



# PERMIT

## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



### AIR QUALITY CLASS I PERMIT

**COMPANY:** UNS Electric, Inc.  
**FACILITY:** Valencia Power Plant  
**PERMIT #:** 52663  
**DATE ISSUED:** October 10, 2011  
**EXPIRY DATE:** October 10, 2016

#### SUMMARY

This renewal operating permit is issued to UNS Electric, Inc. (UNSE) for the continued operation of the Valencia Power Plant facility in Nogales, AZ. The facility is located at 1741 North Grand Avenue, Nogales, Santa Cruz County, AZ 85621. This is a renewal of Operating Permit #32961.

UNSE operates three Hitachi MS 5001 M-series combustion gas turbines rated at 13.5 MW each and one General Electric LM2500 rated at 23 MW. Each of the combustion turbines can be fired on natural gas, distillate oil, or a combination of the two fuels. Natural gas is supplied via a pipeline owned by El Paso Natural Gas (EPNG) that runs through Nogales. Distillate oil is stored onsite in two 50,000-gallon storage tanks.

The Valencia Power Plant utilizes water injection on each of the four combustion turbines to control nitrogen oxide emissions. The Valencia Power Plant is a major source for Title V purposes, with potential emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and sulfur dioxide (SO<sub>2</sub>) greater than 100 tons per year. The facility has voluntarily accepted emission limitations for NO<sub>x</sub>, CO, and SO<sub>2</sub> to stay minor for PSD purposes. This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C) and Title 40 of the Code of Federal Regulations (CFR), except as otherwise defined in this permit. All terms and conditions in this permit are enforceable by the Administrator of the U.S. Environmental Protection Agency.

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**ATTACHMENT "A": GENERAL PROVISIONS**  
**Air Quality Control Permit No. 52663 for**  
**UNS Electric, Inc. – Valencia Power Plant**

**I. PERMIT EXPIRATION AND RENEWAL**

[ARS § 49-426.F, A.A.C. R18-2-304.C.2, and -306.A.1]

- A. This permit is valid for a period of five years from the date of issuance.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

**II. COMPLIANCE WITH PERMIT CONDITIONS**

[A.A.C. R18-2-306.A.8.a and b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE**

[A.A.C. R18-2-306.A.8.c, -321.A.1, and -321.A.2]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless an application for renewal has been submitted pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term.
  - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program.

Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and reissue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

**IV. POSTING OF PERMIT**

[A.A.C. R18-2-315]

- A. The Permittee shall post this permit or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:
1. Current permit number; or
  2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on site.

**V. FEE PAYMENT**

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

**VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE**

[A.A.C. R18-2-327.A and B]

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

## **VII. COMPLIANCE CERTIFICATION**

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

- A.** The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15<sup>th</sup>, and shall report the compliance status of the source during the period between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year. The second certification shall be submitted no later than November 15<sup>th</sup>, and shall report the compliance status of the source during the period between April 1<sup>st</sup> and September 30<sup>th</sup> of the current year.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
  2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,
  3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods and means designated in Condition VII.A.2 above. The certifications shall identify each deviation and take into account for consideration in the compliance certification.
  4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;
  5. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
  6. Other facts the Director may require to determine the compliance status of the source.
- B.** A copy of all compliance certifications shall also be submitted to the EPA Administrator.
- C.** If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above.

## **VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

[A.A.C. R18-2-304.H]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This

certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**IX. INSPECTION AND ENTRY**

[A.A.C. R18-2-309.4]

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD**

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

**XI. ACCIDENTAL RELEASE PROGRAM**

[40 CFR Part 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

**XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING**

**A. Excess Emissions Reporting**

[A.A.C. R18-2-310.01.A and -310.01.B]

- 1. Excess emissions shall be reported as follows:
  - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
    - i. Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the

occurrence of excess emissions including all available information from Condition XII.A.1.b below.

- ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.(1) above.

b. The report shall contain the following information:

- i. Identity of each stack or other emission point where the excess emissions occurred;
- ii. Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
- iii. Date, time and duration, or expected duration, of the excess emissions;
- iv. Identity of the equipment from which the excess emissions emanated;
- v. Nature and cause of such emissions;
- vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and
- vii. Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

- 2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

[A.A.C. R18-2-310.01.C]

**B. Permit Deviations Reporting**

[A.A.C. R18-2-306.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of

the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

**C. Emergency Provision**

[A.A.C. R18-2-306.E]

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was being properly operated at the time;
  - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**D. Compliance Schedule**

[ARS § 49-426.I.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a



schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

**E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown** [A.A.C. R18-2-310]

1. Applicability

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
- d. Contained in A.A.C. R18-2-715.F; or
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
  - h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
  - i. All emissions monitoring systems were kept in operation if at all practicable; and
  - j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.
3. Affirmative Defense for Startup and Shutdown
- a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
    - i. The excess emissions could not have been prevented through careful and prudent planning and design;
    - ii. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

- iii. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- vi. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
- vii. All emissions monitoring systems were kept in operation if at all practicable; and
- viii. Contemporaneous records documented the Permittee's actions in response to the excess emissions.

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.E.2 above.

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.E and A.A.C. R18-2-310.01, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

**XIII. RECORD KEEPING REQUIREMENTS**

[A.A.C. R18-2-306.A.4]

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

- 1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;
  3. The name of the company or entity that performed the analyses;
  4. A description of the analytical techniques or methods used;
  5. The results of such analyses; and
  6. The operating conditions as existing at the time of sampling or measurement.
- B.** The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- C.** All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

**XIV. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306.A.5.a]

The Permittee shall submit the following reports:

- A.** Compliance certifications in accordance with Section VII of Attachment “A”.
- B.** Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment “A”.
- C.** Other reports required by any condition of Attachment “B”.

