

ALJ/MEG/eap

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Decision 99-02-007 February 4, 1999

**ORIGINAL**

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company,  
a California Corporation, for a permit to construct  
the Northern Geysers Area Reinforcement  
Project, pursuant to General Order 131-D.  
(U 39 E)

Application 98-06-039  
(Filed June 17, 1998)

### FINAL OPINION

#### Summary

Pacific Gas and Electric Company (PG&E) is granted a Permit to Construct (permit) the Northern Geysers Area Reinforcement Project (Project). The Project involves improvements to existing facilities at the northern and southern ends of the existing Geysers Unit 11-Fulton transmission line. Today's permit is granted subject to PG&E undertaking certain mitigation measures set forth in Attachment 1 to this decision.

#### Procedural History

On June 17, 1998, pursuant to the Commission's Rules of Practice and Procedure and section IX.B of General Order (GO) 131-D, PG&E filed its application for a permit, together with a Proponent's Environmental Assessment (PEA). No timely protests or requests for hearings were filed.<sup>1</sup> By ruling dated

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<sup>1</sup> A letter was sent by Mr. John Marcucci objecting to further expansion of the Fulton Substation and identifying issues he had with the existing maintenance and operations of the substation along River Road. However, the project at issue in this proceeding does not propose to expand the substation, nor does it propose any improvements along River Road. PG&E has set up a meeting with Mr. Marcucci to discuss the existing maintenance and operation of the substation. We encourage PG&E to develop and

*Footnote continued on next page*

August 13, 1998, the assigned Commissioner determined that hearings were not needed, and in Decision (D.) 98-12-041, the Commission ratified that determination.

On October 16, 1998, the Commission staff published a Draft Mitigated Negative Declaration for public review, in compliance with the California Environmental Quality Act (CEQA), Cal. Pub. Res. Code Secs. 21000 through 21176. No comments were submitted in response to the Draft Mitigated Negative Declaration. A copy of the Final Mitigated Negative Declaration, which includes mitigation and monitoring requirements, is presented in Attachment 1.

#### **Project Purpose, Description and Proposed Schedule**

The Project will reinforce the 115-kV and 60-kV Northern Geysers Power Line System in Colusa, Lake, Mendocino and northern Sonoma counties, in order to meet the rising demand for electricity in these areas. This reinforcement is designed to help prevent voltage problems on the power system as well as help prevent thermal overloads and blackouts, during emergency conditions, to electrical customers within the counties served by the Northern Geysers Power Line System.

The Project involves approximately 3,300 feet of double-circuit 115-kV line and certain substation improvements. As such, it is subject to the requirements of GO 131-D, Section IX B. In particular, Section IX B.1.a. requires the following information:

"a. A description of the proposed power line and substation facilities, including the power line routes; proposed power line equipment, such as tower design and appearance, heights, conductor sizes, voltages,

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implement plans to improve the substation's appearance from River Road, as PG&E apparently intends to do. (See letter dated November 6, 1998 from PG&E to Mr. Rutledge of our Energy Division.)

capacities, substations, switchyards, etc., and a proposed schedule for authorization, construction, and commencement of operation of the facilities."

As described in the PEA, the Project consists of improvements at two separate sites, the Geysers site and the Fulton site. It involves improvements to existing facilities at the northern and southern ends of the existing Geysers Unit 11-Fulton transmission line. This 230-kV line is approximately 25 miles long and currently extends from Geysers Unit 11, located at the Geysers site in the northern portion of the Known Geothermal Resource Area (KGRA), southward to the Fulton Substation. The Geysers site is approximately 11 miles due south of Clear Lake, in a remote portion of Sonoma County dedicated to geothermal power production. The Eagle Rock Substation is also located at the Geysers site, near Geysers Unit 11, but currently has no connection to Unit 11 or the Geysers Unit 11-Fulton line. The Fulton Substation is located at the intersection of U.S. Highway 101 and River Road, in a predominantly agricultural area approximately two miles north of the City of Santa Rosa and one-half mile east of the small community of Fulton.

PG&E proposes to reinforce the Northern Geysers Power Line System by (1) taking Geysers Unit 11 out of the 230-kV transmission system and connecting it to the Eagle Rock Substation so that it will become a part of the Northern Geysers Power Line System, (2) reducing the voltage of one of the two existing 230-kV circuits on the Geysers-Fulton transmission line (the Geysers Unit 11-Fulton Line) to 115 kV, and (3) making improvements at the north end (the Geysers site) and south end (the Fulton site) of this 115-kV line to connect it to the Northern Geysers Power Line System. By adding generation from Geysers Unit 11 and creating a strong 115-kV power tie to the Fulton Substation (which is connected to several additional electrical power generation sources within the KGRA), the Project seeks to provide alternative and more reliable sources of

power than are currently available to customers in Colusa, Lake, Mendocino, and northern Sonoma Counties.

