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Decision No.

JAN 16 1979

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA"

In the Matter of the Application) of PACIFIC GAS AND ELECTRIC COMPANY) for a certificate of public) convenience and necessity under) General Order No. 131 for a 500-kv) Transmission Line from Applicant's) Gates Substation to Applicant's) Gregg Substation.)

(Electric)

Application No. 56532 (Filed June' 7, 1976)

 <u>Charles W. Thissell</u>, Attorney at Law, for applicant.
<u>James S. Shepard</u>, Attorney at Law, for Power Line Committee, and <u>Paul Morrison</u>, for Fresno County Parks & Recreation, protestants.
<u>Johanna Di Pinto</u>, for Hayes Avenue Feasibility Study Group; <u>Allen R. Crown</u>, Attorney at Law, for California Farm Bureau; <u>Eva Marlene Murphy</u>, for the City of Fresno, Planning Division; <u>Gerald D. Vinnard</u>, Attorney at Law, for Eli Lilly Co.; and Edward L. Fannuchi, Attorney at Law, for Citizens Along Hayes Avenue Against Relocation and Family Disruption to Residents and Landowners; interested parties.
<u>James T. Quinn</u> and <u>Steven Weissman</u>, Attorneys at Law, for the Commission staff.

<u>O P I N I O N</u>

Pacific Gas and Electric Company (PG&E) seeks an order of the Commission granting it a certificate pursuant to Section 1001 of the Public Utilities Code declaring that present and future public convenience and necessity will require the construction, installation, operation, and maintenance of a 500-kv transmission line facility from PG&E's Gates Substation to PG&E's proposed Gregg Substation. The estimated cost of the project is \$14,665,000.

A. 56532 ALT.-CTD-op*

Compliance with CEOA and Public Hearings

Pursuant to the provisions of the California Environmental Quality Act (CEQA), Public Resources Code §21000 et. seq, and Rule 17.1 of the Public Utilities Commission's Rules of Practice and Procedure, PG&E filed with its application, as a separate exhibit, an Environmental Data Statement (EDS). Copies of the EDS were submitted to other public agencies having an interest in or responsibility for the various environmental issues involved in this project.

The EDS and comments thereon were independently evaluated and analyzed by the Commission staff and were incorporated into a Draft Environmental Impact Report (EIR). On March 16, 1977, the staff mailed copies of the Draft EIR to various state and local agencies.

Public hearings were held in Fresno before Administrative Law Judge Daly on August 9, 10, 11 and 12, 1977, and on April 25 and 26, 1978.

Proposed Project and Route

PG&E proposes to construct the 51.5-mile, 500-kv Gates-Gregg Line to provide transmission reinforcement for the Fresno area in 1980 and beyond. The proposed facility is a double-circuited 230-kv transmission line with conductors placed on 500-kv open lattice towers. The 230-kv conductors would be bundled to form a single circuit 500-kv some time in the future. According to PG&E, this would permit deferral of a sizable capital investment to build 500-kv termination facilities at Gates and Gregg Substations and a 500/230-kv transformer bank at Gregg Substation. Because the line would be initially operated as a 230-kv operation, the staff takes the position that the 500-kv portion of the application is a matter of future consideration.

Four alternative routes, including one undergrounded alignment, were considered in the proceeding. Others, some of which were recommended by the Commission staff, were considered only briefly and rejected on the basis of cost without further analysis.

A. 56532 ALT.-CTD-ep*

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According to PG&E, operation of the Gates-Gregg Line by the summer of 1980 is necessary because the existing electrical energy supply for Fresno and adjacent areas consists primarily of 230-kv transmission lines from three major substations (Panoche, Gates, and Bellota) and 400 megawatts (MW) of hydroclectric capacity from plants on the San Joaquin and Kings Rivers; the 230-kv transmission lines have a firm capability (maximum load which can be served while sustaining the loss of one transmission line without transmission overloads) of approximately 1,265 MW which results in a maximum area firm capability of 1,655 MW; PG&E's 1980 simultaneous load forecast for Fresno and adjacent areas is 1,745 MW, exceeding the area maximum firm capability by 90 MW; the existing 230-kv transmission system, therefore, will not provide adequate support to Fresno and surrounding areas in the summer of 1980.

According to PG&E, the proposed Gates-Gregg 230-kv line would have a capacity of 976 MW under normal summer loading, and during summer emergency conditions could carry 1,170 MW. At 500-kv operation, the Gates-Gregg line would have a capacity of 2,278 MW under normal summer loading, and could carry 2,672 MW during summer emergency situations.

-3-

- A. 56532 ALT.-CTD-ep*

As offered by PG&E, the population growth for the city of Fresno and Fresno County since 1960 and as projected to the year 2000 is as follows:

Year	Fresno County	FCMA*	City of Fresno
1960	365,945	245,100	133,929
1970	413,329	289,200	165,972
1973	432,000	302,000	172,000
1974	438,000	308,200	174,700
1975	445,400	313,600	176,300
1980	476,700	344,500	192,600
1985	510,700	368,900	208,600
1990	546,700	395,000	225,700
1995	576,700	416,300	240,400
2000	601,900	434,900	253,800

*Fresno City Metropolitan Area

Based on these figures the projected increase in population for the city of Fresno from 1975 to 2000 is 44 percent, or 1.57 percent per year, while the projected increase for the county of Fresno is 35 percent, or 1.25 percent per year.

