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## STATE OF CALIFORNIA

## **Energy Resources Conservation and Development Commission**

In the Matter of:	
	Docket No. 08-AFC-90

The Application for Amendment for the

Palmdale Energy Project

## CITY OF LANCASTER'S ISSUE IDENTIFICATION REPORT

November 10, 2015

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#### STATE OF CALIFORNIA

# **Energy Resources Conservation and Development Commission**

In the Matter of:

Docket No. 08-AFC-9C

The Application for Amendment for the Palmdale Energy Project

#### City of Lancaster's Issue Identification Report

#### I. Introduction

Pursuant to an invitation from Hearing Officer Ken Celli, intervenor City of Lancaster hereby provides the Committee with the following issue identification report and proposed schedule. While we endeavored to include all of the issues Lancaster has identified to date, as of this writing we are still reviewing the applicant's responses to Lancaster's first set of data requests, and we look forward to reviewing the draft analyses from staff, EPA and the Antelope Valley Air Quality Management District (AVAQMD).

We have reviewed staff's November 3, 2015 issue identification and scoping report and found that it accurately and succinctly identified the main issues for this proceeding. Rather than reiterate staff's points, Lancaster takes this opportunity to expand upon several key issues from the staff report and Summit's responses to data requests.

#### II. The Proposed Project Does Not Qualify For a License Amendment

Applicant Summit seeks to amend the Commission's 2011 certification for the Palmdale Hybrid Power Project (PHPP); however, based on the facts, Summit is required

to file an application for certification. In 2011, the Commission certified a nominal 570 MW hybrid of natural gas-fired combined-cycle plant integrated with solar thermal generation. The City of Palmdale's objectives for the PHPP were to provide local baseload power to increase the reliability of the electrical supply for the City of Palmdale, and integrate solar technology to generate carbon neutral power to support the state of California's goal of increasing the percentage of renewable energy in the state's electricity mix. The EPA specifically added conditions to its 2011 prevention of significant deterioration (PSD) permit for the PHPP to ensure that the solar component would be constructed:

Conditions III.B, III.C, and X.I.11 have been added to the permit to require construction of a solar-thermal plant designed to generate 50 MW of power.<sup>1</sup>

In contrast, the proposed project would provide "fast-start flexible generation ... to assist in the integration of renewable energy;" would increase the nominal output of the natural gas-fired combined-cycle generating equipment to 645 MW; would no longer directly provide power to Palmdale but instead utilize the existing CAISO Large Generator Interconnection Agreement to send power to the grid; would eliminate the solar component; and would substantially increase operational emissions of nitrogen oxides (NOx) from 115 to 139 tons/year, volatile organic compounds (VOC) from 40 to 52 tons/year, sulfur oxides (SOx) from 9 to 11 tons/year, carbon monoxide (CO) from

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<sup>&</sup>lt;sup>1</sup> EPA, In re: Palmdale Power Project, PSD Permit No. SE-09-01, PSD Appeal No. 11-07, February 17, 2012, EPA Region 9's Excerpts of Record, Excerpt 4, Responses to Public Comments on the Proposed Prevention of Significant Deterioration Permit for the Palmdale Hybrid Power Project, October 2011, Response to Comment 40, p. 39;

 $http://yosemite.epa.gov/oa/eab\_web\_docket.nsf/filings\%20by\%20appeal\%20number/b1b1430c6ca6e85c85\\2579a7006f57f2/\$file/response\%20to\%20petition\%20excerpts\%20of\%20record\%20...24.01.pdf.$ 

255 to 351 tons/year, and carbon dioxide-equivalent (CO<sub>2</sub>e) greenhouse gas emissions from 1.85 million metric tons/year to 1.93 million metric tons/year.<sup>2</sup>

In short, the only thing the proposed project has in common with the original PHPP is the project site. In fact, in its responses to Lancaster's data requests the applicant admitted as much, singling out the site as the determining factor triggering an amendment proceeding: Summit "seeks to build a thermal power plant on the same site that was licensed by the Commission." It then went on, "the site is already subject to the Commission's jurisdiction" citing to the relevant Commission regulation:<sup>3</sup>

After the final decision is effective under section 1720.4, the applicant shall file with the commission a petition **for any modifications it proposes to the project** design, operation, or performance requirements.<sup>4</sup>

The applicant appears to be arguing that the Commission's weighing of whether an amendment proceeding is proper is based on the project site rather than the particulars of the power plant proposed for that site. But that is incorrect. By definition, post certification proceedings depend on the significance of the changes to the proposed power plant. In particular, proposed changes invoke either an informal modification; a formal amendment proceeding; or, a new application for certification. Here a different applicant is seeking to build a wholly different project on a portion of a site that was previously Commission-approved for a hybrid solar/natural gas plant. This thin connection to the site is not enough to support an amendment application. Based on the facts, Summit must file a new application for certification.

