#### CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET SACRAMENTO, CA 95814-5112

# **DOCKET**

10-AFC-01

DATE JUL 19 2010 RECD. JUL 20 2010



July 19, 2010

**TO:** AGENCY DISTRIBUTION LIST

# REQUEST FOR AGENCY PARTICIPATION IN THE REVIEW OF THE PIO PICO ENERGY CENTER, APPLICATION FOR CERTIFICATION (10-AFC-1)

On June 30, 2010, Pio Pico Energy Center LLC submitted an Application for Certification (AFC) to the California Energy Commission seeking permission to construct and operate a nominal 300-megawatt (MW) natural gas-fired simple-cycle generating facility, the Pio Pico Energy Center (PPEC). The project is proposed to be located in the city of Chula Vista which is located in southwestern San Diego County.

As part of our AFC 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. As such, your review and comment on the AFC for the Pio Pico Energy Center is valuable and encouraged.

# **PROJECT DESCRIPTION**

# Project Location

The project would be located in the city of Chula Vista on approximately 13 acres of undisturbed land at the end of Wueste Road, approximately one-quarter mile southwest of Otay Lakes County Park. The site is located just inside the eastern boundary of the city of Chula Vista's Multiple Species Conservation Plan Preserve (Preserve). The Preserve is a 9,100-acre conservation area which was established by the Otay Ranch Phase 1 Resource Management Plan. The applicant has proposed dedicating mitigation lands to offset the impact of removing the 13 acre site from the Preserve.

# Power Plant Technology

The generating facility would include three General Electric (GE) LMS100 natural gas-fired combustion turbine generators (CTGs), each equipped with water injection to the combustors for reducing production of oxides of nitrogen (NOx), a selective catalytic reduction (SCR) system with 19 percent aqueous ammonia (NH3) injection to further reduce NOx emissions, and an oxidation catalyst to reduce carbon monoxide (CO). Thermal energy is produced in the CTGs through the combustion of natural gas, which is converted into mechanical energy to drive the combustion turbine compressors and electric generators. The total net generating capacity would be approximately 300 MW.

#### Prominent Visual Features

Following are some of the more important and/or larger project features related to the visual impact assessment:

- Three (3) 100-foot tall combustion turbine generator (CTG) stacks.
- Three (3) variable bleed vents with silencers proposed at 53 feet tall.

- A proposed 35-foot tall hot selective catalytic reduction (SCR).
- One (1) partial dry-cooling system at 23-feet tall, 40 feet wide and approximately 400 feet long.
- A proposed 37-foot tall raw water storage tank and a 30-foot demineralized water storage tank.
- Proposed 80-foot tall transmission poles extending from the western boundary of the PPEC site will allow for project interconnection to the existing 120-foot 230kV transmission line corridor just west of the PPEC site.
- The entire project site would be enclosed by a 30-foot tall to 40-foot tall sound wall (varies depending on location around the project site perimeter).

# Hydrology

Groundwater elevations at the project site would be expected to be hydraulically influenced by Lower Otay Reservoir because of the PPEC site's proximity to the reservoir and the reservoir water surface elevation relative to the site elevation. The dam is approximately 2,000 feet northeast of the site. The spillway elevation is 491 feet, and the elevation of the lowest outlet is 395 feet. In comparison, the site's elevation is 370 feet above msl.

#### Water Resources

In addition to supplying potable water throughout its service area, Otay Water District (OWD), maintains and operates a recycled water system. OWD distributes recycled wastewater that meets California Title 22 requirements for reuse. OWD will provide PPEC with recycled water for process water and a back-up firewater supply, as well as potable water for potable uses, only. OWD has provided a "will-serve" letter to PPEC.

## Aquatic Resources

The project's proposed ground disturbance footprint is insulated from the Otay River by roughly 100 feet of topographic relief. Additionally, the lands abutting the project's ground disturbance footprint include the Otay Water Treatment Plant and its appurtenances which further buffer the project's construction and operational activities. The project would avoid directly impacting the Otay River.

However, there are many other small ephemeral washes, swales, and drainages that serve as tributaries to the Otay River and complete avoidance within the project disturbance area will not be possible. Therefore, a delineation of these resources will be required.

#### Electrical Transmission System

The PPEC facility's 230kV switchyard will consist of a 230kV radial feed type configuration, 230kV circuit breakers and disconnect switches, and structural bus supports. Electricity generated by PPEC would be delivered from the new switchyard to the existing 230kV transmission lines through a newly constructed San Diego Gas & Electric (SDG&E) PPEC electrical substation. The new substation would be located on approximately 1.45 acres within the project site.

#### On-site and Off-site Linear Infrastructure

The project has several linear components that extend beyond the site boundaries, specifically:

- Two 230-kilovolt (kV) transmission generation tie-lines, extending approximately 1,000 feet, southwest, from the project site;
- A natural gas pipeline will extend 3,500 feet from the site;
- A recycled water supply line from Otay Water District traverses the site;
- A sewer discharge pipeline will extend 3,500 feet from the site; and
- The site is serviced by an existing access road that would be improved for the project.

#### Construction Schedule

The start of construction is planned for June 2012 with testing planned for August 2013 and commercial operation planned to begin in September 2013. The PPEC is currently negotiating a 20-year power purchase agreement (PPA) with SDG&E.

#### **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 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 required by our regulations. When the AFC is deemed complete, we will begin data discovery and issue analysis phases. At that time, a detailed examination of the issues will occur.

Over the coming months, the Energy Commission will conduct a number of public workshops and then hearings on the proposal to determine whether the proposed project should be approved for construction and operation and under what set of conditions. These workshops 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 the meeting.

#### AGENCY PARTICIPATION

During this data adequacy phase, we request that you review the AFC sections of interest to your agency and determine whether the major issues of concern have been identified. At this time, we are only concerned that such issues are disclosed, not necessarily that they are discussed in detail. We request that you provide any written

comments you may have regarding the disclosure of potential issues of concern by Thursday, **August 19, 2010**. Energy Commission staff will then include any new issues in a formal Issues Identification Report which staff will file soon thereafter. Please address your comments to Eric Solorio, Project Manager, 1516 9<sup>th</sup> Street, MS-15, Sacramento, CA 95814.

When the AFC is accepted as data adequate, your participation in the proceeding will continue to be valuable and encouraged and will allow you to identify and try to resolve issues of concern to your agency. There may be specific requests for agency review and comment during the proceedings after the AFC has been determined to be complete. Local agencies may seek reimbursement for costs incurred in responding to these requests. However, comments provided in response to this request during data adequacy are not reimbursable under Energy Commission guidelines.

Enclosed is a copy of the AFC in electronic format. If you would like to have a hard copy of the AFC sent to you, if you have questions, or if you would like additional information on reimbursement or on how to participate in the Energy Commission's review of the proposed project, please contact Eric Solorio, Project Manager, at (916) 651-0966, or by email at <a href="mailto:essay:

Sincerely,		
•	nson, Manager cilities Siting Office	

Enclosure (1): Application for Certification (10-AFC-1) for Pio Pico Energy Center

Mailing List: 7379 Agency