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Document Title:	Petition to Amend Upgrades to the Gas Turbines
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Filer:	Dale Rundquist
Organization:	NRG Energy, West Region
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El Segundo Power, LLC
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El Segundo, CA 90245
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August 15, 2017

Dale Rundquist
Compliance Project Manager
Siting, Transmission and Environmental Protection (STEP) Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Subject: Petition to Amend Proposing Performance Upgrades to the Gas Turbines at the El Segundo Energy Center Project (CEC Docket No.00-AFC-14C)

Dear Mr. Rundquist:

El Segundo Energy Center, LLC. (Petitioner), the Project Owner, a wholly owned subsidiary of NRG Energy, Inc. (NRG), is pleased to submit the enclosed Petition to Amend (Petition) proposing modifications to equipment licensed by the California Energy Commission (CEC) for the El Segundo Energy Center (ESEC) Project (CEC Docket No.00-AFC-14C). This Petition is being submitted to the CEC in order to gain approval to perform necessary upgrades to gas turbine No. 5 and gas turbine No. 7 (the Project) at the ESEC, located at 301 Vista Del Mar, El Segundo, California. The proposed modifications includes the installation of enhanced hardware in the combustor and turbine sections of the two gas turbines and to optimize the gas turbine control logic. The modifications to the turbines will increase the efficiency and the generating capacity of the gas turbines with no change in the maximum heat input of the gas turbines. This Petition does not propose any changes to the Conditions of Certification (COCs) included in the Final Decision for the project (issued in February 2005) as revised in subsequent CEC's amendments to the Final Decision.

If you have any questions or need further information, please don't hesitate to contact me at (760) 710-2156.

Best Regards,

George L. Piantka, PE
Sr. Director, Regulatory Environmental Services
NRG Energy, West Region

Enclosure

cc: Melissa Hillman, Sierra Research/Trinity Consultants
Ken Riesz, El Segundo Power, LLC

PETITION TO AMEND

NRG El Segundo Energy Center

El Segundo Energy Center
(Docket Number 00-AFC-14C)
Gas Turbine Performance Upgrade Project

Prepared by:

Sierra Research
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916-444-6666

August 2017

sierra research | Trinity Consultants

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1. OVERVIEW OF THE PETITION

El Segundo Energy Center LLC. (Petitioner), the Project Owner, a wholly owned subsidiary of NRG Energy, Inc. (NRG), proposes to make modifications to equipment licensed by the California Energy Commission (CEC) for the El Segundo Energy Center (ESEC) Project (CEC Docket No.00-AFC-14C), located at 301 Vista Del Mar, El Segundo, California This Petition to Amend (Petition) is being submitted to the CEC to gain approval to perform necessary upgrades to gas turbine No. 5 and gas turbine No. 7 (the Project) at the ESEC,; additional details on the proposed Project are included in Section 2.1 of this Petition. This Petition does not propose any changes to the Conditions of Certification (COCs) included in the Final Decision for the El Segundo Power Redevelopment Project (ESPR), issued in February 2005, the Final Decision to ESPR Amendment issued June 30, 2010 that specified the Siemens combined cycle technology (units 5-8) which has been in commercial operations since August 1, 2013, and the minor amendment approved August 17, 2012 that clarified a few Air Quality COCs.

1.1. INFORMATION REQUIREMENTS FOR THE POST-CERTIFICATION AMENDMENT

This Petition contains the information required under the CEC's Siting Regulations for post-certification project modifications (California Code of Regulations [CCR] Title 20, Section 1769). This Petition, as summarized in Table 1-1 below, contains the information necessary for staff to determine that that the Project will not (a) significantly affect the environment, (b) cause a change or deletion of a COC, or (c) cause the project not to comply with applicable laws, ordinances, regulations, and standards (LORS).

Table 1-1. Informational Requirements for Post-Certification Modifications

CCR Title 20, Section 1769 Requirement	Section of Petition Fulfilling Requirement
Complete description of the proposed modifications, including new language for any conditions that will be affected. Section 1769(a)(1)(A).	2.1 Proposed Facility Modifications
A discussion of the necessity for the proposed modification. Section 1769(a)(1)(B).	2.2 Necessity of Proposed Modifications
If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation of why the issue was not raised at that time. Section 1769(a)(1)(C).	2.3 Proposed Modifications Are Based Upon Information Previously Unknown to Petitioner
If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted. Section 1769(a)(1)(D).	2.4 Proposed Modifications Do Not Change or Undermine the Assumptions, Rationale, Findings, or Other Bases of the Final Decision
An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts. Section 1769(a)(1)(E).	2.5 Analysis of the Environmental Impacts from the Proposed Modifications
A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards. Section 1769(a)(1)(F).	2.6 Impacts of the Modifications on the Facility's Ability to Comply with Applicable LORS
A discussion of how the modification affects the public. Section 1769(a)(1)(G).	2.7 Impacts of the Modifications to the Public
A list of property owners potentially affected by the modification and a discussion on the potential effect on property owners, the public, and the parties to the application proceeding. Section 1769(a)(1)(H) and Section 1769(a)(1)(I).	2.8 Potential Effect on Nearby Property Owners, the Public, and the Parties in the Application Proceeding

2.1. PROPOSED FACILITY MODIFICATIONS

The Project consists of the installation of enhanced hardware to the combustor and turbine sections of gas turbine No. 5 and gas turbine No. 7 as well as optimization of the control logic of the gas turbines at the ESEC. These proposed performance upgrades include increased MW output and improved efficiency due to higher gas turbine firing temperatures made possible by improved cooling and coatings of the power turbine stage 1 and 2 blades/vanes, improved coatings on the power turbine stage 3 vanes, and improved sealing of the power turbine stages. In addition, the performance upgrades include the use of an advanced combustion optimization control system. The modifications to the turbines will increase the efficiency and the generating capacity of the gas turbines resulting in an increase in the total gross output per unit ranging from approximately 10 to 20 MWs depending on the ambient conditions and operating mode with a corresponding decrease in heat rate (in terms of Btu/kWh). However, there will be no change in the maximum heat input of the gas turbines (i.e., the maximum heat input to each turbine will remain 2,096 MMBtu/hr) as a result of these proposed upgrades; additionally, the turbines will continue to meet all existing emissions and operating limits established in the existing permits. No changes to the Project's COCs are required for the proposed modifications.

2.2. NECESSITY OF PROPOSED MODIFICATIONS

The proposed modifications are necessary to enable the Petitioner to operate the gas turbines with improved efficiency and flexibility, enabling the combined cycle trains (i.e., Units 5 & 6 and Units 7 & 8) to reduce GHG emissions per megawatt hour (MWh), follow CAISO dispatch instructions over a wider load range, and operate more closely to the maximum output as analyzed in the ESPR Amendment and in the associated Final Determination of Compliance.

2.3. PROPOSED MODIFICATIONS ARE BASED UPON INFORMATION PREVIOUSLY UNKNOWN TO PETITIONER

The Petitioner was not aware that modifications could be made to optimize the turbine efficiency at the time of the original Application for Certification proceeding or during subsequent Petition proceedings.

2.4. PROPOSED MODIFICATIONS DO NOT CHANGE OR UNDERMINE THE ASSUMPTIONS, RATIONALE, FINDINGS, OR OTHER BASES OF THE FINAL DECISION

The proposed modifications to the gas turbines do not change or undermine the assumptions, rationale, finding, or other bases of the Final Decision approving the ESEC or subsequent CEC's amendments to the Final Decision. The Project will increase the rated generating capability of the gas turbines and will also improve the fuel efficiency, but the units will continue to meet all existing air emissions limits established in the existing permits.

2.5. ANALYSIS OF THE ENVIRONMENTAL IMPACTS FROM THE PROPOSED MODIFICATIONS

The proposed modifications will not have significant adverse impacts on the environment; as such, there is no need to further discuss any mitigation measures necessary to offset significant impacts to the environment as a result of the Project. A summary of the environmental resource areas as well as the associated analysis is provided in Table 2-1 below.

Table 2-1. Environmental Analysis Summary

Resource Area	Analysis
Air Quality	There will be no additional emission units added to ESEC. The proposed modifications will not trigger air permit thresholds for permitting (refer to the SCAQMD permit application provided in Appendix A for details). No impact.
Biological Resources	The proposed modifications will be performed on existing emission units at the ESEC. No impact.
Cultural Resources	The proposed modifications will not require ground disturbance activities. No Impact.
Geology and Paleontology	The proposed modifications will not require ground disturbance activities. No impact.
Hazardous Materials	The proposed modifications will not involve hazardous materials or storage. No impact.
Land Use	The proposed modifications will not require any change to land use. No impact.
Noise and Vibration	The proposed modifications will not require any noisy or heavy equipment. The project will continue to meet existing noise and vibration COCs. No impact.
Public Health	There will be no additional emission units added to ESEC. The proposed modifications will not trigger air permit thresholds for permitting (refer to the SCAQMD permit application provided in Appendix A for details). No impact.
Socioeconomic Resources	The proposed modifications will not require extensive labor. The work will be performed during normal maintenance activities that have been scheduled for spring 2018. No impact.
Soil and Water Resources	The proposed modifications will not cause ground disturbances and will not require additional water resources. No impact.
Traffic and Transportation	The proposed modifications will not require offsite staging or laydown, heavy haul deliveries. The project related traffic and transportation, and associated onsite personnel for this modification will be akin to normal maintenance activities. It will be performed during scheduled annual maintenance in spring 2018. No impact.
Visual Resources	The proposed modifications will not change the physical appearance of ESEC. No impact.
Waste Management	The proposed modifications are not expected to cause any change to the level of waste production at the facility. No impact.
Worker Safety and Fire Projection	Activities to be performed on the turbines during the proposed modifications will comply with the existing worker safety and fire protection requirements. No impact.

2.6. IMPACTS OF THE MODIFICATIONS ON THE FACILITY'S ABILITY TO COMPLY WITH APPLICABLE LORS

The proposed modifications will not impact the ESEC's ability to comply with all applicable LORS. The proposed modification does not change any of the emission and/or operating limits specified in the COCs.

Appendix A contains the air permit application prepared on behalf of the Petitioner by its consultant Sierra Research/Trinity Consultants, to be submitted to the South Coast Air Quality Management District (SCAQMD) for the Project. Included in the SCAQMD permit application is a regulatory analysis for the applicable District and federal air requirements for the Project.

2.7. IMPACTS OF THE MODIFICATIONS TO THE PUBLIC

The proposed modifications will not require new construction or alteration of the physical appearance of the facility, and will not change any of the existing emission and/or operating limits specified in the COCs. The project will be completed during the normal annual maintenance activities planned to take 2-3 weeks in spring 2018. Therefore, the proposed modifications will not negatively impact air quality or public health.

2.8. POTENTIAL EFFECT ON NEARBY PROPERTY OWNERS, THE PUBLIC, AND THE PARTIES IN THE APPLICATION PROCEEDING

Nearby property owners, the Public, and Parties to the Application Proceeding will not be affected by the proposed modification since the proposed modification will have no significant environmental effects and will be in compliance with applicable LORS. Because there are no potentially affected property owners, a list of property owners is not included in this Petition.

APPENDIX A: SCAQMD PERMIT APPLICATION FOR THE GAS TURBINE UPGRADE PROJECT

El Segundo Power, LLC
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El Segundo, CA 90245
Phone: 310-615-6342
Fax: 310-615-6060

August 10, 2017

Christian Aviles
Air Quality Engineer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Permit Application - Gas Turbine Performance Upgrade
ESEC Units 5 and 7
El Segundo Power, LLC Facility I.D. 115663

Dear Mr. Aviles:

El Segundo Power, LLC (ESP) is pleased to submit the enclosed permit application to the South Coast Air Quality Management District (SCAQMD or District) for the gas turbines performance upgrade project (Project) at the El Segundo Energy Center (ESEC or Facility). ESP proposes to install enhanced hardware in the combustor and turbine sections of the two gas turbines (CTG No. 5 and CTG No. 7) and to optimize the gas turbine control logic. These proposed changes to the gas turbines will increase the electrical output of the units under certain operating conditions.

The proposed upgrades will not cause any emissions increase from the gas turbines, and the Facility will continue to meet all existing emission limits as specified in the current permits. Details of the Project and the emissions calculations are provided in the enclosed Technical Support Document. The required SCAQMD application forms and a check in the amount of $41,138.80 to cover the application fee, payable to the District, are also enclosed.

If you have any questions or need further information, please don't hesitate to contact me at (760) 710-2156.

Best Regards,

George L. Piantka, PE
Sr. Director, Regulatory Environmental Services
NRG Energy, West Region

cc: Melissa Hillman, Sierra Research/Trinity Consultants
Ken Riesz, El Segundo Power, LLC

PERMIT TO CONSTRUCT AND MINOR PERMIT REVISION APPLICATION

NRG El Segundo Energy Center – El Segundo, California
SCAQMD Facility ID 115663 / CEC Docket Number 00-AFC-14C

Gas Turbine Performance Upgrade Project

Submitted By:

Sierra Research
A Trinity Consultants Company
1801 J Street
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916-444-6666

August 2017

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1. EXECUTIVE SUMMARY

El Segundo Power, LLC (ESP) operates an electric generating station, referred to as the El Segundo Energy Center (ESEC) located at 301 Vista Del Mar, El Segundo, California (the Facility). ESP operates the Facility under the Title V Permit (the Permit) issued by the South Coast Air Quality Management District (SCAQMD) on November 25, 2014. El Segundo Energy Center LLC is the owner of El Segundo Energy Center which was licensed by the California Energy Commission in June 2010.

ESP operates two Siemens SGT6-5000F rapid response combined cycle gas turbines (CTG No. 5 and CTG No. 7), each equipped with dry low-NOx (DLN) combustors, a selective catalytic reduction (SCR) system, and an oxidation catalyst (OxCat), as well as a 20,000-gallon ammonia (NH_3) storage tank (TK-001).

ESP is proposing to (1) install enhanced hardware to the combustor and turbine sections of CTG No. 5 and CTG No. 7 and (2) optimize the control logic of the gas turbines located at the ESEC; this project is referred to as the gas turbine performance upgrade project (the Project). These proposed performance upgrades include increased MW output and improved efficiency due to higher gas turbine firing temperatures made possible by improved cooling and coatings of the power turbine stage 1 and 2 blades/vanes, improved coatings on the power turbine stage 3 vanes, and improved sealing of the power turbine stages. In addition, the performance upgrades include the use of an advanced combustion optimization control system. ESP's overall goal of this Project is to increase the efficiency of each turbine such that the overall generating capacity of the gas turbines increases while the fuel input requirements remain the same. The proposed modifications will increase total gross output per unit from approximately 10 to 20 MWs depending on the ambient conditions and operating mode with a corresponding decrease in heat rate (in terms of Btu/kWh). There will be no change in the maximum heat input of the gas turbines (i.e., the maximum heat input to each turbine will remain at 2,096 MMBtu/hr)[1] as a result of these proposed upgrades; additionally, the turbines will continue to meet all existing emissions and operating limits established in the Permit.

As required by SCAQMD Rule 201, NRG is submitting this Authority to Construct (ATC) Application (the Application) to SCAQMD in order to obtain SCAQMD approval to construct the proposed Project. All information required under SCAQMD Rule 210 and associated "List and Criteria Identifying Information Required of Applicants Seeking a Permit to Construct From the South Coast Air Quality Management District" is included in this Application.[2] Appendix A of this Application includes all required SCAQMD forms.

As required by SCAQMD Rule 3005, NRG is submitting this Title V Minor Permit Revision Application (the Application) to SCAQMD. All information required under SCAQMD Rule 3003 and Rule 3005 is included in this Application. Appendix A of this Application includes all required SCAQMD forms.

NRG has enclosed a check in the amount of $41,138.80 made payable to the SCAQMD to cover the filing fee for the requested permit change. The filing fee was determined based on the SCAQMD's online permit application filing fee calculator; additional details are provided in the SCAQMD Fee Sheet included in Appendix A.

[1] Section D of the Permit, Process 1, Equipment Description.

[2] http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/reg-ii-list-and-criteria.pdf?sfvrsn=0, Accessed July 25, 2017. All information required is contained in either the application report or the SCAQMD forms included in Appendix A.

ESP will submit an amendment petition to the California Energy Commission (CEC) to allow for the project changes discussed above. Consequently, it is expected that the CEC will incorporate the final determination of compliance (FDOC) from the SCAQMD in its final decision on the Project. Moreover, the CEC will be the lead agency for CEQA.

This Application is organized as follows:

- Section 1: Executive Summary
- Section 2: Emission Calculations
- Section 3: Regulatory Analysis

2.1. OPERATING CONDITIONS

It is anticipated that the operating schedule for CTG No. 5 and CTG No.7 will remain the same following completion of the Project, including the number of actual turbine startups (SUs) and shutdown (SDs) events. Turbine SUs and SDs will continue to be limited to 200 SUs per year per turbine.[3] The turbines also are authorized to operate up to 5,466 hours per year.

ESP is not anticipating any change in the emission levels as a result of the Project, and CTG No. 5 and CTG No. 7 will continue to comply with current permitted emissions and operational limits.

2.2. EMISSION ESTIMATES

2.2.1. Regulated Pollutants

As discussed above, there will be no change in the potential to emit (PTE) of CTG No. 5 and CTG No. 7. The hourly, daily, monthly, and annual emissions from the CTGs are presented in the SCAQMD Engineering Evaluation for El Segundo Power Redevelopment Project (00-AFC-14C), dated May 18, 2010; the hourly, 30-day average, monthly, and annual emissions will not change after the Project. Selected pages showing the hourly, 30-day average, monthly, and annual NOx, CO, VOC, SO_2, $PM_{10}/PM_{2.5}$[4] and NH_3 non-commissioning emissions from the CTGs are included in Appendix C.

There will be no change in the toxic air contaminant (TAC) PTE from the CTG No. 5 and CTG No. 7 b. TAC emissions for the two CTGs are presented in Appendix M of the permit application for the El Segundo Power Redevelopment Project (Facility ID No. 115663), submitted to SCAQMD on June 21, 2007. These toxic emissions are also included in Appendix C.

2.2.2. Prevention of Significant Deterioration (PSD) Emission Calculations

The ESEC is located in an attainment area for NO_2, CO, PM_{10}, and SO_2. Refer to Section 3.18 and Section 3.2.1 for additional details on the PSD permitting program. Baseline actual emissions (BAE) are estimated based on the actual emissions from each CTG that have occurred during any consecutive 24-month period within the 5-year period preceding the actual construction of the project.[5] The emissions for gas turbines reported in the ESEC's Annual Emission Reports (AER) to the SCAQMD were based on CEMS data (for NO_2 and CO) or fuel use and emission factors from the emission source test results (for PM_{10} and SOx). Therefore, BAE for CTG No. 5 and CTG No. 7 are estimated using the reported values in the AERs.

The projected actual emissions (PAE) for each turbine are based on the maximum fuel usage and emission factor that has occurred since 2013. Detailed emissions calculations are included in Appendix D.

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[3] Condition A433.1 of the Permit.

[4] $PM_{2.5}$ emissions were not included in the original permitting documents, and are assumed to be approximately as the same as the PM_{10} emissions for this Project.

[5] 40 CFR 52.21 (b)(48)(i)

2.2.3. Rule 1325 Federal $PM_{2.5}$ NSR Emission Calculations

The ESEC is located in a nonattainment area for $PM_{2.5}$. Refer to Section 3.1.6.3 for additional details on Rule 1325. BAE are estimated based on the actual emissions from each CTG that have occurred during any consecutive 24-month period within the 5-year period preceding the actual construction of the project.[6] The emissions for gas turbines reported in the ESEC's AER to the SCAQMD were based on CEMS data (for NO_2) or fuel use and emission factors from the emission source test results (for $PM_{2.5}$). Therefore, BAE for CTG No. 5 and CTG No. 7 are estimated using the reported values in the AERs.

The PAE for each turbine is based on the maximum fuel usage and emission factor that has occurred since 2013. Detailed emissions calculations are included in Appendix D.

[6]Rule 1325(b)(1)

The Facility is subject to federal and SCAQMD air regulations. This section summarizes the air permitting requirements and the key air quality regulations that apply to the emission units impacted by the Project. Applicability to general provisions is not detailed in this narrative summary.

