Decision No. 87928 OCT 4 1977

ORIGINAL

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 230-kv transmission line loop from Applicant's Herndon-Ashlan transmission line to Applicant's proposed Figarden Substation.

Application No. 55019 (Filed July 8, 1974; amended February 18, 1976)

(Electric)

Kermit R. Kubitz, Attorney at Law, for Pacific Gas and Electric Company, applicant.

Lionel B. Wilson, Attorney at Law, and John Dutcher, for the Commission staff.

OPINION

PG&E's Request

On July 3, 1974, Pacific Gas and Electric Company (PG&E) filed Application No. 55019 seeking an order of the Commission issuing a certificate, pursuant to General Order No. 131 of the Commission, that the present health, safety, comfort, and convenience of the public and the present and future public convenience and necessity require or will require the construction, installation, operation, and maintenance of a 230-kv overhead transmission line facility, referred to as the Figarden loop, from PG&E's Herndon-Ashlan transmission line to its proposed Figarden substation.

On February 18, 1976, PG&E filed an amendment to the application in order to reflect changes in land use planning by the city of Fresno, requiring a change in the proposed transmission line and substation.

Hearings were held in Fresno on October 20, 1976 and at San Francisco on January 24, 1977 before Examiner Gillanders. Chief Environmental Engineer Robert C. Moeck issued his Final Environmental Impact Report (Final EIR) on March 11, 1977. Exceptions to the report were due on or before March 31, 1977. As no exceptions were filed, the matter is ready for decision. PG&E's Proposal

General

The proposed project is located in the Figarden area of Fresno on the northwest fringe of the Fresno urbanized area. The project facilities consist of an overhead 230-kv transmission line, substation, and associated 21-kv underground distribution circuits. Three transformer banks will eventually be installed at the substation, but only one transformer bank will be installed initially.

Transmission Line

The route of the Figarden 23C-kv overhead transmission line begins at a junction with the existing PG&E Herndon-Ashlan overhead transmission line at a point approximately 1,200 feet southwest of Gates Avenue and 1,700 feet west of North Brawley Avenue. The line and its attendant 100-foot wide right-of-way proceeds northeast for approximately 4,500 feet parallel to Gates Avenue and then crosses over The Atchison, Topeka and Santa Fe Railroad tracks and Santa Fe Avenue before dropping into the new Figarden substation.

The transmission lines will be supported by lattice steel towers at the take-off point and tubular steel poles elsewhere. The poles will be 90 to 125 feet in height and from 800 to 900 feet apart. There will be a total of five tubular steel poles along the 0.8 mile route and an additional pair of poles at the substation.

Substation

The proposed Figarden substation site is a 5.5-acre parcel bounded by West Bullard Avenue on the north; North Martin Avenue on the east; North Santa Fe Avenue on the southwest; and by an undeveloped dedicated street, Kadota Avenue, on the northwest. The substation will occupy approximately two-thirds of the parcel with access from North Martin Avenue. PG&E will surround the substation with an 8-foot chain link fence and landscape the remainder of the parcel. Facilities within the substation will range in height from 18 to 45 feet.

Environmental Matters

A record on environmental matters was developed in this proceeding through public hearings, preparation of a Draft and Final EIR by our staff, consultation with public agencies, and presentation of testimony and exhibits by PG&E and the staff all of which are elements in the EIR process culminating in the issuance of the Final EIR.

This decision includes, pursuant to Rule 17.1 of our Rules of Practice and Procedure, a series of findings based on the Final EIR's coverage of (a) the environmental impact of the proposed action, (b) any adverse environmental effects which cannot be avoided if the proposal is implemented, (c) mitigation measures proposed to minimize the impact, (d) alternatives to the proposed action, (e) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, (f) any irreversible environmental changes which would be involved in the proposed action should it be implemented, and (g) the growth-inducing impact of the action.

Discussion '

The area referred to as the Bullard-Marks No. 4 Annexation (roughly the area bordered by Marks Avenue on the east, West Herndon Avenue on the north, Valentine Avenue on the west, and Bullard Avenue on the south, a total of 450 acres) was annexed to the city of Fresno in December 1974. In this area PG&E's proposed Figarden substation site is located. Generally Fresno annexes land so that it may be developed. As the Bullard-Marks No. 4 Annexation EIR states,

"Although the mere act of annexation carries with it no automatic entitlement to development of the 451 + acres of private lands involved, policies and actions of local government certainly would seem to imply that the transfer of land use control to the City of Fresno, as a result of annexation, is the only major procedure remaining in the process of allowing urban expansion in the subject area."

