

DOCKETED

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South Coast Air Quality Management District

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NOTICE OF INTENT TO ISSUE PERMITS PURSUANT TO SCAQMD RULES 212, 1710, 1714, AND 3006

This notice is to inform you that the South Coast Air Quality Management District (SCAQMD) has received permit applications from El Segundo Power, LLC for the El Segundo Power Facility Modification (ESPFM) Project which will consist of the proposed replacement of two existing older and less efficient large electric generating utility boilers with three new, state of the art and more efficient electric generating gas turbines at El Segundo Power, LLC in El Segundo. SCAQMD has reviewed these applications and after a careful review and a detailed evaluation of the ESPFM Project has determined that the ESPFM Project complies with all applicable federal, state and local air quality rules and regulations. Therefore, SCAQMD intends to issue Permits to Construct for the ESPFM Project and to revise the Title V permit for this facility. However, prior to issuance of the final Title V permit, SCAQMD is providing an opportunity for public comments on the SCAQMD's proposed decision.

The SCAQMD is the air pollution control agency for the four-county region including all of Orange County and non-desert parts of Los Angeles, Riverside and San Bernardino Counties. Anyone wishing to install or modify equipment that could control or be a source of air pollution within this region must first obtain a permit from the SCAQMD. Under certain circumstances, before a permit is granted, a public notice, such as this, is prepared by the SCAQMD. For this project, public notification is required in accordance with SCAQMD Rule 212(c)(2), Rule 212(g) and Rule 1710(b) because the emissions from the new gas turbines exceed the public notice thresholds for these rules. Public notification is also required by SCAQMD Rule 3006(a) and Rule 1714(e) because there will be a significant revision to the facility's existing Title V air permit and the ESPFM Project is subject to a Prevention of Significant Deterioration (PSD) Permit due to its greenhouse gas emissions.

The SCAQMD has evaluated the permit applications listed below for the following facility and determined that the ESPFM Project meets or will meet all applicable federal, state and SCAQMD air quality rules and regulations as described below:

FACILITY: El Segundo Power, LLC
Facility ID No. 115663
301 Vista Del Mar
El Segundo, CA 90245

CONTACT: George L. Piantka, P.E.
NRG West
5790 Fleet Street, Suite 200
Carlsbad, CA 92008

SCAQMD APPLICATION NUMBERS

Application Number	Equipment Description
548594	GE 7FA.05 Combined Cycle Gas Turbine Generator, Unit 9
548589 and 548590	RR Trent 60 Simple Cycle Gas Turbine Generator, Units 11 and 12
548593	Auxiliary Boiler
548588, 548591, 548592	Air Pollution Control Equipment, SCR and CO Catalyst for Units 9, 11, and 12
548587	Title V/RECLAIM Significant Permit Revision

PROJECT DESCRIPTION

The proposed ESPFM Project is to replace the two existing 335 megawatt (MW) electric utility boiler generator Units 3 and 4 that are older, less efficient units and which have been in operation since 1964 with a new, state of the art and more efficient gas turbine generating system. The new generating system will consist of one natural gas-fired General Electric (GE) 7FA.05 combined cycle gas turbine generator configured with a steam turbine generator and two natural gas-fired RR Trent 60 simple cycle gas turbine generators. The combined generating capacity of the ESPFM Project will be 447 MW, which replaces the generating capacity of the existing Unit 3 (335 MW) and Unit 4 (335 MW). The new ESPFM Project will be equipped with the state of the art Best Available Control Technology (BACT) air pollution control equipment, which consists of catalysts (selective catalytic reduction and oxidation catalysts). Additional new proposed equipment will include an auxiliary boiler to provide necessary steam for the fast start-up of the combined cycle gas turbine generator.

PROJECTED EMISSIONS

During normal operation, the total potential maximum daily, monthly, and annual emissions of criteria pollutants from the operation of the new ESPFM Project are estimated not to exceed the emission levels listed in the table below. In addition, the new ESPFM Project will generate emissions of greenhouse gases (GHGs). The total quantity of GHGs is calculated using the global warming potential for each compound and expressed in an amount equivalent to Carbon Dioxide (CO₂) emissions (CO₂ equivalent). The emissions listed below are strictly from the new equipment and do not include any emission reductions associated with the removal from service of the existing electric utility boiler generator Units 3 and 4.