Environmental Impacts

There are seven basic land-use classifications along or near the proposed route-consisting of urban centers, rural communities, cultivated areas, industrial, airports, military installations, and undeveloped areas. The incorporated cities are Huron (population 1,720), Kerman (population 2,980), and Fresno (population 180,000).

Agricultural areas comprise the major land-use along the proposed route and consist of the following crops: almonds, figs, grapes, oranges, walnuts, and field crops. Of the 51.5 miles along the proposed route, approximately 40.9 miles are devoted to field crops. Grapes compose the next largest set of crops with approximately 6.4 miles under cultivation along the proposed route. Typical agricultural landuse operations such as irrigation, aerial spray operation (cropdusting), planting, and cultivating take place along the proposed route.

Because the proposed line skews diagonally across row crops and orchards for a major portion of the route, straight-line farming operations would be impaired. The diagonal alignment of the line would constitute a special problem to cropdusters operating in the area.

~4-

A. 56532 ALT.-CTD-cp*

<u>Discussion</u>

An evaluation of the record in this matter has led this Commission to the conclusion that there are informational deficiencies in certain vital areas.

A. Need

While the applicant indicates that this project is necessary to meet the energy needs of anticipated growth in the Fresno area, and the staff seemingly acknowledges this need, several of the most basic questions remain unanswered.

First, this Commission questions the methodology used to arrive at PG&E's population projections for the Fresno area. These projections are based solely on recent historical growth patterns in an area that has seen past rapid expansion. To extrapolate a straight-line continuation of that growth until the year 2000 without consideration of other factors is questionable demographic analysis.

Second, this Commission questions the assumption that energy consumption will necessarily grow at the same rate as the population. Both this Commission and the State Energy Commission are tressing conservation, insulation, new appliance efficiency and building standards, load management, solar energy, cogeneration, and other nongeneration methods to meet the energy needs of the state. These efforts should affect both generation and transmission needs in the Fresno area and should be incorporated into the need analysis. PG&E's straight-line energy demand forecast for the Fresno area is incompatible with the sophisticated energy forecasting ongoing in the state. PG&E has access to these forecasts and the in-house expertise to incorporate them into their transmission line need analysis.

Third, the ultimate capacity of the Gates-Gregg 500-kv transmission line is 2,278 MW. This more than doubles the area's present transmission capacity. It is difficult to imagine that a population increase of 35% or 235,955 (PG&E's own estimate for the year 2000) would require that much transmission capacity. More information is needed on how this project fits into long-range planning for the PG&E system. If the line is energized at a 500-kv level, a second line could be needed for the sake of reliability and should be discussed.

~5-

B. Route Selection

Section 21100 of the Public Resources Code requires that the EIR include a thorough analysis of alternatives to the proposed project. This analysis is to be sufficient to allow the project to be disapproved if there are feasible alternatives which would substantially lessen adverse environmental impacts. <u>City of Coronado v. California Coastal</u> <u>Zone Conservation Commission</u> 69 CA. 3d 570,¹582. One of the functions of this provision is to assure that decision-makers thoroughly assess all reasonable alternatives. <u>Friends of Mammoth v. Board of Supervisors</u> 8 C. 3d 247, 263, footnote 8.

While the EIR in this instance describes various possible alternate routes, they are considered in only the most cursory manner. It appears that analysis of a given alternate route ceased as soon as any adverse impact of that route had been identified. This lack of complete analysis makes it impossible for this Commission to weigh the negative aspects of an alternate route against its positive aspects, as nust be done with the proposed route. All reasonable alternatives must be examined with an analysis comparable to that which in the past may have been reserved only for the proposed route. Only then will the Commission be in a position to determine whether any of the alternates might be preferable to the proposed route. An exception to this is Alternate Route 3. Alternate Route 3 would parallel an existing 230-kv transmission line which is easterly from the area in which the preferred route and Alternate Routes 1 and 2 are located. Construction on this route would require removal of a significant number of homes. The record indicates this route is not a reasonable alternative.

-6-

A. 56532 ALT.-CTD-ep*

C. Additional Environmental Concerns

In several other respects the EIR is inadequate to answer many of the questions which CEQA requires be addressed.

1. Growth Inducing Impact

CEQA requires a discussion of the potential growthinducing impacts of a project. Public Resources Code, S21100 (g). The EIR merely views this transmission line as growth-permitting rather than growth-inducing. The only growth-inducing impact noted is the short-term influx of workers to the Fresno area while the line is being constructed.

