

DOCKETED

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CALIFORNIA ENERGY COMMISSION

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**NOTICE OF DETERMINATION
PETITION TO MODIFY THE PROJECT DESCRIPTION
FOR THE BLYTHE ENERGY PROJECT
(99-AFC-8C)**

On November 25, 2014, the Blythe Energy, Inc (Blythe Energy) filed a petition with the California Energy Commission (Energy Commission) requesting to modify the Final Decision for the Blythe Energy Project (BEP). The combined-cycle, natural gas-fired, 520-megawatt facility was certified by the Energy Commission in its Decision on March 21, 2001, and began commercial operation in July 2003. The facility is located in the City of Blythe, in Riverside County.

DESCRIPTION OF PROPOSED MODIFICATION

BEP is composed of two Siemens F Class V84.3A(2) gas turbines with duct-fired heat recovery steam generators, a single condensing steam turbine, two wet cooling towers, and associated plant equipment. Since the BEP commenced commercial operation in 2003, Siemens has developed performance improvements for these gas turbines in the form of a turndown upgrade that will allow the gas turbines to be operated down to minimum loads below 45 percent, compared with the minimum load of 60 percent evaluated during the original permitting process. As currently designed, the turbines are unable to operate at a minimum load lower than 60 percent. With the lowered load capability the turbines would use less fuel and emit less pollutants during minimum load operation.

The turndown upgrade includes minor hardware and software changes, and will therefore constitute a change to the gas turbines as certified. However, since the minimum gas turbine load is not limited by any conditions of certification, and no increases in emissions or other environmental impacts will result from this modification, the proposed change will not require any changes to any conditions. Implementation of the upgrade will improve plant efficiency and lower overall plant emissions, and will have no additional impacts beyond those identified in the Commission Final Decision for the BEP.

The Energy Commission's webpage for this facility, <http://www.energy.ca.gov/sitingcases/blythe/>, has a link to the amendment petition on the right side of the webpage in the box labeled "Compliance Proceeding." Click on the "Documents for this Proceeding (Docket Log)" option.

ENERGY COMMISSION STAFF REVIEW AND DETERMINATION

Staff's conclusions for each technical or environmental area are summarized in the following table.

Summary of Staff Responses to Petition

TECHNICAL / ENVIRONMENTAL AREAS REVIEWED	STAFF RESPONSE			Revised Conditions of Certification Recommended
	Technical Area Not Affected	No Significant Environmental Impact* (SAPM)	Process As Amendment	
Air Quality		X	N/A	N/A
Alternatives	X		N/A	N/A
Biological Resources	X		N/A	N/A
Cultural Resources	X		N/A	N/A
Facility Design	X		N/A	N/A
Geological Resources	X		N/A	N/A
Hazardous Materials Management		X	N/A	N/A
Land Use	X		N/A	N/A
Noise & Vibration	X		N/A	N/A
Paleontological Resources	X		N/A	N/A
Public Health		X	N/A	N/A
Socioeconomics	X		N/A	N/A
Soil & Water Resources	X		N/A	N/A
Traffic & Transportation		X	N/A	N/A
Transmission Line Safety & Nuisance	X		N/A	N/A
Transmission System Engineering	X		N/A	N/A
Visual Resources	X		N/A	N/A
Waste Management		X	N/A	N/A
Worker Safety & Fire Protection		X	N/A	N/A

*There is no possibility that the proposed modifications would have a significant effect on the environment, and the modifications would not result in a change in or deletion of a condition adopted by the Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (20 Cal. Code Regs., § 1769 (a)(2)).

Energy Commission technical staff reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations, and standards (LORS). Staff has determined that the technical or environmental areas of Alternatives, Biological Resources, Cultural Resources, Facility Design, Geological Resources, Land Use, Noise and Vibration, Paleontological Resources, Socioeconomics, Soils and Water Resources, Transmission Line Safety & Nuisance, Transmission System Engineering, and Visual Resources are not affected by the proposed changes, and no revisions or new conditions of certification are needed to ensure the project remains in compliance with all applicable LORS and existing conditions of certification for these areas.