On October 2, 1975 the Fresno City Council adopted a general plan for the Bullard portion of the area to be served by the proposed substation. That plan included a substation site which is now PG&E's amended proposed site.

Following is the Plan's Population and Housing Projection:

BULLARD/MARKS STUDY AREA POPULATION AND HOUSING PROJECTIONS*

	Population		Housing Units	
1975 1980 1985 1990 1995 Ultimate**	7,216 11,459 13,661 15,373 16,515 34,909	Single 1,840 3,298 4,080 4,592 4,993 10,116	Multiple 58 89 109 123 132 274	Total 1,898 3,387 4,189 4,715 5,065 10,930

^{*}Projections assume the availability of public sanitary sewage service throughout the entire Planning Area.

^{**}After year 2000.

Within the plan's boundary are areas zoned residential, commercial, public facilities, light industrial, and open space. Circulation within the area will be by freeway, expressway, arterial, collector, special treatment, and scenic drives.

The areas bordering the study area to the northeast, east, and immediate south are predominantly single-family developments. The major portion of the single-family housing immediately east of the study area (east of Marks Avenue) is new construction, with above-average priced homes on lots of 12,500 square feet and above. Further east near Van Ness Avenue (Van Ness Avenue is two blocks east of Marks Avenue) the single-family area consists mainly of estate homes on lots that are ½ acre and larger in size. Fresno Planning Department characterizes this area as representative of Fresno's finest residential developments, and in recognition of its pleasing appearance, the tree-lined Van Ness Boulevard has been established as a scenic drive.

PG&E's proposed transmission line right-of-way (either overhead or underground construction) is 100 feet in width and passes through areas designated medium density residential or recreational/open space transition. In addition, it is adjacent to an elementary school site and a high school site. A 100-foot wide right-of-way would create a barrier in the heart of the Bullard community. PG&E's proposed alternate underground route is on city streets and is only slightly longer than the right-of-way.

According to the staff's Final EIR:

"There is only one significant effect on the environment due to this project. This is the visual impact of transmission lines and supporting structures. Tubular steel poles will reduce but not eliminate the aesthetic intrusion into this area that is planned for residential development. Testimony and exhibits have been introduced to demonstrate that the impact cannot be mitigated by the alternative of undergrounding in a feasible manner due to excessive cost.

The staff concluded that:

"2. The granting of a certificate and the subsequent construction and operation of the Figarden 230-kv line and Substation project in accordance with the foregoing conditions will eliminate all but one significant

[&]quot;I/ SIGNIFICANT EFFECT ON THE ENVIRONMENT.

Significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the activity including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

impact on the environment. The visual impact of the transmission lines will remain as a significant impact that can be partially mitigated through the use of tubular steel towers instead of lattice towers but not eliminated by undergrounding because undergrounding has been established as economically unfeasible.

"3. Because the transmission line and substation will be in place before most development in the area, later residential construction and buyer awareness of the project will partially mitigate the noise and visual impacts."

We do not agree that "...undergrounding has been established as economically unfeasible." At the hearing held on October 20, 1976, it became apparent that the staff had made no study of alternate methods of supplying the substation underground nor had it made a check to see if PG&E's estimated underground costs were reasonable. The staff's recommendation that overhead transmission be authorized was based solely on its belief "...that in fact overhead was cheaper than underground." The record also showed that PG&E had made no study of undergrounding other than their proposed method. As the Commission is required to consider alternatives to the proposed action (Rule 17.1(B)4), the examiner directed PG&E to prepare studies of alternate methods of supplying the load underground. Subsequently, PG&E supplied the staff and the Commission with its estimates of the costs

of alternative methods of supplying the Figarden area which were received as Exhibits 5 and 6 at the hearing held January 24, 1977. Cost data presented by PG&E's witnesses for the transmission facilities of the alternative proposals was as follows:

Proposed Project (Plan 1)	\$ 380,000	230-kv overhead transmission to Figarden substation.
Plan la	\$ 2,054,000	230-kv underground transmission to Figarden sub-station.
Plan 2	\$ 7,040,000	ll5-kv underground transmission to Figarden substation, 230 to ll5-kv transformation at takeoff.
Plan 2a	\$ 8,502,000	Use Plan 2 with upgraded source of supply.
Plan 3	\$ 7,007,000	230 to 70-kv transformation, 70-kv underground transmission.
Alternate Plan	\$19,067,000	230 to 70-kv transformation, 70-kv underground transmission, three 70-21-kv transformation substations.

