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ORIGINAL

Decision No. 88864 MAY 31 1978

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 from Applicant's Rio Oso-Bellota 230-kv line to Applicant's Lockeford Substation.

(Electric)

Application No. 55799
(Filed July 8, 1975)

O P I N I O N

Statement of Facts

The rural community of Lockeford, resting in an agricultural setting with orchards and vineyards to the west and seasonal crops to the east, is situated on the fairly flat alluvial plain in the northeastern portion of San Joaquin County between the coastal ranges and the Sierra Nevada. Homes and farm buildings, while bunched in the area along Highway 88 and the Jack Tone Road, are generally scattered in a random manner along country roads which in this portion of the county follow or parallel section lines, forming a grid pattern locally. Zoned agricultural, the Lockeford area is under no urbanization pressures. However, a mere four miles to the west is the central valley city of Lodi, population 32,000, famed as a grape and wine center, and Lodi is growing - having recently expanded its city limits, extending energy service to various new subdivisions, and constructing a new sewage plant adequate to service a population of approximately 45,000 people. Lodi has its own municipal electric utility - not subject to regulation by this Commission - obtaining its energy supply as a wholesale customer from Pacific Gas and Electric Company (PG&E).

The electric energy distribution system in the Lockeford-Lodi area is presently serviced by PG&E from four 60/12-kv substations (Victor, Colony, Tokay, and Lodi), as well as from a 12-kv distribution feeder from Lockeford Substation's 115/60-kv Transformer Bank No. 1. In their turn, the four above-named substations receive energy supplies from the Lockeford Substation which obtains its supply from PG&E's Bellota 230/115-kv substation via three 115-kv lines and from PG&E's Valley Springs 230/60-kv substation via a 60-kv transmission line 27.6 miles in length. The maximum megawatt (MW) capacity of the above-described existing distribution system is 146.25 MW.

During the years between 1966 and 1974, the energy load required to supply the Lockeford-Lodi area grew at an annual rate of 9.15 percent. At that growth rate, demand projected through 1980 indicated to PG&E that energy requirements would reach 155.9 MW by the summer of 1979, overloading the three 115-kv transmission circuits from Bellota Substation to Lockeford Substation, as well as both the Lockeford Substation 115/60-kv transformer bank and the Bellota Substation 230/115-kv transformer bank. In order to eliminate potential overloading projected in 1979, 1/ PG&E mu

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1/ The staff and PG&E project different levels of area peak demand; PG&E's projection in its EDS being based upon historic growth rates up to 1974. More recent data indicated that the former growth rate might not be realized. In staff conferences with PG&E in August 1976, errors in the Table of Historic Growth were identified and the impact discussed. PG&E conceded that these changes could indicate a deferral of critical peak demand shortage to 1980. On the other hand, the staff believes the projects completion could be deferred until possibly as late as 1981, especially were legislation passed making municipal utilities conform to some of the expansion and use constraints imposed upon public utilities subject to Commission regulation. Certainly of some consideration in this regard are the requirements of the city of Lodi. To a considerable extent this project is designed to supply power needs of the city of Lodi. The staff critically points out that Lodi, exempt, for example, from the provisions of the Miller-Warren Lifeline Act, has different legal restraints on its use of electric power than do the retail customers of PG&E. Lodi asserts that it has an active energy conservation program and a rate structure similar to that of PG&E. Meanwhile, however, PG&E has a fundamental obligation under the provisions of Public Utilities Code Section 451 to provide its customers, including municipal wholesale customers, with an adequate and continuing supply of electrical energy.

acquire capability to transmit additional energy into the area. Accordingly, by this application it seeks authority to construct and operate 3.9 miles of 230-kv transmission line through agricultural and pasture lands from its Rio Oso-Bellota 230-kv transmission line to the Lockeford Substation and to substantially expand the Lockeford Substation on Kettleman Road from 1.55 acres to 8.8 acres. The initial construction phase would include addition of two 230-kv circuit breakers, a 230- to 60-kv transformer, and a 60-kv regulator, as well as addition of a control building on the Kettleman Road facility.[2/] Cost of this initial phase is estimated to be $2,400,000 and would require approximately eleven months for completion. The transmission line to be erected and extended from the existing Rio Oso-Bellota 230-kv transmission line to the Lockeford Substation would be supported on sixteen to twenty-two 90- to 140-foot tall lattice steel towers. The transmission line would be routed due west, parallel and adjacent to Smith Road, to the junction of Smith and Tully Roads, thence southwestward for 1,500 feet before continuing westward parallel and adjacent to the two existing 115-kv transmission lines to the Lockeford Substation (see map - Appendix B). Tower-to-tower span lengths of the new transmission line would range between 1,000 to 1,400 feet over a nominal 100-foot right-of-way. The cost of the proposed transmission line, including right-of-way, is estimated to be $795,000, and construction would require approximately four months. When brought to full utilization[3/] the completed project would furnish 600 MW of capacity to the Lockeford-Lodi area and would provide a reliable energy supply to all existing and anticipated customers in that area of San Joaquin County.

