

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 (STANDARDS FOR APPROVING PERMITS), 1710 (PSD ANALYSIS, NOTICE, AND REPORTING), 1714 (PSD GREENHOUSE GASES) AND 3006 (TITLE V)

This notice is to inform you that the South Coast Air Quality Management District (SCAQMD) has received permit applications from AES Huntington Beach, LLC for the Huntington Beach Energy Project (HBEP) which will consist of the replacement of two existing older and less efficient large electric generating utility boilers with four new state of the art and more efficient electric generating gas turbines at Huntington Beach Generating Station in Huntington Beach. After a careful review and a detailed evaluation of the HBEP, SCAQMD has determined that the proposed project complies with all applicable federal, state and local air quality rules and regulations. Therefore, SCAQMD intends to issue Permits to Construct for the HBEP 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 HBEP 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 HBEP meets or will meet all applicable federal, state and SCAQMD air quality rules and regulations as described below:

FACILITY: AES Huntington Beach, LLC
Facility ID No. 115389
21730 Newland St
Huntington Beach, CA 92646

CONTACT: Stephen O'Kane
AES Southland
690 N. Studebaker Rd.
Long Beach, CA 90803

SCAQMD APPLICATION NUMBERS

Application Number	Equipment Description
578073	GE 7FA.05 Combined Cycle Gas Turbine Generator#1
578074	GE 7FA.05 Combined Cycle Gas Turbine Generator #2
578075	Air Pollution Control Equipment, SCR/CO Catalyst #1
578076	Air Pollution Control Equipment, SCR/CO Catalyst #2
578077	GE LMS100PB Simple Cycle Gas Turbine Generator #3
578078	GE LMS100PB Simple Cycle Gas Turbine Generator #4
578079	Air Pollution Control Equipment, SCR/CO Catalyst #3
578080	Air Pollution Control Equipment, SCR/CO Catalyst #4
578081	Auxiliary Boiler
578082	Air Pollution Control Equipment, SCR Auxiliary Boiler
578083	Aqueous Ammonia Storage Tank

578084	Aqueous Ammonia Storage Tank
578085	Oil/Water Separator
578086	Oil/Water Separator
578087	Title V/RECLAIM Significant Permit Revision

PROJECT DESCRIPTION

The proposed HBEP will replace the two existing electric utility boiler generator Units 1 and 2 which have been in operation since the 1950's with a new gas turbine generating system. The new generating system will consist of two natural gas-fired GE 7FA.05 combined cycle gas turbine generators configured with a steam turbine generator, and two natural gas fired GE LMS100PB simple cycle turbine generators. The combined generating capacity of the HBEP will be 844 MW (nominal) which replaces the generating capacity of the existing Unit 1 (215 MW) and Unit 2 (215 MW) at the Huntington Beach site as well as existing Unit 7 (460 MW) at AES' Redondo Beach facility. The new HBEP will be equipped with air pollution control equipment, which consists of catalysts (selective catalytic reduction and oxidation catalysts). Additional new proposed equipment will include an auxiliary boiler equipped with SCR, two aqueous ammonia storage tanks and two oil water separators.

EMISSIONS

During normal operation, the total potential maximum daily, monthly, and annual emissions of criteria pollutants from the operation of the new HBEP are estimated not to exceed the emission levels listed in the table below. In addition, the new HBEP 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 1 and 2.

Pollutant	Max Potential Emissions (Tons)		
	Daily	Monthly	Annual
Nitrogen Oxides (NO _x)	0.67	20.7	141.4
Carbon Monoxide (CO)	1.23	35.0	245.4
Volatile Organic Compounds (VOC)	0.31	9.6	71.4
Particulate Matter (diameter less than 10 microns, PM ₁₀ or diameter less than 2.5 microns, PM _{2.5})	0.36	11.0	69.6
Sulfur Oxides (SO _x)	0.16	4.8	11.4
Ammonia (NH ₃)	0.46	8.0	105.3
Carbon Dioxide equivalent (CO ₂ equivalent)	5,387	163,866	1,966,388

The proposed HBEP will not result in an increase in the electrical generating capacity since the total electrical generating capacity of the new HBEP is offset by the generating capacity it replaces, including Units 1 and 2 at Huntington Beach, and Unit 7 at Redondo Beach. 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 for the electrical generating equipment. 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 and SO_x emissions from this facility have to be offset with emission credits that AES Huntington Beach, 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 HBEP and all other equipment) of PM_{2.5} will be limited to less than 100 tons per year, therefore the new HBEP will not trigger the threshold for PM_{2.5} offset requirements as per SCAQMD Rule 1325. The NO_x and SO_x RTCs are required to be provided by AES Huntington Beach, LLC prior to the HBEP 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 HBEP. 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 ten-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	4.7	0.2	0.04	0.01

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).

The Huntington Beach Generating Station is classified as a major stationary source, and the estimated maximum project impacts for NO₂ of 94.5 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 HBEP 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 HBEP is 144.0 µg/m³ and therefore does not result in a violation of the existing 1-hour NO₂ NAAQS of 188 µg/m³.

Also based on the result of a screening analysis of the potential impacts to Class I wilderness areas, the HBEP will not impact visibility on the nearest Class I areas (i.e., San Gabriel Wilderness area and Cucamonga Wilderness area). 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 HBEP is expected to comply with all PSD requirements for criteria pollutants.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD) FOR GREENHOUSE GASES

Based on the proposed HBEP maximum potential greenhouse gas (GHG) emissions, the proposed project is subject to preconstruction review for GHGs. SCAQMD staff has evaluated the GHG emissions from the HBEP for compliance determination with applicable federal, state, and local air quality requirements. The HBEP 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 HBEP 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, and after CEC's final approval of the AFC for this project.

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 no later than June 24, 2016.** This form is available on the SCAQMD website at <http://www.aqmd.gov/docs/default-source/grants/500-g-form.pdf?sfvrsn>, or alternatively, the form can be made available by contacting Mr. Chris Perri 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 Huntington Beach Public Library, 7111 Talbert Avenue, Huntington Beach, CA 92648. 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. Chris Perri (cperri@aqmd.gov), Engineering and Compliance, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91865-4182, (909) 396-2696. 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 no later than July 9, 2016.** 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).

Right to Petition U.S. Environmental Protection Agency (EPA) for Reconsideration: Title V Permits are also subject to review and approval by US EPA. If a public comment is sent to the SCAQMD for this permit, and the SCAQMD has not addressed the comment in a satisfactory manner, and the EPA has not objected to the proposed permit, then the public may submit a petition requesting that the EPA reconsider the decision not to object. Petitions shall be submitted to US EPA, Region 9, Operating Permits Section at 75 Hawthorne Street, San Francisco, CA 94105, within 60 days after the end of the 45-day EPA review period. The EPA review period for this permit starts no earlier than **June 7, 2016**. EPA's review status may be found at <http://www2.epa.gov/caa-permitting/electronic-permit-submittal-system-region-9>.