

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512

DATE: January 22, 2008

TO: Interested Parties

FROM: Dale Rundquist, Compliance Project Manager

SUBJECT: Panoche Energy Center (06-AFC-5C)
Staff Analyses of Proposed Modifications to Add an Additional 6.5
Acres to the Existing Panoche Electrical Substation.

DOCKET 06-AFC-5C	
DATE	JAN 22 2009
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On October 23, 2008, Panoche Energy Center, LLC, filed a petition with the California Energy Commission to amend the Energy Commission Decision for the Panoche Energy Center project. Staff prepared analyses of this proposed change, and copies are enclosed for your information and review.

The Panoche Energy Center project is a 400 MW peaking power plant located approximately 12 miles southwest of the City of Mendota, 2 miles east of Interstate 5 and next to the existing Pacific Gas and Electric Panoche substation in Fresno County. The project was certified by the Energy Commission on December 19, 2007, and is currently under construction.

The proposed modifications will increase the acreage of the existing substation by an additional 6.5 acres. PG&E determined that the Proposed Substation Expansion requires an additional 6.5 acres of land to accommodate the installation of a new Breaker-and-a-half (BAAH) bus configuration in order to improve the long-term electricity transmission reliability of the substation. The electric transmission lines will also be reconfigured to improve the substation's reliability.

Energy Commission staff reviewed the petition and assessed the impacts of this proposal on environmental quality, public health and safety. Analyses were prepared by technical staff in Biological Resources, Cultural Resources, Land Use, and Transmission System Engineering and are attached to this notice. Staff in all other technical areas reviewed the petition and determined the impacts would be less than significant. Staff proposes revisions to existing conditions of certification for Land Use (LAND-1). It is staff's opinion that, with the implementation of this revised condition, the project will remain in compliance with applicable laws, ordinances, regulations, and standards and that the proposed modifications will not result in a significant adverse direct or cumulative impact to the environment (Title 20, California Code of Regulations, Section 1769).

The amendment petition and staff's analysis has been posted on the Energy Commission's webpage at www.energy.ca.gov/sitingcases. The Energy Commission's Order (if approved) will also be posted on the webpage. Energy Commission staff

intends to recommend approval of the petition at the March 25, 2009 Business Meeting of the Energy Commission. If you have comments on this proposed modification, please submit them to me at the address below prior to February 11, 2009.

Dale Rundquist,
Compliance Project Manager
California Energy Commission
1516 9th Street, MS-2000
Sacramento, CA 95814

Comments may be submitted by fax to (916) 654-3882, or by e-mail to Drundqui@energy.state.ca.us. If you have any questions, please contact me at (916) 651-2072.

Enclosures:

Biological Resources Analysis
Cultural Resources Analysis
Land Use Analysis
Transmission System Engineering Analysis

PANOCHÉ ENERGY CENTER (06-AFC-5C)
Request to Amend Final Commission Decision
Biological Resources Staff Analysis
Prepared by: Brian McCollough

INTRODUCTION

Panoche Energy Center, LLC is proposing to expand the existing, neighboring substation by 6.5 acres.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

No LORS applicable to the project have changed since the Commission Decision was published in December 2007.

ANALYSIS

Staff has reviewed the petition for potential environmental effects and consistency with applicable LORS. Based on this review, staff determined that the additional habitat loss impact to the state-endangered and federally-threatened San Joaquin kit fox (*Vulpes macrotis mutica*) caused by the permanent disturbance of the 6.5 acre substation expansion area will need to be mitigated through purchase of 7.15 acres of mitigation credits at the Krayenhagen Hills Conservation Bank in compliance with Biological Resources Condition of Certification BIO-10. The purchase of these mitigation credits will make this additional impact less than significant.

Staff consulted with U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) to discuss the appropriate habitat compensation for this additional impact, and USFWS and CDFG staff confirmed that the appropriate compensation ratios for the new disturbance are 0.3:1 for temporary impacts and 1.1:1 for permanent impacts, the same ratios that applied to the main Panoche Energy Center project (USFWS 2008, CDFG 2008).

CONCLUSIONS AND RECOMMENDATIONS

Staff concludes that the proposed amendment will not result in a significant impact to biological resources, as the mitigation for the original project will mitigate for this additional impact as well.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Existing Biological Resources Conditions of Certification will be sufficient to reduce impacts from the proposed amendment to a less than significant level.