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<sup>&</sup>lt;sup>2</sup> See Petition, pp. 1-3 through 1-4, Table 4.1-1, and p. 4.1-28; PHPP Final Staff Assessment, Table 3.

<sup>&</sup>lt;sup>3</sup> Response to City of Lancaster's Data Requests Set 1 at p. 5 (November 5, 2015).

<sup>&</sup>lt;sup>4</sup> 20 CCR § 1769 (emphasis added by Lancaster).

### III. Air Quality Mitigation

The purpose of the Clean Air Act is to protect public health and the environment when new large sources of pollution, like the Palmdale project, come online. Specifically, the new source review (NSR) program ensures that air quality does not further degrade in air basins where the air is already unhealthy to breathe. Under the NSR program, the proposed Palmdale Energy Project will be required to construct the plant with modern pollution controls, but even fitted with stringent air quality technology, it would still emit unhealthy and unlawful amounts of air pollution. Therefore that new pollution must be "offset" to mitigate emission increases through reductions at existing facilities within the region.<sup>5</sup>

#### A. Emission Reduction Credits to Offset Harmful Air Pollution

As staff noted, the proposed project would be required to provide emission reduction credits (ERCs) to offset emissions of PM10, VOCs, NOx, and CO. The Commission will also need to require ERCs to mitigate the project's local SOx emissions.

Importantly, the applicant for the proposed project, like the applicant for the original PHPP, has not been able to procure the necessary ERCs for any of the criteria pollutants. Under the Clean Air Act, valid offsets are a precondition to an NSR permit.<sup>6</sup> However, in August 2011, the Commission granted the AFC for the PHPP despite the applicant's failure to secure the legally required ERCs.<sup>7</sup> Currently, contrary to clear state and federal requirements, the pending application indicates that Summit intends to pursue the same unlawful and deficient ERC strategy for each of the criteria pollutants as did the

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<sup>&</sup>lt;sup>5</sup> 41Fed. Reg. 55524 (Dec. 21, 1976).

<sup>&</sup>lt;sup>6</sup> See EPA comments on PHPP PDOC at p. 1, offsets "shall be federally enforceable before such [NSR] permit may be issued" citing CAA § 173(c)(1).

<sup>&</sup>lt;sup>7</sup> See Final Decision at pp. 6.2-45 and 6.2-46.

PHPP. Complicating matters further, the new project will need to procure more ERCs for each of the pollutants given the plant's greater emissions.

#### В. **ERCs to Offset Volatile Organic Compounds (VOCs)**

For the original PHPP, the applicant proposed relying on VOC ERCs that were generated at a Bakersfield refinery in 1977, almost four decades ago. The Clean Air Act requires new emissions to be offset by an equal or greater reduction in "actual emissions."8 The Bakersfield refinery is located 76 miles from the project site in a different air basin. In addition, if Summit continues to propose relying on VOC offsets transferred from another air district, it will have to show compliance with Health and Safety Code § 40709.6. That provision contains strict requirements regarding offset ratios in order to protect air quality in both the transferring and receiving air basins. As staff pointed out in the 2010 PHPP FSA, that demonstration was never finalized prior to the final decision in 2011.9 The PHPP's proposed offset scheme was fraught with additional legal and technical deficiencies too numerous to describe here but they nonetheless nullified the proposal. Nothing in the amendment application indicates that any of these deficiencies can be readily remedied.

#### C. **ERCs to Offset Nitrogen Oxides (NOx)**

For the original PHPP, the applicant proposed to transfer NOx ERCs from the Mojave Air District to the Antelope Valley Air District at a ratio inconsistent with both AVAQMD's own rules and CEQA. Both commission staff and EPA were very clear about this in comments on the PHPP FSA. According to the petition, it appears that Summit's NOx offset strategy contains the same legal and technical deficiencies.

