

CALIFORNIA ENERGY COMMISSION

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SACRAMENTO, CA 95814-5512
www.energy.ca.gov



NOTICE OF RECEIPT
EL SEGUNDO ENERGY CENTER, 00-AFC-14C
PETITION TO REPLACE UTILITY BOILER UNITS 3 AND 4
WITH NEW GENERATION UNITS 9, 10, 11 AND 12

California Energy Commission

DOCKETED
00-AFC-14C

TN 70818

MAY 14 2013

On April 23, 2013, El Segundo Energy Center, LLC (ESEC LLC) filed a petition with the California Energy Commission requesting to replace utility boiler Units 3 and 4 with one new combined cycle generator (Unit 9), one steam turbine generator (Unit 10) and two simple-cycle gas turbines (Units 11 and 12) for the El Segundo Energy Center (ESEC) project totaling 449 MW. The current amendment proposes the demolition of Units 3 and 4, to be replaced with Units 9, 10, 11, and 12 and dry cooling technology.

The site is located at the southernmost city limit of the City of El Segundo on the coast of the Pacific Ocean, between Dockweiler State Beach and the City of Manhattan Beach, in Los Angeles County.

DESCRIPTION OF PROPOSED MODIFICATION

ESEC LLC, a wholly owned subsidiary of NRG Energy, Inc. (NRG), proposes to make substantial changes to the ESEC. Primary changes include the demolition and replacement of two once-through-cooled natural gas-fired utility boiler units, Units 3 and 4, with one new combined cycle generator (Unit 9), one steam turbine generator (Unit 10) and two simple-cycle gas turbines (Units 11 and 12). This change will eliminate the use of ocean water for once-through cooling at the facility. The proposed changes will also upgrade and improve the ESEC's existing and approved site infrastructure, provide fast start and dispatch flexibility capabilities to support Southern California grid load balancing and renewable energy integration, and implement improvements to coastal access.

Specific changes proposed through this Petition to Amend (PTA) include:

- Shutdown and demolition of Units 3 and 4;
- Removal and remediation of existing ESEC retention basins;
- Construction of a new, combined administration, maintenance, and operations support building;
- Modifications to existing site access; and
- Improvements to beach access.

The following new major equipment will be installed:

- (Unit 9) - One NRG fast start combined-cycle generator unit (CC Fast), rated at 222 MW net, incorporating a General Electric natural gas combustion turbine generator designed to achieve 75 percent of base load output in 10 minutes;

- One two-pressure, duct-fired heat recovery steam generator (HRSG) designed for rapid startup with conventional SCR/carbon monoxide (CO) catalysts;
- (Unit 10) - One single-case, non-reheat axial exhaust admission condensing steam turbine generator (STG) rated at 112 MW and designed for non-traditional elevated condensing pressure to minimize cooling system size;
- One Heller dry cooling tower system;
- (Units 11 and 12) - Two Rolls Royce Trent 60 generators, rated at 55 MW/unit net, consisting of advanced aeroderivative simple-cycle gas turbines; and
- One Cleaver Brooks auxiliary boiler consisting of a direct contact spray condenser and a mechanically-induced-draft dry-cooling tower.

BACKGROUND

Originally built in the 1950s, the ESEC was a 1,052-megawatt (MW) power plant consisting of four natural gas-fired utility boiler generating units. In 2000, the project owner applied to the Energy Commission to demolish and replace Units 1 and 2 with combined cycle Units 5, 6, and 7 and continue the use of once thru cooling. The project was certified by the Energy Commission on February 3, 2005. In 2007, the owner petitioned to amend the 2005 Decision to install smaller rapid start combined cycle units using dry cooling technology and designated as Units 5&6 and 7&8. The Commission approved this petition on June 30, 2010. NRG started construction on Units 5 – 8 in June 2011 and the project is approximately 83 percent complete and is expected to start commercial operation in August 2013.

ENERGY COMMISSION AMENDMENT REVIEW PROCEDURES

The purpose of the Energy Commission's review process is to assess the impacts of this proposal on environmental quality and on public health and safety. The review process includes an evaluation of the proposed project's compliance with applicable laws, ordinances, regulations, and standards (Title 20, California Code of Regulations, section 1769).

Due to the complexity of this project and the amount of public interest, staff intends to request the Energy Commission identify a Committee to oversee the El Segundo Amendment at the June 12, 2013 Business Meeting. The Committee will develop an amendment schedule that includes public comment and participation opportunities along with staff technical review and analysis.

The El Segundo Amendment will need to be processed as a formal amendment and must ultimately be approved by the full Commission at a noticed business meeting or hearing.

The petition is available on the Energy Commission's webpage for this facility at http://www.energy.ca.gov/sitingcases/elsegundo_amendment/2013_amendment. The

staff analysis, when published, will also be posted on this webpage. If you would like to receive e-mail notifications about project related meetings and documents, sign up on the listserve at <http://www.energy.ca.gov/listservers/>.

If you have any questions, please contact Craig Hoffman, Compliance Project Manager, at (916) 654-4781, or by fax to (916) 654-3882, or via e-mail at craig.hoffman@energy.ca.gov.

This Notice of Receipt is being mailed to interested parties and property owners adjacent to the project site who may want to participate in the amendment process.

Any person may file written comments on the petition with the Energy Commission's Dockets Unit. All written comments and all materials filed with the Dockets Unit will become part of the public record of the proceeding and may be posted to the Energy Commission's website for this facility.

All comments must be in writing. Those submitting comments electronically should provide them as either a Microsoft Word document (.doc or .docx) or in Portable Document Format (.pdf) and include your name or your organization's name in the file name. Please e-mail electronic written comments to docket@energy.ca.gov and include the docket number (00-AFC-14C) in the subject line of your e-mail. Those submitting non-electronic written comments should include the docket number (00-AFC-14C) in the first paragraph and mail or hand-deliver the comments to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 00-AFC-14C
1516 Ninth Street
Sacramento, CA 95814-5512

For further information on how to participate in this proceeding, please contact the Energy Commission Public Adviser's Office at (916) 654-4489, or at (800) 822-6228 (toll free in California), or by e-mail at publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail to mediaoffice@energy.ca.gov.

Date: May 14, 2013

original signed by C. Marxen
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