To the extent that transmission capacity exceeds the actual existing needs of the area, a potential for growth inducement would appear to exist. New industrial and commercial development may be attracted to the area precisely because of this excess transmission capacity which may not exist in other areas. This potential has not even been recognized in the EIR. Perhaps through analysis of this potential effect and other public utility considerations, this concern could be resolved in favor of project approval. Absent such analysis we are unable to make the reasoned decision CEQA requires.

2. Impact on Areas of Archeological or Historical Importance

Even though areas known to have archeological significance are along the project route, the potential impact on these areas has not been ascertained.

3. Impact on Agricultural Lands

The analysis presented in this proceeding is inadequate. A study was offered showing the economic impact on agricultural lands but emphasized the loss of the land on which the actual facilities would be located. Potentially significant impacts on farming activities such as cropdusting, cultivating, and harvesting were largely ignored.

Conclusion

The Commission has carefully considered the record in this application and is bothered by what it does not see. An application must clearly demonstrate that the proposed project is essential to meet the future public convenience and necessity by taking into account the best possible estimates of population growth and energy demand and need,

-7-

A. 56532 ALT.-CTD-cp**

)the impact of current and expected conservation efforts in reducing that need, and numerous other factors that may affect the project.

As has been expressly mandated by the Legislature, a determination of the need for and location of energy facilities can no longer be exclusively a function of traditional economics -- the least expensive option, in terms of construction dollars, is not always the best. Alternatives must be evaluated on a wide range of criteria. This Commission intends to make its decisions regarding transmission line facilities based on a wide range of factors which must be extensively examined. To a great extent the record in this proceeding is devoid of the type of vital information and analysis which is necessary to make that decision. For this reason, based on the record before us, this Commission has no choice but to deny this application at this time.

PG&E should understand that this is <u>not</u> a determination that this project is not an appropriate one for it to pursue and which this Commission might not in the future approve. PG&E is invited to submit a new application in the future containing information necessary to supplement the record in this proceeding so as to respond to the deficiencies noted above. It would seem proper to allow PG&E to incorporate by reference any or all portions of the record in this proceeding. In all other respects it would be considered a completely new application.

The Commission's staff should similarly be aware that a resubmission of this application will necessitate supplementation of the EIR prepared in this proceeding. This too should be done in conformity with the preceding discussion.

Findings

1. PG&E has proposed the construction of a 51.5 mile-long Gates to Gregg 500-kv transmission line to be initially operated at an energy level of 230-kv.

2. This project was the subject of an environmental impact report prepared by this Commission and was considered at various public hearings conducted during 1977 and 1978.

3. The record in this proceeding indicates that need for the project was evidenced by the proponent solely on the basis of historical population growth in the Fresno area.

-8-

A. 56532 ALT.-CTD-cp**

4. The record is virtually void of any consideration of other factors which may have substantial impact on need for the facility such as the location of generation capacity to supply the historically projected need, and the impact of conservation, load management, solar energy, demographic trends, and other factors which may impact that need.

5. While various alternative routes to the one proposed by PG&E are discussed to a limited extent, Alternates1 and 2 or others in . the immediate area, which appear potentially feasible, were excluded from a comprehensive analysis due to an early rejection on economic grounds. Alternative 3 can be eliminated from further studies.

6. The growth-inducing impact of this project is discussed in the EIR solely with regard to the short-term construction impacts of the facility but not with respect to the impacts of the facility on long-term area growth.

7. There is little discussion in the record of any sites of potential archeological significance.

8. Applicant proposes conversion of the initial two 230-kv circuits to one 500-kv circuit when future loading will justify that expense. <u>This should be investigated at the time of conversion</u>; Further studies should consider the establishment of this new 500-kv service into the Fresno area. A comprehensive review of the necessity for future expansion of the 500-kv system must be considered in the supplemental proceeding.

9. By Decision No. 89761, dated December 19, 1978, the time limit for approval or disapproval of this application pursuant to Chapter 4.5 of the Government Code was extended to January 31, 1979.

-9-

A. 56532 ALT.-CTD-ep**

Conclusions

1. There is inadequate information in the record in this proceeding to justify Commission approval of this project.

2. Statutory time constraints require that a decision be made on this application prior to January 31, 1979.

3. The application must therefore be denied.

<u>o r d e r</u>

IT IS ORDERED that a certificate of public convenience and necessity to Pacific Gas and Electric Company to construct and operate a 500-kv transmission line together with related appurtenances from its Gates Substation to its Gregg Substation as proposed in this proceeding is denied without prejudice.

IT IS FURTHER ORDERED that if Pacific Gas and Electric Company requests this Commission to consider a new request for this project in the future, the Company shall file a new application for a certificate of public convenience and necessity. In such new application it may, at its discretion, request incorporation by reference of any or all pleadings, whibits, testimony, or other documents or materials contained in the record of this proceeding. Any new or supplemental information which may be prepared or offered on behalf of the applicant, the Commission staff, or any other party to the new application shall be processed in accordance with this Commission's Rules of Practice and Procedure and the California Environmental Quality Act.

The effective date of this order shall be the date hereof.

r	Dated at	Selt ATALCOND
day of	JANUARY	, 1979.

Commissioners

-10-