

**Briefing Outline for
Siting Committee Presentation**

**WALNUT CREEK ENERGY, LLC
(05-AFC-2C)**

Contact: Christina Snow 651-3770

Time Needed: 10 minutes

Action Requested of Siting Committee: This is an informational item for review

Business Meeting Date: May 4, 2011

Background:

On November 22, 2005, Walnut Creek Energy, LLC (WCE), a wholly-owned subsidiary of Edison Mission Energy (EME), submitted an Application for Certification (AFC) to construct and operate a nominal 500 megawatt (MW) simple-cycle power plant, the Walnut Creek Energy Park (WCEP). The peaking power plant was certified by the California Energy Commission (Energy Commission) on February 27, 2008 and has not yet been constructed. The facility will be located at 911 Bixby Drive in the City of Industry, Los Angeles County.

SUMMARY OF PETITION

- On March 8th, 2011, WCE filed a petition with the California Energy Commission (Energy Commission) requesting to amend the Air Quality Conditions of Certification (COC) for the Walnut Creek Energy Park.
- The amendment involves several minor permit changes to the Energy Commission's Final Decision made on February 27th, 2008 (CEC2008). All changes have been approved by the South Coast Air Quality Management District (SCAQMD) in a revised Determination of Compliance (DOC) issued on March 11th, 2011.

More specifically, the changes to the conditions are:

- **AQ-SC7** and **AQ-19**: Recognize the emission reduction credit exemption under SCAQMD Rule 1304(a)(2) as a result of decommissioning Huntington Beach (HB) Units 3 and 4, and stipulate offset requirements for non-exempt emissions.
- **AQ-1** and **AQ-6**: Change monthly emission limits and fuel usage due to the new fuel heating value used in revised FDOC.
- **AQ-3**: Increase the number of startups/shutdowns from 350 to 480 per year.
- **AQ-4**: Decrease the carbon monoxide (CO) emission limit from 6 parts per million (ppm) to 4 ppm at 15 percent oxygen, to meet new best available control technology (BACT) requirements.
- **AQ-16**: Increase the NO_x RECLAIM Trading Credits (RTCs) to reflect an increase in the potential number of startups/shutdowns, elect to be in SO_x RECLAIM program, and submit SO_x RTCs.
- The petition does not involve modifications to any of the power plant equipment or to the facility design.

STAFF ANALYSIS

SCAQMD RULE 1304 EMISSION OFFSET REQUIREMENTS (AQ-SC7 and AQ-19)

- The requested COC changes related to emission offsets take into account the current severe scarcity of emission reduction credits (ERCs) in the South Coast Air Basin and the rescission of the amendment to SCAQMD's Rule 1309.1 that previously permitted power plants to obtain offsets from SCAQMD's Priority Reserve Account (PRA), also called Priority Reserve Credits (PRC).
- The prior Commission Decision allows the project owner to offset emissions either through the surrender of certified ERCs or through the PRA, per SCAQMD Rule 1309.1. However, because PRA offsets are no longer available, WCE proposes instead to meet the SCAQMD emissions offset requirements with a combination of certified ERCs and a partial exemption from providing ERCs as offsets that is offered under SCAQMD Rule 1304(a)(2) for replacing older existing utility steam boiler equipment with newer and more efficient advanced natural-gas-fired generation.
- To achieve this, WCE would purchase the steam boilers and steam turbine generators of Huntington Beach (HB) Units 3 and 4 from AES Southland Holdings, LLC and its subsidiary, AESHB and would retire HB Units 3 and 4.
- Although District Rule 1304(a)(2) allows a megawatt-for-megawatt offset exemption. Any increase in generation capacity from WCEP would require offsets through ERCs from reductions elsewhere within the air basin. The total capacity of Units 3 and 4 from HB is 450 MW, while the maximum capacity for WCEP 500.5 MW. Therefore, WCE needs to provide ERCs for the net capacity increase of 50.5 MW.
- The applicant has secured adequate ERCs for VOC emission offset (see Table 4 in Staff Analysis), but is currently in the process of securing the non-exempted 10.09 percent of project's PM10/PM2.5 ERCs. These ERCs will be provided by the time the owner submits the application to SCAQMD for the Permit to Construct (PTC).
- Staff reviewed the mitigation strategy (offset exemption under Rule 1304(a)(2) and ERCs associated with the increase of MW at WCEP) and determined that they are adequate to mitigate the project impacts as the only ERCs yet to be obtained are approximately 10 percent of PM10 offsets and all other offsets have been procured.