**XV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304.G and -306.A.8.e]

- A.** The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B.** If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

**XVI. PERMIT AMENDMENT OR REVISION**

[A.A.C. R18-2-318, -319, and -320]

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319); and
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

**XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION**

[A.A.C. R18-2-306.A.4 and -317]

- A. The Permittee may make changes at the permitted source without a permit revision if all of the following apply:
  - 1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(19);
  - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
  - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
  - 4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A; and
  - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVII.A and XVII.C of this Attachment.
- C. For each change under Conditions XVII.A and XVII.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.

- D.** Each notification shall include:
1. When the proposed change will occur;
  2. A description of the change;
  3. Any change in emissions of regulated air pollutants; and
  4. Any permit term or condition that is no longer applicable as a result of the change.
- E.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate to Conditions XVII.A and XVII.B above.
- F.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section.
- G.** Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, do not satisfy Condition XVII.A above.

## **XVIII. TESTING REQUIREMENTS**

[A.A.C. R18-2-312]

- A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

**B. Operational Conditions during Testing**

Tests shall be conducted during operation at the full load of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

- C.** Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

**D. Test Plan**

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. Test duration;

2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

**E. Stack Sampling Facilities**

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);
3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

**F. Interpretation of Final Results**

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

**G. Report of Final Test Results**

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

**XIX. PROPERTY RIGHTS**

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

**XX. SEVERABILITY CLAUSE**

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

**XXI. PERMIT SHIELD**

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XVI.B of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

**XXII. PROTECTION OF STRATOSPHERIC OZONE**

[40 CFR Part 82]

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.



**ATTACHMENT "B": SPECIFIC CONDITIONS**  
**Air Quality Control Permit No. 52663 for**  
**UNS Electric, Inc. – Valencia Power Plant**

**I. FACILITY WIDE REQUIREMENTS**

**A.** The Permittee shall have on site or on call a person certified in EPA Reference Method 9. [A.A.C. R18-2-306.A.3.c]

**B.** At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by this Attachment performed in the same six month period as applicable to the compliance certification period. [A.A.C. R18-2-306.A.5.a]

**C.** The Permittee shall keep a log of all emission related maintenance activities performed at the facility. [A.A.C. R18-2-306.A.3.c]

**D. Voluntarily Accepted Limitations**

1. Emission Limitations [A.A.C R18-2-306.01, -306.02, and -331.A.3.a]  
[Material permit conditions are indicated by underline and italics]

a. Nitrogen Oxides (NO<sub>x</sub>)

*Total combined emissions of NO<sub>x</sub> from the four Gas Turbine Units (P1, P2, P3, and P4), Emergency Diesel Generator Engine (EGEN), and the three startup engines BSP1, BSP2, & BSP3 shall not exceed 240 tons per year, calculated daily as a rolling 365-day total.*

b. Carbon Monoxide (CO)

*Total combined emissions of CO from the four Gas Turbine Units (P1, P2, P3, and P4), Emergency Diesel Generator Engine (EGEN), and the three startup engines BSP1, BSP2, & BSP3 shall not exceed 240 tons per year, calculated daily as a rolling 365-day total.*

2. Monitoring, Recordkeeping, and Reporting Requirements [A.A.C. R18-2-306.A.3, 4 & 5, -306.02(C), and -312.H.3]

a. For the purpose of compliance demonstration with the annual NO<sub>x</sub> and CO emission limits in Condition I.D.1 above, the Permittee shall comply with the continuous emission monitoring, recordkeeping and reporting provisions in Condition II.F of this Attachment.

b. The Permittee shall keep records of daily and rolling 365-day totals of the hours of operation of the EGEN and startup engines BSP1, BSP2, & BSP3.

- c. The Permittee shall calculate daily the emissions of NO<sub>x</sub> and CO from the EGEN and startup engines BSP1, BSP2, & BSP3 by using the hours of operation and the emission factors for each of the engine as provided below:

EMITTING UNIT	UNIT	EMISSION FACTOR	
		NO <sub>x</sub>	CO
Emergency Diesel Generator	g/Kw-hr	6.4	3.5
Startup Engines BSP1, BSP2, & BSP3	lb/hp-hr	0.031	0.00668

- d. The Permittee shall calculate the rolling 365-day total emissions of NO<sub>x</sub> and CO from Gas Turbine Units P1, P2, P3, P4, EGEN, and startup engines BSP1, BSP2, & BSP3 to show compliance with Condition I.D.1 above.
- e. Each calendar day during which total combined rolling 365-day total NO<sub>x</sub> emission rate from Gas Turbine Units P1, P2, P3, P4, EGEN, startup engines BSP1, BSP2, & BSP3 exceed 240 tons shall constitute an exceedance of Condition I.D.1.a. Exceedances shall be reported to the Director in accordance with Condition XII.A of Attachment “A”.
- f. Each calendar day during which total combined rolling 365-day total CO emission rate from Gas Turbine Units P1, P2, P3, P4, EGEN, startup engines BSP1, BSP2, & BSP3 exceed 240 tons shall constitute an exceedance of Condition I.D.1.b. Exceedances shall be reported to the Director in accordance with Condition XII.A of Attachment “A”.
- g. Each individual day and 365-day rolling total NO<sub>x</sub> and CO emission rate in the reporting period shall be included in the semiannual compliance certification required by Condition VII of Attachment “A”.
- h. The Permittee shall maintain the following records in accordance with Condition XIII of Attachment “A”:

  - i. Records all CEMS and fuel flow rate monitoring system performance evaluations, calibration checks and adjustments, and maintenance activities.
  - ii. All compliance records including calculations, reports, and supporting documentation.