3.1. SCAQMD REQUIREMENTS

3.1.1. Regulation II – Permits

3.1.1.1. Rule 201 – Permit to Construct

Rule 201 states that any facility building, erecting, installing, altering, or replacing non-exempt equipment that causes or controls the emission of air pollutants must first obtain a permit to construct from the SCAQMD. Because CTG No. 5 and CTG No. 7 will be altered as a result of this Project, ESP is submitting this application for a permit to construct.

3.1.1.2. Rule 210 – Applications

Rule 210 requires the applicant to submit applications for a permit to construct in a manner and form prescribed by the SCAQMD. ESP is submitting this application to SCAQMD which includes SCAQMD's permit applications forms and additional information as required in the "List and Criteria Identifying Information Required of Applicants Seeking a Permit to Construct From the South Coast Air Quality Management District." Therefore, this permit to construct application satisfies the requirements of this rule.

Additionally, ESP is requesting that SCAQMD process this application expeditiously (please refer to Form 400-XPP in Appendix A). Per Rule 210(b) and (c), NRG is committed to providing SCAQMD with any additional information necessary to process this application in an expeditious manner.

3.1.1.3. Rule 212 – Standards for Approving Permit and Issuing Public Notices

Rule 212(c) requires that written notification be distributed at least 30 days prior to the date of the Executive Officer's intent to grant a Permit to Construct or permit modification. Notification is required for the Project if one or more of the criteria listed below applies.

- The Project is a source under Regulation XX or under Regulation XXX that may emit air contaminants located within 1,000 feet from the outer boundary of a school. This does not apply to a modification of an existing facility if it is determined that the modification will reduce air contaminants from the facility and there will be no increase in health risk at any receptor location. However, this does not apply to modifications that have no potential to affect emissions; or

- The Project has on-site emission increases exceeding any of the daily maximums specified below.
  - Volatile Organic Compounds (VOC) – 30 lbs/day
  - Nitrogen Oxides (NOx) – 40 lbs/day
  - PM_{10} – 30 lbs/day
  - Sulfur Dioxide (SO_2) – 60 lbs/day
  - Carbon Monoxide (CO) – 220 lbs/day
  - Lead (Pb) – 30 lbs/day

- The Project is a source under Regulation XX or under Regulation XXX with increases in emissions of toxic air contaminants, and
  - The Project results in a maximum individual cancer risk (MICR) greater than or equal to one in a million (1×10^{-6}) unless the total facility-wide MICR is below ten in a million (10×10^{-6}); or
  - The Project results in amounts or concentrations of other substances that pose a potential risk of nuisance.

The emissions from the Facility are not expected to increase after the completion of the Project; the total facility-wide residential MICR is expected to stay under ten in a million (10×10^{-6});[7] and the Facility is located more than 1,000 feet from a school. Therefore, the Project is not subject to the public notice requirements of Rule 212.

3.1.2. Regulation III – Fees

3.1.2.1. Rule 301 – Permitting and Associated Fees

Rule 301 establishes a fee schedule and requires fees to be paid for permit processing by the applicant. A check in the amount of $41,138.80 made payable to the SCAQMD is included in this application. A copy of the fee calculation form is provided in Appendix A.

3.1.3. Regulation IV - Prohibitions

3.1.3.1. Rule 401 – Visible Emissions

Rule 401(b)(1) limits visible emissions to an opacity of less than 20% (No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines). CTG No. 5 and CTG No. 7 will continue to operate with natural gas and emissions will be controlled by the DLN combustors and SCR/OxCat Systems after the proposed modifications; therefore, ESP will continue to operate CTG No. 5 and CTG No. 7 in a manner that complies with this rule.

3.1.3.2. Rule 402 – Nuisance

Rule 402 requires that a person not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that cause or have a natural tendency to cause injury or damage to business or property. With the continued use of natural gas, DLN combustors, and SCR/OxCat systems, it is expected that the CTG No. 5 and CTG No. 7 will not become a nuisance as described in this rule.

3.1.3.3. Rule 403 – Fugitive Dust

The purpose of Rule 403 is to reduce the amount of particulate matter (PM) entrained in the ambient air as a result of anthropogenic fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. The provisions of this rule apply to any activity or man-made condition capable of generating fugitive dust. The Project is not expected to involve demolition or major construction activities. Therefore, it is unlikely that the Project will generate fugitive dust emissions.

[7] As discussed in the SCAQMD engineering evaluation for EI Segundo Power Redevelopment Project (00-AFC-14C), under the section for Rule 1401 – New Source Review of Toxic Air Contaminants, p. 34, 5/18/2010.

3.1.3.4. Rule 407 – Liquid and Gaseous Air Contaminants

Rule 407(a) limits CO emissions to 2,000 ppmvd and SO_2 emissions to 500 ppmvd, averaged over 15 minutes. CTG No. 5 and CTG No. 7 will continue to be controlled by the OxCat, which controls CO emissions. CTG No. 5 and CTG No. 7 will continue to meet the Rule 407 CO emission limits following completion of the Project.

The SO_2 limit specified in Rule 407 does not apply to equipment that complies with Rule 432.1 gaseous fuel sulfur content. CTG No. 5 and CTG No. 7 will continue to comply with Rule 431.1 following completion of the Project.

3.1.3.5. Rule 408 – Circumvention

Rule 408 states that no equipment shall be installed to reduce or conceal an emission that would otherwise constitute a violation. The Facility is not in violation of any applicable regulations, and the Project is not intended to reduce or conceal emissions from the Facility. Therefore, ESP will continue to comply with this rule.

3.1.3.6. Rule 409 – Combustion Contaminants

For CTG No.5 and CTG No. 7 individually, Rule 409 limits the discharge of combustion contaminants from the combustion of fuel to 0.23 grams per cubic meter (0.1 grain per cubic foot) of gas, calculated to 12% CO_2, averaged over 15 minutes. Per Rule 102, the term combustion contaminants is defined as "particulate matter discharged into the atmosphere from the burning of any kind of material containing carbon in a free or combined state." Each CTG is expected to continue meeting this limit inherently through use of natural gas; compliance will be demonstrated via triennial source testing requirements.[8] Additionally, each turbine is subject to a more stringent PM limit per Rule 475, which is further addressed in Section3.1.3.8.

3.1.3.7. Rule 431.1 – Sulfur Content of Gaseous Fuels

Rule 431.1(c)(1) limits the sulfur compounds in the natural gas to 16 ppmv, calculated as H_2S. The Facility will use pipeline-quality natural gas that has a sulfur content of less than 0.25 gr/100 scf. Therefore, ESP will continue to comply with this rule.

3.1.3.8. Rule 475 – Electric Power Generating Equipment

Rule 475 applies to power generating equipment rated at greater than 10 MW and installed after May 7, 1976. Rule 475(a)(3) limits the PM_{10} mass emissions to 11 lbs/hr or a PM_{10} concentration limit of 0.01 grains/dscf, calculated at 3% O_2. Compliance is demonstrated if either the mass emission limit or the concentration limit is met. Each CTG is expected to continue meeting this limit inherently through use of natural gas; compliance will be demonstrated via triennial source testing requirements.[9]

3.1.4. Regulation IX – Standards of Performance for New Stationary Sources (NSPS)

Regulation IX incorporates the NSPS codified at 40 CFR Part 60 by reference, which are discussed in Section 3.2.2 of this report.

[8] Per Condition D29.9 of the Permit.
[9] Ibid.

3.1.5. Regulation X – National Emission Standards for Hazardous Air Pollutants (NESHAP)

Regulation X incorporates the NESHAP codified at 40 CFR Part 63 by reference, which are discussed in Section 3.2.3 of this report.

3.1.6. Regulation XIII - New Source Review (NSR)

The NSR requirements pursuant to Regulation XIII are provided below. Because the ESEC is considered a major stationary source for NOx under the RECLAIM Program, Regulation XIII does not apply to NOx emissions from the CTG No. 5 and CTG No. 7; refer to Section 3.1.9 of this application for additional details on NSR requirements for NOx pursuant to the RECLAIM Program.[10] As such, NSR requirements will be reviewed only for all other relevant pollutants (i.e., nonattainment air contaminants [$PM_{2.5}$, VOC, SOx] and ammonia) emitted from the CTG No. 5 and CTG No. 7.

3.1.6.1. Rule 1301 - General

Rule 1301 establishes the general pre-construction requirements for new, modified, or relocated facilities. Per Rule 1302(x), modification is defined as "any physical change in equipment, change in method of operation, or an addition to an existing facility, which may cause the issuance of air contaminants." CTG No. 5 and CTG No. 7 will incur a physical change as part of the project and, as such, are considered modified under Regulation XIII. Specific NSR requirements are discussed in more detail in the subsequent sections.

Per Rule 1301(b)(2), this Project will be processed in accordance with the regulations of the CEC. Concurrent with the application, ESP is submitting a PTA for the Project to the CEC.

3.1.6.2. Rule 1303 – Requirements

Rule 1303(a) states that Best Available Control Technology (BACT) must be applied to the installation of a new source or modification of an existing source which results in an increase of any nonattainment air contaminant, any ozone-depleting compound, or ammonia. Per Rule 1306(b), emission increases for BACT applicability are calculated based on permit conditions that directly limit the emissions from the unit on a pound per day basis or based on the maximum rated capacity and maximum daily or monthly operation hours as applicable. As discussed previously, there will be no increase in the maximum rated capacity (i.e., the maximum heat input) and the maximum hours of operation of the CTGs on an hourly or a daily basis as a result of this project. Therefore, the Project is not subject to BACT requirements.

Rule 1303(b) requires that the SCAQMD deny the permit issuance if a net emission increase of any nonattainment air contaminant occurs as a result of a project unless certain requirements are met. Per Rule 1306(d)(2), net emission increases are calculated based on the methodologies described under Rule 1306(d) (i.e., post modification PTE minus the permitted/allowable pre-modification PTE). As discussed previously, there will be no increase in the PTE of the CTGs on an hourly, a daily, or annual basis as a result of this project. Therefore, the Project is not subject to the additional requirements listed under Rule 1303(b).

3.1.6.3. Rule 1325 - Federal $PM_{2.5}$ New Source Review Program

The purpose of this rule is to address emissions of $PM_{2.5}$ and its precursors, NOx and SOx, through a federal NSR program. This rule applies to any new major polluting facility, major modifications to a major polluting facility, and any modification to an existing facility that would constitute a major polluting facility in and of itself located

[10]Per Rule 1301(b)(1), Rule 2001(j) and Table 1 of Rule 2001.

in areas federally designated pursuant to Title 40 of the Code of Federal Regulations (40 CFR 81.305) as nonattainment for $PM_{2.5}$. (Rule 1325(a)). Applicability of the rule is determined on a pollutant-by-pollutant basis. Per Rule 1325(b)(4), a major polluting facility, on a pollutant-specific basis, has a PTE at or above 100 tpy prior to August 14, 2017. On August 14, 2017, the major polluting facility threshold for each pollutant (SOx and $PM_{2.5}$) will be lowered to 70 tpy. The ESEC is not considered a major polluting facility of SOx as the PTE is less than 100 tpy, and it will also be less than 70 tpy after August 14, 2017. However, the ESEC will be considered a major polluting facility of $PM_{2.5}$ after August 14, 2017.[11] As such, Rule 1325 applicability needs to be evaluated only as it relates to NOx and $PM_{2.5}$ emissions associated with the proposed Project.

Per Rule 1325(b)(3), major modification is defined as "any physical change in or change in the method of operation of a major polluting facility that would result in: a significant emissions increase of a regulated NSR pollutant; and a significant net emissions increase of that pollutant from the major polluting facility." Per Rule 1325(b)(12), significant means "in reference to a net emissions increase ..., a rate of emissions that would equal or exceed any of the following rates: Nitrogen oxides: 40 tons per year … $PM_{2.5}$: 10 tons per year." Because CTG No. 5 and CTG No. 7 will be physically changed as a result of the Project, ESP must evaluate if a significant emissions increase for NOx or $PM_{2.5}$ will occur.

Per Rule 1325(d)(2), emission calculation for existing emission units should use the actual-to-projected-actual applicability test to determine if the Project results in a significant emission increase. As described in Section 2.2.3 of this application and shown in Table 3-1 below, the Project does not result in a significant emission increase for either $PM_{2.5}$ or NOx; as such, Rule 1325 does not apply to the proposed Project. Detailed emissions are included in Appendix C.

Table 3-1. SCAQMD Rule 1325 Applicability Determination (tpy)

	NO_2	**PM_{10}**
Baseline Actual Emissions (BAE) for CTG No. 5[a]	15.79	3.33
Baseline Actual Emissions (BAE) for CTG No. 7[a]	18.44	3.47
Project BAE	**34.23**	**6.80**
Projected Actual Emissions (PAE) for CTG No. 5[b]	21.00	3.96
Projected Actual Emissions (PAE) for CTG No. 7[b]	21.00	3.96
Project PAE	**42.00**	**7.92**
Project Emission Increase (PAE – BAE)	**7.77**	**1.12**
Major Modification Significance Levels[c]	40	10
Rule 1325 Triggered?	No	No

Notes:
[a] Based on emissions of the most representative two-year period during the past five years (Rule 1325 (b)(1)).
[b] Based on the historical information on fuel usage and emission profiles anticipated for future use of the CTG No. 5 and CTG No. 7.
[c] Based on SCAQMD Rule 1325 (b)(12).

[11] Permit Section D, Condition F2.1 – $PM_{2.5}$ PTE is less than 100 tons per year.

3.1.7. Regulation XIV – Toxics and Other Non-Criteria Pollutants

3.1.7.1. Rule 1401 – New Source Review of Toxic Air Contaminants (TAC)

This rule specifies limits for maximum individual cancer risk (MICR), acute hazard index (HIA), chronic hazard index (HIC), and cancer burden (CB) from new permit units, relocations, or modifications to existing permits that emit toxic air contaminants. Per Rule 1401(c)(9), modification is defined as "means any physical change in, change in method of operation, or addition to an existing permit unit that requires an application for a permit to construct and/or operate." As such, this Project is subject to the requirements of Rule 1401. That said, because ESP is not proposing to change the current permitted heat input rate or permitted emission limits, it is reasonable to assume that the conclusions reached in previous risk evaluations continue to hold. Appendix C provides details from the previous Engineering Analysis prepared by the SCAQMD which demonstrates that the risks associated with the CTG No. 5 and No. 7 are less than the risk limits stipulated in Rule 1401(d); therefore, per Rule 1401(g)(1)(B), the Project is exempt from the requirements of Rule 1401(d) because "the modification … causes … no increase in the cancer burden, MICR, or acute or chronic HI at any receptor location." ESP will continue to operate the CTG No. 5 and No. 7 in compliance with permit requirements.

3.1.8. Regulation XVII – Prevention of Significant Deterioration (PSD)

3.1.8.1. Rule 1701 - General

Rule 1701 establishes the SCAQMD procedures to determine if prevention of significant deterioration (PSD) applies to a stationary source and the requirements that must be met should PSD apply. It is important to note that the SCAQMD applicability procedures differ from EPA's applicability procedures for determining if PSD applies to a stationary source. On July 25, 2007, EPA and SCAQMD entered into a partial delegation agreement which, in general, allowed the SCAQMD to issue PSD permits pursuant to Regulation XVII and EPA to issue PSD permits when the applicant applies for a PSD permit modification based on the "additional calculation methodologies set forth in 40 CFR 52.21."[12] In this application, ESP has opted to demonstrate that PSD does not apply to the proposed project using the "additional calculation methodologies" pursuant to 40 CFR 52.21, which are further addressed in Section 3.2.1 of this application. As such, PSD applicability pursuant to Rule 1701 using the calculation methodologies provided in Rule 1706 is not addressed in this application.

3.1.8.2. Rule 1714 – Prevention of Significant Deterioration (PSD) for Greenhouse Gases

In general, Rule 1714 incorporates the greenhouse gas PSD permit requirements codified at 40 CFR Part 52.21 by reference, which are discussed in Section 3.2.1 of this report.

3.1.9. Regulation XX – Regional Clean Air Incentives Market (RECLAIM)

3.1.9.1. Rule 2001 –Applicability

Rule 2001 established the criteria to determine if a new and existing facility is subject to the RECLAIM program. Under Rule 2000(c)(45), a major stationary source under the RECLAIM program is one that has the PTE greater than or equal to 10 tpy NOx or 100 tpy SOx. As such, the ESEC is considered a major stationary source of NOx under the RECLAIM program because the PTE for the Facility exceeds 10 tpy NOx. ESP will continue to comply with the Regulation XX requirement following completion of the Project.

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[12] https://www.epa.gov/sites/production/files/2015-08/documents/south_coast_aqmd_psd_delegation_agreement.pdf, Accessed July 26, 2017.

Per Rule 2001(j) and Table 1 of Rule 2001, facilities subject to the RECLAIM program for NOx are not subject to the following SCAQMD rules (only potentially applicable rules specific to the Project are listed here): 218, 429, 430, 474, 476, 1134, 1135, and Regulation XIII for NOx NSR. As such, these specific rules are not further addressed in this application.

3.1.9.2. Rule 2005 - New Source Review for RECLAIM

This rule specifies various new source review requirements for new and modified facilities subject to the RECLAIM program. Per Rule 2000(c)(48), modification is defined as "any physical change or change in the method of operation of a source." As such, this Project is subject to the requirements of Rule 1401 because the No. 5 CTG and No. 7 CTG will be physically modified and the ESEC is classified as a major stationary source of NOx under Rule 2000.

Rule 2005(c) requires that "modification of an existing source which results in an emission increase" install BACT and demonstrate through air dispersion modeling that a significant increase in NO_2 concentrations will not occur. An "emission increase" is defined as follows: "an increase in emissions occurs if a source's maximum hourly potential to emit immediately prior to the proposed modification is less than the source's post modification maximum hourly potential to emit."[13] It is expected that the No. 5 CTG and No. 7 CTG will continue to comply with the current NOx emission limit of 2.0 ppm @ 15% O_2 averaged over 60 minutes following the Project; as such, the Project will not result in an emission increase in the maximum hourly NOx emissions. Therefore, Rule 2005(c) does not apply to the Project. Rule 2005(g) provides additional requirements for major modifications of NOx pursuant to EPA's Clean Air Act. As described in Section 3.2.1, the Project is not considered a major modification for NOx under 40 CFR 52.21; as such, Rule 2005(g) does not apply to the proposed Project.

3.1.10. Regulation XXX – Title V Permits

3.1.10.1. Rule 3005 – Permit Revisions

Rule 3005 establishes the procedures for submitting permit revision applications for Title V Permits to the SCAQMD. The Project is considered a minor revision to the Title V permit because there will be no emission increases and otherwise meets the definition for "minor revision" as per Rule 3000(b)(15).

Per Rule 3005(c)(2), a minor permit revision application must include the following information:

1. A description of the change, the emissions resulting from the change, and any new regulatory requirements that will apply if the change occurs; and
2. Certification by a responsible official, consistent with paragraph (c)(7) of Rule 3003, that the requested revision meets the criteria for use of minor permit revision procedures and a request that such procedures be used.

This application contains all required information for a complete minor permit revision application, and the required responsible official certification is included in Appendix A of this application.

3.1.11. Regulation XXXI – Acid Rain Permit Program

Regulation XXXV incorporates the Acid Rain Permit Program codified at 40 CFR Part 72 by reference, which are discussed in Section 3.2.5 of this report.

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[13] Rule 2005(d).

3.2. FEDERAL REQUIREMENTS

3.2.1. Prevention of Significant Deterioration (PSD)

A stationary source is considered "major" for PSD if it has the potential to emit either (1) 100 tons per year or more of a regulated pollutant if the source is classified as one of 28 designated industrial source categories, or (2) 250 tons per year or more of any regulated pollutant for unlisted sources. Given that the facility is in one of the 28 listed source categories, ESEC is considered an existing major source for PSD with potential emissions of at least one PSD pollutant over the 100 tons per year threshold as a facility.