REFERENCES

CDFG 2008. Personal communication between Justin Sloan and Brian McCollough regarding the Panoche Energy Center Amendment. November 26, 2008.

USFWS 2008. Personal communication between Shelley Buranek and Brian McCollough regarding the Panoche Energy Center. December 2, 10, 2008.

PEC 2006a—Panoche Energy Center Project, Application for Certification. Submitted to the California Energy commission on August 2, 2006.

PEC 2008a—Panoche Energy Center, Petition to Amend Final Commission Decision. Submitted to the California Energy Commission on October 23, 2008.

PANOCHÉ ENERGY CENTER (06-AFC-5C)
Request to Amend the Final Commission Decision
Cultural Resources Staff Analysis
Prepared by: Dorothy Torres

INTRODUCTION

Panoche Energy Center (PEC) is proposing an amendment to the Final Commission Decision that would add an additional 6.5 acres to an existing substation. The 6.5 acres would be used to accommodate the installation of a new Breaker-and-a-half (BAAH) bus configuration that would improve the long term reliability of the substation. Transmission lines would also be reconfigured, including replacement and removal of several poles, to improve long term reliability.

The 400-megawatt project was certified by the Energy Commission on December 19, 2007, and construction began in early 2008. To date, no previously unknown cultural resources have been discovered during the archaeological monitoring of the construction of the PEC project.

Prior to making additions to the substation, the project would remove vegetation (pomegranate trees), grade, and compact soil and realign approximately 1,145-feet of an existing irrigation ditch. PEC would also install a security fence around the perimeter of the 6.5 acres. The ground preparation of the proposed 6.5 acres would involve grading and compaction of soil and other types of ground disturbance necessary for construction. Sites of new tubular steel poles would be graded and two existing transmission structures would be removed. If archaeological resources are present at the location of the substation expansion, the removal of pomegranate trees, grading, excavation, and other ground disturbance associated with the ground preparation for construction have the potential to impact previously undiscovered archaeological resources.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

There are no new or changed LORS in the technical area of cultural resources since the project was licensed.

ANALYSIS

Consultants to the applicant conducted a literature and records search for the original PEC project. The record search did not identify any previously recorded cultural resources within the 0.5 mile study area around the original PEC project. The 6.5 acres to be impacted and considered for this amendment were included in the original study area. The records search also revealed that no cultural resources surveys had been conducted within the potential impact area of the project. Subsequently, consultants to the applicant conducted surveys for both archaeological sites and built environment resources (buildings or structures). No archeological sites or significant built environment resources were identified (PEC 2006a: pp. 5.7-9 to 5.7-12).

In support of the proposed amendment, URS archaeologists, Brian Hatoff and Dean Martorana surveyed the proposed 6.5 acre expansion area on July 23, 2008. The survey area was a fairly level pomegranate orchard with sparse ground cover.

No prehistoric archaeological resources were identified within the 6.5-acre expansion area including the 200 feet survey buffer around the proposed expansion area. In addition, the survey did not identify any evidence of historic artifacts; therefore no previously identified cultural resources would be impacted by ground disturbance associated with the 6.5 acre addition to the substation or the relocation of transmission lines that would allow connection to the proposed BAAH (PEC 2008a, Appendix C, Cultural Resources Technical Report, p 5-1).

No additional cultural conditions or changes to conditions of certification are necessary to mitigate potential impacts to newly discovered resources. If the previously accepted cultural resources conditions of certification are appropriately implemented, any impacts to newly discovered prehistoric or historic archaeological resources would be reduced to a less than significant level.

Staff has reviewed the petition for potential environmental effects and consistency with applicable LORS. Based on this review, staff determined that this amendment is consistent with existing LORS.

CONCLUSIONS AND RECOMMENDATIONS

No previously identified significant cultural resources are present within the proposed 6.5 acre amendment area. The cultural resources survey of the proposed 6.5 acre amendment area did not identify any prehistoric or historic archaeological resources that might be impacted by the proposed amendment. Therefore, the amendment would not result in unmitigated significant adverse impact(s) to known cultural resources and if the previously adopted cultural resources conditions of certification are properly implemented they would mitigate any impacts to newly discovered archaeological resources to a less than significant level.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Staff does not propose additions or modifications to the Conditions of Certification.