## II. GAS TURBINE UNITS P1, P2, P3, AND P4

### A. General Provisions

The following requirements apply to the operation, maintenance, and testing of Gas Turbine Units P1, P2, P3, and P4 and associated monitoring systems in accordance with 40 CFR Part 60, Subpart A – General Provisions.

1. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
2. The Permittee shall submit excess emissions and monitoring systems performance reports and/or summary report forms on a quarterly basis as required by 40 CFR 60.7(c) and (d). The Permittee may reduce the frequency of reporting in accordance with the provisions in 60.7(e). [40 CFR 60.7(c), (d), and (e)]
3. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as provided in 40 CFR 60.7(f)(1) and (2). [40 CFR 60.7(f)]
4. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate this facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
6. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR Part 60, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 60.11(g)]
7. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission, which

would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]

8. The Permittee shall comply with the “General notification and reporting requirements” found in 40 CFR 60.19. [40 CFR 60.19]

## **B. Operational Limitations**

### 1. Fuel Limitation

- a. Type of Fuel [A.A.C. R18-2-306.A.2]

The Permittee shall not cause or allow the combustion of any fuel in Gas Turbine Units P1, P2, P3, and P4 other than:

- i. Pipeline quality natural gas;
- ii. Distillate fuel oil; or
- iii. Mixture of natural gas and distillate fuel oil.

- b. Monitoring, Recordkeeping, and Reporting Requirements [A.A.C. R18-2-306.A.4]

- i. On a daily basis, the Permittee shall keep records of the type of fuel burned in Gas Turbine Units P1, P2, P3, and P4.
- ii. The Permittee shall keep a record of any change in fuel type including:
  - (a) Type of fuel change; and
  - (b) Date and time of the fuel change.

## **C. Nitrogen Oxides**

1. Emission Limitations/Standards [40 CFR 60.332(a)(1) and (b)]

The Permittee shall not cause to be discharged into the atmosphere from each Gas Turbine (Units P1, P2, P3, and P4) any gases which contain nitrogen oxides (NO<sub>x</sub>) in excess of:

$$\text{STD} = 0.0075 * \frac{(14.4)}{Y} + F$$

Where:

STD = allowable ISO corrected NO<sub>x</sub> emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen = 0

STD = 75 ppmv at 15 percent oxygen

2. Air Pollution Control Equipment

[Material permit conditions are indicated by underline and italics]

a. *At all times when Gas Turbine Units P1, P2, P3, and P4 are in operation, including periods of startup, shutdown, and malfunction, the Permittee shall to the extent practicable, maintain and operate the water injection system(s) in a manner consistent with good air pollution control practice for minimizing NO<sub>x</sub> emissions.*

[A.A.C. R18-2-2-331.A.3.e and 40 CFR 60.11(d)]

b. *The Permittee shall operate and maintain an audible alarm system on each gas turbine unit to alert the turbine operator when the water injection system becomes inoperable.*

[A.A.C. R18-2-306.A.3 and -331.A.3.e]

3. Monitoring, Recordkeeping, and Reporting Requirements

[Material permit conditions are indicated by underline and italics]

a. *The Permittee shall certify, maintain, operate, and quality-assure Continuous Emission Monitoring Systems (CEMS) consisting of NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>) monitors for measuring NO<sub>x</sub> emissions from Gas Turbine Units P1, P2, P3, and P4.*

[40 CFR 60.334.(a), A.A.C. R18-2-306.A.3, -306.02.C, and -331.A.3.c]

b. *The Permittee shall calibrate, maintain, and operate fuel flow rate monitoring systems for determining the natural gas and/or distillate fuel oil input rate to each gas turbine unit for each operating hour. Each fuel flow rate monitoring system shall be calibrated and quality-assured in accordance with Conditions II.F.7 and II.F.8.*

[A.A.C. R18-2-306.A.3, -306.02.C, and -331.A.3.c]

c. The Permittee shall utilize CEMS required by Condition II.C.3.a to demonstrate compliance with Condition II.C.1 as follows:

i. The NO<sub>x</sub> and diluent CEMS shall be certified, maintained, and operated as follows:

- (a) Each CEMS must be certified according to Performance Specification 2 and 3 (for diluent) of 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. [40 CFR 60.334(b)(1)]
  - (b) Except for the system breakdowns, repairs, calibration checks, and zero and span adjustments, the NO<sub>x</sub> and diluent CEMS shall be in continuous operation, during each hour of Unit (P1, P2, P3, and P4) operation. [40 CFR 60.13(e)]
  - (c) During each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [40 CFR 60.334(b)(2)]
  - (d) For the purpose of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h). [40 CFR 60.334(b)(3)]
  - (e) For each unit operating hour in which a valid hourly average is obtained for both NO<sub>x</sub> and diluent, the data acquisition and handling system must calculate and record the hourly NO<sub>x</sub> emissions in the units of the applicable NO<sub>x</sub> emission standard under Condition II.C.1 of this Attachment. For any hour in which the hourly average O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub>, a diluent cap value of 19.0 percent O<sub>2</sub> may be used in the emission calculations. [40 CFR 60.334(b)(3)(i)]
  - (f) A worst case ISO correction factor may be calculated and applied using historical ambient data in accordance with the procedures in 40 CFR 60.334(b)(3)(ii). [40 CFR 60.334(b)(3)(ii)]
- ii. The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR

60.7(c). The reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. Periods of excess emissions and monitor downtime that shall be reported are defined as follows:

- (a) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO<sub>x</sub> concentration exceeds the applicable emission limit in Condition II.C.1 of this Attachment. A 4-hour rolling average NO<sub>x</sub> concentration is the arithmetic average of the average NO<sub>x</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub> and, to ISO standard conditions) and the three unit operating hour average NO<sub>x</sub> concentrations immediately preceding that unit operating hour.
- (b) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO<sub>x</sub> concentration or diluent (or both).
- (c) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period. The Permittee is not required to report ambient conditions if opting to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii).

