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STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	
Petition to Amend The Carlsbad Energy Center	Docket No. 07-AFC-060

ENERGY COMMISSION STAFF RESPONSE TO PETITIONS FOR RECONSIDERATION AND INTERVENOR SIMPSON'S MOTION TO REISSUE THE PMPD AND REOPEN THE EVIDENTIARY RECORD

I. INTRODUCTION

On July 30, 2015, the California Energy Commission approved a petition to amend the Carlsbad Energy Center Project (ACECP) certification. On September 2, 2015, Intervenor Robert Simpson filed a petition for reconsideration of the Energy Commission's approval of the amendment. A petition for reconsideration was also filed that same day by Intervenor Robert Sarvey. The petitions for reconsideration are timely (Cal. Code Regs., tit.20, sec 1720, subd. (a).)

II. CRITERIA FOR RECONSIDERATION

The Energy Commission's regulations set forth the requirements for a petition:

"A petition for reconsideration must specifically set forth either: 1) new evidence that despite the diligence of the moving party could not have been produced during the evidentiary hearings on the case, or 2) an error in fact or change or error of law. The petition must fully explain why the matters set forth could not have been considered during the evidentiary hearings, and their effects upon a substantive element of the decision." (Cal. Code Regs., tit 20, sec. 1720(a).)

The granting of a proper petition is entirely discretionary. (Pub. Resources Code, sec. 25530.)

The California Supreme Court, in *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 470 Cal.3d 376, analyzed legislative intent in relation to streamlining the CEQA process. In this case the controversy centered on whether a final EIR should have been recirculated for public comment. The EIR only needed to be recirculated if it contained "significant new information."

In order to determine the meaning of "significant new information," the Court looked at legislative intent and history. While the Court found that the "Legislature apparently intended to reaffirm the goal of meaningful public participation in the CEQA review process," the Court also found that "the Legislature did not intend to promote endless rounds of revision and recirculation...." The Legislature was streamlining CEQA review at the time, and the Court recognized the Legislature's goal when it repeated, from *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, that, "[R]ules regulating the protection of the environment must not be subverted into an instrument for the oppression and delay of social, economic, or recreational development and advancement." (quoting Goleta Valley, supra, at p. 576.) The Court considered both "the legislative goals of furthering public participation in the CEQA process and of not unduly prolonging the process so that the process deters development and advancement."

"In reviewing draft EIRs [Environmental Impact Report], persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts of the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of the EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and the experimentation recommended or demanded by commenters." CEQA Guidelines, section 15204, subd. (a).

III. INTERVENOR SIMPSON DOES NOT RAISE NEW EVIDENCE OR ERRORS OF FACT OR LAW

Mr. Simpson raises a number of issues in his petition for reconsideration. To the extent that Staff does not specifically rebut each and every statement made by Mr. Simpson, his comments regarding solar flux and stack "collision" impacts on birds, undergrounding of transmission wires, and noise impacts were discussed during the proceedings and therefore are not "new" matters. Mr. Simpson disagrees with the Energy Commission's findings and decision but there is substantial evidence to support the Final Decision and no new facts upon which to grant the petition.

We address his issue of the use of clutch technology below in our response to Intervenor Sarvey.

Mr. Simpson alleges an error of law in citing the Energy Commission's deletion of prior condition of certification AQ-SC11. The Commission did not unilaterally decide that Prevention of Significant Deterioration does not apply: the San Diego Air Pollution Control District's Final Determination of Compliance also confirmed this fact (see Exhibit 3041, pp. 4-5).

He also alleges that the Coastal Commission did not proceed in a manner required by law citing (presumably) Public Resources Code section 27402. Staff cannot determine the substance of this allegation as that code section was repealed in 1977. But the Energy Commission's procedures do include public notice and comment procedures, and do include receiving comment from the Coastal Commission.

In short, Mr. Simpson has not raised new information or errors of law or fact that would require the Energy Commission to grant the petition.

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¹ Mr. Simpson suggests that Staff should have done a detailed analysis of the potential thermal exposures due to convective heat transfer in the CTG plume. Convective heat transfer is not like radiative heat transfer. Convection heat transfer rates are minimal across interfaces involving low density/insulating material (e.g. from air into feathers and down). Exposure to hot air for a short duration won't heat a body appreciably in the short exposure time available as a bird flies across the stack plume. Hence the low probability (small plume size) and low consequence (small temperature rise of bird) produce only a low risk to avian populations even at the most hazardous exposure level above the stack opening. This is why Staff did not further analyze this issue.

² See Final Staff Assessment (FSA), pp 4.3-16-17. 4.3-21 (TN #: 203696).

³ See FSA, p.4.13-46; Staff Brief, pp. 8-10 (TN #: 204351).

⁴ See FSA, pp 4.3-13-15, 4.3-17.

IV. INTERVENOR SARVEY ALSO DOES NOT RAISE NEW EVIDENCE OR ERRORS OF FACT OR LAW

Mr. Sarvey bases his petition on the alleged failure of the Energy Commission to consider and require a project alternative that the project owner install clutch technology that would allow the power plant to operate in synchronous condenser mode, producing reactive power.

CEQA Guidelines section 15126.6 states that an EIR shall describe a range of reasonable alternatives to the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

Petitioner cites the California Public Utilities Commission (CPUC) Decision 15-05-051 as the requirement that the amended Carlsbad Energy Center Project adopt clutch technology in the project.⁵ After discussing the potential of LMS-100 units to use a clutch to allow them to operate in synchronous condenser mode, the CPUC stated: "Therefore, we direct SDG&E to evaluate the feasibility and cost-effectiveness of this clutch technology." (Staff has no information about whether SDG&E has done the evaluation.)