For the technical areas of Air Quality, Hazardous Materials Management, Public Health, Traffic and Transportation, Waste Management and Worker Safety and Fire Protection, staff has determined the project would continue to comply with applicable LORS and would not change any conditions of certification. Staff notes the following for these technical areas:

- **Air Quality.** The proposed modifications reduce the emissions due to the reduction of heat inputs and fuel use at the minimum load. With the implementation of existing conditions of certification the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS and there would be no significant impacts beyond those in the original Energy Commission decision.
- **Hazardous Materials Management.** During the installation activities for the turbine upgrade several hazardous materials will be used onsite. Similar to equipment maintenance activities, these materials would include solvents, gasoline, lubricants, and welding gases which are already included in the annual compliance report under the existing **HAZ-1** condition. No extremely hazardous or regulated hazardous materials will be used on site specifically for installation of the upgrade, and none of these materials pose significant potential for off-site impacts as a result of the limited quantities on site, their low relative toxicity, their physical state and/or their environmental mobility. Therefore, with continued compliance to existing conditions of certification, **HAZ-1** specifically, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS.
- **Public Health.** The proposed modification will not result in an increase in toxic air emissions. With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS.
- **Traffic and Transportation.** With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS. The current project certification was approved based on specific gas turbine operating characteristics that included a minimum operating load of approximately 60%. The proposed modifications provide a more efficient way to operate the turbines by enabling them to operate at a lower minimum load (below 45%), which is below the current minimum operating load capability. With lowered load capability, the turbines would use less fuel and emit fewer pollutants during minimum load operation. The reduction in the gas turbine minimum operating characteristics (from 60% to below 45% minimum operating load) would decrease the height of thermal exhaust plumes. Overall, exhaust plume heights generated during minimum operating load (at 45%) with implementation of the proposed turndown upgrade at the BEC would be lower than plume heights currently generating during minimum operating load (at 60%). The decrease in thermal exhaust plume heights associated with the proposed change would not result in a significant impact. The proposed amendment would have beneficial effects to traffic and transportation and would not affect the traffic and transportation conditions of certification.

- **Waste Management.** With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS. In accordance with **WASTE-3**, any construction waste generated by this short duration construction project shall comply with the existing Construction Waste Management Plan.
- **Worker Safety and Fire Protection.** With the implementation of existing conditions of certification, the proposed modification would not have a significant effect on the environment and would continue to comply with all applicable LORS. The short duration of upgrade activities shall comply with worker safety and fire safety measures contained in health and safety plans utilized for construction of the main facility, reference specifically **WORKERSAFETY-1**.

Section 1769(a)(2) of Title 20, California Code of Regulations, states, “(w)here staff determines that there is no possibility that the modifications may have a significant effect on the environment, and if the modifications will not result in a change or deletion of a condition adopted by the commission in the final decision or make changes that would cause the project not to comply with any applicable laws, ordinances, regulations, or standards, no commission approval is required....”

Pursuant to that section, Energy Commission staff has determined for this petition that approval by the full Commission is not required and the proposed modifications meet the criteria for approval at the staff level because:

- The modification[s] will not have any significant effect on the environment;
- Existing conditions of certification are sufficient to cover the proposed modification[s] without changes to, or deletions of, any conditions of certification; and
- The project as modified will maintain full compliance with applicable LORS.

This Notice of Determination has been mailed to the Commission’s facility mail list of interested parties and property owners adjacent to the facility site. It has also been e-mailed to the facility listserv. The listserv is an automated Energy Commission e-mail system by which information about this facility is e-mailed to parties who have subscribed. To subscribe, go to the Commission’s webpage for this facility, cited above, scroll down the right side of the project’s webpage to the box labeled “Subscribe,” and provide the requested contact information.

Any person may file an objection to staff’s determination within 14 days of the date of this Notice on the grounds that the project modification does not meet the criteria set forth in section 1769(a)(2). Absent any relevant objections, the amendment petition will be approved 14 days after this Notice is docketed. To use the Energy Commission’s electronic commenting feature to object to staff’s determination, go to the Energy Commission’s

webpage for this facility, cited above, click on the "Submit e-Comment" link, and follow the instructions in the on-line form. Be sure to include the facility name in your comments. Once submitted, the Energy Commission Dockets Unit reviews and approves your comments, and you will receive an e-mail with a link to them.

Written comments may also be mailed or hand-delivered to:

California Energy Commission
Dockets Unit, MS-4
Docket No. 99-AFC-8C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with and approved by the Dockets Unit will be added to the facility Docket Log and be publicly accessible on the Energy Commission's webpage for the facility.

If you have questions about this Notice, please contact Mary Dyas, Compliance Project Manager, at (916) 651-8891, or by fax to (916) 654-3882, or via e-mail at mary.dyas@energy.ca.gov.

For information on participating in the Energy Commission's review of the petition, please call the Public Adviser at (800) 822-6228 (toll-free in California) or send your e-mail to publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail to mediaoffice@energy.ca.gov.

Date: 12/18/14



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