[40 CFR 60.334(j)(1)(iii)]

4. Permit Shield

[A.A.C.R18-2-325]

Compliance with Condition II.C shall be deemed compliance with the following requirements as of the date of issuance of this permit: 40 CFR 60.332(a)(1) & (b), 334(a), (b)(1), (b)(2), (b)(3), (b)(3)(i) & (ii), and (j)(1)(iii).

**D. Sulfur Dioxide (SO<sub>2</sub>)**

1. Emission Limitations/Standards

[Material permit conditions are indicated by underline and italics]

- a. *The Permittee shall not burn in Gas Turbine Units P1, P2, P3, and P4 any fuel that contains sulfur in excess of 0.2 percent by weight.* [A.A.C. R18-2-306.01 & -331.A.3.a, and 40 CFR 60.333(b)]

- b. Total combined emissions of SO<sub>2</sub> from Gas Turbine Units P1, P2, P3, and P4 shall not exceed 200 tons per year, calculated monthly as rolling 12-month total.  
[A.A.C. R18-2-306.01, -306.02, and -331.A.3.a]

2. Monitoring, Recordkeeping, and Reporting Requirements

a. Fuel Sulfur Content

i. Natural Gas

The Permittee shall maintain a vendor-provided copy of that part of the Federal Energy Regulatory Commission (FERC)-approved Tariff agreement that contains the sulfur content and the lower heating value of the pipeline quality natural gas and demonstrates that the fuel meets the definition of “natural gas” contained in 40 CFR 60.331(u). [40 CFR 60.334(h)(3)]

ii. Distillate Fuel Oil

(a) The Permittee shall keep on record a copy of the distillate fuel oil purchase specification sheet. This specification sheet shall include the sulfur content (sulfur weight percentage) and the method used to determine the sulfur content of the distillate fuel oil. [A.A.C. R18-2-306.A.4]

(b) The Permittee shall monitor the total sulfur content of the distillate fuel oil being fired in each gas turbine unit. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10)(i). [40 CFR 60.334(h)(1)]

(c) The Permittee shall use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of 40 CFR 75 Appendix D (i.e., flow proportional sampling, daily sampling, sampling from the unit’s storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with distillate fuel oil already in the intended storage tank). [40 CFR 60.334(i)(1)]

(d) The fuel analyses required by Condition II.D.2.a.(2)(b) may be performed by the Permittee, a service contractor retained by the Permittee, the fuel vendor, or any other qualified agency. Distillate fuel oil vendor specifications



maintained in accordance with Condition II.D.2.a.(2)(a) may be used to meet the requirements of Conditions II.D.2.a.(2)(b) and (c), if the sampling and analysis procedures contained in Conditions II.D.2.a.(2)(b) and (c) are adhered to. [40 CFR 60.335(b)(11)]

- (e) For the purpose of demonstrating compliance with Condition II.D.1.a, the Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c). All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. Periods of excess emissions and monitor downtime that shall be reported are defined as follows:
  - (1) For oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in any gas turbine exceeds the limits in Condition II.D.1.a and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
  - (2) If the option to sample each delivery of distillate oil has been selected, the Permittee shall immediately switch to one of the other oil sampling options if the sulfur content of a delivery exceeds the limit in Condition II.D.1.a. The Permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to Condition II.D.2.a.(2)(e)(1). When all of the fuel from the delivery has been burned, the Permittee may resume using the as-delivered sampling option.

- (3) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

[40 CFR 60.334(j)(2)]

b. Annual SO<sub>2</sub> Emission Limit

For the purpose of compliance demonstration with Condition II.D.1.b, the Permittee shall perform the following calculations, recordkeeping, and reporting:

- i. The Permittee shall utilize fuel sulfur analysis or specification data required by Condition II.D.2.a, actual fuel usage records, and emission factors approved by the Department to calculate and record each individual month and the 12-month rolling total combined SO<sub>2</sub> emission rate from Gas Turbine Units P1, P2, P3, and P4.
- ii. The calculations required by Condition II.D.2.b.(1) shall be performed and results documented by the 15<sup>th</sup> day of each calendar month for the previous 12-month period.
- iii. Each calendar month during which total combined rolling 12-month total SO<sub>2</sub> emission rate from Gas Turbine Units P1, P2, P3, and P4 exceed 200 tons shall constitute an exceedance of Condition II.D.1.b. Exceedances shall be reported to the Director in accordance with Condition XII.A of Attachment “A”.
- iv. Each individual month and twelve month rolling total SO<sub>2</sub> emission rate in the reporting period shall be included in the semiannual compliance certification required by Condition VII of Attachment “A”.
- v. All compliance records, calculations, and supporting documentation shall be maintained in accordance with Condition XIII of Attachment “A”.

[A.A.C. R18-2-306.A.3, 4 & 5, and -306.02(C)]

3. Permit Shield

[A.A.C.R18-2-325]

Compliance with Condition II.D shall be deemed compliance with 40 CFR 60.333 (a) & (b), 334(h)(1) & (3), (i)(1), (j)(2), and 60.335(b)(11).