REFERENCES

PEC 2006a—Panoche Energy Center Project, Application for Certification. Submitted to the California Energy commission on August 2, 2006.

PEC 2008a—Panoche Energy Center, Petition to Amend Final Commission Decision. Submitted to the California Energy Commission on October 23, 2008.

**PANOCHÉ ENERGY CENTER (06-AFC-5C)
Request to Amend the Proposed Substation Site
Transmission System Engineering
Sudath Arachchige and Mark Hesters**

INTRODUCTION

Panoche Energy Center, LLC, is seeking approval to modify the Panoche Energy Center (PEC) Project by increasing the acreage of the previously approved 2.5-acre PG&E substation. The proposed changes to the PEC involve an additional 6.5 acres for the expansion of the existing substation, which would be expanded to the south side of the existing substation to accommodate the installation of a new Breaker-and-a-half substation configuration, as well as rearranging the electric transmission lines to connect to the new modified substation to improve the long term reliability. The project consists of four gas turbine generators rated for 410 MW with a plant auxiliary load of 9 MW. The maximum net output to the grid will be 401 MW. Each generator will have one 13.8/230kV, 125 MVA step-up transformer. The project will connect to the 230kV bus at PG&E's Panoche substation via generator tie line to be built by the interconnection customer. The expected on-line date of the project is September 2009; construction began in early 2008.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

At the time of Certification, LORS applicable to TSE were identified in staff's Final Staff Assessment (FSA) and Commission Decision. Approval of the amendment would not require analysis of any new LORS.

ANALYSIS

The proposed substation modification consists of the installation of eighteen 230kV SF6 gas circuit breakers, disconnect switches, bus support structures, fencing and foundation which will require an additional 6.5 acres of land. Selection of a new Breaker-and-a-half substation configuration and rearranging the electric transmission lines to interconnect a modified substation would improve the long term reliability of the Panoche substation. The generator tie line will be connected to the 230kV bus at bay number 6 of the Panoche substation via approximately 1000 feet of 795 kcmil ACSS conductors. Due to very short length of the overhead 230kV interconnection between Panoche substation and the PEC, the applicant has proposed a redundant, double-pilot current differential protection scheme to achieve coordination with all lines connected to the 230kV bus at Panoche substation. The proposed changes are acceptable to staff and are in compliance with existing Conditions of Certification (COCs) and will insure compliance with applicable laws, ordinances, regulations and standards (LORS).

CONCLUSION AND RECOMMENDATION

The PEC substation expansion would utilize the same breaker ratings (230kV) with a new Breaker-and-a-half substation configuration. The modification of the substation would not trigger any downstream transmission reliability impacts of the PG&E system other than possible CEQA environmental impacts that may occur due to the substation expansion. Additionally, the proposed substation expansion will not affect PEC's ability to comply with all applicable LORS. Therefore, the COCs in the Final Decision would remain unchanged.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Staff does not propose additions or modifications to the Conditions of Certification.

REFERENCES

PEC 2006a—Panoche Energy Center Project, Application for Certification. Submitted to the California Energy commission on August 2, 2006.

PEC 2008a—Panoche Energy Center, Petition to Amend Final Commission Decision. Submitted to the California Energy Commission on October 23, 2008.

PANOCHÉ ENERGY PROJECT (06-AFC-5C)
Request to Amend the Proposed Substation Site
LAND USE Staff Analysis
Prepared by: Amanda Stennick

INTRODUCTION

Panoche Energy Center, LLC, is seeking approval to modify the Panoche Energy Center Project (PEC) by increasing the acreage of the previously approved 2.5-acre PG&E substation by 6.5 acres resulting in a 9.0-acre substation. The proposed substation is identified by Assessor Parcel Number 027-060-81S.

The 400-megawatt project was certified by the Energy Commission on December 19, 2007. Construction began in early 2008. The PEC is located in the northwestern section of the Westside Valley Area in Fresno County. The PEC site is located southeast of the intersection of West Panoche Road and Davidson Avenue, about 2 miles east of Interstate 5, and 14 miles west of Highway 33.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

At the time of certification, LORS applicable to Land Use were identified in staff's Final Staff Assessment (FSA). Approval of the amendment would not require analysis or inclusion of any new LORS.