The Project involves two components. At the Geysers site, PG&E plans to install a 3,300-foot long, 115-kV loop that will connect Geysers Unit 11 and the existing Geysers Unit 11-Fulton line to the Eagle Rock Substation and to add two 115-kV electric bays with two 115-kV line positions to the substation. At the Fulton site, the connection point of the Geysers Unit 11-Fulton line at the substation will be moved from its existing 230-kV line position to a 115-kV line position. Once the improvements are completed, the operating voltage of the Geysers Unit 11-Fulton line will then be reduced from 230-kV to 115-kV.

This Project will result in a new 3,300-foot long, Geysers Unit 11-Eagle Rock 115-kV power line and a new 25-mile long Eagle Rock-Fulton 115-kV power line. The new Geysers Unit 11-Eagle Rock power line will be comprised of a short segment of the former Geysers Unit 11-Fulton transmission line plus the north portion of the new 3,300-foot loop into the Eagle Rock Substation. The new Eagle Rock-Fulton power line will be comprised of the south portion of new 3,300-foot loop out of the Eagle Rock Substation plus almost all of the former 25-mile Geysers Unit 11-Fulton transmission line.

Construction of the Geysers site improvements would occur over a period of 10 weeks. Fulton site improvements would occur over a 13-week period. All construction equipment, vehicles, personnel, and staging areas would be accommodated at the existing substation sites to minimize the impact on neighboring property owners. Although the Geysers Unit 11-Fulton line would be temporarily de-energized to connect the new facilities, no electrical service interruptions to customers are expected during construction. In order to avoid any disruption of service, PG&E will construct the Project in stages. First, the new 115-kV bays and line positions would be added inside the two substations.

Access improvements would then be made to new pole locations. Then foundations for new tubular steel poles at both sides would be excavated and poured and new poles installed.

Conductors would then be strung on the new poles. Once the tubular steel poles and conductors are installed, all equipment would be tested and the line energized. Final tests would then be run with the facilities energized and the sites would be cleared of any remaining debris. The final testing would be completed during nighttime (off-peak) hours to prevent outages.

The project is estimated to cost \$4.3 million.<sup>2</sup>

### **Project Alternatives**

Section IX B.1.c. of GO 131-D requires the applicant to discuss the reasons for selecting the proposed power line route or substation location, including a comparison of the advantages and disadvantages of alternative routes. PG&E considered the following routing alternatives for the proposed 115-kV line at the Geysers area and at Fulton Substation: north and south route alternatives for the Geysers site, a west route alternative for the Fulton site and an alternative to the Fulton site that would cross Highway 101.

PG&E concludes that the proposed route is superior to all of the alternatives. Compared to the alternatives, the proposed route is the shortest routing alternative, thus requiring the least amount of poles and power line facilities. It also contains the least number of routing turns, thereby minimizing the costs of strengthening towers to accommodate increased stresses and strains in power line facilities. By comparison, PG&E argues that the alternative routes are longer and would result in either comparable or greater environmental

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<sup>2</sup> October 1, 1998 phone communication between PG&E and Andrew Barnsdale, Energy Division.

impacts. Some of those impacts could not be mitigated, e.g., visual impacts along Highway 101.

### **Environmental Consideration**

CEQA requires the Commission to assess the potential environmental impact of a project in order that adverse effects are avoided or mitigated, and environmental quality is restored or enhanced to the fullest extent possible. To achieve this objective, Rule 17.1 of the Commission's Rules requires the proponent of any project subject to Commission approval to submit with the application for such project an environmental assessment which is referred to as the PEA. The PEA is used by the Commission to focus on any impacts of the project which may be of concern and to prepare the Commission's initial study to determine whether the project would need a Negative Declaration or an Environmental Impact Report.

As discussed above, PG&E filed its PEA with its application for a permit to construct. The Energy Division completed its initial study and determined that the Project would have a less than significant environmental impact or no impact in the following areas: land use and planning, population and housing, transportation/circulation, air quality, energy and mineral resources, hazards, cultural resources, utilities and service systems, biological resources, water, recreation, cumulative impacts, public services, visual resources and noise.