CHANGE OF MONTHLY EMISSION LIMITS AND FUEL USAGE (AQ-1 and AQ-6)

- The change to the monthly emission limits and fuel usage are requested due to the new fuel heating value used in revised DOC(1050 BTU/scf, instead of 1020 BTU/scf). The increase of heating value will lower the volumetric fuel usage as well as emissions, and therefore decrease the WCEP expected impacts.

INCREASE IN FREQUENCY OF STARTUPS AND SHUTDOWNS (AQ-3)

- WCE proposes to increase the maximum number of startups/shutdowns from 350 to 480 per year and the number of daily startups from 1 to 2. This change would allow the project to meet the commitments of their Power Purchase Agreement (PPA). Staff evaluated the project impacts and concluded that this increase would not make any significant changes to the previous project impacts nor create any new exceedances of air quality standards.

DECREASE CO EMISSION LIMIT (AQ-4)

- The decrease in CO emission limits is proposed in order to meet the new BACT requirement in the South Coast air district. The proposed modification will result in a lower project CO impacts.

CHANGE OF NO_x AND SO_x RTCs (AQ-16)

- The increase in the NO_x RECLAIM Trading Credits (RTCs) reflects an increase in the potential number of startups/shutdowns. WCEP is electing to be in SO_x RECLAIM program, and submit SO_x RTCs to the SCAQMD.

The requested project changes would conform to applicable federal, State, and SCAQMD air quality LORS, and the amended project would not cause significant adverse air quality impacts, provided that the following COCs are included. All air quality impacts are mitigated to a level that there are no significant adverse CEQA impacts.

Proposed Changes

The exemption under SCAQMD Rule 1304(a)(2) encourages the retirement of existing older and less efficient boilers with newer, quick-start, and more efficient equipment as long as any net increase in generation would be offset using other means. The proposed shutdown of existing aging utility steam boilers would help to support many significant public policy initiatives.

The WCEP will provide 500 MW of voltage support in the South Coast Air Basin, and five quick-starting, fast-ramping turbines that will assist in integrating renewable energy into the grid to meet the State of California's Renewable Portfolio Standards of 33 percent by 2020.

WCEP's offset exemption under Rule 1304(a)(2) would have the following benefits:

- Allow the earlier retirement of older, less-efficient power plant boilers.
- Allow the accelerated retirement of coastal plant boiler units that use once-through cooling, supporting the State Water Resources Control Board's Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, adopted May 4, 2010 and effective October 1, 2010. This will reduce impacts on marine life caused by once-through cooling.
- Replace inflexible and outmoded technology with state-of-the art peaking generation that is capable of starting and ramping up quickly to support the reliable integration of intermittent renewable generation to the grid.
- Reduce the basin-wide electrical generation potential to emit by replacing electric generating equipment with no operating restrictions with equipment limited to 4,000 operating hours per year, 40 start-up sequences per month, and two starts per day.
- Improve existing air quality in the South Coast Air Basin by retiring older, less-efficient generation and from the surrender of certified ERCs through interpollutant trade.

PUBLIC PROCESS

- The Original Petition to modify project filed/docketed and posted on the web on March 10, 2011.

- The Notice of Receipt mailed to the post-certification mailing list and affected public agencies and docketed on March 18, 2011 and was posted on the website on March 24, 2011.
- A revised Petition to Amend was received on April 1, 2011 and docketed then posted on the web on April 4, 2011.
- Staff analysis was docketed and posted on the Energy Commission website on April 4, 2011 and mailed to interested parties.
- A comment letter was received by the County of Los Angeles Public Health office requesting that the Energy Commission analyze the proposed amendment for noise impacts. Staff has determined that there are no noise related impacts as a result of the proposed amendment.

FINDINGS

- The petition meets all the filing criteria of Section 1769(a) concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- The proposed modifications to the Air Quality Conditions of Certification will result in a beneficial change by ensuring compliance with SCAQMD Rule 1309.1 and 1304(a)(2); and,
- There has been a substantial change in circumstances since the Energy Commission certification justifying the change and the change is based on information that was not available to the parties prior to Energy Commission certification in that the proposed modifications relate to the most recent air quality emission limit requirements as determined by the SCAQMD.

RECOMMENDATION

- Staff recommends that the Energy Commission approve the petition to amend based upon staff's findings and subject to the revised Conditions of Certification.