For existing facilities, PSD permitting is required if a proposed project constitutes a major modification to an existing major source for each regulated NSR pollutant that is considered to be in attainment for the area of interest. A major modification occurs if a project will result in a significant net emissions increase of a regulated NSR pollutant. Los Angeles County is designated attainment for the national ambient air quality standards for NO_2, CO, PM_{10}, and SO_2. Thus, PSD requirements potentially apply to these pollutants.

As noted in Section 3.1.8, EPA and SCAQMD entered into a partial delegation agreement which, in general, allowed the SCAQMD to issue PSD permits pursuant to SCAQMD Regulation XVII and EPA to issue PSD permits when the applicant applies for a PSD permit modification based on the "additional calculation methodologies" set forth in 40 CFR 52.21. ESP has opted to evaluate the proposed project using the "additional calculation methodologies" pursuant to 40 CFR 52.21, as outlined below.

Per 40 CFR 52.21(a)(2)(iv)(c), an actual-to-projected-actual applicability test was completed for the proposed project wherein the emission increases—calculated as the difference of the projected actual emissions (per 40 CFR 52.21(b)(41)) and the baseline actual emissions (per 40 CFR 52.21(b)(48)(i)-(ii))—were compared to the PSD significant emission rate thresholds for applicable regulated NSR pollutants. As shown in Table 3-2, the Project does not trigger PSD for regulated NSR pollutants.

Based on the U.S. Supreme Court's June 23, 2014 opinion on the GHG Tailoring Rule (Utility Air Regulatory Group v. EPA, No. 12-1146), the Project would not be subject to PSD review regardless of its GHG emissions if the emissions increases for other regulated NSR pollutants are below their respective significant emissions thresholds. As shown in Table 3-2, since the Project is not subject to PSD requirements because of the regulated NSR pollutant emission changes, PSD for GHGs does not need to be further evaluated.

Table 3-2. PSD Applicability Determination (tpy)

	NO_2	CO	PM_{10}	SOx
BAE for CTG No. 5[a]	15.79	9.61	3.33	0.52
BAE for CTG No. 7[a]	18.44	13.58	3.47	0.45
Project BAE	**34.23**	**23.19**	**6.80**	**0.97**
PAE for Unit 5[b]	21.00	20.89	3.96	1.15
PAE for Unit 7[b]	21.00	20.89	3.96	1.15
Project PAE	**42.00**	**41.78**	**7.92**	**2.30**
Project Emission Increase (PAE – BAE)	**7.77**	**18.59**	**1.12**	**1.33**
PSD Major Modification Significance Levels[c]	40	100	15	40
PSD Review Required?	No	No	No	No

Notes:
[a] Based on emissions of the most representative two-year period during the past five years (40 CFR 52.21 (b)(48)(i)).
[b] Based on the historical information on fuel usage and emission profiles anticipated for future use of the CTG No. 5 and CTG No. 7.
[c] 40 CFR 52.21 (b)(23)(i)

3.2.2. New Source Performance Standards (NSPS)

NSPS apply to certain types of equipment that are newly constructed, modified, or reconstructed after specified applicability dates. Only the NSPS subparts that may be potentially applicable to CTG No. 5 and CTG No. 7 are addressed in this section.

3.2.2.1. 40 CFR 60 Subpart A – General Provisions

All affected sources are subject to the general provisions of NSPS Subpart A unless specifically excluded by the source-specific NSPS. Subpart A requires initial notification and performance testing, recordkeeping, monitoring; provides reference methods; and mandates general control device requirements for all other subparts as applicable. ESP will continue to meet all applicable requirements of the general provisions outlined in 40 CFR 60 Subpart A.

3.2.2.2. 40 CFR Part 60 Subpart GG – NSPS for Stationary Gas Turbines

NSPS GG, *Standards of Performance for Stationary Gas Turbines*, applies to stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the lower heating value of the fuel fired. As noted in Section 3.2.2.3, the CTGs at ESEC are subject to the requirements of 40 CFR 60 Subpart KKKK, thereby making the turbines exempt from the requirements of 40 CFR 60 Subpart GG per 40 CFR 60.4305 (b).

3.2.2.3. 40 CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines

NSPS KKKK, *Standards of Performance for Stationary Combustion Turbines*, applies to stationary combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005, with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel fired. Based on the construction dates and the heat input at peak loads, the CTGs at ESEC are subject to NSPS KKKK. ESP will continue to comply with all applicable NSPS KKKK requirements as outlined in the current permit.

3.2.2.4. 40 CFR Part 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

NSPS TTTT, *Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units*, applies to electric generating units that commenced construction after January 8, 2014 and/or commenced modification or reconstruction after June 18, 2014. The CTGs at ESEC were constructed prior to January 8, 2014, and have not undergone any modification or reconstruction since original installation. As such, NSPS TTTT does not apply to the existing units at ESP.

3.2.3. National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAPs are established in 40 CFR Part 63 to control the emissions of hazardous air pollutants (HAPs). Only the NESHAP subparts that may be potentially applicable to the CTGs are addressed in this section.

3.2.3.1. 40 CFR Part 63 Subpart YYYY – NESHAP for Stationary Gas Turbines

NESHAP YYYY applies to stationary gas turbines located at major sources of HAPs. Because the Facility is not a major source of HAPs (with a site-wide HAP PTE below 25 tons/year [combined HAPs] and 10 tons/year [single HAP], this standard does not apply to the turbines at ESEC.

3.2.4. Compliance Assurance Monitoring (CAM)

The CAM regulation (40 CFR 64) applies to emission units at major stationary sources required to obtain a Title V permit, which use control equipment to achieve a specified emission limit. Although the CTG No. 5 and CTG No. 7 may be subject to the CAM regulations, 40 CFR 64.5 (a) and (b) does not require submittal of the information required under 40 CFR 64.4 as part of a Title V minor permit revision application. As such, CAM regulatory applicability is not further evaluated in this application.

3.2.5. Acid Rain Provisions

The ESEC is subject to the requirements of the federal Acid Rain program (40 CFR Part 72) because the electricity generated by CTG No. 5 and CTG No. 7 are rated at greater than 25 MW. ESP will continue to operate the ESEC in a manner compliant with the Acid Rain program requirements.

APPENDIX A: SCAQMD APPLICATION FORMS

Print Form

South Coast Air Quality Management District
Application Checklist

Mail Application To:
P.O. Box 4944
Diamond Bar, CA 91765
(909) 396-3385

Tel: (909) 396-3385
www.aqmd.gov

Facility Name: El Segundo Power, LLC Facility ID No: 115,663

Equipment Description: Performance upgrade for the two existing gas turbines

For all the activities and forms listed below please refer to the AQMD web site: www.aqmd.gov/permit

CATEGORY 1: Permit to Construct/Permit to Operate
(For New Construction, Alteration/Modification, Change of Condition, Change of Location and Existing Equipment without Permit.)

(1) Complete and sign Form 400-A.

(2) Enclose a signed check for the correct fee. Please see Fees section.

(3) Submit all information necessary to process permit (MSDS, equipment drawings, etc.).

(4) Complete and sign applicable equipment-specific Form 400-E-xx.

- 400-E-GI General Information Summary (pdf 71 kb)
- 400-E-1a Particulate Matter (PM) Control Equipment (Baghouse/Filter) (pdf 287 kb)
- 400-E-1b PM Control Equipment (Cyclone) (pdf 234 kb)
- 400-E-1c PM Control Equipment (Electrostatic Precipitator) (pdf 261 kb)
- 400-E-2a Volatile Organic Compound (VOC) Control Equipment (Afterburner/Oxidizer) (pdf 465 kb)
- 400-E-2b VOC Control Equipment (Carbon Adsorber) (pdf 259 kb)
- 400-E-2c VOC Control Equipment (Flare) (pdf 252 kb)
- 400-E-3 Scrubber (pdf 448 kb)
- 400-E-4 Abrasive Blasting Equipment * (pdf 718 kb)
- 400-E-5 Selective Catalytic Reduction (SCR) System, Oxidation Catalyst and Ammonia Catalyst (pdf 327 kb)
- 400-E-7 Dry Cleaning Equipment (pdf 264 kb)
- 400-E-8 Ethylene Oxide Sterilizer (pdf 315 kb)
- 400-E-9a External Combustion Equipment* (Boiler) (pdf 578 kb)
- 400-E-9b External Combustion Equipment (Bake/Cure Oven) (pdf 242 kb)
- 400-E-9c External Combustion Equipment (Solder Reflow/Wave/Hot Air Leveling Machine) (pdf 286 kb)
- 400-E-9d External Combustion Equipment (Burn Off Furnaces/Brake Debonders/Wax Burnoff Furnaces) (pdf 252 kb)
- 400-E-9e External Combustion Equipment (Food Broiler/Fryer) (pdf 318 kb)
- 400-E-10 Degreaser (pdf 216 kb)
- 400-E-11 Fuel Dispensing and Storage Equipment (pdf 490 kb)
- 400-E-12 Gas Turbine (pdf 409 kb)
- 400-E-13a Internal Combustion Engine - Emergency* (pdf 957 kb)
- 400-E-13b Internal Combustion Engine - Non-Emergency (pdf 319 kb)
- 400-E-14 Open Process Tank (pdf 343 kb)
- 400-E-15 Printing Equipment (pdf 274 kb)
- 400-E-16 Solid Materials Storage Equipment (pdf 180 kb)
- 400-E-17a Powder Spray Booth * (pdf 471 kb)
- 400-E-17b Spray Booth/Open Spray (pdf 329 kb)
- 400-E-18 Storage Tank (Liquid & Gaseous Material) (pdf 428 kb)
- 400-E-19 Asbestos Removal Equipment (pdf 154 kb)

- 400-E-21 Application for Dairy Farms (pdf 273 kb)
- 400-E-22 Application for Laying Hen Ranches (pdf 313 kb)
- 400-E-23 Orchard Heaters (pdf 239 kb)

* These forms are our new 'intelligent' forms. That is, they will perform basic emissions calculations as you enter data, and will print out these calculations and also print basic permit conditions that you might expect on a permit for this equipment. **NOTE: Your actual permit conditions may differ**, these are only a **sample** of standard permit conditions.

(5) For equipment that is not covered by any of the above equipment specific forms, the following applicable data are required. See Form 400-E-GI (General Information) at the top of the listing above, for explanations.

- **Equipment Location Drawing**
- **Fuel and Burners Used**
- **Operating Schedule**
- **Equipment Description**
- **Material Safety Data Sheets (MSDS)**
- **Process Description**
- **Flow Diagram**
- **Process Rate**
- **Air Quality Impact**
- **Stack/Exhaust Emissions Data**
- **Drawing of the Exhaust Stream**
- **Drawing of Equipment/Process**
- **Plot Plan**

CATEGORY 2: Permit to Operate (For Change of Operator)

(1) Complete and sign Form 400-A.

(2) Enclose a signed check for the correct fee. Please see Fees section.

(3) Enclose a copy of the previous permit.

(4) For RECLAIM facilities, complete and submit Forms 2007-1 and 2007-2 to transfer RECLAIM Trading Credits (RTCs) and the correct RTC Registration Fee.

CATEGORY 3: Emission Reduction Credit (ERC) Certificate of Title

(1) Complete and sign Form 401.

(2) Enclose a signed check for the correct fee. Per Rule 301.

(3) Submit supporting documents to establish eligibility and to verify the quantity of emission reduction. (See instructions for Form 401 for more information.)

CATEGORY 4: Miscellaneous Plans

(1) Complete and sign Form 400-A.

(2) Enclose a signed check for the correct fee; per Rule 306.

(3) Submit supporting documents containing information required by the specific rule under which the application is filed.

South Coast Air Quality Management District

Form 400-A

Application Form for Permit or Plan Approval

List only one piece of equipment or process per form

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. **Facility Name** (Business Name of Operator to Appear on the Permit): El Segundo Power, LLC

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice Issued By AQMD): 115663

3. **Owner's Business Name** (If different from Business Name of Operator):

Section B - Equipment Location Address

4. **Equipment Location Is:** (•) Fixed Location ( ) Various Location
(For equipment operated at various locations, provide address of initial site.)

301 Vista Del Mar
Street Address
El Segundo , CA 90245
City Zip
George L. Piantka, PE Senior Director, Env Serv
Contact Name Title
(760) 710-2156 Ext. Fax #
E-Mail: George.Piantka@nrg.com

Section C - Permit Mailing Address

5. **Permit and Correspondence Information:**
[ ] Check here if same as equipment location address

5790 Fleet Street, Suite 200
Address
Carlsbad , CA 92008
City State Zip
George L. Piantka, PE Senior Director, Env Serv
Contact Name Title
(760) 710-2156 Ext. Fax #
E-Mail: George.Piantka@nrg.com

Section D - Application Type

6. **The Facility Is:** ( ) Not In RECLAIM or Title V ( ) In RECLAIM ( ) In Title V (•) In RECLAIM & Title V Programs

7. **Reason for Submitting Application** (Select only ONE):

7a. New Equipment or Process Application:
- ( ) New Construction (Permit to Construct)
- ( ) Equipment On-Site But Not Constructed or Operational
- ( ) Equipment Operating Without A Permit *
- ( ) Compliance Plan
- ( ) Registration/Certification
- ( ) Streamlined Standard Permit

7b. Facility Permits:
- ( ) Title V Application or Amendment (Refer to Title V Matrix)
- ( ) RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:
- ( ) Administrative Change
- (•) Alteration/Modification
- ( ) Alteration/Modification without Prior Approval *
- ( ) Change of Condition
- ( ) Change of Condition without Prior Approval *
- ( ) Change of Location
- ( ) Change of Location without Prior Approval *
- ( ) Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number:
G33559

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. **Estimated Start Date of Construction** (mm/dd/yyyy):
8b. **Estimated End Date of Construction** (mm/dd/yyyy):
8c. **Estimated Start Date of Operation** (mm/dd/yyyy):

9. **Description of Equipment or Reason for Compliance Plan** (list applicable rule): Turbine performance upgrade.

10. **For Identical equipment, how many additional applications are being submitted with this application?** (Form 400-A required for each equipment / process): 1

11. **Are you a Small Business as per AQMD's Rule 102 definition?** (10 employees or less and total gross receipts are $500,000 or less OR a not-for-profit training center) (•) No ( ) Yes

12. **Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment?** (•) No ( ) Yes
If Yes, provide NOV/NC#:

Section E - Facility Business Information

13. **What type of business is being conducted at this equipment location?** Electric Power Generation

14. **What is your business primary NAICS Code?** (North American Industrial Classification System): 221112

15. **Are there other facilities in the SCAQMD jurisdiction operated by the same operator?** ( ) No (•) Yes

16. **Are there any schools (K-12) within 1000 feet of the facility property line?** (•) No ( ) Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. **Signature of Responsible Official:**

18. **Title of Responsible Official:** Plant Manager

19. **I wish to review the permit prior to issuance.** (This may cause a delay in the application process.) ( ) No (•) Yes

20. **Print Name:** Ken Riesz

21. **Date:** 8/10/17

22. **Do you claim confidentiality of data?** (If Yes, see instructions.) (•) No ( ) Yes

23. **Check List:** [X] Authorized Signature/Date [X] Form 400-CEQA [X] Supplemental Form(s) (ie., Form 400-E-xx) [X] Fees Enclosed

AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED $	PAYMENT TRACKING #	VALIDATION

DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL	EQUIPMENT CATEGORY CODE	TEAM	ENGINEER	REASON/ACTION TAKEN

Validate/Print Reset

South Coast Air Quality Management District

Form 400-A

Application Form for Permit or Plan Approval

List only one piece of equipment or process per form

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit): El Segundo Power, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

3. Owner's Business Name (If different from Business Name of Operator):

Section B - Equipment Location Address

4. Equipment Location Is: (●) Fixed Location ( ) Various Location
(For equipment operated at various locations, provide address of initial site.)

301 Vista Del Mar
Street Address
El Segundo , CA 90245
City Zip
George L. Piantka, PE Senior Director, Env Serv
Contact Name Title
(760) 710-2156
Phone # Ext. Fax #
E-Mail: George.Piantka@nrg.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:
☐ Check here if same as equipment location address

5790 Fleet Street, Suite 200
Address
Carlsbad , CA 92008
City State Zip
George L. Piantka, PE Senior Director, Env Serv
Contact Name Title
(760) 710-2156
Phone # Ext. Fax #
E-Mail: George.Piantka@nrg.com

Section D - Application Type

6. The Facility Is: ( ) Not In RECLAIM or Title V ( ) In RECLAIM ( ) In Title V (●) In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

( ) New Construction (Permit to Construct)
( ) Equipment On-Site But Not Constructed or Operational
( ) Equipment Operating Without A Permit *
( ) Compliance Plan
( ) Registration/Certification
( ) Streamlined Standard Permit

7b. Facility Permits:

( ) Title V Application or Amendment (Refer to Title V Matrix)
( ) RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:

( ) Administrative Change
(●) Alteration/Modification
( ) Alteration/Modification without Prior Approval *
( ) Change of Condition
( ) Change of Condition without Prior Approval *
( ) Change of Location
( ) Change of Location without Prior Approval *
( ) Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number:
G33558

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy):
8b. Estimated End Date of Construction (mm/dd/yyyy):
8c. Estimated Start Date of Operation (mm/dd/yyyy):

9. Description of Equipment or Reason for Compliance Plan (list applicable rule):
Turbines performance upgrade.

10. For Identical equipment, how many additional applications are being submitted with this application? (Form 400-A required for each equipment / process) 1

11. Are you a Small Business as per AQMD's Rule 102 definition? (10 employees or less and total gross receipts are $500,000 or less OR a not-for-profit training center) (●) No ( ) Yes

12. Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment? (●) No ( ) Yes
If Yes, provide NOV/NC#:

Section E - Facility Business Information

13. What type of business is being conducted at this equipment location?
Electric Power Generation

14. What is your business primary NAICS Code? (North American Industrial Classification System) 221112

15. Are there other facilities in the SCAQMD jurisdiction operated by the same operator? ( ) No (●) Yes

16. Are there any schools (K-12) within 1000 feet of the facility property line? (●) No ( ) Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official:

18. Title of Responsible Official:
Plant Manager

19. I wish to review the permit prior to issuance. (This may cause a delay in the application process.) ( ) No (●) Yes

20. Print Name:
Ken Riesz

21. Date: 8/10/17

22. Do you claim confidentiality of data? (If Yes, see instructions.) (●) No ( ) Yes

23. Check List: ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed

AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED $	PAYMENT TRACKING #	VALIDATION

DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL	EQUIPMENT CATEGORY CODE	TEAM	ENGINEER	REASON/ACTION TAKEN

Validate/Print Reset

South Coast Air Quality Management District

Form 400-A

Application Form for Permit or Plan Approval

List only one piece of equipment or process per form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. **Facility Name** (Business Name of Operator to Appear on the Permit): El Segundo Power, LLC

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice Issued By AQMD): 115663

3. **Owner's Business Name** (If different from Business Name of Operator):

Section B - Equipment Location Address

4. **Equipment Location Is:** (●) Fixed Location ( ) Various Location
(For equipment operated at various locations, provide address of initial site.)