2/ Transformer bank capacity will thereafter be added as required by area load growth.

3/ When the 230-kv load at Lockeford exceeds approximately 300 MW, a second subconductor will be added to the 230-kv tower line circuits, and the Rio Oso-Bellota 230-kv tower line circuits will be reconnected as a single circuit looped through Lockeford Substation, bringing the full load capacity up to 600 MW of load from the proposed 230-kv transmission line.

Notice of the filing of this application was published in the Commission's Daily Calendar of July 10, 1975. No objections to the granting of the sought-after authority have been received from any source. The project is not one exempted by the Guidelines for Implementation of the California Environmental Quality Control Act (CEQA) of 1970 (see California Administrative Code, Title 14, Division 6). In the mistaken belief that it was the "Lead Agency", the San Joaquin County Board of Planning Adjustment included the project as an item on its agenda for November 12, 1975 and December 10, 1975 public meetings in Stockton. The Commission staff was present at these sessions. There was no public participation. Questions were raised by various county agencies relative to potential flooding of the transmission line route and of the substation site (both having been flooded in 1955 and 1958), traffic during the construction period, possible long-term effects of induced currents upon area residents, interference to radio-TV reception, and oxidant production. Following these sessions the county agency recognized its nonlead agency status.

On April 2, 1976 the administrative law judge assigned to this matter ruled (1) that the sought-after grant of authority might have a significant effect upon the environment, and (2) that this Commission was the lead agency for the project. In this latter regard, and in compliance with the provisions of Rule 17.1 of the Commission's Rules of Practice and Procedure, PG&E included an Environmental Data Statement (EDS) with its application at time of filing. As required by the State EIR Guidelines, copies of this EDS were distributed by the Commission staff to the responsible agencies involved.[4/] To a varied degree these responsible agencies made comment on the EDS. In its turn PG&E responded to these agency comments. All of this material was considered by the staff and is discussed in the Draft Environmental Impact Report (DEIR) issued by the staff and filed with the office of the Secretary of Resources on February 23, 1977. Notice to the general public of completion of the DEIR was accomplished pursuant to the provisions

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4/ The EDS was circulated for review to the agencies listed below: San Joaquin County Planning Department, San Joaquin County Public Works Department, Air Resources Board, Resources Agency, Department of Fish and Game, Department of Transportation, and city of Lodi.

of Rule 17.1(f)(8) of our Rules of Practice and Procedure by advertising in the STOCKTON RECORD, the LODI NEWS-SENTINEL, and the STOCKTON NEWS, all newspapers of general circulation in San Joaquin County, and by placement of copies of the DEIR in public libraries in Lodi and Stockton. Copies were also distributed to all public agencies having jurisdiction by law over the project, to state agencies having pertinent statutory authority or expertise according to the Resources Agency Guidelines, and to interested local agencies. Some of these responsible agencies returned comments on the DEIR. However, there was no public response. Accordingly, on September 26, 1977 the administrative law judge concluded that there was no public interest in a hearing on the DEIR, and directed the staff to proceed with preparation of a Final Environmental Impact Report (EIR), allowing opportunity for the applicant, responsible agencies, and the public to file exceptions and replies, and ruling that the application in all its aspects would proceed on an ex parte basis.

The Final EIR was completed and submitted to the State Clearinghouse on October 26, 1977. The twenty-day period provided under provisions of Rule 80 of our Rules of Procedures during which exceptions could be filed lapsed without receipt of any comment.

Discussion

PG&E has a fundamental obligation under provisions of Section 451 of the Public Utilities Code to "...furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public." While there may be some small difference of opinion between PG&E and the staff as to whether this project could be deferred beyond 1980 to 1981, it is reasonably clear that the existing energy distribution system serving the Lockeford-Lodi area will be inadequate to meet requirements within a short period of time, and that the additional capacity to transmit energy into the area proposed by this application will be needed. Certainly the requirements of the municipal utility of the city of Lodi to a considerable degree are responsible for this

approaching demand for additional energy.[5/] However, whether the municipal utility of the city of Lodi should be subject to the jurisdiction of this Commission insofar as time-of-use pricing, load management equipment, or other concepts are concerned is a matter for the legislature. Under present law PG&E is required to build these facilities in time to meetreasonably anticipated needs. Since existing capacity could be exceeded in June 1980 should transfers continue to be made out of system as they are today, we will not through delay risk impairing the safety, health, comfort, economy, and convenience of the people of the area, and will authorize PG&E to immediately proceed with construction.