**E. Carbon Monoxide**

1. Annual CO Emission Limit [A.A.C R18-2-306.01, -306.02, and -331.A.3.a]

For the purpose of compliance determination with the annual CO emission limit in Condition I.D.1.b, the Permittee shall comply with the continuous emission monitoring, recordkeeping, and reporting requirements in Conditions II.E.2 and II.F below.

2. Monitoring, Recordkeeping, and Reporting Requirements

a. *The Permittee shall certify, maintain, operate, and quality-assure Continuous Emission Monitoring Systems (CEMS) consisting of CO and O<sub>2</sub> (or CO<sub>2</sub>) monitors for measuring CO emissions from Gas Turbine Units P1, P2, P3, and P4.*

[A.A.C. R18-2-306.A.3, -306.02.C, and -331.A.3.c]  
[Material permit conditions are indicated by underline and italics]

b. *The Permittee shall calibrate, maintain, and operate fuel flow rate monitoring systems for determining the natural gas and/ or distillate fuel oil input rate to each gas turbine unit for each operating hour. Each fuel flow rate monitoring system shall be calibrated and quality-assured in accordance with Conditions II.F.7 and II.F.8.* [A.A.C. R18-2-306.A.3, -306.02.C, and -331.A.3.c]  
[Material permit conditions are indicated by underline and italics]

**F. Monitoring, Recordkeeping, and Reporting Requirements for Annual NO<sub>x</sub> and CO Emission Limits** [A.A.C. R18-2-306.A.3, 4 & 5, -306.02(C), and -312.H.3]

1. For the purpose of compliance demonstration with Conditions I.D.1 and II.E.1, the Permittee shall utilize the NO<sub>x</sub>, CO, and diluent CEMS on Gas Turbine Units P1, P2, P3, and P4 in conjunction with the Data Acquisition and Handling System (DAHS) and fuel flow monitoring systems to calculate mass emissions in units of pounds per hour, pounds per day, and tons per daily rolling 365-day total.
2. The Permittee shall comply with the following requirements in 40 CFR 60.13 for each CEMS:
- a. 40 CFR 60.13(d): Zero, span, and calibration drift check requirements;
  - b. 40 CFR 60.13(e): Minimum frequency of operation requirements;
  - c. 40 CFR 60.13(f): Installation guidelines;
  - d. 40 CFR 60.13(h): Data reduction; and
  - e. 40 CFR 60.13(i): Provisions for the approval of alternate monitoring procedures

3. Each CEMS shall meet the following Performance Specifications in 40 CFR 60 Appendix B:
  - a. NO<sub>x</sub>: Performance Specification 2– Specifications and Test Procedures for SO<sub>2</sub> and NO<sub>x</sub> Continuous Emission Monitoring Systems in Stationary Sources
  - b. O<sub>2</sub> or CO<sub>2</sub>: Performance Specification 3– Specifications and Test Procedures for O<sub>2</sub> and CO<sub>2</sub> Continuous Emission Monitoring Systems in Stationary Sources
  - c. CO: Performance Specification 4–Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources
4. Each CEMS shall meet the Quality Assurance Requirements in 40 CFR 60 Appendix F.
5. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO<sub>x</sub>, CO diluent concentration, or fuel flow rate.
6. During CEMS or fuel flow rate monitoring system downtime, the Permittee shall implement the missing data procedures and calculations contained in the most current monitoring system QA/QC plan.
7. Quality Assurance Requirements for Natural Gas Fuel Flowmeters:
  - a. Each transmitter or transducer shall be calibrated by equipment that has a current certificate of traceability to NIST standards at least once every four calendar quarters in which a unit operated on natural gas for 168 hours or more during each quarter but not less than once every three years. The Permittee shall check the calibration of each transmitter or transducer by comparing its readings to that of the NIST traceable equipment at least once at the following levels: the zero-level, and at least two other upscale levels (e.g., “mid” and “high”), such that the full range of transmitter or transducer readings corresponding to normal unit operation is represented.
  - b. The Permittee shall calculate the accuracy of each transmitter or transducer at each level tested, using the following equation:

$$ACC = \frac{|R - T|}{FS} * 100$$

Where:

ACC = Accuracy of the transmitter or transducer as a percentage of full-scale.

R = Reading of the NIST traceable reference value (in milliamperes, inches of water, psi, or degrees).

T = Reading of the transmitter or transducer being tested (in milliamperes, inches of water, psi, or degrees, consistent with the units of measure of the NIST traceable reference value).

FS = Full-scale range of the transmitter or transducer being tested (in milliamperes, inches of water, psi, or degrees, consistent with the units of measure of the NIST traceable reference value).

- c. If each transmitter or transducer meets an accuracy of  $\pm 1.0$  percent of its full-scale range at each level tested, the fuel flowmeter accuracy of 2.0 percent is considered to be met at all levels. If, however, one or more of the transmitters or transducers does not meet an accuracy of  $\pm 1.0$  percent of full-scale at a particular level, then the Permittee may demonstrate that the fuel flowmeter meets the total accuracy specification of 2.0 percent at that level by using one of the following alternative methods. If, at a particular level, the sum of the individual accuracies of the three transducers is less than or equal to 4.0 percent, the fuel flowmeter accuracy specification of 2.0 percent is considered to be met for that level. Or, if at a particular level, the total fuel flowmeter accuracy is 2.0 percent or less, when calculated in accordance with Part 1 of American Gas Association Report No. 3, General Equations and Uncertainty Guidelines, the flowmeter accuracy requirement is considered to be met for that level.
- d. If during a transmitter or transducer accuracy test the flowmeter accuracy specification of 2.0 percent is not met at any of the levels tested, the Permittee shall repair or replace the transmitter(s) or transducer(s) as necessary until the flowmeter accuracy specification has been achieved at all levels. (Note that only transmitters or transducers which are repaired or replaced need to be re-tested; however, the re-testing is required at all three measurement levels to ensure that the flowmeter accuracy specification is met at each level).
- e. For orifice, nozzles, and venturi type flowmeters, the Permittee shall perform a primary element inspection for damage and corrosion at least once every 12 calendar quarters in which a unit operated on natural gas for 168 hours or more during each quarter but not less than once during the term of this permit. If damage and/or corrosion are found, the Permittee shall replace

the flowmeter or restore the damaged or corroded flowmeter to “as new” condition.