As it was obvious that Plans 2 through the Alternate Plan were not responsive to the examiner's direction they were given no consideration at the hearing nor will they be given any consideration in this decision. Cross-examination developed that

Plans I and la contained serious errors—overhead costs were understated, and underground costs were overstated. In addition, the record revealed that the city of Fresno and other interested parties were never informed of the reduction in costs between overhead and underground due to the relocation of the substation as reflected in PG&E's amendment to the application. The information the city had, based solely on PG&E's EDS, indicated a cost differential of \$3,150,000. The city apparently never was directly informed that the cost differential as currently estimated by PG&E is only \$1,674,000.

PG&E's witnesses were unable to justify its estimated underground costs—indeed, they were not even able to justify the design of the line. The witnesses priced out only what was given to them; they could not testify that the underground line was properly designed. PG&E did not present a qualified engineer to testify why PG&E claims it is necessary now to build an underground line of 425 MVA² capacity to supply an ultimate load of only 280 MVA. 3/

The California Administrative Code, Title M, Division 6, Section 15088, states:

"15088. STATEMENT OF OVERRIDING CONSIDERATIONS.

"(a) Existing law requires public agencies to have reasons to support their decisions. Where agencies have taken action Without preparing written reasons to support the

If right-of-way costs for the overhead line are properly included, the difference becomes \$1,014,000 as PG&E's EDS states that the underground lines would be placed in city streets; therefore, there would be no right-of-way costs involved in such construction.

^{2/} MVA = million volt-amperes

^{3/} If an underground line of only 280 MVA capacity were to be constructed, the cost differential between overhead and underground would be considerably less than \$1,000,000.

decision based on information in the written record, courts have invalidated the action.

- "(b) Where the decision of the public agency allows the occurrence of significant effects identified in the Final EIR, the agency must state in writing reasons to support its action based on the Final EIR or other information in the record. This statement need not be contained in the EIR.
- "(c) The reasons to support an action described in Subsection (b) may be set forth in a statement of overriding considerations. If such a statement is made, it should be included in the record of the project approval and may be attached to the Notice of Determination."

Based on this record, there is no basis to prepare a "Statement of Overriding Considerations", nor are there any reasons to recommend overhead construction. On the contrary, this record shows compelling reasons to order the transmission line underground.

Findings

1. The evidence demonstrates the need for the proposed substation and a properly designed underground transmission line.

The Commission has carefully considered the evidence on environmental matters contained in the Final EIR, and makes the following findings pursuant to Rule 17.1(j)(3) of its Rules of Practice and Procedure:

Environmental Impact of the Proposed Action

- 2-a. If constructed as proposed, the project would have a significant effect on the environment. If the substation were to be supplied by a properly designed underground transmission line installed in city streets, there would be no significant effect on the environment.
- b. The proposed substation is in a residential neighborhood and the proposed overhead transmission line would create a barrier through the heart of the community. The area is newly developed and is expected to grow considerably.

Any Adverse Environmental Effects Which Cannot be Avoided if the Proposal is Implemented

- 3. If the construction of the transmission line is done underground there will be no permanent adverse environmental effects.
- 4. The construction of the project will cause some transient environmental effects from noise, dust, and disruption of vehicular traffic, but since the Figarden area is rapidly undergoing urbanization, these impacts will not represent a significant adverse effect to local residents.

Mitigation Measures Proposed to Minimize the Impact

- 5. Operational effects of the Figarden substation will include some low-frequency transformer noise dependent upon the type of transformers, the location and landscaping of the substation, and the location of surrounding residences.
- 6. PG&E can adequately mitigate transformer noise impact through the use of one or more low-noise transformers. PG&E is required to comply with an existing Fresno noise ordinance requiring noise levels of 55 DB or less at the property line.

Alternatives to the Proposed Action

7. In the event of "no Project" as an alternative, PG&E would have to design some other method of supplying the load.

Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

- S. There are no irreversible and long-term impacts of the project. Short-term effects would be the impact on air quality and the temporary effects resulting from the construction. Balanced against these environmental effects are PG&E's obligation to provide needed electric energy in its service territory and the adverse impacts, both social and environmental, of any failure to do so.
- 9. The only short-term use of the environment involved in construction and operation of the project is in the use of land at the substation. Balanced against this short-term use are the energy needs of PG&E's customers in the area.