The Energy Division determined that the Project would have potentially significant environmental effects in the area of surface erosion, but found that this potential impact could be avoided or reduced to a less than significant level by mitigation measures. Based on the findings of the initial study, PG&E agreed to incorporate mitigation measures to address surface erosion as part of the Project. In addition, PG&E incorporated other mitigation measures into the Project that would lessen the potential environmental effects in other areas.

Section X of GO 131-D requires that applications for a permit to construct include a description of the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields (EMFs) generated by the proposed facilities. PG&E presents a description of measures to reduce potential exposure to EMFs that are in accordance with D.93-11-013 and consistent with PG&E's Transmission and Substation EMF Design Guidelines.

### **Discussion**

PG&E's application documents the need for this Project to prevent voltage problems on the power system as well as help prevent thermal overloads and blackouts during emergency conditions. PG&E also demonstrates that the proposed route for the Project is superior to alternatives, from both cost and environmental perspectives. The environmental documents developed in compliance with CEQA identify no significant environmental effects of the Project that cannot be avoided or reduced to non-significant levels by mitigation.

In view of the above, we will grant PG&E a permit to construct the Project, subject to the mitigation and monitoring requirements set forth in Attachment 1.

### **Comments on Draft Decision**

The draft decision of the administrative law judge in this matter was mailed to the parties in accordance with Public Utilities Code § 311(g) and Rule 77.1 of the Rules of Practice and Procedure. No comments were filed.

### **Findings of Fact**

1. The Project is needed to meet rising demand and help prevent voltage, thermal overload and blackout problems, during emergency conditions, to PG&E customers within the counties served by the Northern Geysers Power Line System.
2. The proposed route for the Project is superior to all of the alternatives. Compared to the alternatives, the proposed route is the shortest routing

alternative, thus requiring the least amount of poles and power line facilities. It also contains the least number of routing turns, thereby minimizing the costs of strengthening towers to accommodate increased stresses and strains in power line facilities. The alternative routes are longer and would result in either comparable or greater environmental impacts.

3. PG&E's application conforms to the requirements of GO 131-D and our Rules of Practice and Procedure (Rule 17.1).

4. The Mitigated Negative Declaration reflects the independent judgment of this Commission.

5. The contents of the Mitigated Negative Declaration conform to the requirements of CEQA.

6. The Mitigated Negative Declaration identified no significant environmental effects of the project that could not be avoided or reduced to non-significant levels by changes to the Project that have been accepted by PG&E.

#### **Conclusions of Law**

1. The Mitigated Negative Declaration has been processed and completed in compliance with the requirements of CEQA.

2. PG&E should be granted a permit to construct the Project.

3. Because there are no further issues to address in this case, this proceeding should be closed.

4. In order that PG&E may proceed as expeditiously as possible on this Project, this order should be effective today.



**FINAL ORDER**

**IT IS ORDERED that:**

1. The Mitigated Negative Declaration for the Northern Geysers Area Reinforcement Project, which includes mitigation and monitoring requirements, is adopted pursuant to the requirements of the California Environmental Quality Act.
2. The Energy Division shall file the Mitigated Negative Declaration with Central Files as part of the record in this proceeding.
3. Pacific Gas and Electric Company (PG&E) is granted a Permit to Construct the Northern Geysers Area Reinforcement Project.
4. PG&E shall comply with the mitigation and monitoring requirements set forth in Attachment I to this order.
5. The Commission does not, by this order, determine that PG&E's construction program is necessary or reasonable for ratemaking purposes. These issues are normally tested in general ratemaking proceedings.
6. This proceeding is closed.

This order is effective today.

Dated February 4, 1999, at San Francisco, California.

RICHARD A. BILAS  
President  
HENRY M. DUQUE  
JOSIAH L. NEEPER  
Commissioners

A. 98-06-039

Attachment 1

STATE OF CALIFORNIA

Gray Davis, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3228



January 5, 1999

To: All Parties and Energy Subscribers:

This note is written to inform you that the Energy Division's Final Mitigated Negative Declaration on PG&E's application (A.98-06-039) for a Permit to Construct the Northern Geysers Area Reinforcement Project will be mailed today to all commenters on the Draft Negative Declaration and all parties on the Service List.

The Final Mitigated Negative Declaration will also be posted on the Internet for viewing or downloading by Monday, January 5, 1999 at the following address:

[www.envreview.com](http://www.envreview.com)

If you did not receive a copy of the Final Mitigated Negative Declaration, or are unable to access the document electronically, please call Stephen Rutledge of the Energy Division at 415-703-1637.

The Final Mitigated Negative Declaration will be considered for adoption at the Commission meeting scheduled for February 4, 1999.

Energy Division  
California Public Utilities Commission

(End of Attachment 1)