- f. The Permittee shall log in ink, or in an electronic format the date that the calibration and inspection was conducted, the results of the calibration or inspection, and corrective action taken if needed.
8. Quality Assurance Requirements for Distillate fuel oil Flowmeters
    - a. For each flow divider, the speed pickups, and transducers shall be calibrated at least once every four calendar quarters in which a unit operated on distillate oil for 168 hours or more during each quarter but not less than once every three years. The Permittee shall log in ink, or in an electronic format, a record of the date the calibration was conducted.
    - b. For orifices, nozzles, venturi, vortex, turbine type flowmeters, and transmitters or transducers, the Permittee shall follow the quality assurance procedures outlined in Condition II.F.7, except that the frequency of such procedures shall be based on operation of the unit(s) on distillate oil.
  9. NO<sub>x</sub> and CO mass emission rates for each Gas Turbine Unit in units of pounds per hour, pounds per day, and tons per daily rolling 365-day total shall be calculated using the CEMS and diluent concentration data and fuel flow rate monitoring data. The Permittee shall use the procedures in Method 19 of 40 CFR 60 Appendix A and 40 CFR 75 Appendix F as applicable to calculate NO<sub>x</sub> mass emission rates.

### **III. INTERNAL COMBUSTION ENGINES (ICEs)**

#### **A. Applicability**

This Section is applicable to the black start stationary CI engines BSP1, BSP2, & BSP3 and EGEN identified in Equipment List, Attachment “C”.

#### **B. Fuel Limitations**

[A.A.C. R18-2-306.01.A and -331.A.3.a]  
[Material permit conditions are indicated by underline and italics]

*The Permittee shall only fire diesel fuel in the ICEs.*

#### **C. Existing Source Requirements**

This Section applies to ICEs marked as ‘No’ in New Source Performance Standards (NSPS) Applicable column of Equipment List, Attachment “C”.

1. Particulate Matter and Opacity
  - a. Emissions Limitations and Standards

- i. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery into the atmosphere in excess of the amounts calculated by the following equation:

$$E = 1.02 Q^{0.769}$$

Where

E = the maximum allowable particulate emission rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.  
[A.A.C. R18-2-719.C.1]

- ii. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.  
[A.A.C. R18-2-719.B]

- iii. Opacity [A.A.C. R18-2-719.E]

- (a) The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40 percent opacity.

- (b) Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

- b. Monitoring, Reporting, and Recordkeeping [A.A.C. R18-2-306.A.3.c]

The Permittee shall keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and heating value of the fuel. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-719.I]

- c. Permit Shield [A.A.C. R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.B, C.1, E, and I.

2. Sulfur Dioxide

a. Emission Limitations and Standards

- i. While firing with diesel fuel, the Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu. [A.A.C. R18-2-719.F]
- ii. The Permittee shall only burn fuel containing less than 0.9 percent by weight of sulfur. [A.A.C. R18-2-719.H]

b. Monitoring, Recordkeeping, and Reporting

- i. The Permittee shall keep daily records of the sulfur content and lower heating value of the fuel being fired in the ICEs. The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in Condition III.C.2.a. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c and -719.I]
- ii. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8 percent. [A.A.C. R18-2-719.J]

c. Permit Shield [A.A.C. R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.F, H, I, and J.

**D. New Source Performance Standard (NSPS) Requirements**

1. Applicability

- a. This Section applies to EGEN. [40 CFR 60.4200(a)(2)]
- b. Emergency CI ICE Definition [40 CFR 60.4219]

EGEN ICE shall be limited to emergency situations and required testing and maintenance only such as to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or used to pump water in the case of fire or flood, etc. The engine shall not be used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity.



2. Operating Requirements

- a. *Operation of the EGEN for any operation other than emergency operation, maintenance, and testing is prohibited.*  
[40 CFR 60.4211(e); R18-2-331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- b. *The Permittee shall operate the non-resettable hour meter on the EGEN.*  
[40 CFR 60.4209(a), R18-2-331.A.3.a]  
[Material Permit Conditions are indicated by underline and italics]
- c. The Permittee shall operate and maintain the engine over its entire life according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. A copy of the instructions or approved procedures shall be kept onsite and made available to ADEQ upon request. [40 CFR 60.4206, 4211(a), and A.A.C. R18-2-306.A.3]
- d. The Permittee shall only change those engine settings that are permitted by the manufacturer. [40 CFR 60.4211(a)]
- e. The Permittee shall meet the requirements of 40 CFR Parts 89, 94, and/or 1068, as they apply. [40 CFR 60.4211(a)]
- f. The Permittee may operate the EGEN for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. [40 CFR 60.4211(e)]
- g. Maintenance checks and readiness testing is limited to 100 hours per year. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. [40 CFR 60.4211(e)]

3. Fuel Requirements

The Permittee shall use fuel that meets the following requirements of 40 CFR 80.510(b). [40 CFR 60.4207(b)]

- a. Sulfur Content: 15 ppm maximum; and
- b. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

