received: 12/6/2024 via email with letter attached

Commentor: Christopher Heintz, Corporate Sr. Environmental Advisor, NV Energy
Christopher.Heintz@nvenergy.com

Phone: 702-402-2048

COMMENT: Section 121.10.1 should include the same RACT Control Requirement as CGS, specifically the clause “The units shall be determined compliant using the existing continuous emission monitoring system (CEMS) on each one.”

RESPONSE: AQR 121.10.1 is updated to add subparagraph (e): “The units shall be determined compliant using the existing CEMS on each one.”

COMMENT: The proposed regulation format and order of requirements should mirror each other.

RESPONSE: Because Unit 4 is not required to have a CEMS, AQRs 121.5.2 and 121.10.2 cannot be identical. For clarity, AQR 121.5.2 is updated as follows:

121.5.2 RACT Monitoring Requirements

- (a) For all emission units, the owner or operator shall:*
 - (1) Monitor the occurrences and durations of startup/shutdown cycles; and*
 - (2) Demonstrate compliance with NO_x emissions limits.*
- (b) For Units 5–8 (EUs: A00701A, A00702B, A00705, and A00708) and Units 11–22 (Peaker units, EUs: A27–A38):*
 - (1) Install, calibrate, maintain, operate, and certify CEMS for NO_x;*
 - (2) Require periodic audit procedures and QA/QC procedures for the CEMS;*
 - (3) Conduct RATA of the NO_x CEMS; and*
 - (4) Monitor CEMS NO_x data.*

COMMENT: The requirement should be the same as CGS. As such, the requirement should be removed. Compliance will be determined using the existing NO_x CEMS. Further the draft regulation is not clear as to whether testing is required using both fuels (NVE has not combusted #2 Diesel in those units for over 25 years).

RESPONSE: AQR 121.10 is updated to remove the RACT testing requirements, as well as the associated requirements to maintain records of performance test results and to submit performance test results.

COMMENT: Section 121.10.4 (Sun Peak) requirements should be the same in format and verbiage in Section 121.5.3 for CGS. Additionally, 121.10.4(e)(4) states “CEMS VOC and NOx data.” Sun Peak units do not operate VOC CEMS.

RESPONSE: AQR 121.10 is updated to remove the reference to VOC. Because Unit 4 is not required to have a CEMS, AQRs 121.5.3 and 121.10.3 (formerly 121.10.4 before the testing requirements were removed) cannot be identical. There are no changes to AQR 121.5.3, but 121.10.3 is updated as follows:

121.10.3 RACT Recordkeeping and Reporting Requirements

The owner or operator shall:

- (a) Maintain records of required reporting, including records of all inspections, maintenance, and repairs;*
- (b) Maintain records of hours of operation for the turbine generators;*
- (c) Maintain records of the date, time, and duration of each startup and shutdown cycle of each turbine generator;*
- (d) For the turbine generators, maintain records of:*
 - (1) QA/QC procedure;*
 - (2) CEMS audit and calibration results, along with any corrective actions taken;*
 - (3) The time, duration, nature, and probable cause of any CEMS downtime, and of any corrective actions taken; and*
 - (4) CEMS NOx data.*
- (e) Submit an annual emissions inventory report; and*
- (f) Submit an annual compliance certification.*

END

BCC 2/4/2025 Approved item #34 for signature

Final Audit Report

2025-02-10

Created:	2025-02-05 (Pacific Standard Time)
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COUNTY OF CLARK) SS:

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ATTN: COMMISSION CLERK
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LAS VEGAS NV 89155

Account # 104095
Order ID 329716

IMAGE ON NEXT PAGE(S)

Leslie McCormick, being 1st duty sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal/Las Vegas Sun, daily newspaper regularly issued, published and circulated in the Clark County, Las Vegas, Nevada and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal/Las Vegas Sun, in 2 edition(s) of said newspaper issued from 02/11/2025 to 02/18/2025, on the following day(s):

02/11/2025, 02/18/2025

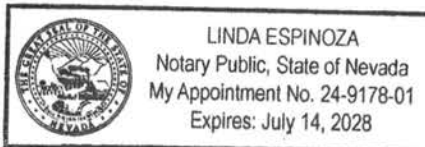
Leslie McCormick

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this February 18, 2025

Notary

Linda Espinoza



ORDINANCE NO. 5216

AN ORDINANCE TO ADOPT
CLARK COUNTY AIR QUALITY
REGULATION SECTION
121, "REASONABLY AVAILABLE
CONTROL TECHNOLOGY
DETERMINATIONS FOR
SPECIFIC MAJOR STATIONARY
SOURCES IN THE 2015 8-HOUR
OZONE NAAQS
MODERATE NONATTAINMENT
AREA HA 212," TO CODIFY THE
REASONABLY AVAILABLE
CONTROL TECHNOLOGY
DETERMINATIONS FOR CERTAIN
MAJOR STATIONARY SOURCES
THAT MAY CAUSE OR
CONTRIBUTE TO EMISSIONS OF
NITROGEN OXIDES OR VOLATILE
ORGANIC COMPOUNDS WITHIN
THE OZONE MODERATE
NONATTAINMENT BOUNDARY;
AND PROVIDING FOR OTHER
MATTERS PROPERLY RELATED
THERETO.

NOTICE IS HEREBY GIVEN that
typewritten copies of the above
numbered and entitled
Ordinance are available for
inspection by all interested
parties at the Office of the
County Clerk of Clark County,
Nevada, at her Commission
Division Office on the first floor
of the Clark County
Government Center, 500 South
Grand Central Parkway, Las
Vegas, Nevada, and that said
Ordinance was proposed by
Commissioner Tick Segerblom
on the 21st day of January 2025
and passed on the 4th day of
February 2025, by the following
vote of the Board of County
Commissioners:

Aye:

Tick Segerblom
William McCurdy II
April Becker
James B. Gibson
Justin Jones
Marilyn K. Kirkpatrick
Michael Naft

Nay: None

Abstaining: None

Absent: None

This Ordinance shall be in full
force and effect from and after
the 19th day of February 2025.

(SEAL) LYNN MARIE GOYA,
COUNTY CLERK and Ex-Officio
Clerk of the Board of County
Commissioners

Dated this 4th day of February
2025.

PUB: Feb. 11, 18, 2025
LV Review-Journal