301 Vista Del Mar
Street Address

El Segundo , CA 90245
City Zip

George L. Piantka, PE — Senior Director, Env Serv
Contact Name — Title

(760) 710-2156 — Ext. — Fax #
Phone #

E-Mail: George.Piantka@nrg.com

Section C - Permit Mailing Address

5. **Permit and Correspondence Information:**
[ ] Check here if same as equipment location address

5790 Fleet Street, Suite 200
Address

Carlsbad , CA 92008
City State Zip

George L. Piantka, PE — Senior Director, Env Serv
Contact Name — Title

(760) 710-2156 — Ext. — Fax #
Phone #

E-Mail: George.Piantka@nrg.com

Section D - Application Type

6. **The Facility Is:** ( ) Not In RECLAIM or Title V ( ) In RECLAIM ( ) In Title V (●) In RECLAIM & Title V Programs

7. **Reason for Submitting Application** (Select only ONE):

7a. New Equipment or Process Application:

- ( ) New Construction (Permit to Construct)
- ( ) Equipment On-Site But Not Constructed or Operational
- ( ) Equipment Operating Without A Permit *
- ( ) Compliance Plan
- ( ) Registration/Certification
- ( ) Streamlined Standard Permit

7b. Facility Permits:

- (●) Title V Application or Amendment (Refer to Title V Matrix)
- ( ) RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ( ) Administrative Change
- ( ) Alteration/Modification
- ( ) Alteration/Modification without Prior Approval *
- ( ) Change of Condition
- ( ) Change of Condition without Prior Approval *
- ( ) Change of Location
- ( ) Change of Location without Prior Approval *
- ( ) Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number:

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. **Estimated Start Date of Construction** (mm/dd/yyyy):

8b. **Estimated End Date of Construction** (mm/dd/yyyy):

8c. **Estimated Start Date of Operation** (mm/dd/yyyy):

9. **Description of Equipment or Reason for Compliance Plan** (list applicable rule):
Turbines preformance upgrade. Title V minor revision

10. **For Identical equipment, how many additional applications are being submitted with this application?**
(Form 400-A required for each equipment / process)

11. **Are you a Small Business as per AQMD's Rule 102 definition?**
(10 employees or less and total gross receipts are $500,000 or less OR a not-for-profit training center) (●) No ( ) Yes

12. **Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment?** (●) No ( ) Yes
If Yes, provide NOV/NC#:

Section E - Facility Business Information

13. **What type of business is being conducted at this equipment location?**
Electric Power Generation

14. **What is your business primary NAICS Code?**
(North American Industrial Classification System) 221112

15. **Are there other facilities in the SCAQMD jurisdiction operated by the same operator?** ( ) No (●) Yes

16. **Are there any schools (K-12) within 1000 feet of the facility property line?** (●) No ( ) Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. **Signature of Responsible Official:** Ken Riesz

18. **Title of Responsible Official:** Plant Manager

19. **I wish to review the permit prior to issuance.** (This may cause a delay in the application process.) ( ) No (●) Yes

20. **Print Name:** Ken Riesz

21. **Date:** 8/10/17

22. **Do you claim confidentiality of data?** (If Yes, see instructions.) (●) No ( ) Yes

23. **Check List:** ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed

AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED $	PAYMENT TRACKING #	VALIDATION

DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL	EQUIPMENT CATEGORY CODE	TEAM	ENGINEER	REASON/ACTION TAKEN

Validate/Print Reset

South Coast Air Quality Management District

Form 400-CEQA
California Environmental Quality Act (CEQA) Applicability

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

The SCAQMD is requirec by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project at the same time, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Permit Services at (909) 396-3385 or (909) 396-2668.

Section A - Facility Information

1. **Facility Name** (Business Name of Operator To Appear On The Permit): El Segundo Power, LLC

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice Issued By AQMD): 115663

3. **Project Description:**
The proposed turbine performance upgrade project includes the installation of enhanced hardware in the combustor and turbine sections of the two gas turbines along with optimizing the turbine control logic

Section B - Review For Exemption From Further CEQA Action

Check "Yes" or "No" as applicable

	Yes	No	Is this application for:
1.	◉	○	**A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, attach a copy of the signed Notice of Determination to this form.
2.	○	◉	**A request for a change of permittee only (without equipment modifications)?**
3.	○	◉	**A functionally identical permit unit replacement with no increase in rating or emissions?**
4.	○	◉	**A change of daily VOC permit limit to a monthly VOC permit limit?**
5.	○	◉	**Equipment damaged as a result of a disaster during state of emergency?**
6.	○	◉	**A Title V (i.e., Regulation XXX) permit renewal (without equipment modifications)?**
7.	○	◉	**A Title V administrative permit revision?**
8.	○	◉	**The conversion of an existing permit into an initial Title V permit?**

If "**Yes**" is checked for any question in Section B, your application does not require additional evaluation for CEQA applicability. Skip to Section D - Signatures on page 2 and sign and date this form.

Section C - Review of Impacts Which May Trigger CEQA

Complete Parts I-VI by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

	Yes	No	Part I - General
1.	○	○	**Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc.
2.	○	○	**Is this project part of a larger project?** If yes, attach a separate sheet to briefly describe the larger project.
			Part II - Air Quality
3.	○	○	**Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?**
4.	○	○	**Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package.

[1] A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.

[2] To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.

[3] To download this form and the instructions, visit http://www.aqmd.gov/ceqa or http://www.aqmd.gov/permit

Section C - Review of Impacts Which May Trigger CEQA (cont.)			
	Yes	No	Part II - Air Quality (cont.)
5.	○	○	**Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 – Nuisance.
6.	○	○	**Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?**
7.	○	○	**Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?**[4]
			Part III – Water Resources
8.	○	○	**Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities.
9.	○	○	**Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines, sewage hook-ups, etc.
			Part IV – Transportation/Circulation
10.			**Will the project result in** (Check all that apply):
	○	○	**a. the need for more than 350 new employees?**
	○	○	**b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?**
	○	○	**c. increase customer traffic by more than 700 visits per day?**
			Part V – Noise
11.	○	○	**Will the project include equipment that will generate noise GREATER THAN 90 decibels (dB) at the property line?**
			Part VI – Public Services
12.			**Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply):
	○	○	**a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day.
	○	○	**b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds).

****REMINDER:** *For each "Yes" response in Section C, attach all pertinent information including but not limited to estimated quantities, volumes, weights, etc.***

Section D - Signatures

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

1. Signature of Responsible Official of Firm:		2. Title of Responsible Official of Firm:
		Plant Manager
3. Print Name of Responsible Official of Firm:		4. Date Signed:
Ken Riesz		8/10/17
5. Phone # of Responsible Official of Firm:	6. Fax # of Responsible Official of Firm:	7. Email of Responsible Official of Firm:
(310) 615-6030		ken.riesz@nrg.com
8. Signature of Preparer, (If prepared by person other than responsible official of firm):		9. Title of Preparer:
10. Print Name of Preparer:		11. Date Signed:
12. Phone # of Preparer:	13. Fax # of Preparer:	14. Email of Preparer:

THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND ANY ATTACHMENTS WITH FORM 400-A.

[4] Table 1 – Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

Validate/Print Reset

South Coast Air Quality Management District

Form 400-E-12
Gas Turbine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

Facility Name (Business Name of Operator That Appears On Permit): El Segundo Power, LLC

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 301 Vista Del Mar, El Segundo, CA 90245

(•) Fixed Location ( ) Various Locations

Section B - Equipment Description

Turbine

Manufacturer: Siemens | Model: SGT6-5000F | Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 2,096.00 MMBTU/hr _____ kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr _____ kWh

Function (Check all that apply)

☒ Electrical Generation ☐ Driving Pump/Compressor ☐ Emergency Peaking Unit
☐ Steam Generation ☐ Exhaust Gas Recovery ☐ Other (specify): _____

Cycle Type

( ) Simply Cycle ( ) Regenerative Cycle
(•) Combined Cycle ( ) Other (specify): _____

Combustion Type

( ) Tubular (•) Can-Annular ( ) Annular

Fuel (Turbine)

☒ Natural Gas ☐ LPG ☐ Digester Gas*
☐ Landfill Gas* ☐ Propane ☐ Refinery Gas* ☐ Other*: _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity: _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer: N/A | Model:

Number of burners: _____ Rating of each burner (HHV): _____

Type: ( ) Low NOx (please attach manufacturer's specifications)

( ) Other: _____
Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)

( ) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Landfill Gas* ( ) Propane ( ) Refinery Gas* ( ) Other*: _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

South Coast Air Quality Management District

Form 400-E-12
Gas Turbine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section B - Equipment Description (Cont.)

Air Pollution Control

(•) Selective Catalytic Reduction (SCR)* ( ) Selective Non-Catalytic Reduction (SNCR)*

( ) Oxidation Catalyst* ( ) Other (specify)*: _____

( ) Steam/Water Injection: Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost: _____ Installation Cost: _____ Annual Operating Cost: _____

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF Model: _____

Catalyst Dimensions: Length: _____ ft. _____ in. Width: _____ ft. _____ in. Height: _____ ft. _____ in.

Catalyst Cell Density: _____ cells/sq.in. Pressure Drop Across Catalyst: _____

Manufacturer's Guarantee: CO Control Efficiency: _____ % Catalyst Life: _____ yrs

VOC Control Efficiency: _____ % Operating Temp. Range: _____ °F

Space Velocity (gas flow rate/catalyst volume): _____ Area Velocity (gas flow/wetted catalyst surface area): _____

VOC Concentration into Catalyst: 2.0 PPMVD@ 15%O_2 CO Concentration inot Catalyst: 4.0 PPMVD@ 15%O_2

Section C - Operation Information

On-line Emissions Data

Pollutants	Maximum Emissions Before Control *		Maximum Emissions After Control	
	PPM@15% O_2, dry	lb/hour	PPM@15% O_2, dry	lb/hour
ROG	2.0		2.0	
NOx	9.0		2.0	
CO	4.0		2.0	
PM_{10}		9.5		9.5
SOx		1.46		1.46
NH_3	0.0		5	

* Based on temperature, fuel consumption, and MW output.

Reference (attach data):

[X] Manufacturer Emission Data [ ] EPA Emission Factors [ ] AQMD Emission Factors [ ] Source Test

Stack or Vent Data

Stack Height: 210 ft. _____ in. Stack Diameter: 20 ft. _____ in.

Exhaust Temperature: 361 °F Exhaust Pressure: _____ inches water column

Exhaust Flow Rate: 803493 CFM Oxygen Level: 11.16 %

South Coast Air Quality Management District

Form 400-E-12

Gas Turbine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section C - Operation Information (cont.)

Startup Data

No. of Startups per day: 6 No. of Startups per year: 200 Duration of each startup: 1 hrs.

Shutdown Data

No. of Shutdowns per day: 6 No. of Shutdowns per year: 200 Duration of each Shutdown: 1 hrs.

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM@15% O_2, dry	lb/hour	PPM@15% O_2, dry	lb/hour
ROG		17.3		9.7
NOx		112		47.3
CO		556.6		294.9
PM_{10}		9.5		9.5
SOx		1.46		1.46
NH_3		14.3		14.3

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS): CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? (•) Yes ( ) No

The following parameters will be continuously monitored:

☒ NOx ☒ CO ☒ O_2

☒ Fuel Flow Rate ☒ Ammonia Injection Rate ☐ Other (specify): _____

☐ Ammonia Stack Concentration: Ammonia CEMS Make: _____

Ammonia CEMS Model: _____

Operating Schedule

Normal: 24 hours/day 7 days/week 52 weeks/yr

Maximum: 24 hours/day 7 days/week 52 weeks/yr

Section D - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application is true and correct.

Preparer Info

Signature: _____ Date: 8/10/12

Title: Plant Manager Company Name: NRG

Name: Ken Riesz

Phone #: (310) 615-6030 Fax #:

Email: ken.riesz@nrg.com

Contact Info

Name: George L. Piantka, PE

Title: Sen. Director Env Serv Company Name: NRG

Phone #: (760) 710-2156 Fax #:

Email: George.Piantka@nrg.com

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information. ☐

Validate/Print Reset

South Coast Air Quality Management District

Form 400-E-12
Gas Turbine

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEOA, and Form 400-PS.

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

Facility Name (Business Name of Operator That Appears On Permit): El Segundo Power, LLC

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 301 Vista Del Mar, El Segundo, CA 90245

(•) Fixed Location ( ) Various Locations

Section B - Equipment Description

Turbine

Manufacturer: Siemens | Model: SGT6-5000F | Serial No.:

Size (based on Higher Heating Value - HHV):

Manufacturer Maximum Input Rating: 2,096.00 MMBTU/hr _____ kWh

Manufacturer Maximum Output Rating: _____ MMBTU/hr _____ kWh

Function (Check all that apply)

[X] Electrical Generation [ ] Driving Pump/Compressor [ ] Emergency Peaking Unit
[ ] Steam Generation [ ] Exhaust Gas Recovery [ ] Other (specify): _____

Cycle Type

( ) Simply Cycle ( ) Regenerative Cycle
(•) Combined Cycle ( ) Other (specify): _____

Combustion Type

( ) Tubular (•) Can-Annular ( ) Annular

Fuel (Turbine)

[X] Natural Gas [ ] LPG [ ] Digester Gas*
[ ] Landfill Gas* [ ] Propane [ ] Refinery Gas* [ ] Other*: _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

Heat Recovery Steam Generator (HRSG)

Steam Turbine Capacity: _____ MW

Low Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

High Pressure Steam Output Capacity: _____ lb/hr @ _____ °F

Superheated Steam Output Capacity: _____ lb/hr @ _____ °F

Duct Burner

Manufacturer: N/A | Model:

Number of burners: _____ Rating of each burner (HHV): _____

Type: ( ) Low NOx (please attach manufacturer's specifications)

( ) Other: _____
Show all heat transfer surface locations with the HRSG and temperature profile

Fuel (Duct Burner)

( ) Natural Gas ( ) LPG ( ) Digester Gas*
( ) Landfill Gas* ( ) Propane ( ) Refinery Gas* ( ) Other*: _____

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

South Coast Air Quality Management District

Form 400-E-12
Gas Turbine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section B - Equipment Description (Cont.)

Air Pollution Control

(•) Selective Catalytic Reduction (SCR)* ( ) Selective Non-Catalytic Reduction (SNCR)*

( ) Oxidation Catalyst* ( ) Other (specify)*: _____

( ) Steam/Water Injection: Injection Rate: _____ lbs. water/lbs. fuel, or _____ mole water/mole fuel

* Separate application is required.

Capital Cost: _____ Installation Cost: _____ Annual Operating Cost: _____

Oxidation Catalyst Data (If Applicable)

Manufacturer: BASF Model: _____

Catalyst Dimensions: Length: _____ ft. _____ in. Width: _____ ft. _____ in. Height: _____ ft. _____ in.

Catalyst Cell Density: _____ cells/sq.in. Pressure Drop Across Catalyst: _____

Manufacturer's Guarantee: CO Control Efficiency: _____ % Catalyst Life: _____ yrs

VOC Control Efficiency: _____ % Operating Temp. Range: _____ °F

Space Velocity (gas flow rate/catalyst volume): _____ Area Velocity (gas flow/wetted catalyst surface area): _____

VOC Concentration into Catalyst: 2.0 PPMVD@ 15%O_2 CO Concentration inot Catalyst: 4.0 PPMVD@ 15%O_2

Section C - Operation Information

On-line Emissions Data

Pollutants	Maximum Emissions Before Control *		Maximum Emissions After Control	
	PPM@15% O_2, dry	lb/hour	PPM@15% O_2, dry	lb/hour
ROG	2.0		2.0	
NOx	9.0		2.0	
CO	4.0		2.0	
PM_{10}		9.5		9.5
SOx		1.46		1.46
NH_3	0.0		5	

* Based on temperature, fuel consumption, and MW output.

Reference (attach data):

[X] Manufacturer Emission Data [ ] EPA Emission Factors [ ] AQMD Emission Factors [ ] Source Test

Stack or Vent Data

Stack Height: 210 ft. _____ in. Stack Diameter: 20 ft. _____ in.

Exhaust Temperature: 361 °F Exhaust Pressure: _____ inches water column

Exhaust Flow Rate: 803493 CFM Oxygen Level: 11.16 %

South Coast Air Quality Management District

Form 400-E-12
Gas Turbine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section C - Operation Information (cont.)

Startup Data

No. of Startups per day: 6 No. of Startups per year: 200 Duration of each startup: 1 hrs.

Shutdown Data

No. of Shutdowns per day: 6 No. of Shutdowns per year: 200 Duration of each Shutdown: 1 hrs.

Startup and Shutdown Emissions Data

Pollutants	Startup Emissions		Shutdown Emissions	
	PPM@15% O_2, dry	lb/hour	PPM@15% O_2, dry	lb/hour
ROG		17.3		9.7
NOx		112		47.3
CO		556.6		294.9
PM_{10}		9.5		9.5
SOx		1.46		1.46
NH_3		14.3		14.3

Monitoring and Reporting

Continuous Emission Monitoring System (CEMS): CEMS Make: _____

CEMS Model: _____

Will the CEMS be used to measure both on-line and startup/shutdown emissions? (•) Yes ( ) No

The following parameters will be continuously monitored:

☒ NOx ☒ CO ☒ O_2

☒ Fuel Flow Rate ☒ Ammonia Injection Rate ☐ Other (specify): _____

☐ Ammonia Stack Concentration: Ammonia CEMS Make: _____

Ammonia CEMS Model: _____

Operating Schedule

Normal: 24 hours/day 7 days/week 52 weeks/yr

Maximum: 24 hours/day 7 days/week 52 weeks/yr

Section D - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application is true and correct.

Preparer Info

Signature: _____ Date: 8/10/17

Title: Plant Manager Company Name: NRG

Name: Ken Riesz

Phone #: (310) 615-6030 Fax #:

Email: ken.riesz@nrg.com

Contact Info

Name: George L. Piantka, PE

Title: Senior Director Company Name: NRG

Phone #: (760) 710-2156 Fax #:

Email: George.Piantka@nrg.com

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information. ☐

Validate/Print Reset

South Coast Air Quality Management District

Form 400-PS

Plot Plan And Stack Information Form

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Form 400A and Form 400-CEQA

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

Facility Name (Business Name of Operator To Appears On The Permit): El Segundo Power, LLC

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 301 Vista Del Mar, El Segundo, CA 90245

(•) Fixed Location ( ) Various Locations

Section B - Location Data

Plot Plan

Please attach a site map for the project with distances and scales. Identify and locate the proposed equipment on the map. A copy of the appropriate Thomas Brothers page, a web-based map, or a sketch that shows the major streets and location of the equipment is acceptable.

Location of Schools Nearby

Is the facility located within a 1/4 mile radius (1,320 feet) of the outer boundary of a school? ( ) Yes (•) No

If yes, please provide name(s) of school(s) below:

School Name: _____ School Name: _____

School Address: _____ School Address: _____

Distance from stack or equipment vent to the outer boundary of the school: _____ feet

Distance from stack or equipment vent to the outer boundary of the school: _____ feet

CA Health & Safety Code 42301.9: "School" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes.

Population Density

(•) Urban ( ) Rural (<50% of land within 3 km radius accounted for by urban land use categories, i.e., multi-family dwelling or industrial.)

Zoning Classification

(•) Mixed Use Residential Commercial Zone (M-U) ( ) Service and Professional Zone (C-S) ( ) Medium Commercial (C-3)

( ) Heavy Commercial (C-4) ( ) Commercial Manufacturing (C-M)

Section C - Emission Release Parameters - Stacks, Vents

Stack Data

Stack Height: 210.00 feet (above ground level) What is the height of the closest building nearest the stack? 87 feet

Stack Inside Diameter: 240.00 inches Stack Flow: 803,493 acfm Stack Temperature: 361 °F

Rain Cap Present: ( ) Yes (•) No Stack Orientation: (•) Vertical ( ) Horizontal

If the stack height is less than 2.5 times the closest building height (H), please provide information on any building within 5xH distance from the stack (attach additional sheet if necessary):

Building #/Name: _____ Building #/Name: _____

Building Height: _____ feet (above ground level) Building Height: _____ feet (above ground level)

Building Width: _____ feet Building Width: _____ feet

Building Length: _____ feet Building Length: _____ feet

Receptor Distance From Equipment Stack or Roof Vents/Openings

Distance to nearest residence or sensitive receptor*: 2,254 feet

Distance to nearest business: 550 feet

Building Information

Are the emissions released from vents and/or openings from a building? ( ) Yes (•) No

If yes, please provide:

Building #/Name: _____ Building Width: _____ feet

Building Height: _____ feet (above ground level) Building Length: _____ feet

*AQMD Rule 1470 defines SENSITIVE RECEPTOR as meaning any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

South Coast Air Quality Management District

Form 400-PS

Plot Plan And Stack Information Form

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Form 400A and Form 400-CEQA.

Section D - Authorization/Signature

I hereby certify that all information contained herein and information submittfgfed with this application is true and correct.