4. Emission Limitations/Standards [40 CFR 60.4204(b) and 60.4205 (b)]  
[40 CFR 89.112; Table 1]
- a. Non-methane hydrocarbons (NMHC) and Nitrogen Oxides (NO<sub>x</sub>)
- The Permittee shall limit the combined emissions of NMHC and NO<sub>x</sub> from the EGEN to 6.4 g/Kw-hr.
- b. Carbon Monoxide (CO)
- The Permittee shall limit the emissions of CO from the EGEN to 3.5 g/Kw-hr.
- c. Particulate Matter (PM)
- The Permittee shall limit the emissions of PM from the EGEN to 0.2 g/Kw-hr.
5. Monitoring and Record Keeping Requirements
- a. The Permittee shall maintain a copy of engine certification(s) or other documentation demonstrating that the engine complies with the applicable standards in this Permit, and shall make the documentation available to ADEQ upon request.  
[40 CFR 60.4211(a)]
- b. The Permittee shall keep records of fuel supplier specifications. The specifications shall contain information regarding the name of fuel supplier, sulfur content, and cetane index or aromatic content in the fuel. These records shall be made available to ADEQ upon request.  
[40 CFR 60.4211(a)]
6. Permit Shield [A.A.C. R-18-2-325]
- Compliance with the conditions in this Part shall be deemed in compliance with 40 CFR 60.4200 (a)(2), 4204(b), 4205(b), 4207(b), 4209(a), 4211 (a) & (e), and 4219.

**E. National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements**

1. Applicability
- a. This Section applies to black start engines (BSP1, BSP2, and BSP3) installed for the sole purpose of startup of combustion turbines.  
[40 CFR 63.6590(a)(1)(iii) and 6675]
- b. The Permittee shall comply with the terms of this Section no later than May 3, 2013.  
[40 CFR §63.6595(a)(1)]

2. General Operating Requirements

- a. The Permittee must be in compliance with the applicable emission/operating limitations at all times. [40 CFR 63.6605(a)]
- b. At all times the Permittee shall operate and maintain the ICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- c. The Permittee shall minimize the ICE's time at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
- d. Except during periods of startup, the Permittee shall meet the following requirements for each black start engine:
  - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
  - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.  
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]
- e. The Permittee may opt to utilize an oil analysis program in order to extend the oil change requirement specified in Condition III.E.2.d. The oil analysis shall be performed at the same frequency specified in Condition III.E.2.d. The analysis program shall at a minimum analyze the following three parameters:
  - i. Total base number;
  - ii. Viscosity; and
  - iii. Percent water content.

The condemning limits for these parameters are as follows:

- i. Total base number is less than 30 percent of the total base number when oil is new;
    - ii. Viscosity of the oil has changed by more than 20 percent from the viscosity of oil when new; and
    - iii. Percent water content by volume is greater than 0.5. [40 CFR 63.6625(i)]
  - f. The Permittee shall operate and maintain each black start engine according to manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e); Table 6, Item 9]
- 3. Reporting, Recordkeeping, and Notification requirements
  - a. The Permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
  - b. The Permittee shall keep each record for 5 years following the date of each occurrence, maintenance, corrective action, report, or record. [40 CFR 63.6660(b)]
  - c. The Permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, maintenance, corrective action, report, or record. [40 CFR 63.6660(c)]
- 4. Permit Shield [A.A.C. R-18-2-325]

Compliance with the conditions in this Part shall be deemed compliance with 40 CFR 6590(a)(1)(iii); 6595(a)(1); 6603(a), 6605(a) & (b); 6625 (h), (i), & (e), 6660 (a), (b), & (c), and 6675.

**IV. DIESEL STORAGE TANKS**

**A. Applicability**

This Section applies to the diesel storage tanks listed in Equipment List, Attachment "C".

**B. Gaseous Emissions**

- 1. The Permittee shall not emit gaseous or odorous materials from the equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution. [A.A.C. R18-2-730.D]

2. Materials including solvents or other volatile compounds shall be processed, stored, used, and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory. [A.A.C. R18-2-730.F]
3. Where a stack, vent, or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution ton adjoining property. [A.A.C. R18-2-730.G]
4. Permit Shield [A.A.C. R18-2-325]

Compliance with the terms of this section shall be deemed compliance with A.A.C. R18-730.D, F, and G.

## **V. FUGITIVE DUST REQUIREMENTS**

### **A. Applicability**

This Section applies to any source of fugitive dust in the facility.

### **B. Particulate Matter and Opacity**

Open Areas, Roadways & Streets, Storage Piles, and Material Handling

1. Emission Limitations/Standards
  - a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40 percent measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-614]
  - b. The Permittee shall not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20 percent opacity. [A.A.C. R18-2-702.B]
  - c. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne
    - i. Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or

excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means; [A.A.C. R18-2-604.A]

- ii. Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means; [A.A.C. R18-2-604.B]
- iii. Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed; [A.A.C. R18-2-605.A]
- iv. Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust; [A.A.C. R18-2-605.B]
- v. Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust; [A.A.C. R18-2-606]
- vi. Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored; [A.A.C. R18-2-607.A]
- vii. Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents; [A.A.C. R18-2-607.B]
- viii. Any other method as proposed by the Permittee and approved by the Director. [A.A.C. R18-2-306.A.3.c]

## 2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Conditions V.B.1.c.i through V.B.1.c.viii above were performed and the control measures that were adopted. [A.A.C. R18-2-306.A.3.c]

b. Opacity Monitoring Requirements

- i. A certified Method 9 observer shall conduct a quarterly visual survey of visible emissions from the fugitive dust sources. The Permittee shall keep a record of the name of the observer, the date and location on which the observation was made, and the results of the observation.
- ii. If the observer sees a visible emission from a fugitive dust source that on an instantaneous basis appears to exceed applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the visible emission.
  - (a) If the six-minute opacity of the visible emission is less than or equal to applicable opacity standard, the observer shall make a record of the following:
    - (i) Location, date, and time of the observation; and
    - (ii) The results of the Method 9 observation.
  - (b) If the six-minute opacity of the visible emission exceeds applicable opacity standard, then the Permittee shall do the following:
    - (i) Adjust or repair the controls or equipment to reduce opacity to below the applicable standard; and
    - (ii) Report it as an excess emission under Section XII.A of Attachment "A".  
[A.A.C. R18-2-306.A.3.c]

3. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-604.A, 604.B, 605, 606, 607, and 612.