Irreversible Environmental Changes Which Would be Involved if the Proposed Action Should be Implemented

10. There will be no irreversible environmental effects of the construction and operation of the project if the transmission line is placed underground.

Growth-Inducing Impact of the Proposed Action

- ll. Construction and operation of the project will have some minimal growth-inducing impact resulting from the addition of construction employees during construction of the project. There will be some secondary effects resulting from the impact of the additional property taxes on the local economy.
- 12.a. The need to build the project in order to provide reliable electric service is a response to anticipated growth in PG&E's territory.
- b. Without additional substation capacity, reliable electric service could not be maintained, even for present customers, as new customers are added and sufficient load growth occurs. In that event PG&E would not meet one of its fundamental public utility obligations.
- 13. The transmission line associated with the substation is being constructed to meet expected electrical demand, not to create any increased demand.

Environmental Assessment in the Aggregate

- 14. In summary, the project should not, on balance, have a significant effect on the environment.
- 15. The public safety, health, comfort, convenience, and necessity require the installation, maintenance, operation, and use of the substation together with underground transmission lines and related facilities.

- 16. As a matter of law, PG&E must comply with applicable noise standards lawfully adopted.
 - 17. The construction of the project:
 - a. Is reasonably required to meet area demands for present and/or future reliable and economic electric service:
 - b. Will not produce an unreasonable burden on natural resources, aesthetics of the area in which the proposed facilities are to be located, public health, and safety, air and water quality in the vicinity, or parks, recreational and scenic areas, or historic sites and buildings, or archaeological sites.
 - c. Will not place an unreasonable burden on the general body of ratepayers. The three major electric utilities in California in 1977 will spend \$34 million for conversion of overhead distribution to underground. PG&E's share is \$14 million.

The action taken herein is not to be considered as indicative of amounts to be included in future proceedings for the purpose of determining just and reasonable rates.

The Notice of Determination for the project is attached as Appendix A to this decision, and the Commission certifies that the Final EIR has been completed in compliance with CEQA and the Guidelines and that it has reviewed and considered the information contained in the EIR.

Based on the foregoing findings the Commission concludes that the project should be authorized in the manner and to the extent set forth in the following order.

ORDER

IT IS ORDERED that:

- l. A certificate of public convenience and necessity is granted to Pacific Gas and Electric Company (PG&E) to construct and operate a substation together with an underground transmission line and related facilities in the Figarden area of the city of Fresno.
- 2. PG&E shall file with this Commission a detailed statement of the capital cost of the substation together with transmission lines and related facilities, within one year following the date this project is placed in commercial operation.
- 3. The authorization granted shall expire if not exercised within three years from the effective date hereof.

The Executive Director of the Commission is directed to file a Notice of Determination for the project, with contents as set forth in Appendix A to this decision, with the Secretary for Resources.

	The effective	e date of	this	order	shall	ъe	twenty	days
after the	Dated at DCTUBER	San Francisc	30	, Ca	alifor	nia,	, this_	4th
day of	, DCTUBER	, 197	77.				-	

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Commissioners

Commissioner William Symons, Jr., being necessarily absent, did not participate in the disposition of this proceeding.

Commissioner Claire T. Dedrick. being necessarily absent. did not participate. in the disposition of this proceeding.

APPENDIX A

NOTICE OF DETERMINATION

то: 🖅	Secretary for Resources 1416 Ninth Street, Room 1311 Sacramento, CA 95814	FROM:	California Public Utilities Commission 350 McAllister Street
<i>□</i> .	County Clerk County of		San Francisco, CA 94102
SUBJECT:	Filing of Notice of Determing 21152 of the Public Resource		ompliance with Section 21108 or
Project T	itlc Figarden Substation	& 23 <u></u>	Thansmission line
State Cle	eringhouse Number (If submitted)		
Contact F			phone Number -557-1487
Project I			
Application Californians	Description ation by Pacific Gas and artion by Pacific Gas and rnia Public Utilities Con ission line and substation of the city of Fresno. (mmission on for se	to construct a 230-kv : rvice to the Figarden .
	to advise that the <u>Californ</u> (Lead the following determinations	Agency)	
1. The p	project has been XX approved disappro		Lead Agency.
2. The p	project // will have a st	ignificant ecision N	effect on the environment. o. attached.)
3. 🖾	An Environmental Impact Report to the provisions of CEQA.	rt was prep	ared for this project pursuant
			this project pursuant to the tive Declaration is attached.
Date Rece	pived for Filing		cutive Director
		Title	
		Date	