

DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	204393
Document Title:	Public Participation in the Review of the Puente Power Project, dated April 24, 2015
Description:	N/A
Filer:	Alicia Campos
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	4/27/2015 10:14:39 AM
Docketed Date:	4/27/2015

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5112



April 24, 2015

To: MEMBERS OF THE PUBLIC

**PUBLIC PARTICIPATION IN THE REVIEW OF THE PUENTE POWER PROJECT
(15-AFC-01)**

On April 15, 2015, NRG Oxnard Energy Center LLC submitted an Application for Certification (AFC) to construct, own and operate the Puente Power Project (P3). P3 would be sited on approximately 3 acres of previously disturbed vacant brownfield land located on the northern portion of the existing 36-acre Mandalay Generating Station (MGS) site at 393 North Harbor Boulevard in Oxnard, Ventura County, California.

PROJECT DESCRIPTION

The proposed Puente Power Project (P3 or project) would replace two aging gas-fired steam-generating units (Units 1 and 2) at the existing MGS, with a new General Electric (GE) Frame 7HA.01 natural gas-fired combustion turbine generator (CTG) and associated auxiliaries. Construction laydown and parking areas would be within the existing MGS site. P3 would upgrade and repurpose existing maintenance, warehouse, and transmission interconnections, and ancillary systems to the extent feasible. No offsite linear developments are currently proposed as part of the project. If P3 is approved and developed, MGS Units 1 and 2 would be retired by the completion of commissioning of P3.

The generator output from P3 would be stepped-up to 220 kilovolts (kV) from the GE 7HA.01 CTG operating in simple-cycle mode. The power block would provide peaking power and is expected to operate up to an approximately 30 percent capacity factor. Full-load output of the unit under expected operating and ambient (temperature/relative humidity) conditions would range from approximately 241 net megawatts (MW) to a peak of 271 net MW. The new generating unit would tie into the existing adjacent switchyard, owned by Southern California Edison, using one of the MGS Units 1 and 2 breaker positions that would be vacated when one of the units is removed from service during the commissioning of P3.

Power produced by P3 would serve electric demand in Southern California. Peak load operation would most likely occur during summer on-peak hours, and minimum load operation during off-peak hours. The P3 design provides for a wide range of operating flexibility (i.e., an ability to start up quickly and operate efficiently during operating modes).

An ultra-dry low nitrogen oxide (NO_x) combustor system would be used to control the NO_x concentration exiting the CTG. As an additional post-combustion NO_x control system, a selective catalytic reduction (SCR) system would be installed downstream of the gas turbine. The SCR system would inject an aqueous ammonia solution into the exhaust gas stream upstream of a catalyst bed to reduce the NO_x to inert nitrogen and water. Dilution air fans would temper flue gas temperatures to meet SCR catalyst temperature requirements. An oxidation catalyst system would also be incorporated into the air quality control system to control emissions of carbon monoxide (CO) and volatile organic compounds (VOCs).

P3 would use natural gas supplied by Southern California Gas Company (SoCalGas) and would connect to a new gas metering station adjacent to the P3 site. A new natural gas pipeline of approximately 500 feet would extend from the new gas metering station through a new gas compressor to the combustion turbine interface.

The project would use dry cooling technology, which eliminates the once-through cooling system that cools MGS units 1 and 2 with ocean water that must be phased out by 2020 to comply with the facility Implementation Plan for State Water Resources Control Board Resolution 2010-0020. Total estimated annual water use for P3's process and service water needs is expected to be approximately 16 acre-feet per year (AFY), most of which is used for the inlet air evaporative coolers that are used for power augmentation. Estimated annual domestic water use is expected to be the same as for MGS, or approximately 3 AFY. The process water and potable water source is proposed to be the city of Oxnard; the point of connection would be to the existing MGS potable water supply.

Sanitary wastewater would be discharged to the MGS existing septic system. Process wastewater would be stored in one of the existing MGS retention basins, and ultimately discharged to the ocean via the existing outfall. Stormwater also would be directed to one of the existing MGS retention basins, where the water would be reused onsite for industrial purposes (i.e., evaporative cooling for the P3 unit) and/or irrigation purposes to the extent feasible and practical. Surplus stormwater would be discharged to the ocean via an existing outfall. Discharge flows would substantially decrease as compared to existing operating conditions for MGS Units 1 and 2 due to decreased plant water use for P3.

The project would integrate Leadership in Energy and Environmental Design (LEED) concepts. The proposed project would use existing MGS facilities, thereby reducing construction waste. A portion of the existing MGS warehouse would be reconfigured to add a control room for the new plant. The existing administration building would be upgraded. Based on the preliminary concepts identified, the project could receive a LEED Certified rating for the new control room and a LEED Silver rating for the improvements to the administration building.

Construction of P3 is expected to occur over a 21 month period (from October 2018 through June 2020). Commercial operation of P3 is expected by June 2020.

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 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 has a certified regulatory program and is the lead agency under the California Environmental Quality Act (CEQA).

The first step in the review process is for Energy Commission staff to determine whether or not the AFC contains all the information and data required by Title 20, California Code of Regulations, Appendix B. When the Energy Commission deems the AFC is complete, staff will begin the discovery and issue analysis phases. At that time, a detailed and thorough examination of issues will occur.

PUBLIC PARTICIPATION

Over the coming months, the Energy Commission will conduct public workshops and hearings to determine whether the proposed project should be approved for construction and operation and 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 property owners located within 1000 feet of the proposed project site and 500 feet of a project linear feature (e.g. pipeline). By being on the mailing list, you will receive notices of all project-related activities and notices when documents related to the proposed project's evaluation are available for review. Alternately, if you would prefer to receive email notifications about project related meetings and documents, sign up on the project Listserv at www.energy.ca.gov/listservers/. Please direct your technical or project schedule questions to Jon Hilliard, Project Manager, at (916) 654-3936, or by e-mail at jon.hilliard@energy.ca.gov.

If you desire information on participating in the Energy Commission's review of the project, please contact the Energy Commission's Public Adviser, Alana Mathews, 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 publicadviser@energy.ca.gov.