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### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



# NOTICE OF RECEIPT OF A SUPPLEMENTAL APPLICATION FOR CERTIFICATION FOR THE ALAMITOS ENERGY CENTER (13-AFC-01)

On October 26, 2015, AES Southland Development, LLC (AES-SD) submitted a Supplemental Application for Certification (SAFC) (13-AFC-01) to the California Energy Commission to address significant revisions to the design for modernizing the existing Alamitos Generating Station (AGS). The SAFC replaces the original Application for Certification (AFC) filed on December 27, 2013. The Alamitos Energy Center (AEC), as currently proposed, would be located on approximately 21 acres of the 71-acre brownfield AGS site. The proposed project site is bounded to the north by State Route 22: to the east by the San Gabriel River; to the south by 2<sup>nd</sup> Street; and to the west by N. Studebaker Rd., in the city of Long Beach, Los Angeles County, California. Existing Alamitos Generating Station Units 1-6 are currently in operation with a net generating capacity of 1,950 megawatts (MW). Although AES still intends to demolish all six operating units, AES is no longer including the demolition as part of the proposed AEC project, but now plans to accomplish the demolition under a separate CEQA proceeding through a Memorandum of Understanding with the city of Long Beach. Demolition of retired Unit 7 and construction activities at the project site are anticipated to last 56 months, from first guarter 2017 until third guarter 2021.

#### PROJECT DESCRIPTION

The project description in the SAFC for the proposed AEC has changed from that in the AFC filed on December 27, 2013. The revised proposed AEC would include a nominal 640-megawatt (MW), natural gas-fired, combined-cycle power block and a 400-MW simple-cycle, air-cooled electrical generating facility. Power Block 1 would consist of two natural gas-fired combustion turbine generators (CTG) in a combined-cycle configuration with two unfired heat recovery steam generators (HRSG), one steam turbine generator (STG), an air-cooled condenser, an auxiliary boiler, and related ancillary equipment (collectively, AEC CCGT). Power Block 2 would consist of four simple-cycle CTGs with fin-fan coolers and ancillary facilities (collectively, AEC SCGT). The AEC is proposed to use potable water provided by the city of Long Beach Water Department (LBWD) for construction, operational process, and sanitary uses. This water would be supplied through existing onsite potable water lines.

The AEC would interconnect to the existing SCE 230-kilovolt (kV) switchyard adjacent to the northern side of the property. No new offsite natural gas lines would be necessary for the project. AEC would be supplied via the existing service pipeline for AGS Units 5 and 6 from the offsite 30-inch-diameter, high-pressure pipeline owned and operated by SoCalGas. Natural gas compressors, water treatment facilities, emergency services, and administration and maintenance buildings would be constructed within the existing site footprint. Storm water would be discharged into two retention basins and then ultimately to the San Gabriel River via existing storm water outfalls.

The AEC would include a new 1,000 linear-foot process/sanitary wastewater pipeline to the first point of interconnection with the existing LBWD sewer system and would

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eliminate the current practice of treatment and discharge of process/sanitary wastewater to the San Gabriel River. The project may also require upgrading approximately 4,000 linear feet of the existing offsite LBWD sewer line downstream of the first point of interconnection. Therefore, this possible offsite project-related improvement to the LBWD system will require analysis during the Energy Commission certification process.

As described in the SAFC, the AEC CCGT will be located on the southern-most portion of the AEC site, on the former AGS fuel oil-storage site. AEC CCGT will include the following principal design elements:

- Two General Electric (GE) 7FA.05 CTGs with a nominal rating of 227 MW each. The CTGs will be equipped with evaporative coolers on the inlet air system and dry low oxides of nitrogen (NOx) combustors;
- Two HRSGs with no supplemental firing, each equipped with a selective catalytic reduction (SCR) unit in the ductwork for the control of NOx emissions, and an oxidation catalyst to control carbon monoxide (CO) and volatile organic compound (VOC) emissions;
- One, single-flow, impulse, down-exhaust-condensing STG with a nominal rating of approximately 229 MW;
- One air-cooled condenser that would replace the once-through system utilizing ocean water currently used for cooling the AGS and a closed-loop fin-fan cooler;
- A new natural gas compressor and compressor building for the CCGT;
- One generator step-up (GSU) transformer per each GE 7FA gas turbine and one for the steam turbine; and
- One 230-kV interconnection to the existing SCE switchyard, which is adjacent to the site.

The AEC SCGT will be located on the northern portion of the AEC site, adjacent to the San Gabriel River. The AEC SCGT will include the following principal design elements:

- Four GE Energy LMS 100 PB natural gas-fired combustion turbine generators (CTGs) with a nominal rating of 100 MW each;
- Each CTG is equipped with selective catalytic reduction (SCR) equipment containing catalysts to further reduce NOx emissions, and an oxidation catalyst to reduce carbon monoxide (CO) emissions;
- Auxiliary equipment associated with each CTG will include an inlet-air-filter house with evaporative cooler, turbine intercooler and associated intercooler circulating pumps;
- Each pair of CTGs will share one fin-fan heat exchanger and one GSU transformer;
- A new natural gas compressor and compressor building for the SCGT; and
- One 230-kV interconnection to the existing onsite SCE 230-kV switchyard (see Section 3.0, Transmission System Engineering).

The two power blocks will share the following design elements:

- Direct connection to an existing Southern California Gas Company 30-inch-diameter natural gas pipeline and metering station;
- Connection to existing onsite municipal and industrial water lines;
- Fire water and suppression systems;
- A new 1,000-linear-foot process/sanitary wastewater pipeline to the first point of interconnection with the existing LBWD sewer system at the east end of East Vista Street in Long Beach:
- · An existing storm water retention pond; and
- · Water treatment and storage systems.