**VI. MOBILE SOURCES**

**A. Emission Limitations/Standards**

1. Roadway and Site Cleaning Machinery

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period of time greater than 10 consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting

cold equipment shall be exempt from this requirement for the first 10 minutes. [A.A.C.R18-2-804.A]

2. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period of time greater than 10 consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes. [A.A.C.R18-2-802.A]

**B. Permit Shield** [A.A.C. R18-2-325]

Compliance with the conditions of this part shall be deemed compliance with the following requirements as of the date of issuance of this permit: A.A.C. R18-2-802.A and 804.A.

**VII. OTHER PERIODIC ACTIVITIES**

**A. Abrasive Blasting**

Particulate Matter and Opacity Standards

1. Emission Limitation/Standards
  - a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:
    - i. Wet blasting
    - ii. Effective enclosure with necessary dust collecting equipment; or
    - iii. Any other method approved by the Director. [A.A.C. R18-2-726]

- b. Opacity Limitations [A.A.C. R18-2-702.B.3]

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any sandblasting or other abrasive blasting operations, opacity of greater than 20 percent.

2. Monitoring and Recordkeeping Requirement [A.A.C. R18-2-306.A.3.c]

Each time an abrasive blasting project is conducted, the Permittee shall keep a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and



- c. Type of control measures employed.
3. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this part shall be deemed compliance with the requirements of A.A.C. R18-2-702.B.3 and 726.

**B. Use of Paints**

1. Volatile Organic Compound Standards

a. Emissions Limitations/Standards

While performing spray-painting operations, the Permittee shall comply with the following requirements:

- i. The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.  
[A.A.C. R18-2-727.A]

- ii. The Permittee shall not either: [A.A.C. R18-2-727.B]

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

- (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

- iii. For the purposes of Conditions VII.B.1.a.ii and VII.B.1.a.iv, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions VII.B.1.a.iii.(a) through VII.B.1.a.iii.(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

- (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.  
[A.A.C. R18-2-727.C]

iv. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions VII.B.1.a.iii.(a) through VII.B.1.a.iii.(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.  
[A.A.C. R18-2-727.D]

b. Monitoring and Recordkeeping Requirements  
[A.A.C. R18-2-306.A.3.c]

i. Each time a spray painting project is conducted, the Permittee shall keep a record of the following:

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed, if any;
- (d) Material Safety Data Sheets for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.

ii. Spot painting projects shall be exempt from the recordkeeping requirements of Condition VII.B.1.b.i above.

c. Permit Shield  
[A.A.C. R18-2-325]

Compliance with the conditions of this part shall be deemed compliance with the following requirements as of the date of issuance of this permit: A.A.C. R18-2-727.

## C. Demolition/Renovation

### Hazardous Air Pollutants Standards

#### 1. Emissions Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR Part 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).  
[A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement [A.A.C. R18-2-306.A.3.c]

The Permittee shall keep all required records in a file. The required records shall include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

3. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this part shall be deemed compliance with A.A.C. R18-2-1101.A.8 as of the date of issuance of this permit.

**ATTACHMENT “C”: EQUIPMENT LIST  
Air Quality Control Permit No. 52663 for  
UNS Electric, Inc. – Valencia Power Plant**

<b>Equipment No./ S. No.</b>	<b>Name</b>	<b>Make</b>	<b>Model</b>	<b>Capacity</b>	<b>Year of Installation/ Manufacture</b>	<b>NSPS Applicable</b>	<b>NESHAP Applicable</b>
P1/960621	Combustion Gas Turbine Unit 1	Hitachi	M	13.5 MW Continuous Maximum Rating	1988	Yes, Subpart GG	No
P2/960631	Combustion Gas Turbine Unit 2	Hitachi	M	13.5 MW Continuous Maximum Rating	1988	Yes, Subpart GG	No
P3/960641	Combustion Gas Turbine Unit 3	Hitachi	M	13.5 MW Continuous Maximum Rating	1988	Yes, Subpart GG	No
P4/481-574	Combustion Gas Turbine Unit 4	General Electric	LM 2500	23 MW Continuous Maximum Rating	2006/1987	Yes, Subpart GG	No
P8	Diesel Fuel Storage Tank			50,000 gallons	1997	No	No
P9	Diesel Fuel Storage Tank			50,000 gallons	1949	No	No
BSP1/ 8FF3470	P1 Black Startup CI Engine	Detroit Diesel	8083-7400	480 HP	1988	No	Yes, Existing
BSP2/ 8FF7267	P2 Black Startup CI Engine	Detroit Diesel	8083-7400	480 HP	1988	No	Yes, Existing
BSP3/ 8VF142944	P3 Black Startup CI Engine	Detroit Diesel	8083-7400	480 HP	1988	No	Yes, Existing
EGEN/ EST0088	Emergency Diesel Generator Engine	Caterpillar	C18DE96	923 HP	2010	Yes, Subpart IIII	Yes, New