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<sup>&</sup>lt;sup>8</sup> 42. U.S.C. § 7503(c)(1).

<sup>&</sup>lt;sup>9</sup> FSA at 1-9.

### D. ERCs to Offset Inhalable Coarse Particulate Matter (PM10)

The applicant proposes to pave unpaved roads as a means of offsetting the proposed project's PM10 emissions. However, staff was correct in the PHPP FSA that the AVAQMD is required to adopt a regulation that describes the mechanism by which such "non-traditional" offsets would qualify and be quantified to offset combustion-related pollution. Likewise, EPA was clear that the project could not rely on road paving to offset PM10 emissions absent a SIP-approved rule. Both agencies pointed to road paving Rule 1406 adopted by the Mojave Desert Air Quality Management District in 2013 as a model for AVAQMD. To date, AVAQMD has not proposed such a regulation; but absent a formal rule, any road paving credits relied on to mitigate the project's combustion-related pollution would be in clear violation of state and federal law.

#### E. Greenhouse Gases

The proposed project would emit more than 1.9 million metric tons of CO2e greenhouse gas emissions per year, <sup>12</sup> and would eliminate the solar thermal component, which was specifically included in the PHPP to mitigate carbon emissions. In fact, EPA's PSD permit for the original project expressly *required* the solar thermal component to mitigate climate change impacts. <sup>13</sup> Under the Clean Air Act, the applicant is required to conduct a full technical analysis to show that the project's combustion equipment is fitted

<sup>&</sup>lt;sup>10</sup> PHPP FSA at p. 1-10, "the AVAQMD is required to develop a rule allowing for the generation of ERCs for all non-traditional emission sources."

<sup>&</sup>lt;sup>11</sup> EPA Region 9's comments on AVAQMD's preliminary determination of compliance, at p. 1 (March 19, 2009).

<sup>&</sup>lt;sup>12</sup> Petition, Table 4.1-3, p. 4.1-5.

<sup>&</sup>lt;sup>13</sup> See EPA's response to comments on its PSD permit for the PHPP at p. 40 (Oct. 2011).

with the "best available control technology." To date, the applicant has not provided the parties with the required BACT analysis.

## **IV.** Project Alternatives

The proposed project must be subject to a robust alternatives analysis consistent with CEQA. Specifically, the staff assessment should analyze feasible non-fossil fuel alternatives that would meet the project's objective of "assisting in the integration of renewable energy generated in California." A new large fossil fuel plant is intuitively incongruous, and likely unnecessary, to aid California in reaching a 50% renewable energy standard. For example, recently expanded markets, such as the western energy imbalance market (EIM) and the proposed CAISO expansion, provide significant reliability for renewable energy integration in California by economically dispatching a broad array of regional resources from neighboring states.

Similarly, energy storage technology could be a cost-effective, non-polluting alternative to the proposed project. Unlike gas turbines, energy storage technologies react very quickly to grid variations so that fewer megawatts of storage are needed to provide grid services. In fact, a single energy storage resource can, for instance, help smooth renewables, provide emergency backup, and reduce fossil fuel consumption, while reducing new transmission and distribution infrastructure. Storage has been proven to help balance the difference between renewable output and load without relying on inefficient peaking power plants. Energy storage has hit the mainstream as a viable alternative. Energy giant NextEra recently announced, ""We're going to deploy probably

\$100 million in [energy storage] projects in the next 12 months in places like PJM, California and Arizona."14

Given rapidly evolving regional markets and energy storage technology, the applicant must prepare an alternatives analysis that incorporates the above options alone or in combination.

#### V. **Proposed Schedule**

City of Lancaster has no objection to staff's proposed schedule; except that we believe an issue resolution workshop on November 17, 2015 would be premature. We look forward to working with staff on mutually convenient dates going forward.

#### VI. Conclusion

Intervenor City of Lancaster appreciates the opportunity to provide the above list of key outstanding issues in need of full staff analysis.

Dated: November 10, 2015 Respectfully submitted,

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<sup>&</sup>lt;sup>14</sup>See http://www.greentechmedia.com/articles/read/NextEra-on-Storage-Post-2020-There-May-Never-be-Another-Peaker-Built-in-t?utm\_source=Daily&utm\_medium=Newsletter&utm\_campaign=GTMDaily