PG&E initially comprehensively identified and discussed the major environmental factors involved in this project in the EDS submitted with its application. Subsequently, as mandated by the "State EIR Guidelines" (Guidelines) under CEQA, and Section 17.1 of this Commission's Rules of Practice and Procedure, these factors were further developed, commented upon, reviewed, and analyzed by PG&E, the staff, and the responsible agencies involved during the consultative process leading through the DEIR to preparation of the Final EIR. We have considered and reviewed these environmental factors, including the information contained in the Final EIR, along with other factors in arriving at our decision to approve the project application. Therefore, we are able to certify that the Final EIR has been completed in compliance with CEQA and the Guidelines. The major environmental factors involved in the project are summarized below as to their impact:

5/ The San Joaquin County General Plan to 1990 indicates that while the area generally will remain in agricultural use until at least 1990, the town of Lockeford will roughly double its population. On the other hand, the city of Lodi is growing and expanding now, and accounts for over half the megawatt summer load in the entire area.

Land Resources: There will be only minor inconvenience as a consequence of the transmission line to the western agricultural area and no effect upon the eastern grazing area. Construction of the substation will remove approximately 7-1/2 acres of vineyards and walnut orchards from agricultural use. Land use of the surrounding properties to the transmission line is not expected to change as a result of the project,6/ although use of the surrounding properties to the substation could change to more of a quasi-industrial usage.

Biological (Vegetation and Wildlife) Resources: The major disturbance will be during construction. There will be no significant permanent adverse impacts on the biological resources of the area.

Air and Water Resources: The project is expected to have negligible impact on the air and no significant impact on the water resources of the area. Noise derived from the proposed transformer banks at the substation may increase 12 to 18 percent, and would be audible 500 feet away at the nearest existing residence. However, PG&E will monitor sound levels and make modifications if necessary.

Future land use will be affected by the existence of the transmission line in that future residences may be restricted from the south side of Smith Road within the right-of-way, and the desirability of smaller lots along the north side of Smith Road will be reduced. Because of transformer noise levels immediately adjacent to the substation, the adjacent surrounding vineyard and orchard land would be undesirable for future residential development. Adverse impacts arising out of the project itself are mostly short term and the tradeoffs do not involve significant commitment of resources. In the event that a better method of transmitting large supplies of electrical energy is developed so that tower structures

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6/ There are no park or recreational areas located near any of the transmission line alternate routes considered, nor at the substation, and no recorded archaeological sites. A study made by Dr. Roberta S. Greenwood concluded that the substation site contained no potential for the presence of archaeological remains and that the proposed transmission line route was the alternative least likely to contain archaeological remains. There are no recognized historical sites within the proposed project boundaries.

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In considering a route for the proposed transmission line PG&E suggested and analyzed alternatives, including undergrounding.[7/] While in each instance the two alternative overhead routes considered would be less expensive,[8/] they were rejected as not conforming to existing land use patterns, creating small encumbered triangular pieces of residual property, necessitating removal or trimming oak trees on the routes, or in one instance, involving a potential archaeological site.[9/] The adopted approach to the enlargement of the

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7/ Placing the transmission line underground using existing roadways was investigated as an alternative for overhead transmission; however, the total costs to underground both the initial 1979 230-kv loop and the future 2nd phase to bring capacity from 400 MW to 600 MW, including the switching station (overhead to underground) at the transition site, would be $17,400,000 against $1,143,000 for overhead. In addition, traffic would be disrupted for approximately 18 months with trenching going on for 10 months of that period. The benefits of undergrounding in this agricultural area are clearly outweighed by the far lesser costs of overhead.

8/ $56,000 and $81,000, respectively, for the two alternate routes considered.

9/ Among the questions raised was that of why a third route was necessary at all - why not merely parallel the existing corridors or upgrade the existing lines? PG&E points out that the existing systems were built 61 and 27 years ago. To parallel the existing corridors would require 4.7 miles of new 230-kv line and 48+ acres of additional right-of-way on one line, and 7 miles and 72+ acres on the other. Costs, apart from rights-of-way, would be $968,000 or $1,442,000, respectively, against $550,000 for the proposed new line. Furthermore, the new 230-kv towers would be taller than the existing 115-kv towers, lessening visual quality.

To rebuild the existing lines to 230-kv, including a 230/60-kv transformer at Lockeford would cost $8,808,000. To rebuild the existing 115-kv line including a 230/115-kv transformer at Bellota substation and a 115/60-kv transformer at Lockeford would cost $12,552,000. Contrasting these costs to the $5,143,000 cost of the proposed line (all exclusive of rights-of-way) indicates the substantially higher costs for rebuilding.

While line loss of energy over the 3 routes considered differs, the smallness of the difference makes it of minimal consideration in selection of a route.