Pollutant	Max Potential Emissions (Tons)		
	Daily	Monthly	Annual
Nitrogen Oxides (NO _x)	0.53	12.76	97.0
Carbon Monoxide (CO)	1.36	30.39	174.8
Volatile Organic Compounds (VOC)	0.20	4.98	34.2
Particulate Matter (diameter less than 10 microns, PM ₁₀ or diameter less than 2.5 microns, PM _{2.5})	0.26	6.33	55.0
Sulfur Oxides (SO _x)	0.02	0.62	5.3
Ammonia (NH ₃)	0.28	7.34	56.9
Carbon Dioxide equivalent (CO ₂ equivalent)	4,909	117,590	1,064,085

The proposed ESPFM Project will not result in an increase in the electrical generating capacity since the total electrical generating capacity of the new ESPFM Project is the same as the electrical generating capacity it replaces. SCAQMD Rule 1304(a)(2) provides an offset exemption for an electric utility boiler replacement project such as this project. Therefore, the applicant is not required to provide emission offsets for VOC and SO_x. Also, the South Coast Air Basin meets and is in attainment with ambient air quality standards for CO, so no CO offsets are required. All of the NO_x emissions from this facility have to be offset with emission credits that El Segundo Power, LLC either holds or purchases through the Regional Clean Air Incentive's Market (RECLAIM) in the form of RECLAIM Trading Credits (RTCs). Finally, the total facility's potential emissions (the proposed new ESPFM Project and all other equipment) of PM_{2.5} will be limited to less than 100 tons per year, therefore the new ESPFM Project will not trigger the threshold for PM_{2.5} offset requirements as per SCAQMD Rule 1325. The NO_x RTCs are required to be provided by El Segundo Power, LLC prior to the ESPFM Project commencing its operation in accordance with SCAQMD RECLAIM Rule 2005.

As a result of burning natural gas in the gas turbines, emissions from the proposed project also contain small quantities of pollutants that are considered air toxics under SCAQMD Rule 1401-New Source Review of Toxic Air Contaminants. Therefore, a health risk assessment (HRA) has been performed for the ESPFM Project. The health risk assessment uses health protective assumptions in estimating maximum risk to an individual person. Even assuming this health protective condition, the evaluation shows that the maximum individual cancer risk (MICR) increase from the gas turbines and the total project, as a whole, even without considering the emission reductions from old equipment being replaced, is less than one-in-one million and in compliance with SCAQMD's risk thresholds listed in Rule 1401. Also, acute and chronic indices, which measure non-cancer health impacts, are less than one. According to the state health experts, a hazard index of one or less means that the surrounding community including the most sensitive individuals such as very young children and the elderly will not experience any adverse health impacts due to exposure to these emissions. These levels of estimated risk are below the threshold limits of SCAQMD Rule 1401 (d) established for new or modified sources. The HRA results are shown in the table below:

Equipment	MICR (in a million)		Non-Cancer Hazard Index	
	Resident	Worker	Acute	Chronic
Facility HRA	0.31	0.06	0.013	0.0067
Rule 1401 Limit	1 without BACT for Toxics (T-BACT) 10 with T-BACT		1.0	

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) FOR CRITERIA POLLUTANTS

The South Coast Air Basin is in attainment with the national ambient air quality standards for Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), Carbon Monoxide (CO) and Particulate Matter with aerodynamic diameter less than 10 microns (PM₁₀); therefore, the NO₂, SO₂, CO, and PM₁₀ emissions from the project are subject to the SCAQMD's Prevention of Significant Deterioration (PSD) regulation (Regulation XVII).