Staff agrees with Messrs. Simpson and Sarvey that adding a clutch is technically feasible on a variety of combustion turbines, and that a few California combustion turbines have clutches installed. However, we cannot find any information on if and when the clutches are disengaged to operate as synchronous condensers. The determination of the need for VARs would be no different than the consideration of needed capacity or real power. Determining whether or not VARs are needed at a specific location is outside the Energy Commission's siting purview.

⁵ Mr. Sarvey states that he docketed this CPUC decision on April 6, 2015, four days after the close of evidentiary hearings in this matter.

⁶ Staff is aware of four CalPeak peaking plants in California with clutches installed that would allow the generators to operate as synchronous condensers. We believe that in the approximately 15 years these peaking plants have been operating, they have never been asked to do so, nor have they operated in that configuration.

⁷ Volt-ampere reactive (VAR) is a unit in which reactive power is expressed in an AC electric power system. Reactive power regulates the voltage in the electrical system and is necessary to avoid blackouts and to move active power through transmission and distribution systems (i.e. "voltage support").

The benefits possible by the deployment of this technology at a given power plant are only realized when:

- there is a need for location- specific ancillary/grid support services;
- the plant is not needed for (a) energy or (b) ancillary services other than voltage support, if provision of these services requires the plant to be operating and producing energy. When needed for energy or spinning reserve, the generator and turbine are connected and the plant is producing energy and providing voltage support; the fact that it can provide voltage support without generating energy is irrelevant at that point in time; and,
- the synchronous condenser is needed for voltage support but the energy and capacity not provided by the plant are provided by a different plant that is more efficient/lower emitting than the plant that it replaces. Reliance on a synchronous condenser to provide the needed voltage support would require replacing the energy it would have provided. The replacement energy might not be cleaner depending on load levels, time of day, etc.

The California ISO (CAISO) is the agency primarily responsible for determining the need for voltage support in the balancing authority area, as well as the impact and effectiveness of existing or proposed resources in its provision. In comments on the need for, and impact of installing synchronous condenser technology at the ACECP site, it stated to the CPUC:

"The Alternate Proposed Decision includes language directing SDG&E to study the addition of synchronous condenser technology, commonly referred to as a 'clutch,' at the Carlsbad Energy Center facility. In response to the Alternate Proposed Decision, the CAISO analyzed both peak forecast and lower load level scenarios to test whether the addition of synchronous condenser technology could enable a reduction in the amount of gas-fired generation (and associated emissions) that the Carlsbad Energy Center would otherwise be expected to produce. In recent years, the CAISO has approved significant upgrades to the Southern California transmission system to address reactive power needs and will continue to update and evaluate the adequacy of these solutions in future planning studies. The CAISO targeted these upgrades at locations that were both highly electrically efficient and feasible at times of peak system loading with some locations having expansion capabilities for even more reactive support should it become necessary. Due to the specific circumstances of localized voltage stability, the thermal limitations in the area, and the development of better-situated synchronous condensers in the area, the CAISO has not been able to confirm that the

synchronous condenser technology at Carlsbad would enable any material reduction in gas-fired generation output. Assuming that the transmission system upgrades and Commission-authorized procurement are realized in a timely manner, synchronous condenser technology at the Carlsbad Energy Center may not provide material emission reduction benefits [emphasis added]. Therefore, based on a preliminary analysis, the CAISO has not been able to identify significant benefits to the installation of synchronous condenser technology at the Carlsbad Energy Center."

Staff prepared an appropriate alternatives analysis given the information available at the time the FSA was completed.

With respect to Mr. Sarvey's other assertions, Staff believes the Final Decision and the FSA have addressed all of the significant comments.

CEQA Guidelines section 15384(a) states in part that "substantial evidence" means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. So although Mr. Sarvey may not agree with the Final Decision, CEQA acknowledges that a different conclusion may be reached than what he believes is appropriate.

V. INTERVENOR SIMPSON'S MOTIONS TO REISSUE THE PMPD AND REOPEN THE EVIDENTIARY RECORD SHOULD BE DENIED

Mr. Simpson's motions should be denied. First, the Notice of Issuance of the Final Determination of Compliance (FDOC) was reissued but no changes were made to the actual FDOC. The only change made to the Notice of Issuance was a correction of a minor description error in the original notice in the second paragraph identifying the approved plant as combined-cycle. It was, however, correctly stated in the more detailed equipment description in the original notice that the turbines are simple-cycle design and correctly identified and analyzed throughout the FDOC as being simple-cycle.

The California Department of Fish and Wildlife (CDFW) is not on the list-serves for this project although many other State agencies are. However, it would be erroneous to believe that the CDFW was not informed, aware of or included in Staff's drafting of the FSA Biology section. On August 12, 2014, Staff emailed a copy of the petition to amend to CDFW and other

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⁸ Comments of the California Independent System Operator Corporation on Alternative Proposed Decision, filed in California Public Utilities proceeding A.14-07-009, April 27, 2015.

interested agencies, including U.S. Fish and Wildlife and the Coastal Commission. There are no listed species on-site and vegetation on the project site that would fall within CDFW's purview⁹. It is clear from the conditions of certification that the CDFW was consulted with respect to ensuring appropriate mitigation.

Dated: September 16, 2015

Respectfully Submitted,

[Original signed by]

Jeffery M. Ogata Assistant Chief Counsel

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⁹ See FSA, pp. 4.3-7-8.