Signature of Preparer:	Title of Preparer:	Preparer's Phone #: (310) 615-6030 / 760 710 2156
George L Piantka	Sr. Director ~~Plant Manager~~	Preparer's Email: ken.riesz@nrg.com / george-piantka@nrg.com

Contact Person:	Contact's Phone#:	Date Signed:
George L. Piantka, PE	(760) 710-2156	8/10/17
Contact's Email: George.Piantka@nrg.com	Contact's Fax#:	

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South Coast Air Quality Management District

Form 400-PS

Plot Plan And Stack Information Form

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Form 400A and Form 400-CEQA

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

Facility Name (Business Name of Operator To Appears On The Permit): El Segundo Power, LLC

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site): 301 Vista Del Mar, El Segundo, CA 90245

(•) Fixed Location ( ) Various Locations

Section B - Location Data

Plot Plan

Please attach a site map for the project with distances and scales. Identify and locate the proposed equipment on the map. A copy of the appropriate Thomas Brothers page, a web-based map, or a sketch that shows the major streets and location of the equipment is acceptable.

Location of Schools Nearby

Is the facility located within a 1/4 mile radius (1,320 feet) of the outer boundary of a school? ( ) Yes (•) No

If yes, please provide name(s) of school(s) below:

School Name: _____ School Name: _____

School Address: _____ School Address: _____

Distance from stack or equipment vent to the outer boundary of the school: _____ feet

Distance from stack or equipment vent to the outer boundary of the school: _____ feet

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Population Density

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Rain Cap Present: ( ) Yes (•) No Stack Orientation: (•) Vertical ( ) Horizontal

If the stack height is less than 2.5 times the closest building height (H), please provide information on any building within 5xH distance from the stack (attach additional sheet if necessary):

Building #/Name: _____ Building #/Name: _____

Building Height: _____ feet (above ground level) Building Height: _____ feet (above ground level)

Building Width: _____ feet Building Width: _____ feet

Building Length: _____ feet Building Length: _____ feet

Receptor Distance From Equipment Stack or Roof Vents/Openings

Distance to nearest residence or sensitive receptor*: 2,516 feet

Distance to nearest business: 517 feet

Building Information

Are the emissions released from vents and/or openings from a building? ( ) Yes (•) No

If yes, please provide:

Building #/Name: _____ Building Width: _____ feet

Building Height: _____ feet (above ground level) Building Length: _____ feet

*AQMD Rule 1470 defines SENSITIVE RECEPTOR as meaning any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers, and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

South Coast Air Quality Management District

Form 400-PS

Plot Plan And Stack Information Form

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Section D - Authorization/Signature

I hereby certify that all information contained herein and information submittfgfed with this application is true and correct.

Signature of Preparer:	Title of Preparer:	Preparer's Phone #: (310) 615-6030 / 760 710 2156
George L Piantka	Sr Director Plant Manager	Preparer's Email: ken.riesz@nrg.com / george.piantka@nrg.com

Contact Person:	Contact's Phone#:	Date Signed:
George L. Piantka, PE	(760) 710-2156	8/4/17
Contact's Email: George.Piantka@nrg.com	**Contact's Fax#:**	

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South Coast Air Quality Management District

Form 500-A2
Title V Application Certification

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section I - Operator Information

1. **Facility Name** (Business Name of Operator That Appears On Permit): El Segundo Power, LLC

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice Issued By AQMD): 115663

3. **This Certification is submitted with a** (Check one):
   - a. (•) Title V Application (Initial, Revision or Renewal)
   - b. ( ) Supplement/Correction to a Title V Application
   - c. ( ) MACT Part 1

   Clear

4. **Is Form 500-C2 included with this Certification?** ( ) Yes (•) No

Section II - Responsible Official Certification Statement

Read each statement carefully and check each that applies – ***You must check 3a or 3b.*** Clear

1. **For Initial, Permit Renewal, and Administrative Application Certifications:**
   - a. ( ) The facility, including equipment that are exempt from written permit per Rule 219, is currently operating and will continue to operate in compliance with all applicable requirement(s) identified in Section II and Section III of Form 500-C1,
     - i. [ ] except for those requirements that do not specifically pertain to such devices or equipment and that have been identified as "Remove" on Section III of Form 500-C1.
     - ii. [ ] except for those devices or equipment that have been identified on the completed and attached Form 500-C2 that will not be operating in compliance with the specified applicable requirement(s).
   - b. ( ) The facility, including equipment that are exempt from written permit per Rule 219, will meet in a timely manner, all applicable requirements with future effective dates.
2. **For Permit Revision Application Certifications:**
   - a. [✓] The equipment or devices to which this permit revision applies, will in a timely manner comply with all applicable requirements identified in Section II and Section III of Form 500-C1.
3. **For MACT Hammer Certifications:**
   - a. ( ) The facility is subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63), also known as the MACT "hammer." The following information is submitted with a Title V application to comply with the Part 1 requirements of Section 112(j).
   - b. ( ) The facility is not subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63).

Section III - Authorization/Signature

I certify under penalty of law that I am the responsible official for this facility as defined in AQMD Regulation XXX and that based on information and belief formed after reasonable inquiry, the statement and information in this document and in all attached application forms and other materials are true, accurate, and complete.

1. Signature of Responsible Official:	2. Title of Responsible Official:
	Plant Manager
3. Print Name: Ken Riesz	**4. Date:** 8/10/17
5. Phone #: (310) 615-6030	**6. Fax #:**

7. Address of Responsible Official:

Street #	City	State	Zip
301 Vista Del Mar	El Segundo	CA	90245

Acid Rain Facilities Only: Please Complete Section IV

Acid Rain facilities must certify their compliance status of the devices subject to applicable requirements under Title IV by an individual who meets the definition of Designated (or Alternate) Representative in 40 CFR Part 72.

Section IV - Designated Representative Certification Statement	
For Acid Rain Facilities Only: I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.	
1. Signature of Designated Representative or Alternate:	**2. Title of Designated Representative or Alternate:** Plant Manager
3. Print Name of Designated Representative or Alternate: Ken Riesz	**4. Date:** 8/10/17
5. Phone #: (310) 615-6030	**6. Fax #:**
7. Address of Designated Representative or Alternate: 301 Vista Del Mar (Street #) / El Segundo (City) / CA (State) / 90245 (Zip)	

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South Coast Air Quality Management District

Form 500-C1

Title V Compliance Status Report

To provide the compliance status of your facility with applicable federally enforceable requirements and identify other local-only requirements, complete this form and attach it to a completed compliance certification Form 500-A2. As appropriate, all submittals of Form 500-C2 as appropriate should also be attached to this form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section I - Operator Information

1. Facility Name (Business Name of Operator That Appears On Permit): El Segundo Power, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115663

PROCEDURES FOR DETERMINING COMPLIANCE STATUS

1. **Equipment verification:** Review the list of pending applications, and either the preliminary Title V facility permit or the list of current permits to operate that the AQMD provided you, to determine if they completely and accurately describe all equipment operating at the facility. Attach a statement to describe any discrepancies.
2. **Identify applicable requirements*:** Use the checklist in Section II to identify all applicable and federally-enforceable local, state, and federal rules and regulations, test methods, and monitoring, recordkeeping and reporting (MRR) requirements that apply to any equipment or process (including equipment exempt from a permit by Rule 219) at your facility.
   The potential applicable requirements, test methods and MRR requirements are identified and listed adjacent to each given equipment/process description. Check off each box adjacent to the corresponding requirement as it applies to your particular equipment/process.
   Note: Even if there is only one piece of equipment that is subject to a particular requirement, the appropriate box should be checked.
3. **Identify additional applicable requirements*:** Use Section III to identify any additional requirements not found in Section II. Section II is not a complete list of all applicable requirements. It does not include recently adopted NESHAP regulations by EPA or recent amendments to AQMD rules. Do not add rules listed in Section V here.
4. **Identify any requirements that do not apply to a specific piece of equipment or process:** Also use Section III to identify any requirements that are listed in Section II but that do not apply to a specific piece of equipment or process. Fill out Section III of this form and attach a separate sheet to explain the reason(s) why the identified rules do not apply. Note: Listing any requirement that does not apply to a specific piece of equipment will not provide the facility with a permit shield unless one is specifically requested by completing Form 500-D and is approved by AQMD.
5. **Identify SIP-approved rules that are not current AQMD rules:** Use Section IV to identify older versions of current AQMD rules that are the EPA-approved versions in the State Implementation Plan (SIP), and that are still applicable requirements as defined by EPA. The facility is not required to certify compliance with the items checked in Section IV provided that the non-SIP approved rule in Section II is at least as stringent as the older SIP-approved version in Section IV. **
6. **Identify Local-Only Enforceable Regulatory Requirements:** Use Section V to identify AQMD rules that are not SIP-approved and are not federally enforceable.
7. **Determine compliance:** Determine if all equipment and processes are complying with all requirements identified in Sections II and III. If each piece of equipment complies with all applicable requirements, complete and attach Form 500-A2 to certify the compliance status of the facility. If any piece of equipment is not in compliance with any of the applicable requirements, complete and attach Form 500-C2 in addition to Form 500-A2.

* The following AQMD rules and regulations are not required to be included in Section II and do not have to be added to Section III: Regulation I, List and Criteria in Regulation II, Rule 201, Rule 201.1, Rule 202, Rule 203, Rule 205, Rule 206, Rule 207, Rule 208, Rule 209, Rule 210, Rule 212, Rule 214, Rule 215, Rule 216, Rule 217, Rule 219, Rule 220, Rule 221, Regulation III, Regulation V, Regulation VIII, Regulation XII, Regulation XV, Regulation XVI, Regulation XIX, Regulation XXI, Regulation XXII, and Regulation XXX.

** Emission units adversely affected by the gap between current and SIP-approved versions of rules may initially be placed in a non-Title V portion of the permit

Section I Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ All Air Pollution Control Equipment Using Combustion (RECLAIM & non-RECLAIM sources)	☐ Rule 480 (10/07/77)	N/A	N/A
☐ All Coating Operations (12/15/00)	☐ Rule 442	☐ Rule 442(f)	☐ Rule 442(g)
☐ All Combustion Equipment, ≥ 555 Mmbtu/Hr (except for NOx RECLAIM sources)	☐ Rule 474 (12/04/81)	☐ AQMD TM 7.1 or 100.1	
☑ All Combustion Equipment Except Internal Combustion Engines (RECLAIM & non-RECLAIM sources)	☑ Rule 407 (04/02/82) ☑ Rule 409 (08/07/81)	☑ AQMD TM 100.1 or 10.1, 307-91 ☑ AQMD TM 5.1, 5.2, or 5.3	
☑ All Combustion Equipment Using Gaseous Fuel (except SOx RECLAIM sources)	☑ Rule 431.1 (06/12/98)	☑ Rule 431.1(f)	☑ Rule 431.1(d) & (e)
☐ All Combustion Equipment Using Liquid Fuel (except SOx RECLAIM sources)	☐ Rule 431.2 (09/15/00)	☐ Rule 431.2(g)	☐ Rule 431.2(f)
☑ All Combustion Equipment Using Fossil Fuel (except SOx RECLAIM sources)	☑ Rule 431.3 (05/07/76)		
☑ All Equipment	☑ Rule 401 (11/09/01) ☑ Rule 405 (02/07/86) ☑ Rule 408 (05/07/76) ☑ Rule 430 (07/12/96) ☑ Rule 701 (06/13/97) ☑ New Source Review, BACT ☑ Rule 1703 (10/07/88) ☑ 40 CFR68 - Accidental Release Prevention	☑ California Air Resources Board Visible Emission Evaluation ☐ AQMD TM 5.1, 5.2, or 5.3 N/A See Applicable Subpart	☐ Rule 430(b) See Applicable Subpart
☐ All Equipment Processing Solid Materials	☐ Rule 403 (06/03/05)	☐ Rule 403(d)(3)	☐ Rule 403(f)
☑ All Equipment With Exhaust Stack (except cement kilns subject to Rule 1112.1)	☑ Rule 404 (02/07/86)	☑ AQMD TM 5.1, 5.2, or 5.3	
☐ All Facilities Using Solvents to Clean Various Items or Equipment	☐ Rule 109 (05/02/03) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART T	☐ Rule 109(g) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1171(c)(6) See Applicable Subpart
☑ All RECLAIM Equipment (NOx & SOx)	☑ Reg. XX - RECLAIM	☐ Rule 2011, App. A (05/06/05) ☑ Rule 2012, App. A (05/06/05)	☐ Rule 2011, App. A (05/06/05) ☑ Rule 2012, App. A (05/06/05)
☐ Abrasive Blasting	☐ Rule 1140 (08/02/85)	☐ Rule 1140(d) & (e), AQMD Visible Emission Method	

KEY ABBREVIATIONS: **Reg.** = AQMD Regulation; **Rule** = AQMD Rule; **App.** = Appendix; **AQMD TM** = AQMD Test Method; **CFR** = Code of Federal Regulations; **CCR** = California Code of Regulations

Section I Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Aggregate and Related Operations	☐ Rule 1157 (09/08/06)	☐ Rule 1157(f)	☐ Rule 1157(e)
☐ Appliances Containing Ozone Depleting Substances (except Motor Vehicle Air Conditioners): Manufacturing, Repair, Maintenance, Service, & Disposal	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Asphalt	See Manufacturing, Asphalt Processing & Asphalt Roofing		
☐ Asphalt Concrete/Batch Plants	☐ 40 CFR60 SUBPART I	See Applicable Subpart	See Applicable Subpart
☐ Benzene Emissions, Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, & Coke By-Product Recovery Plants	☐ Rule 1173 (02/06/09) ☐ Rule 1176 (09/13/96) ☐ 40 CFR61 SUBPART L ☐ 40 CFR61 SUBPART Y ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 1173(j) ☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1173(i) ☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Benzene Transfer Operations	☐ Rule 1142 (07/19/91) ☐ 40 CFR61 SUBPART BB ☐ 40 CFR63 SUBPART Y	☐ Rule 1142(e) See Applicable Subpart See Applicable Subpart	☐ Rule 1142(h) See Applicable Subpart See Applicable Subpart
☐ Benzene Waste Operations	☐ Rule 1176 (09/13/96) ☐ 40 CFR61 SUBPART FF ☐ 40 CFR63 SUBPART CC	☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart
☐ Beryllium Emissions	☐ 40 CFR61 SUBPART C	See Applicable Subpart	See Applicable Subpart
☐ Beryllium Emissions, Rocket Motor Firing	☐ 40 CFR61 SUBPART D	See Applicable Subpart	See Applicable Subpart
☐ Boiler, < 5 Mmbtu/Hr (non-RECLAIM sources)	☐ Rule 1146.1 (09/05/08) ☐ Rule 1146.2 (05/05/06) ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146.1(d) N/A See Applicable Subpart	☐ Rule 1146.1(c)(2) & (c)(3) N/A See Applicable Subpart
☐ Boiler, < 5 Mmbtu/Hr (RECLAIM sources)	☐ Rule 1146.1 (09/05/08) - excluding NOx requirements ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146.1(d) See Applicable Subpart	☐ Rule 1146.1(c)(2) & (c)(3) See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Boiler, ≥ 5 Mmbtu/Hr (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 475 (08/07/78) ☐ Rule 476 (10/08/76) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBPART D ☐ 40 CFR60 SUBPART Da ☐ 40 CFR60 SUBPART Dc ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 7.1, 100.1, 5.1, 5.2, or 5.3 ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Boiler, ≥ 5 Mmbtu/Hr (RECLAIM sources)	☐ Rule 475 (08/07/78) ☐ Rule 476 (10/08/76) - excluding NOx requirements ☐ Rule 1146 (09/05/08) - excluding NOx requirements ☐ Rule 2011 (05/06/05) ☐ or Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART D ☐ 40 CFR60 SUBPART Da ☐ 40 CFR60 SUBPART Dc ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 7.1, 100.1, 5.1, 5.2, or 5.3 ☐ Rule 1146(d) ☐ Rule 2011, App. A (05/06/05) ☐ or Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1146(c)(6) & (c)(7) ☐ Rule 2011, App. A (05/06/05) ☐ or Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Boiler, Petroleum Refining (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 431.1 (06/12/98) ☐ Rule 475 (08/07/78) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBBPART J ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ Rule 431.1(f) ☐ AQMD TM 5.1, 5.2, or 5.3 ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 431.1(d) & (e) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart

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Section I Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Boiler, Petroleum Refining (RECLAIM sources)	☐ Rule 1146 (09/05/08) - excluding NOx requirements ☐ Rule 2011 (05/06/05) ☐ or ☐ Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146(d) ☐ Rule 2011, App. A (05/06/05) ☐ or ☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart	☐ Rule 1146(c)(6) & (c)(7) ☐ Rule 2011, App. A (05/06/05) ☐ or ☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart
☐ Boilers, Electric Utility (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 1135 (07/19/91) ☐ 40 CFR60 SUBPART Db ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ Rule 1135(e) See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 1135(e) See Applicable Subpart See Applicable Subpart
☐ Boilers, Electric Utility (RECLAIM sources)	☐ Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART Db ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart	☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart
☐ Bulk Loading Of Organic Liquids	☐ Rule 462 (05/14/99) ☐ 40 CFR60 SUBPART XX ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART BBBBBB ☐ 40 CFR63 SUBPART EEEE	☐ Rule 462(f) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 462(g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Cadmium Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Calciner, Mineral Industries	☐ 40 CFR60 SUBPART UUU	See Applicable Subpart	See Applicable Subpart
☐ Calciner, Petroleum Coke	☐ Rule 477 (04/03/81) ☐ Rule 1119 (03/02/79) ☐ 40 CFR63 SUBPART L	☐ AQMD Visible Emissions, AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 6.1 or 100.1 See Applicable Subpart	See Applicable Subpart
☐ Charbroilers	☐ Rule 1174 (10/05/90) ☐ Rule 1138 (11/14/97)	☐ AQMD Test Protocol ☐ Rule 1138(g)	☐ Rule 1138(d)
☐ Chrome Plating & Chromic Acid Anodizing Operation	☐ Rule 1426 (05/02/03) ☐ Rule 1469 (12/05/08)	☐ Rule 1469(e)	☐ Rule 1426(e) ☐ Rule 1469(g), (j) & (k)

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Coating Operation, Adhesive Application Operation	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1168 (01/07/05) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART RR	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1168(f) & (e) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1132(g) ☐ Rule 1168(d) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Aerospace Assembly & Component Manufacturing	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1124 (09/21/01) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART GG	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1124(e) & (f) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1124(j) & (d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Graphic Arts (Gravure, Letter Press, Flexographic & Lithographic Printing Process, Etc.)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1130 (10/08/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART QQ ☐ 40 CFR60 SUBPART RR ☐ 40 CFR60 SUBPART FFF ☐ 40 CFR60 SUBPART VVV ☐ 40 CFR63 SUBPART KK ☐ 40 CFR63 SUBPART JJJJ	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1130(h) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1130(e) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Magnet Wire Coating	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1126 (01/13/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1126(d) ☐ Rule 1132(f) ☐ Rule 1171(e)	☐ Rule 109(c) ☐ Rule 1126(c)(4) ☐ Rule 1132(g) ☐ Rule 1171(c)(6)

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Coating Operation, Marine Coating (Except for recreational equipment)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1106 (01/13/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1106(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1106(c)(5) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Metal Coating	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1107 (01/06/06) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART EE ☐ 40 CFR60 SUBPART SS ☐ 40 CFR63 SUBPART NNNN ☐ 40 CFR63 SUBPART MMMM ☐ 40 CFR63 SUBPART RRRR	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1107(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1107(j) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Metal Containers, Closure, & Coil Coating Operations	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1125 (03/07/08) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART TT ☐ 40 CFR60 SUBPART WW ☐ 40 CFR63 SUBPART KKKK ☐ 40 CFR63 SUBPART SSSS	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1125(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1125(c)(6) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Motor Vehicle & Mobile Equipment Non-Assembly Line Coating Operation	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1151 (12/02/05) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1151(h) ☐ Rule 1171(e)	☐ Rule 109© ☐ Rule 1132(g) ☐ Rule 1151(f) ☐ Rule 1171(c)(6)