## **ENERGY COMMISSION'S SITE CERTIFICATION PROCESS**

The Energy Commission is responsible for reviewing and ultimately approving or denying all applications to construct and operate thermal electric power plants, 50 MW and greater, in California. The Energy Commission's facility certification process carefully examines public health and safety, environmental impacts, and engineering aspects of proposed power plants and all related facilities such as electric transmission lines and natural gas and water pipelines. The Energy Commission is the Lead Agency under the California Environmental Quality Act (CEQA), and because the siting process is a certified regulatory program, the Energy Commission produces several environmental and decision documents rather than an environmental impact report. The issuance of a certificate by the Energy Commission is in lieu of any local or state permits, and federal permits to the extent permitted by federal law.

The project review is currently in the discovery and analysis phase, during which Energy Commission staff makes a detailed examination of the issues that may occur, analyzes project impacts and potential mitigation measures.

Under its certified regulatory program, the Energy Commission staff prepares and publishes both a Preliminary Staff Assessment (PSA) and a Final Staff Assessment (FSA). After allowing for a public comment period on the PSA, staff will prepare and publish the FSA which will address comments received on the PSA and serve as staff's expert testimony in evidentiary hearings to be held by the Energy Commission Committee assigned to hear this case. The Committee will hold evidentiary hearings and will consider the testimony and information presented by staff, applicant, intervenors, government agencies, and the public, prior to proposing its decision. In the last step, the full Energy Commission will issue the final decision.

As part of the review process, the staff of the Energy Commission endeavors to work closely with local, state, and federal agencies to ensure that all laws, ordinances, regulations and standards are met and incorporated into the final decision of the Energy Commission.

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#### **PUBLIC PARTICIPATION**

Over the coming months, the Energy Commission will conduct a number of public workshops and hearings to determine whether the proposed project should be approved for construction and operation and, if so, under what set of conditions. These workshops and hearings will provide the public, as well as local, state, and federal agencies, the opportunity to ask questions about, and provide input on, the proposed project. The Energy Commission will issue notices for these workshops and hearings at least 10 days prior to each meeting.

This notice of receipt has been mailed to all parties that requested placement on the mailing list and to property owners located within 1000 feet of the proposed project site or 500 feet of project linear features (e.g. pipeline). If you want to continue to receive notices of all project-related activities and when documents related to the proposed project's evaluation are available for review, you must sign up on the email list serve at <a href="https://www.energy.ca.gov/listservers/">www.energy.ca.gov/listservers/</a>. If you are unable to receive future notices by e-mail and would like them to be sent to you in the mail, you must mail back the attached reply form or contact Cenne Jackson, Project Assistant, at (916) 651-9106, or by e-mail at <a href="mailto:cenne.jackson@energy.ca.gov">cenne.jackson@energy.ca.gov</a>.

You can find a copy of the AFC and information about the project and proceedings on the project website: <a href="http://www.energy.ca.gov/sitingcases/alamitos/">http://www.energy.ca.gov/sitingcases/alamitos/</a>. Please direct your technical or project schedule questions to Christopher Meyer, Project Manager, at (916) 654-4640, or by e-mail at <a href="mailto:christopher.meyer@energy.ca.gov">christopher.meyer@energy.ca.gov</a>.

Agencies and members of the public who wish to provide written comments on the project to the Energy Commission are asked to submit their comments using the Energy Commission's e-commenting feature by going to the Energy Commission's Alamitos Energy Center webpage <a href="http://www.energy.ca.gov/sitingcases/alamitos/">http://www.energy.ca.gov/sitingcases/alamitos/</a> and clicking on the "Submit e-Comment" link. A full name, e-mail address, comment title, and either a comment or an attached document (in the .doc, docx, or .pdf format) is mandatory. After entering a response to the test used by the system to ensure that responses are generated by a human user and not a computer, click on the "Agree & Submit Your Comment" button to submit the comment to the Energy Commission Dockets Unit. Written comments may also be mailed or hand delivered to:

California Energy Commission Dockets Unit, MS-4 Docket No. 13-AFC-01 1516 Ninth Street Sacramento, CA 95814-5512

All written comments and materials filed with the Dockets Unit will become part of the public record of the proceeding. Additionally, comments will be posted on the website. If you desire information on participating in the Energy Commission's review of the project, please contact the Energy Commission's Public Adviser at (916) 654-4489 or toll free in California, at (800) 822-6228. The Public Adviser's Office can also be contacted via email at <a href="mailto:publicadviser@energy.ca.gov">publicadviser@energy.ca.gov</a>.

# **AVAILABILITY OF THE AFC DOCUMENT**

Copies of the AFC will be available for public inspection at the following public libraries:

Long Beach Main Library	Los Alamitos-Rossmoor Library
101 Pacific Avenue	12700 Montecito Road
Long Beach, CA 90822	Seal Beach, CA 90740
Long Beach Public Library – Los Altos	Brewitt Neighborhood Library
Neighborhood	4036 E. Anaheim
5614 E Britton Drive	Long Beach, CA 90804
Long Beach, CA 95801	
Bay Shore Neighborhood Library	
195 Bay Shore Avenue	
Long Beach, CA 90803	

Copies of the AFC are also available at the Energy Commission's Library in Sacramento, the California State Library in Sacramento, and at California public libraries in Eureka, Fresno, San Francisco, Los Angeles, and San Diego. In addition, copies will be distributed to those public agencies that would normally have jurisdiction except for the Energy Commission's exclusive authority to certify sites and related facilities.

Date: 12/10/15

Chris Davis, Siting Office Manager

Sincerely,

Mailed to:

General List (7501)

Property Owner List (7503)