El Segundo Power, LLC is classified as a major stationary source, and the projected maximum project emissions of NO₂ of 23.1 micro grams per cubic meter (µg/m³) exceed the PSD significance impact level (SIL) of 7.5 µg/m³. Therefore, an incremental modeling analysis is required to demonstrate that the proposed ESPFM Project does not cause, or make significantly worse an existing, 1-hour NO₂ violation of the national ambient air quality standard (NAAQS). The results of the incremental modeling analysis show that the peak contribution from the proposed ESPFM Project is 3.38 µg/m³ and therefore does not result in a violation of the existing 1-hour NO₂ NAAQS.

Also based on the result of a modeling analysis of the potential impacts to Class I wilderness areas, the results show no adverse visibility impacts on the nearest Class I areas (i.e., San Gabriel Wilderness area and Cucamonga Wilderness area) that may be impacted by the ESPFM Project. The U.S. Department of Agriculture – National Park/Forest Services are currently reviewing the PSD modeling analysis. Based on all of these analysis and evaluations, the SCAQMD has determined that the proposed ESPFM Project is expected to comply with all PSD requirements for criteria pollutants.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) FOR GREENHOUSE GASES

Based on the proposed ESPFM Project's maximum potential greenhouse gas (GHG) emissions, the proposed project is subject to preconstruction review for GHGs. The U.S. Environmental Protection Agency (EPA) is responsible for reviewing the GHG emissions and for issuing the GHG PSD permit. SCAQMD Rule 1714 became effective on January 10, 2013. As a result, SCAQMD staff has evaluated

the GHG emissions from the ESPFM Project for compliance determination with applicable federal, state, and local air quality requirements. The ESPFM Project is found to comply with Rule 1714 BACT requirements for GHG emissions through the use of energy efficient gas turbines.

Based on the result of our detailed analysis and evaluation, the SCAQMD has determined that the ESPFM Project complies with all applicable federal, state and SCAQMD air quality Rules and Regulations and, therefore, SCAQMD intends to issue the Permits to Construct for the equipment described above. However, prior to issuance of a final permit, SCAQMD is providing an opportunity for a 30-day public comment period and an EPA review period. SCAQMD will consider issuance of the final permit only after all pertinent public and EPA comments, if any, have been received and considered.

This facility is classified as a federal Title IV (Acid Rain) and Title V facility. Pursuant to SCAQMD Rule 3006 – Public Participation, any person may request a proposed permit hearing on an application for an initial, renewal, or significant revision to a Title V permit by filing with the Executive Officer a complete Hearing Request Form (Form 500G) for a proposed hearing by January 13 2014. This form is available on the SCAQMD website at <http://www.aqmd.gov/permit/Formspdf/TitleV/AQMDForm500-G.pdf>, or alternatively, the form can be made available by contacting Mr. Kenneth L. Coats at the e-mail and telephone number listed below. In order for a request for a public hearing to be valid, the request must comply with the requirements of SCAQMD Rule 3006 (a)(1)(F). On or before the date the request is filed, the person requesting a proposed permit hearing must also send by first class mail a copy of the request to the facility address and contact person listed above.

The proposed permits and other information are available for public review at the SCAQMD's headquarters in Diamond Bar, and at the El Segundo Public Library, 111 West Mariposa Avenue, El Segundo, CA 90245. Additional information including the facility owner's compliance history submitted to the SCAQMD pursuant to California Health and Safety Code Section 42336, or otherwise known to the SCAQMD, based on credible information, is available at the SCAQMD for public review by contacting Mr. Kenneth L. Coats (kcoats@aqmd.gov), Engineering and Compliance, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91865-4182, (909) 396-2527. A copy of the draft Permits to Construct can also be viewed at <http://www3.aqmd.gov/webappl/PublicNotices2/>. Anyone wishing to comment on the air quality elements of the permits must submit comments in writing to the SCAQMD at the above address, attention Mr. Andrew Lee. **Comments must be received by January 27, 2014.** If you are concerned primarily about zoning decisions and the process by which the facility has been sited in this location, contact the local city or county planning department for the city or unincorporated county in which the facility is located. For your general information, anyone experiencing air quality problems such as dust or odor can telephone in a complaint to the SCAQMD 24 hours a day by calling toll free 1-800-CUT-SMOG (1-800-288-7664).