ANALYSIS

The petition to amend is a request to expand the 2.5-acre PG&E substation by 6.5 acres to accommodate the installation of a new breaker-and-a-half (BAAH) bus configuration. As was done for the 2007 2.5-acre expansion, a lot line adjustment would be filed by PG&E with Fresno County to accommodate the footprint of the proposed 6.5-acre expansion. Energy Commission staff reviewed the petition and assessed the impacts of this amendment on land use.

As discussed in staff's September 2007 FSA, the 6.5 acres is part of a larger parcel that is under a Williamson Act contract and planted in pomegranate trees. Approval of the amendment would convert 6.5 acres of prime agricultural land to a non-agricultural use. In the petition to amend, the project owner anticipated the Energy Commission's requirement to mitigate the loss of the 6.5 acres of agricultural land for the substation expansion.

Consistent with PG&E's actions for the 2007 2.5-acre expansion, PG&E would acquire the land for the proposed substation expansion in lieu of eminent domain and would therefore, be consistent with Government Code Section 51295. The existing Williamson Act contract would be deemed null and void for the 6.5 acres.

In the 2007 analysis, staff used the California Agricultural Land Evaluation and Site Assessment (LESA) model to assess the loss of 15.3 acres of prime agricultural land (12.8-acre project site and 2.5-acre PG&E substation expansion) and concluded the

PEC's impact to agriculture was significant. To mitigate for the loss of prime farmland, staff proposed Condition of Certification **LAND-1**, which required the applicant to pay a fee to an agricultural land trust to purchase 15.3 acres of prime farmland as a conservation easement in Fresno County or adjacent Central Valley counties.

To implement **LAND-1**, a farmland mitigation agreement between the San Joaquin River Parkway and Conservation Trust (SJRPT) and the project owner was finalized on December 20, 2007. Land Use staff spoke with the Executive Director of the SJRPT about the proposed amendment and the additional 6.5 acres of farmland that would be converted. In the SJRPT Executive Director's opinion, the simplest and most expeditious way to mitigate the 6.5-acre loss would be to amend the December 20, 2007 Farmland Mitigation Agreement to include the 6.5 acres in the agreement. The amended farmland mitigation agreement would be finalized in February 2009. Land Use staff agrees with this approach and proposes a modification to Condition of Certification **LAND-1** to include the additional 6.5 acres.

CONCLUSIONS AND RECOMMENDATIONS

Staff has reviewed the petition for potential environmental effects and consistency with applicable LORS. Based on this review, staff determined that the amendment as proposed would be consistent with the LORS identified is staff's 2007 FSA and compatible with the current development pattern for the area established by the Fresno County General Plan. To mitigate the loss of an additional 6.5 acres of prime farmland, staff proposes the modification of Condition of Certification **LAND-1**, as shown below.

PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

Staff has proposed modifications to the **LAND USE** conditions of certification as shown below.

LAND-1 The project owner shall mitigate for the loss of ~~15.3~~ **21.8** acres of prime farmland at a one-to-one ratio.

Verification: The project owner shall provide a mitigation fee payment to an agricultural land trust such as the San Joaquin River Parkway and Conservation Trust or any other land trust that has been previously approved by the Compliance Project Manager (CPM) at least 30 days prior to the start of construction. The fee payment will be determined by an independent appraisal conducted on available, comparable, farmland property on behalf of the agricultural land trust. The project owner shall pay all costs associated with the appraisal. The project owner shall provide documentation to CPM that the fee has been paid and that the ~~15.3~~ **21.8** acres of prime farmland and/or easements shall be purchased within three years of start of operation as compensation for the ~~15.3~~ **21.8** acres of prime farmland to be converted by the PEC. The documentation also shall guarantee that the land/easements purchased by the trust will be located in Fresno County and will be farmed in perpetuity. If no available land or easements can be purchased in Fresno County, then the purchase of

lands/easements in other Central Valley counties is acceptable. The project owner shall provide to the CPM updates in the Annual Compliance Report on the status of farmland/easement purchase(s).

REFERENCES

PEC (Panoche Energy Center Project) 2006a – Application for Certification. Submitted to the California Energy Commission on August 2, 2006.

PEC (Panoche Energy Center Project) 2008a – Petition to Amend Final Commission Decision (06-AFC-5). Submitted to the California Energy Commission on October 23, 2008.