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Section I \pplicable Requirements, Test Methods, & MRR Requiremer			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Coating Operation, Motor Vehicle Assembly Line	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1115 (05/12/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART MM ☐ 40 CFR63 SUBPART IIII	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1115(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1115(g) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Paper, Fabric, & Film Coating Operations	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1128 (03/08/96) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART VVV ☐ 40 CFR63 SUBPART OOOO	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1128(f) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1128(e) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Plastic, Rubber, & Glass	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1145 (12/04/09) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART TTT ☐ 40 CFR63 SUBPART NNNN ☐ 40 CFR63 SUBPART PPPP	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1145(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1145(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Pleasure Craft	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1106.1 (02/12/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1106.1(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1106.1(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Coating Operation, Screen Printing	☐ Rule 109 (05/02/03) ☐ Rule 1130.1 (12/13/96) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART KK	☐ Rule 109(g) ☐ Rule 1130.1(g) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1130.1(c)(5) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☑ Coating Operation, Use Of Architectural Coating (Stationary Structures)	☑ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☑ Rule 1113 (07/13/07) ☐ Rule 1132 (05/05/06) ☑ Rule 1171 (05/01/09)	☑ Rule 109(g) ☐ Rule 481(d) ☑ Rule 1113(e) ☐ Rule 1132(f) ☑ Rule 1171(e)	☑ Rule 109(c) ☐ Rule 1132(g) ☑ Rule 1171(c)(6)
☐ Coating Operation, Wood Flat Stock	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1104 (08/13/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1104(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1104(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Wood Products (Commercial Furniture, Cabinets, Shutters, Frames, Toys)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1136 (06/14/96) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART JJ	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1136(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1132(g) ☐ Rule 1136(d) & (g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coater	See Coating Operations		
☐ Columns	See Petroleum Refineries, Fugitive Emissions		
☐ Composting Operation	☐ Rule 1133 (01/10/03) ☐ Rule 1133.1 (01/10/03) ☐ Rule 1133.2 (01/10/03)	☐ Rule 1133.1(e) ☐ Rule 1133.2(g)	☐ Rule 1133.1(d) ☐ Rule 1133.2(h)
☐ Compressors	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Concrete Batch Plants	See Nonmetallic Mineral Processing Plants		
☐ Consumer Product Manufacturing	See Manufacturing, Consumer Product		
☐ Cooling Tower, Hexavalent Chromium	☐ 40 CFR63 SUBPART Q	See Applicable Subpart	See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Copper Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Crude Oil Production	See Oil Well Operations		
☐ Crusher	See Nonmetallic Mineral Processing Plants		
☐ Dairy Farms and Related Operations	☐ Rule 1127 (08/06/04)	☐ Rule 1127(h)	☐ Rule 1127(g)
☐ Degreasers	☐ Rule 109 (05/02/03) ☐ Rule 1122 (05/01/09) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART T	☐ Rule 109(g) ☐ Rule 1122(h) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1122(i) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Dry Cleaning, Perchloroethlyene	☐ Rule 1421 (12/06/02)	☐ Rule 1421(e) & (i)	☐ Rule 1421(g) & (h)
☐ Dry Cleaning, Petroleum Solvent	☐ Rule 109 (05/02/03) ☐ Rule 1102 (11/17/00) ☐ 40 CFR60 SUBPART JJJ	☐ Rule 109(g) ☐ Rule 1102(g) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1102(f) See Applicable Subpart
☐ Dryers, Mineral Industries	☐ 40 CFR60 SUBPART UUU	See Applicable Subpart	See Applicable Subpart
☐ Ethylene Oxide Sterilizer	See Sterilizer, Ethylene Oxide		
☐ Flanges	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Fluid Catalytic Cracking Unit	☐ Rule 218 (05/14/99) ☐ Rule 1105 (09/01/84) ☐ Rule 1105.1 (11/07/03)	☐ AQMD TM 100.1 ☐ Rule 1105(c)(1) ☐ Rule 1105.1(f)	☐ Rule 218(e) & (f) ☐ Rule 1105(c)(2) ☐ Rule 1105.1(e)
☐ Foundries, Iron and Steel	☐ 40 CFR63 SUBPART EEEEE	See Applicable Subpart	See Applicable Subpart
☐ Friction Materials Manufacturing	See Manufacturing, Friction Materials		
☐ Fugitive Emissions, Benzene	☐ Rule 1173 (12/06/02) ☐ 40 CFR61 SUBPART L ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Fugitive Emissions, Chemical Plant	☐ Rule 466 (10/07/83)	☐ Rule 466(f)	☐ Rule 466(e)
	☐ Rule 466.1 (03/16/84)	☐ Rule 466.1(g)	☐ Rule 466.1(h)
	☐ Rule 467 (03/05/82)	☐ Rule 467(f)	☐ Rule 467(e)
	☐ Rule 1173 (02/06/09)	☐ Rule 1173(j)	☐ Rule 1173(i)
	☐ 40 CFR60 SUBPART VV	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR61 SUBPART V	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART R	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart
☐ Fugitive Emissions, Natural Gas Processing Plant	☐ Rule 466 (10/07/83)	☐ Rule 466(f)	☐ Rule 466(e)
	☐ Rule 466.1 (03/16/84)	☐ Rule 466.1(g)	☐ Rule 466.1(h)
	☐ Rule 467 (03/05/82)	☐ Rule 467(f)	☐ Rule 467(e)
	☐ Rule 1173 (02/06/09)	☐ Rule 1173(j)	☐ Rule 1173(i)
	☐ 40 CFR60 SUBPART KKK	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR61 SUBPART V	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART R	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Fugitive Emissions, Oil & Gas Production Facility	☐ Rule 466 (10/07/83)	☐ Rule 466(f)	☐ Rule 466(e)
	☐ Rule 466.1 (03/16/84)	☐ Rule 466.1(g)	☐ Rule 466.1(h)
	☐ Rule 467 (03/05/82)	☐ Rule 467(f)	☐ Rule 467(e)
	☐ Rule 1173 (02/06/09)	☐ Rule 1173(j)	☐ Rule 1173(i)
	☐ 40 CFR61 SUBPART V	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART R	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart
☐ Fugitive Emissions, Pipeline Transfer Station	☐ Rule 466 (10/07/83)	☐ Rule 466(f)	☐ Rule 466(e)
	☐ Rule 466.1 (03/16/84)	☐ Rule 466.1(g)	☐ Rule 466.1(h)
	☐ Rule 467 (03/05/82)	☐ Rule 467(f)	☐ Rule 467(e)
	☐ Rule 1173 (02/06/09)	☐ Rule 1173(j)	☐ Rule 1173(i)
	☐ 40 CFR61 SUBPART V	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART R	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Basic Oxygen Process	☐ 40 CFR60 SUBPART Na	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Electric Arc, For Steel Plants: Constructed After August 17, 1983	☐ 40 CFR60 SUBPART AAa	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Electric Arc, For Steel Plants: Constructed After Oct. 21, 1974, & On Or Before Aug. 17, 1983	☐ 40 CFR60 SUBPART AA	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Glass Melting	☐ Rule 1117 (01/06/84)	☐ Rule 1117(c), AQMD TM 7.1 or 100.1	
	☐ 40 CFR60 SUBPART CC	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Lead Melting, Automotive Batteries	☐ Rule 1101 (10/07/77)	☐ AQMD TM 6.1	
	☐ 40 CFR63 SUBPART X	See Applicable Subpart	See Applicable Subpart

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Gasoline Transfer & Dispensing Operation	☐ Rule 461 (06/03/05)	☐ Rule 461(f)	☐ Rule 461(e)(6) & (e)(7)
☐ Glass Manufacturing	See Manufacturing, Glass		
☐ Grain Elevators	☐ 40 CFR60 SUBPART DD	See Applicable Subpart	See Applicable Subpart
☐ Halon-containing Equipment, Use for Technician Training, Testing, Maintenance, Service, Repair, or Disposal	☐ 40 CFR82 SUBPART H	See Applicable Subpart	See Applicable Subpart
☐ Hazardous Waste Combustors	☐ 40 CFR63 SUBPART EEE	See Applicable Subpart	See Applicable Subpart
☐ Heater, Asphalt Pavement	☐ Rule 1120 (08/04/78)	☐ AQMD Visible Emissions, AQMD TM 6.2	☐ Rule 1120(f)
☐ Heaters, Petroleum Refinery Process	☐ Rule 429 (12/21/90) ☐ Rule 431.1 (06/12/98) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART DDDDD	N/A ☐ Rule 431.1(f) ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart	☐ Rule 429(d) ☐ Rule 431.1(d) & (e) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart
☐ Heaters, Process	See Boilers		
☐ Incinerators	☐ 40 CFR60 SUBPART E ☐ 40 CFR60 SUBPART CCCC	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Inorganic Arsenic Emissions, Arsenic Trioxide & Metallic Arsenic Production Facilities	☐ 40 CFR61 SUBPART P	See Applicable Subpart	See Applicable Subpart
☐ Internal Combustion Engines, Reciprocating	☐ Rule 1110.2 (07/09/10) ☐ 40 CFR60 SUBPART IIII and JJJJ ☐ 40 CFR63 SUBPART ZZZZ	Rule 1110.2(g) See Applicable Subpart See Applicable Subpart	Rule 1110.2(f) See Applicable Subpart See Applicable Subpart
☐ Kiln, Cement Plant	☐ Rule 1112 (06/06/86) ☐ Rule 1112.1 (12/04/09) ☐ 40 CFR60 SUBPART F	N/A N/A See Applicable Subpart	N/A N/A See Applicable Subpart

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Section I Applicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Landfills	☐ Rule 1150 (10/15/82) ☐ Rule 1150.1 (03/17/00) ☐ 40 CFR60 SUBPART WWW ☐ 40 CFR63 SUBPART AAAA	☐ Rule 1150.1(j) See Applicable Subpart See Applicable Subpart	☐ Rule 1150.1(e) & (f) See Applicable Subpart See Applicable Subpart
☐ Lead Acid Battery Manufacturing Plants	See Manufacturing, Lead Acid Battery		
☐ Lead Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Manufacturing, Asphalt Processing & Asphalt Roofing	☐ Rule 470 (05/07/76) ☐ Rule 1108 (02/01/85) ☐ Rule 1108.1 (11/04/83) ☐ 40 CFR60 SUBPART UU ☐ 40 CFR63 SUBPART LLLLL	N/A ☐ Rule 1108(b) ☐ Rule 1108.1 (b) See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Brick & Structural Clay Products	☐ 40 CFR63 SUBPART JJJJJ	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Cement	☐ Rule 1156 (03/06/09)	☐ Rule 1156(g)	☐ Rule 1156(f)
☐ Manufacturing, Clay Ceramics	☐ 40 CFR63 SUBPART KKKKK	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Coatings & Ink (SIC Code 2851)	☐ Rule 1141.1 (11/17/00) ☐ 40 CFR63 SUBPART HHHHH	N/A See Applicable Subpart	☐ Rule 1141.1(c) See Applicable Subpart
☐ Manufacturing, Consumer Product	☐ Title 17 CCR 94500		
☐ Manufacturing, Food Product	☐ Rule 1131 (06/06/03)	☐ Rule 1131(e)	☐ Rule 1131(d)
☐ Manufacturing, Friction Materials	☐ 40 CFR63 SUBPART QQQQQ	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Glass	☐ Rule 1117 (01/06/84) ☐ 40 CFR60 SUBPART CC ☐ 40 CFR61 SUBPART N	☐ Rule 1117(c), AQMD TM 7.1 or 100.1 See Applicable Subpart See Applicable Subpart	 See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Hydrochloric Acid	☐ 40 CFR63 SUBPART NNNNN	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Lead-Acid Battery	☐ 40 CFR60 SUBPART KK	See Applicable Subpart	See Applicable Subpart

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Section I: Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Manufacturing, Lime	☐ 40 CFR63 SUBPART AAAAA	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Magnetic Tape Industry	☐ 40 CFR60 SUBPART SSS ☐ 40 CFR63 SUBPART EE	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Miscellaneous Organic Chemical	☐ 40 CFR63 SUBPART FFFF	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Nitric Acid	☐ Rule 218 (05/14/99) ☐ Rule 1159 (12/06/85) ☐ 40 CFR60 SUBPART G	☐ AQMD TM 100.1 ☐ AQMD TM 7.1 or 100.1 See Applicable Subpart	☐ Rule 218(e) & (f) See Applicable Subpart
☐ Manufacturing, Plywood & Composite Wood Products	☐ Rule 1137 (02/01/02) ☐ 40 CFR63 SUBPART DDDD	N/A See Applicable Subpart	☐ Rule 1137(e) See Applicable Subpart
☐ Manufacturing, Polymer Industry	☐ 40 CFR60 SUBPART DDD ☐ 40 CFR63 SUBPART W ☐ 40 CFR63 SUBPART J	See Applicable Subpart See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Polymeric Cellular Foam	☐ Rule 1175 (09/07/07) ☐ 40 CFR63 SUBPART UUUU	☐ Rule 1175(f) See Applicable Subpart	☐ Rule 1175(e) See Applicable Subpart
☐ Manufacturing, Products Containing Halon Blends	☐ 40 CFR82 SUBPART H	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Products Containing Organic Solvents	☐ Rule 443.1 (12/05/86)	N/A	N/A
☐ Manufacturing, Products Containing Ozone Depleting Substances (ODS)	☐ 40 CFR82 SUBPART A ☐ 40 CFR82 SUBPART E	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Reinforced Plastic Composites	☐ 40 CFR63 SUBPART WWWW	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Refractory Products	☐ 40 CFR63 SUBPART SSSSS	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Resin	☐ Rule 1141 (11/17/00) ☐ 40 CFR63 SUBPART W	☐ Rule 1141(d) See Applicable Subpart	☐ Rule 1141(c) See Applicable Subpart
☐ Manufacturing, Rubber Tire	☐ 40 CFR63 SUBPART XXXX	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Semiconductors	☐ Rule 109 (05/02/03) ☐ Rule 1164 (01/13/95) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART BBBBB	☐ Rule 109(g) ☐ Rule 1164(e) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1164(c)(5) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Manufacturing, Solvent	☐ Rule 443 (05/07/76)	N/A	N/A

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Section I Applicable Requirements, Test Methods, & MRR Requirement			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Manufacturing, Sulfuric Acid	☐ Rule 469 (02/13/81) ☐ 40 CFR60 SUBPART H ☐ 40 CFR60 SUBPART Cd	☐ AQMD TM 6.1 or 6.2 See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Surfactant	☐ Rule 1141.2 (01/11/02)	☐ Rule 1141.2(e) ☐ AQMD TM 25.1	
☐ Manufacturing, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	☐ 40 CFR60 SUBPART III ☐ 40 CFR60 SUBPART NNN	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	☐ 40 CFR60 SUBPART RRR	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Vinyl Chloride	☐ 40 CFR61 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Water Heaters	☐ Rule 1121 (09/03/04)	N/A	N/A
☐ Manufacturing, Wool Fiberglass Insulation	☐ 40 CFR60 SUBPART PPP	See Applicable Subpart	See Applicable Subpart
☐ Manure Processing Operations	☐ Rule 1127 (08/06/04)	☐ Rule 1127(h)	☐ Rule 1127(g)
☐ Marine Tank Vessel Operations	☐ Rule 1142 (07/19/91) ☐ Rule 1173 (02/06/09) ☐ 40 CFR63 SUBPART Y	☐ Rule 1142(e) ☐ Rule 1173(j) See Applicable Subpart	☐ Rule 1142(h) ☐ Rule 1173(i) See Applicable Subpart
☐ Mercury Emissions	☐ 40 CFR61 SUBPART E ☐ 40 CFR63 SUBPART IIII	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Motor Vehicle Air Conditioners with Ozone Depleting Substances (ODS): Repair, Service, Manufacturing, Maintenance, or Disposal	☐ 40 CFR82 SUBPART B ☐ 40 CFR82 SUBPART F	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Municipal Waste Combustors	☐ 40 CFR60 SUBPART Cb ☐ 40 CFR60 SUBPART Ea ☐ 40 CFR60 SUBPART Eb	See Applicable Subpart See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Negative Air Machines/HEPA, Asbestos	☐ 40 CFR61 SUBPART M	See Applicable Subpart	See Applicable Subpart
☐ Nickel Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Nonmetallic Mineral Processing Plants	☐ Rule 404 (02/07/86) ☐ Rule 405 (02/07/86) ☐ 40 CFR60 SUBPART OOO	☐ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart	See Applicable Subpart
☐ Off-site Waste and Recovery Operation	☐ 40 CFR63 SUBPART DD	See Applicable Subpart	See Applicable Subpart

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Section I Applicable Requirements, Test Methods, & MRR Requiremer			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Oil and Gas Well Operation	☐ Rule 1148 (11/05/82) ☐ Rule 1148.1 (03/05/04)	☐ AQMD TM 25.1 ☐ Rule 1148.1 (g)	☐ Rule 1148.1 (f)
☐ Onshore Natural Gas Processing, SO2 Emissions	☐ 40 CFR60 SUBPART LLL	See Applicable Subpart	See Applicable Subpart
☐ Open Fires	☐ Rule 444 (11/07/08)		
☐ Open Storage, Petroleum Coke	☐ Rule 403 (06/03/05) ☐ Rule 403.1 (04/02/04) ☐ Rule 1158 (06/11/99)	☐ Rule 403(d)(4) ☐ Rule 1158(h)	☐ Rule 403(f) ☐ Rule 403.1(h) ☐ Rule 1158(j)
☐ Open Storage	☐ Rule 403 (06/03/05) ☐ Rule 403.1 (04/02/04)	☐ Rule 403(d)(4)	☐ Rule 403(f) ☐ Rule 403.1(h)
☐ Outer Continental Shelf Platform	☐ Rule 1183 (03/12/93) ☐ 40 CFR55	☐ 40 CFR55 See Applicable Subpart	☐ 40 CFR55 See Applicable Subpart
☐ Oven, Commercial Bakery	☐ Rule 1153 (01/13/95)	☐ Rule 1153(h)	☐ Rule 1153(g)
☐ Oven, Petroleum Coke	☐ Rule 477 (04/03/81) ☐ 40 CFR63 SUBPART L ☐ 40 CFR63 SUBPART CCCCC	☐ AQMD Visible Emissions, AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Ozone Depleting Substances (ODS) or Alternative ODS, Use	☐ 40 CFR82 Subpart G	See Applicable Subpart	See Applicable Subpart

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Section I: Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Petroleum Refineries	☐ Rule 218 (05/14/99)	☐ AQMD TM 100.1	☐ Rule 218(e) & (f)
	☐ Rule 465 (08/13/99)		
	☐ Rule 468 (10/08/76)	☐ AQMD TM 6.1 or 6.2	
	☐ Rule 469 (02/13/81)	☐ AQMD TM 6.1 or 6.2	
	☐ Rule 1118 (11/04/05)	☐ Rule 1118(j)	☐ Rule 1118(f), (g), (h), & (i)
	☐ Rule 1123 (12/07/90)	N/A	☐ Rule 1123(c)
	☐ Rule 1189 (01/21/00)	☐ Rule 1189(f)	☐ Rule 1189(e)
	☐ 40 CFR60 SUBPART J	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART EEEE	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART GGGGG	See Applicable Subpart	See Applicable Subpart
	☐ Title 13 CCR 2250		
☐ Petroleum Refineries, Fugitive Emissions	☐ Rule 1173 (02/06/09)	☐ Rule 1173(j)	☐ Rule 1173(i)
	☐ Rule 466 (10/07/83)	☐ Rule 466(f)	☐ Rule 466(e)
	☐ Rule 466.1 (03/16/84)	☐ Rule 466.1(g)	☐ Rule 466.1(h)
	☐ Rule 467 (03/05/82)	☐ Rule 467(f)	☐ Rule 467(e)
	☐ 40 CFR60 SUBPART GGG	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR61 SUBPART V	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART F	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART G	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART H	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART I	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART R	See Applicable Subpart	See Applicable Subpart
	☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart

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Section I Applicable Requirements, Test Methods, & MRR Requirement			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Petroleum Refineries, Storage Tanks	☐ Rule 463 (05/06/05) ☐ Rule 1178 (04/07/06) ☐ 40 CFR60 SUBPART K ☐ 40 CFR60 SUBPART Ka ☐ 40 CFR60 SUBPART Kb ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC ☐ 40 CFR63 SUBPART EEEE	☐ Rule 463(g) ☐ Rule 1178(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 463(e)(5) ☐ Rule 1178(f) & (h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Petroleum Refineries, Wastewater Systems	☐ Rule 1176 (09/13/96) ☐ Rule 464 (12/07/90) ☐ 40 CFR60 SUBPART QQQ ☐ 40 CFR63 SUBPART CC	☐ Rule 1176(h) N/A See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart
☐ Pharmaceuticals & Cosmetics Manufacturing	☐ Rule 1103 (03/12/99) ☐ 40 CFR63 SUBPART GGG	☐ Rule 1103(f) See Applicable Subpart	☐ Rule 1103(e) See Applicable Subpart
☐ Polyester Resin Operation	☐ Rule 109 (05/02/03) ☐ Rule 1162 (07/08/05) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 1162(f) ☐ Rule 1171(e)	☐ Rule 109(c) ☐ Rule 1162(e) ☐ Rule 1171(c)(6)
☐ Primary Magnesium Refining	☐ 40 CFR63 SUBPART TTTTT	See Applicable Subpart	See Applicable Subpart
☐ Printing Press	See Coating Operations		
☐ Publicly Owned Treatment Works Operations	☐ Rule 1179 (03/06/92) ☐ 40 CFR60 SUBPART O	☐ Rule 1179(e) See Applicable Subpart	☐ Rule 1179(c) & (d) See Applicable Subpart
☐ Pumps	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		

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Section I \pplicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Recycling & Recovery Equipment for Ozone Depleting Substances (ODS),	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Refrigerant Reclaimers for Ozone Depleting Substances (ODS)	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Rendering Plant	☐ Rule 472 (05/07/76)	N/A	☐ Rule 472(b)
☐ Rock Crushing	See Nonmetallic Mineral Processing Plants		
☐ Secondary Aluminum Production	☐ 40 CFR63 SUBPART LL	See Applicable Subpart	See Applicable Subpart
☐ Semiconductor Manufacturing	See Manufacturing, Semiconductors		
☐ Sewage Treatment Plants	See Publicly Owned Treatment Works Operation		
☐ Site Remediation	☐ 40 CFR63 SUBPART GGGGG	See Applicable Subpart	See Applicable Subpart
☐ Smelting, Primary Copper	☐ 40 CFR63 SUBPART QQQ	See Applicable Subpart	See Applicable Subpart
☐ Smelting, Secondary Lead	☐ 40 CFR60 SUBPART L ☐ 40 CFR63 SUBPART X	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Soil Decontamination / Excavation	☐ Rule 1166 (05/11/01) ☐ 40 CFR63 SUBPART GGGGG	☐ Rule 1166(e) See Applicable Subpart	☐ Rule 1166(c)(1)(C) See Applicable Subpart
☐ Spray Booth	See Coating Operations		
☐ Sterilizer, Ethylene Oxide	☐ 40 CFR63 SUBPART O	See Applicable Subpart	See Applicable Subpart
☐ Storage Tank, Degassing Operation	☐ Rule 1149 (07/14/95) ☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart

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Section I Applicable Requirements, Test Methods, & MRR Requiremen			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Storage Tank, Greater Than 19,815 Gallon Capacity	☐ Rule 463 (05/06/05) ☐ Rule 1178 (04/07/06) ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR60 SUBPART K ☐ 40 CFR60 SUBPART Ka ☐ 40 CFR60 SUBPART Kb ☐ 40 CFR63 SUBPART R ☐ 40CFR63 SUBPART BBBBBB ☐ 40 CFR63 SUBPART CC	☐ Rule 463(g) ☐ Rule 1178(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 463(e)(5) ☐ Rule 1178(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Synthetic Fiber Production Facilities	☐ 40 CFR60 SUBPART HHH	See Applicable Subpart	See Applicable Subpart
☐ Taconite Iron Ore Processing Facilities	☐ 40 CFR63 SUBPART RRRRR	See Applicable Subpart	See Applicable Subpart
☑ Turbine, Stationary Gas-Fired	☑ Rule 1134 (08/08/97) ☑ Rule 475 (08/07/78) ☐ 40 CFR60 SUBPART GG ☑ 40 CFR60 SUBPART KKKK ☐ 40 CFR63 SUBPART YYYY	☑ Rule 1134(e) & (g) ☑ AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart See Applicable Subpart See Applicable Subpart	☑ Rule 1134(d) & (f) See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Turbine, Stationary Oil-Fired	☐ 40 CFR63 SUBPART YYYY	See Applicable Subpart	See Applicable Subpart
☐ Valves	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Vessel, Refinery Process	☐ Rule 1123 (12/07/90)	N/A	☐ Rule 1123(c)
☐ Vessels	See Petroleum Refineries, Fugitive Emissions		

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Section I Applicable Requirements, Test Methods, & MRR Requirement			
Equipment/Process	**Applicable Requirement**	**Test Method**	**MRR Requirement**
☐ Wastewater, Chemical Plant	☐ Rule 464 (12/07/90) ☐ Rule 1176 (09/13/96) ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART CC	N/A ☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Wastewater Treatment, Other	☐ Rule 464 (12/07/90) ☐ Rule 1176 (09/13/96)	N/A ☐ Rule 1176(h)	☐ Rule 1176(f) & (g)
☐ Woodworking Operations	☐ Rule 1137 (02/01/02)	N/A	☐ Rule 1137(e)

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Section III - Supplemental Identification of Specific Requirements

Complete this section **only** if there is a specific requirement (i.e., rule reference, test method, or MRR requirement) that is:

1. Listed for a specific type of equipment or process in Section II of this form & **DOES NOT** pertain to a specific device at your facility*; OR,
2. Is **NOT** Listed for a specific type of equipment or process in Section II of this form but it **IS** applicable to a specific device at your facility.

NOTES:

1. For any specific requirement, test method, or MRR requirement that is identified as "Remove," attach additional sheets to explain the reasons why the specific requirement does not pertain to the device listed.
2. All boxes that are checked in Section II and any additional requirements identified in this section as "Add" will be used to determine the facility's compliance status. This information will be used to verify the certification statements made on Form 500-A2.
3. Do not use this section to identify equipment that is exempt from specific rule requirements. Your equipment is automatically considered to be in compliance with the rule that specifically exempts the equipment from those requirements.
4. Listing any requirement that does not apply to a specific piece of equipment in this section will not provide the facility with a permit shield unless one is specifically requested by completing Form 500-D and approved by the AQMD.

* If this section is completed as part of the initial Title V application & there is no device number assigned, refer to the existing permit or application number in this column.

Device No.*	Specific Requirement (Rule Number & Date)	Add (A) or Remove (R) (Check one)	Test Method	Add (A) or Remove (R) (Check one)	MRR Requirement	Add (A) or Remove (R) (Check one)
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R
		O A O R		O A O R		O A O R

Section IV - SIP-Approved Rules That Are Not The Most Current AQMD Rules					
Check off each SIP-Approved Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.					
SIP - Approved Rule	**Adoption/ Amendment Date**	**Check (✓) If Applies**	**SIP - Approved Rule**	**Adoption/ Amendment Date**	**Check (✓) If Applies**
401	03/02/84	☑			☐
431.2	05/04/90	☐			☐
461	6/3/05	☐			☐
466.1	05/02/80	☐			☐
469	04/07/76	☐			☐
475	10/08/76	☑			☐
1112	01/06/84	☐			☐
1112.1	2/7/86	☐			☐
1113	11/08/96	☑			☐
1117	1/6/83	☐			☐
1122	07/11/97	☐			☐
1132	03/05/04	☐			☐
1140	02/01/80	☐			☐
1146	11/17/00	☐			☐
1146.1	5/13/94	☐			☐
1151	12/11/98	☐			☐
1158	6/11/99	☐			☐
1162	11/17/00	☐			☐
1166	07/14/95	☐			☐
1171	11/07/03	☐			☐
1175	05/13/94	☐			☐
1186	09/10/99	☐			☐

Section V - AQMD Rules That Are Not SIP-Approved (Continued on Following Page)					
Check off each AQMD Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.					
Non SIP - Approved Rule	**Adoption/ Amendment Date**	**Check (✓) If Applies**	**Non SIP - Approved Rule**	**Adoption/ Amendment Date**	**Check (✓) If Applies**
53 Los Angeles Co.	N/A	☑	1192	06/16/00	☐
53 Orange Co.	N/A	☐	1193	07/09/10	☐
53 Riverside Co.	N/A	☐	1194	10/20/00	☐
53 San Bernardino Co.	N/A	☐	1195	05/05/06	☐
53A San Bernardino Co.	N/A	☐	1196	06/06/08	☐
402	05/07/76	☑	1401	09/10/10	☑
429	12/21/90	☑	1401.1	11/04/05	☐
430	07/12/96	☑	1402	03/04/05	☐
441	05/07/76	☐	1403	10/05/07	☐
473	05/07/76	☐	1404	04/06/90	☐
477	04/03/81	☐	1405	01/04/91	☐
480	10/07/77	☐	1406	07/08/94	☐
1109	08/05/88	☐	1407	07/08/94	☐
1110.2	07/09/10	☐	1411	03/01/91	☐
1116.1	10/20/78	☐	1414	05/03/91	☐
1127	08/06/04	☐	1415	10/14/94	☐
1143	07/09/10	☐	1418	09/10/99	☐
1147	12/05/08	☐	1420	09/11/92	☐
1148.1	03/05/04	☐	1420.1	11/05/10	☐
1150	10/15/82	☐	1421	12/06/02	☐
1155	12/04/09	☐	1425	03/16/01	☐
1156	03/06/09	☐	1426	05/02/03	☐
1157	09/08/06	☐			☐
1163	06/07/85	☐			☐
1170	05/06/88	☐			☐
1183	03/12/93	☐			☐
1186.1	01/09/09	☐			☐
1191	06/16/00	☐			☐

Section V - AQMD Rules That Are Not SIP-Approved (Continued on Following Page)					
Check off each AQMD Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.					
Non SIP - Approved Rule	**Adoption/ Amendment Date**	**Check (✓) If Applies**	**Non SIP - Approved Rule**	**Adoption/ Amendment Date**	**Check (✓) If Applies**
1469	12/05/08	☐	2009.1	05/11/01	☐
1469.1	03/04/05	☐	2501	05/09/97	☐
1470	06/01/07	☐	2506	12/10/99	☐
1472	03/07/08	☐			☐
2009	01/07/05	☑			☐
		☐			☐
		☐			☐
		☐			☐
		☐			☐
		☐			☐

SCAQMD Permit Processing Fees Portal

Hide Tooltip

Fee Sheet

Below are the permit fees calculated based on the information entered. Click the "Print" button to print the Fee Sheet for your records.

Print Restart

Permit Unit	
Gas Turbine, 50 MW, other fuel	$17,285.23
Gas Turbine, 50 MW, other fuel (1 Identical)	$8,642.62
Expedited Processing Fee	$12,963.93
Facility Permit Revision Fee	
Administrative Permit Revision Fee	$2,247.02

Summary

Permit Fees	$25,927.85
Expedited Processing Fees	$12,963.93
Higher Fees	$0.00
Small Business Discount	$0.00
Total:	**$41,138.80**

Back Generate Voucher

APPENDIX B: GAS TURBINES PERFORMANCE DATA

SIEMENS

NRG El Segundo

Estimated SGT6-5000F(3) Gas Turbine Performance
Gas Turbine in Combined Cycle / Ultra Low NO_x Combustor
SGen6-1000A(104/50) Brushless / 0.90 Power Factor

June 14, 2017

SITE CONDITIONS:	CASE 1	CASE 2	CASE 3	CASE 4	CASE 5	CASE 6	CASE 7	CASE 8	CASE 9	CASE 10	CASE 14	CASE 15	CASE 21	CASE 25	CASE 26
FUEL TYPE	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
LOAD LEVEL	BASE	BASE	BASE	50%	BASE	BASE	BASE	50%	BASE	BASE	60%	50%	BASE	60%	50%
NET FUEL HEATING VALUE, Btu/lb_m (LHV)	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643	20,643
GROSS FUEL HEATING VALUE, Btu/lb_m (HHV)	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899	22,899
AMBIENT DRY BULB TEMPERATURE, °F	77.8	77.8	77.8	77.8	83.0	83.0	83.0	83.0	62.0	62.0	62.0	62.0	41.0	41.0	41.0
AMBIENT RELATIVE HUMIDITY, %	49.6	49.6	49.6	49.6	47.0	47.0	47.0	47.0	70.0	70.0	70.0	70.0	75.9	76	76
AMBIENT PRESSURE, psia	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640	14.640
COMPRESSOR INLET TEMPERATURE, °F	77.8	66.7	77.8	77.8	83.0	70.4	83.0	83.0	57.0	62.0	62.0	62.0	41.0	41.0	41.0
EVAPORATIVE COOLER STATUS / EFFECTIVENESS, %	OFF	85	OFF	OFF	OFF	85	OFF	OFF	85	OFF	OFF	OFF	OFF	OFF	OFF
INLET PRESSURE LOSS, in. H_2O (Total)	4.4	4.5	4.4	2.1	4.3	4.5	4.3	2.1	4.6	4.6	2.6	2.2	4.5	2.5	2.2
EXHAUST PRESSURE LOSS, in. H_2O (Total)	17.3	18.2	18.7	8.6	16.9	17.9	18.5	8.4	18.9	18.6	10.6	9.1	18.8	10.8	9.3
EXHAUST PRESSURE LOSS, in. H_2O (Static)	14.1	14.8	15.2	7.0	13.8	14.6	15.1	6.8	15.4	15.2	8.6	7.4	15.3	8.8	7.6
INJECTION FLUID	None	None	Steam	None	None	None	Steam	None	None	None	None	None	None	None	None
INJECTION RATIO	---	---	1.15	---	---	---	1.40	---	---	---	---	---	---	---	---
GAS TURBINE PERFORMANCE:															
FUEL FLOW, lb_m/hr	86,481	89,695	91,501	53,738	85,091	88,735	91,330	53,054	91,532	90,768	62,597	56,080	91,470	63,431	56,874
INJECTION RATE, lb_m/hr	---	---	105,226	---	---	---	127,862	---	---	---	---	---	---	---	---
HEAT INPUT, MMBtu/hr (LHV)	1,785	1,852	1,889	1,109	1,757	1,832	1,885	1,095	1,889	1,874	1,292	1,158	1,888	1,309	1,174
HEAT INPUT, MMBtu/hr (HHV)	1,980	2,054	2,096	1,231	1,948	2,032	2,091	1,215	2,096	2,078	1,433	1,284	2,095	1,452	1,302
EXHAUST TEMPERATURE, °F	1,154	1,146	1,151	1,154	1,160	1,149	1,159	1,160	1,129	1,138	1,138	1,138	1,112	1,122	1,122
EXHAUST FLOW, lb_m/hr	3,811,258	3,915,247	3,921,296	2,660,264	3,755,794	3,874,067	3,887,880	2,629,098	4,014,456	3,972,489	2,973,629	2,757,680	4,025,938	3,017,569	2,803,675
EXHAUST GAS COMPOSITION (% BY VOLUME):															
OXYGEN	12.11	11.96	11.16	12.95	12.09	11.92	10.92	12.92	12.09	12.10	12.71	12.95	12.28	12.83	13.08
CARBON DIOXIDE	3.96	3.99	4.00	3.54	3.95	3.99	4.01	3.53	3.98	3.99	3.69	3.56	3.97	3.69	3.56
WATER	9.16	9.61	13.35	8.36	9.33	9.84	14.41	8.53	9.10	8.95	8.36	8.13	8.28	7.73	7.49
NITROGEN	73.88	73.56	70.64	74.19	73.75	73.38	69.82	74.04	73.95	74.07	74.29	74.38	74.59	74.79	74.88
ARGON	0.88	0.88	0.84	0.89	0.88	0.88	0.83	0.89	0.88	0.89	0.89	0.89	0.89	0.89	0.90
MOLECULAR WEIGHT	28.32	28.27	27.86	28.37	28.30	28.25	27.75	28.35	28.33	28.35	28.38	28.39	28.42	28.45	28.46

NOTES:

- Performance is based on new and clean condition. All data is estimated and not guaranteed.
- Gross power output is at the generator terminals. It does not include SGT-PAC™ auxiliary load losses.
- Estimated GT Performance values are dependent upon receiving test tolerances equal to measurement uncertainty calculated in accordance with ASME PTC 19.1-2005.
- Fuel gas composition is per CSS.
- Gas fuel must be in compliance with the SIEMENS Gas Fuel Spec (ZDX555-DC01-MBP-2500-01).
- Average temperature of the gas fuel is 59°F. Sensible Heat of the fuel is not included in the calculated Heat Input values.
- Injection ratios are estimated and may be adjusted during plant commissioning to meet emissions requirements. Performance will be adjusted to the actual injection rate.
- Performance is based on fast start option.
- The anti-icing system may be in operation at cold ambient in order to maintain emission compliance. The performance data are provided WITHOUT considering the anti-icing system in operation. With any anti-icing system in operation, GT output and efficiency will be lower than what is shown.
- Emissions exclude ambient air contributions and are for steady-state conditions.
- Please be advised that the information contained in this transmittal has been prepared and is being transmitted per customer request specifically for information purposes only.
- Data included in any permit application or Environmental Impact Statement are strictly the customer's responsibility. Siemens is available to review permit application data upon request.

APPENDIX C: HISTORICAL DATA

the unit is down. Therefore, there is no need to distinguish between hot, warm, and cold start-ups even though the proposed power plant will operate in combined cycle mode. This rapid-start feature is unique to this highly efficient combined cycle configuration from Siemens-Westinghouse and is known as "Rapid Response-Combined Cycle (R2C2). It allows the facility to significantly reduce start-up emissions as compared with traditional combined cycle configurations in which the steam turbine is not by-passed and the entire CTG–ST train is started simultaneously. Similar rapid-start configurations with the Siemens-Westinghouse combined cycle CTGs are being proposed at the City of Vernon and the San Gabriel Generating Station. Although the specific configurations at these facilities do not allow for a complete by-pass of the steam turbine such as with the proposed R2C2 configuration at El Segundo, the configurations at these facilities use an auxiliary boiler to keep the system pre-heated to a temperature such that the system can start-up under warm or hot conditions, and minimize the number of cold starts.

Table 12 below is the total estimated start-up and shutdown emissions for the SGT6-5000F CTG as provided by Siemens-Westinghouse.

Table 12 - Total Estimated Start-up and Shutdown Emissions, per CTG

Mode	Time, minutes	Total Emissions per Event (pounds)			
		NOx	CO	VOC	PM10
Start-up @ 62 deg F	12	24	259	12	3
Shutdown @ 62 deg F	7	10	131	5	1
Start-up @ 41 deg F	12	25	267	13	3
Shutdown @ 41 deg F	7	10	135	5	1

The applicant anticipates a maximum of 200 hours/year during which a CTG start-up will occur. During a CTG start-up, there are approximately 12 minutes in which elevated emissions occur. Therefore, the hourly emission rates during a start-up hour will be based on 12 minutes of uncontrolled emissions followed by 48 minutes of normal operation in which BACT levels are assumed. The applicant has also indicated that there will be up to 200 hours per year of shutdowns which will comprise 53 minutes of normal operation at which BACT levels are assumed followed by 7 minutes of elevated emissions as the catalyst gradually cools down.

Normal Operations

The emissions during normal operations are assumed to be fully controlled to Best Available Control Technology (BACT) levels, and exclude emissions due to commissioning, start up and shutdown periods, which are not subject to BACT levels. Hourly, monthly, annual, and 30-day averages are calculated and shown in Appendices A through C.

Emissions During A Commissioning Year

Tables 13 through 15 below show the cumulative emissions during a commissioning year from both gas turbines which include commissioning, start-up, shutdown and normal operation.

Table 13 – Mass Emission Rates, lb/hr (Commissioning Year)

	Emissions, lb/hr					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operations	30.88	18.80	10.74	2.93	18.98	28.54
Start up	112.06	834.84	34.60	2.93	18.98	
Shutdown	71.00	442.36	19.48	2.93	18.98	
Commissioning	60.14	628.08	33.50	2.93	18.98	
TOTALS	**274.08**	**1,924.08**	**98.32**	**11.72**	**75.92**	**28.54**

Table 14 – Mass Emission Rates, lb/month (Commissioning Year)

	Emissions, lb/month					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operation, Start up, Shutdown & Commissioning (1-30)	13,129.28	236,291.44	10,922.08	519.76	3,357.08	
Normal Operation, Start up, Shutdown & Commissioning (31-49)	24,447.88	33,650.96	8,276.28	2,131.60	13,836.82	
HIGHEST MONTH	**24,447.88**	**236,291.44**	**10,922.08**	**2,131.60**	**13,836.82**	**14,070.22**

Table 15 – Mass Emission Rates, lb/year (Commissioning Year)

	Emissions, lb/year					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operations	143,314.08	87,250.80	49,844.34	13,551.72	88,179.00	132,454.14
Start up	22,412.00	166,960.00	6,920.00	584.00	3,800.00	
Shutdown	14,200.00	88,472.00	3,896.00	584.00	3,800.00	
Commissioning	24,958.10	260,678.10	13,902.50	1,211.80	7,885.00	
TOTALS	**204,884.18**	**603,360.90**	**74,562.84**	**15,931.52**	**103,664.00**	**132,454.14**

Emissions During A Non-Commissioning Year

Tables 16 through 18 below show the cumulative emissions during a non-commissioning year from both CTGs which include start-up, shutdown and normal operation.

Table 16 – Mass Emission Rates, lb/hr (Non-Commissioning Year)

	Emissions, lb/hr					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operations	30.88	18.80	10.74	2.92	18.98	28.54
Start up	112.06	834.84	34.60	2.92	18.98	
Shutdown	71.00	442.36	19.48	2.92	18.98	
TOTALS	**213.94**	**1,296.00**	**64.82**	**8.76**	**56.94**	**28.54**

Table 17 – Mass Emission Rates, lb/month (Non-Commissioning Year)

	Emissions, lb/month					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operations	18,713.28	11,392.80	6,508.44	1,769.52	11,514.00	17,295.24
Start up	6,944.00	51,760.08	2,145.20	181.04	1,178.00	
Shutdown	4,402.00	27,426.32	1,207.76	181.04	1,178.00	
TOTALS	**30,059.28**	**90,579.20**	**9,861.40**	**2,131.60**	**13,870.00**	**17,295.24**

Table 18 – Mass Emission Rates, lb/year (Non-Commissioning Year)

	Emissions, lb/year					
2-Siemens SGT6-5000F CTGs	NOx	CO	VOC	SO_2	PM_{10}	NH_3
Normal Operations	156,129.28	95,052.80	54,301.44	14,763.52	96,064.00	144,298.24
Start up	22,412.00	166,968.00	6,920.00	584.00	3,800.00	
Shutdown	14,200.00	88,472.00	3,896.00	584.00	3,800.00	
TOTALS	**192,741.28**	**350,492.80**	**65,117.44**	**15,931.52**	**103,664.00**	**144,298.24**

30-Day Averages

The 30 Day Average emissions are calculated in Appendix B for both a commissioning and non-commissioning year for the worst case operating scenario. The worst case operating scenario was defined as OC3 in Table 9 above.

Table 19 is a comparison of the 30-day averages *for a single permit unit* for both a commissioning year and a non-commissioning year. The maximum 30-day averages for each pollutant are shown as shaded in Table 19 below:

Table.19 - 30-Day Average (Permit unit)

	NOx	CO	VOC	SOx	PM_{10}
30 Day Average (Commissioning Year)	407	**3,938**	**182**	36	231
30 Day Average (Non-Commissioning Year)	**501**	1,510	164	**36**	**231**

SCHOOL LOCATIONS

This proposed project is located at 301 Vista Del Mar El Segundo, CA. The school located nearest to the facility, Little Palette School, is at least 0.74 miles away (well beyond 1,000 feet) from the site as measured by the Mapquest program found at http://www.mapquest.com. The remaining nine schools are located even further away from the site, as shown in the table below. The school locations in relation to the project site are shown graphically in the illustration below.

No	Name of School	Address	Mapquest Distance Miles
1	Little Palette School	425 Main Street, El Segundo	0.74
2	Flight Services Unlimited	426 ½ Main Street, El Segundo	0.75
3	Richmond Street Elementary	615 Richmond Street , El Segundo	0.78
4	Real Estate Center	531 Main Street No. 935, El Segundo	0.79
5	El Segundo Babe Ruth	338 Eucalyptus Dr, El Segundo	0.84

Appendix M - ESPR
Non-Criteria Pollutant Emission Calculations

PAGES	PAGE	A/N
BY	DATE	

Annual and Maximum Hourly Non-Criteria Pollutant Emissions For CTGs

Pollutant	Emission Factor(1) lb/MMscf	1 Turbine Max Firing Rate MMBtu/hr	Natural Gas HHV Btu/scf	Turbine Operating Hours hrs/yr	1 Turbine Max Hourly Firing Rate MMscf/hr	1 Turbine Annual Avg Firing Rate MMscf/yr	1 Turbine Max. Hourly Emissions lbs/hr (each)	2 Turbines Max. Hourly Emissions lbs/hr	1 Turbine Annual Emissions tons/yr (each)	2 Turbines Annual Emissions tons/yr	Hourly Emission Rate Per Turbine g/sec (each)	Annual Emission Rate Per Turbine g/sec (each)
Ammonia	(2)	2,096.0	1,027.7	5,456	2.04	11,127	1.43E+01	2.85E+01	36.42	72.85	1.80E+00	1.05E+00
Propylene	7.71E-01	2,096.0	1,027.7	5,456	2.04	11,127	1.57E+00	3.14E+00	4.29	8.58	1.98E-01	1.23E-01
Hazardous Air Pollutants												
Acetaldehyde	4.08E-02	2,096.0	1,027.7	5,456	2.04	11,127	8.32E-02	1.66E-01	0.23	0.45	1.05E-02	6.53E-03
Acrolein	3.69E-03	2,096.0	1,027.7	5,456	2.04	11,127	7.53E-03	1.51E-02	0.02	0.04	9.48E-04	5.91E-04
Benzene	3.33E-03	2,096.0	1,027.7	5,456	2.04	11,127	6.79E-03	1.36E-02	0.02	0.04	8.56E-04	5.33E-04
1,3-Butadiene	4.39E-04	2,096.0	1,027.7	5,456	2.04	11,127	8.95E-04	1.79E-03	0.00	0.00	1.13E-04	7.03E-05
Ethylbenzene	3.26E-02	2,096.0	1,027.7	5,456	2.04	11,127	6.65E-02	1.33E-01	0.18	0.36	8.38E-03	5.22E-03
Formaldehyde	3.67E-01	2,096.0	1,027.7	5,456	2.04	11,127	7.48E-01	1.50E+00	2.04	4.08	9.43E-02	5.87E-02
Hexane	2.59E-01	2,096.0	1,027.7	5,456	2.04	11,127	5.28E-01	1.06E+00	1.44	2.88	6.66E-02	4.15E-02
Naphthalene	1.66E-03	2,096.0	1,027.7	5,456	2.04	11,127	3.39E-03	6.77E-03	0.01	0.02	4.27E-04	2.66E-04
Anthracene	3.38E-05	2,096.0	1,027.7	5,456	2.04	11,127	6.89E-05	1.38E-04	0.00	0.00	8.69E-06	5.41E-06
Benzo(a)anthracene	2.26E-05	2,096.0	1,027.7	5,456	2.04	11,127	4.61E-05	9.22E-05	0.00	0.00	5.81E-06	3.62E-06
Benzo(a)pyrene	1.39E-05	2,096.0	1,027.7	5,456	2.04	11,127	2.83E-05	5.67E-05	0.00	0.00	3.57E-06	2.22E-06
Benzo(b)fluoranthrene	1.13E-05	2,096.0	1,027.7	5,456	2.04	11,127	2.30E-05	4.61E-05	0.00	0.00	2.90E-06	1.81E-06
Benzo(k)fluoranthrene	1.10E-05	2,096.0	1,027.7	5,456	2.04	11,127	2.24E-05	4.49E-05	0.00	0.00	2.83E-06	1.76E-06
Chrysene	2.52E-05	2,096.0	1,027.7	5,456	2.04	11,127	5.14E-05	1.03E-04	0.00	0.00	6.48E-06	4.03E-06
Dibenz(a,h)anthracene	2.35E-05	2,096.0	1,027.7	5,456	2.04	11,127	4.79E-05	9.59E-05	0.00	0.00	6.04E-06	3.76E-06
Indeno(1,2,3-cd)pyrene	2.35E-05	2,096.0	1,027.7	5,456	2.04	11,127	4.79E-05	9.59E-05	0.00	0.00	6.04E-06	3.76E-06
Propylene oxide	2.98E-02	2,096.0	1,027.7	5,456	2.04	11,127	6.08E-02	1.22E-01	0.17	0.33	7.66E-03	4.77E-03
Toluene	1.33E-01	2,096.0	1,027.7	5,456	2.04	11,127	2.71E-01	5.42E-01	0.74	1.48	3.42E-02	2.13E-02
Xylene	6.53E-02	2,096.0	1,027.7	5,456	2.04	11,127	1.33E-01	2.66E-01	0.36	0.73	1.68E-02	1.05E-02
Total HAPs =										10.42		

Notes:

(1) All factors except PAHs, hexane, and propylene from AP-42, Table 3.1-3, 4/00.
Individual PAHs, hexane and proplyene are CATEF mean results as AP-42 does not include factors for these compounds.

(2) Based on 5 ppm ammonia slip from SCR system.

Offset Requirements

Pollutant	Facility PTE (ton/yr)	Offset Threshold (ton/yr)	Required Offsets (Y/N)	Comply (Y/N)
PM2.5	51.83	100	No	Yes

Based on the analysis above, the source complies with the requirements of the Federal PM2.5 NSR Rule.

Rule 1401 – New Source Review of Toxic Air Contaminants

This rule specifies limits for maximum individual cancer risk (MICR), acute hazard index (HIA), chronic hazard index (HIC) and cancer burden (CB) from new permit units, relocations, or modifications to existing permits which emit toxic air contaminants. Rule 1401 requirements are summarized as follows:

Table 27 – Rule 1401 Requirements

Parameters and Specifications	Rule 1401 Requirements
MICR, without T-BACT	$\leq 1x10^{-6}$
MICR, with T-BACT	$\leq 1x10^{-5}$
Acute Hazard Index	≤ 1.0
Chronic Hazard Index	≤ 1.0
Cancer Burden	≤ 0.5

The applicant performed a Tier 4 health risk assessment using the Hot Spots Analysis and Reporting Program (HARP). The analysis included an estimate of the MICR for the nearest residential and commercial receptors, as well as the acute and chronic hazard indices on a per unit basis. Table 28 below shows the results of the health risk assessment as performed by the applicant.

Table 28 – Rule 1401 Modeled Results (permit-unit basis)

Risk Parameter	Residential	Commercial	Rule 1401 Requirements	Compliance (Yes/No)
CTG No. 5				
MICR	4.00EE-8	1.28EE-8	≤1.0EE-6	Yes
HIA	6.00EE-3	6.00EE-3	≤1.0	Yes
HIC	1.60EE-3	1.60EE-3	≤1.0	Yes
CTG No. 7				
MICR	4.05EE-8	1.31EE-8	≤1.0EE-6	Yes
HIA	6.00EE-3	6.00EE-3	≤1.0	Yes
HIC	1.60EE-3	1.60EE-3	≤1.0	Yes

Table 28 shows that El Segundo Power, LLC will comply with the applicable requirements of Rule 1401. The cancer burden is not computed because the highest MICR is less than $1EE10^{-6}$. AQMD modeling staff has reviewed the health risk assessment for the proposed project and provided their comments in a memorandum from Ms. Jill Whynot to Mr. Mike Mills dated November 15, 2007. The ISCST3 modeling conforms to AQMD's dispersion modeling procedures. No discrepancies were noted. In addition, the facility performed a health risk assessment to submit to the CEC as part of the CEQA requirements. The overall project risk (including the existing boilers) is less than 1 in a million.

APPENDIX D: EMISSION CALCULATIONS

NRG El Segundo Turbine Upgrade Project
Baseline Emissions

Table D-1. Baseline NOx emissions (tons/year)

	2012 [2]	2013 [3]	2014	2015	2016	Baseline Emission [4]
			CTG No. 5			
Emission Factors (lb/MMscf) [1]	--	--	4.36	4.73	4.34	
Turbine Emissions (lb) [1]	--	--	28,651.33	34,523.00	22,038.70	
2-Year Average (tons)				15.79	14.14	15.79
			CTG No. 7			
Emission Factors (lb/MMscf) [1]	--	--	4.95	4.84	5.10	
Turbine Emissions (lb) [1]	--	--	33,881.23	39,890.90	22,404.80	
2-Year Average (tons)				18.44	15.57	18.44

Table D-2. Baseline CO emissions (tons/year)

	2012 [2]	2013	2014	2015	2016	Baseline Emission [4]
			CTG No. 5			
Emission Factors (lb/MMscf) [1]	--	2.79	0.78	2.58	3.86	
Turbine Emissions (lb) [1]	--	10,027.26	5,111.84	18,828.10	19,623.90	
2-Year Average (tons)			3.78	5.98	9.61	9.61
			CTG No. 7			
Emission Factors (lb/MMscf) [1]	--	2.85	0.33	3.89	5.07	
Turbine Emissions (lb) [1]	--	8,926.20	2,251.45	32,021.50	22,290.50	
2-Year Average (tons)			2.79	8.57	13.58	13.58

Table D-3. Baseline VOC emissions (tons/year)

	2012 [2]	2013	2014	2015	2016	Baseline Emission [4]
			CTG No. 5			
Emission Factors (lb/MMscf) [1]	--	1.00	0.70	0.70	0.74	
Turbine Emissions (lb) [1]	--	3,594.00	4,605.27	5,112.35	3,762.09	
2-Year Average (tons)			2.05	2.43	2.22	2.43
			CTG No. 7			
Emission Factors (lb/MMscf) [1]	--	1.00	0.66	0.66	0.76	
Turbine Emissions (lb) [1]	--	3,132.00	4,516.58	5,438.55	3,341.38	
2-Year Average (tons)			1.91	2.49	2.19	2.49

Table D-4. Baseline PM10/PM2.5 emissions (tons/year) [5]

	2012 [2]	2013	2014	2015	2016	Baseline Emission [4]
			CTG No. 5			
Emission Factors (lb/MMscf) [1]	--	0.74	0.96	0.96	0.76	
Turbine Emissions (lb) [1]	--	2,659.56	6,315.79	7,011.23	3,853.60	
2-Year Average (tons)			2.24	3.33	2.72	3.33
			CTG No. 7			
Emission Factors (lb/MMscf) [1]	--	0.54	0.92	0.92	0.83	
Turbine Emissions (lb) [1]	--	1,691.28	6,295.85	7,581.00	3,662.33	
2-Year Average (tons)			2.00	3.47	2.81	3.47

Table D-5. Baseline SOx emissions (tons/year)

	2012 [2]	2013	2014	2015	2016	Baseline Emission [4]
			CTG No. 5			
Emission Factors (lb/MMscf) [1]	--	0.09	0.09	0.09	0.28	
Turbine Emissions (lb) [1]	--	323.46	592.11	657.30	1,423.49	
2-Year Average (tons)			0.23	0.31	0.52	0.52
			CTG No. 7			
Emission Factors (lb/MMscf) [1]	--	0.07	0.07	0.07	0.28	
Turbine Emissions (lb) [1]	--	219.24	479.03	576.82	1,231.03	
2-Year Average (tons)			0.17	0.26	0.45	0.45

Table D-6. Annual Fuel Use (MMscf)

	2012	2013	2014 [6]	2015	2016	Maximum
Turbine Fuel Use, CTG No. 5 (MMscf) [1]	--	3,594.0	6,579.0	7,303.4	5,083.9	7,303.4
Turbine Fuel Use, CTG No. 7 (MMscf) [1]	--	3,132.0	6,843.3	8,240.2	4,396.6	8,240.2
Total, CTGs No. 5 and No. 7		6,726.0	13,422.3	15,543.6	9,480.5	

Notes:

1. Based on annual emission reports to the SCAQMD.
2. CTGs No. 5 and 7 were not operational until 2013. Therefore, no operational data was available for 2012.
3. NOx emissions and emission factors for CTGs No. 5 and 7 were not available in the 2013 AER.
4. Per 40 CFR 52.21 (b)(48)(i)(c), when a project involves multiple emissions units, only one consecutive 24-month period can be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
5. PM10 is assumed to be PM2.5.
6. 2014 fuel use (MMscf) is estimated from the emissions and emission factors in the SCAQMD reports.

NRG El Segundo Turbine Upgrade Project

Table D-7. Projected Maximum Fuel Use for the Gas Turbines

Maximum Fuel Use for CTG No. 5 (MMscf) [1]	7,303.36
Maximum Fuel Use for CTG No. 7 (MMscf) [1]	8,240.22
Projected Maximum Fuel Use, each unit (MMscf)	8,240.22

1. Projected-maximum fuel use is based on the maximum total fuel use for CTGs No. 5 and 7 since 2013

Table D-8. Projected Maximum Emission Factors for the Gas Turbines

	NOx	CO	PM10	SOx
Emission Factors, CTG No. 5 (lb/MMscf) [1]	4.73	3.86	0.96	0.28
Emission Factors, CTG No. 7 (lb/MMscf) [1]	5.10	5.07	0.92	0.28
Maximum Emission Factor, CTG No. 5 or 7 (lb/MMscf)	5.10	5.07	0.96	0.28
Projected Actual Emissions (PAE), each CTG (tons/year)	21.00	20.89	3.96	1.15

1. Emission factors are based on the maximum emission factors for Units 5 and 7, as reported in the SCAQMD's AERs.
2. Based on the historical information on fuel usage and emission profiles anticipated for future use of the CTG No. 5 and CTG No. 7 PAE for each CTG are calculated as (Projected Maximum Fuel Use, MMscf) x (Maximum Emission Factor, lb/MMscf).

Table D-9. PSD Applicability Determination

	Emissions (tons/year)			
	NOx	CO	PM10	SOx
Baseline Actual Emissions (BAE), CTG No. 5 [1]	15.79	9.61	3.33	0.52
Baseline Actual Emissions (BAE), CTG No. 7 [1]	18.44	13.58	3.47	0.45
Project BAE	34.23	23.19	6.80	0.97
Projected Actual Emissions (PAE), CTG No. 5 [2]	21.00	20.89	3.96	1.15
Projected Actual Emissions (PAE), CTG No. 7 [2]	21.00	20.89	3.96	1.15
Project PAE	42.00	41.78	7.92	2.30
Project Emission Increase (PAE - BAE)	7.77	18.59	1.12	1.33
PSD Major Modification Significance Levels [3]	40	100	15	40
PSD Review Required?	No	No	No	No

1. Based on emissions of the most representative 2-year period during the past 5 years (40 CFR 52.21 (b)(48)(i)).
2. Based on the maximum fuel use for CTGs No. 5 and No. 7 and maximum emission factor for gas turbines since 2013.
3. 40 CFR 52.21 (b)(23)(i).

Table D-10. SCAQMD Rule 1325 Applicability Determination

	Emissions (tons/year)	
	NOx	PM2.5
Baseline Actual Emissions (BAE), CTG No. 5 [1]	15.79	3.33
Baseline Actual Emissions (BAE), CTG No. 7 [1]	18.44	3.47
Project BAE	34.23	6.80
Projected Actual Emissions (PAE), CTG No. 5 [2]	21.00	3.96
Projected Actual Emissions (PAE), CTG No. 7 [2]	21.00	3.96
Project PAE	42.00	7.92
Project Emission Increase (PAE - BAE)	7.77	1.12
Major Modification Significance Levels [3]	40	10
Rule 1325 Triggered?	No	No

1. Based on emissions of the most representative 2-year period during the past 5 years (Rule 1325 (b)(1)).
2. Based on the historical information on fuel usage and emission profiles anticipated for future use of the CTG No. 5 and CTG No. 7 PAE for each CTG are calculated as (Projected Maximum Fuel Use, MMscf) x (Maximum Emission Factor, lb/MMscf).
3. SCAQMD Rule 1325 (b)(12).