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While line loss of energy over the 3 routes considered differs, the smallness of the difference makes it of minimal consideration in selection of a route.

2. Under the provisions of Public Utilities Code Section 451 PG&E has an obligation to provide its customers with an adequate and continuing supply of electrical energy.

3. The projected growth in demand for electrical energy in the Lockeford-Lodi area of northeastern San Joaquin County by the summer of 1980 could well exceed the capacity of the existing electric energy distribution system to meet service requirements.

4. The proposed project is reasonably required to meet area demands for future reliable and economic electric service and to prevent foreseeable overloading.

5. The construction of the proposed project 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, parks, recreational, and scenic areas, or historic sites and building, or archaeological sites.

6. Adverse impacts resulting from the project will be mostly short-term, or involve minor inconvenience to agricultural operation and aesthetic visual impairments. Tradeoffs will not involve significant commitment of resources.

7. Mitigation measures proposed to be taken to minimize the impact are satisfactory.

8. The costs to parallel the two existing transmission routes, or to rebuild them, are substantially higher than those for the proposed project, and these alternatives do not offer aesthetic advantages sufficient to outweigh the substantially higher costs.

9. The alternatives to the proposed project, as well as the alternatives as to route, site, location, etc., within the scope of the project, are less favorable than those of the proposed site, route, and appended facilities.

10. The short-term inconvenience and long-term commitment of resources are substantially outweighed by the benefits to be derived from availability of an adequate, reliable, and stable electrical energy supply.

11. There are no irreversible environmental effects involved in implementation of this project.

12. The project will facilitate expected growth in the area.

13. Future project plans include addition of a second sub-conductor to the 230-kv tower line circuits, and reconnection of the Rio Oso-Bellota 230-kv tower line circuits as a single circuit looped through Lockeford Substation.

14. Under the conditions here existing there would be minor aesthetic disadvantage to the public in permitting this transmission line to be overhead rather than underground, and the economic advantages in overheading would be substantial.

Conclusions

1. Present and future public convenience and necessity require the construction and operation of this 230-kv transmission line and substation expansion.

2. 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.

3. The applicant is placed on notice that operative rights, as such, do not constitute a class of property which may be capitalized or used as an element of value in rate fixing for any amount of money in excess of that originally paid to the State as the consideration for the grant of such rights. Aside from their purely permissive aspect, such rights extend to the holder a full or partial monopoly of a class of business. This monopoly feature may be modified or canceled at any time by the State, which is not limited in any respect as to the number of rights which may be given.

4. The Commission certifies that the Final EIR has been completed and adopted by this Commission in compliance with CEQA and the Guidelines, and that it reviewed and considered the information contained in the Final EIR in arriving at this decision.

5. The certificate of public convenience and necessity for the transmission line and substation expansion should be authorized in the manner set forth in the following order.

O R D E R

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to Pacific Gas and Electric Company to construct and operate a 230-kv transmission line from its Rio Oso-Bellota 230-kv transmission line to its Lockeford Substation and to substantially expand its Lockeford Substation, with subsequent reconnection of its Rio Oso-Bellota 230-kv circuits as a single circuit looped through its Lockeford Substation. This authority is to include related appurtenances.

2. Pacific Gas and Electric Company shall file with this Commission a detailed statement of the capital costs of this transmission line and substation expansion project, together with related appurtenances, within one year following the date the project is placed in commercial operation.

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

The effective date of this order shall be thirty days after the date hereof.

Dated at San Francisco, California, this 31st day of MAY, 1978.

President

William Symons Jr.

Commissioners

Commissioner Robert Batinovich, 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.

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APPENDIX A
NOTICE OF DETERMINATION

TO: [X] Secretary for Resources
1416 Ninth Street, Room 1311
Sacramento, CA 95814

[ ] County Clerk
County of _____

FROM: (Lead Agency)
California Public Utilities Commission
350 McAllister Street
San Francisco, CA 94102

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

Project Title: Lockeford Substation and 230-kv Transmission Line	
State Clearinghouse Number (If submitted to State Clearinghouse): (SCH) 77030701	
Contact Person: D. B. Steger	Telephone Number: 415-557-0442
Project Location: Lockeford, CA	
Project Description: Application by Pacific Gas and Electric Company to California Public Utilities Commission for a certificate of public convenience and necessity to construct and operate a 230-kv transmission line from applicant's existing Rio Oso-Bellota 230-kv transmission line to its Lockeford Substation; to expand that substation, and subsequently reconnect its Rio Oso-Bellota 230-kv circuits as a single circuit looped through its Lockeford Substation.	

This is to advise that the California Public Utilities Commission (Lead Agency) has made the following determinations regarding the above-described project:

1. The project has been [X] approved [ ] disapproved by the Lead Agency.

2. The project [X] will [ ] will not have a significant effect on the environment.

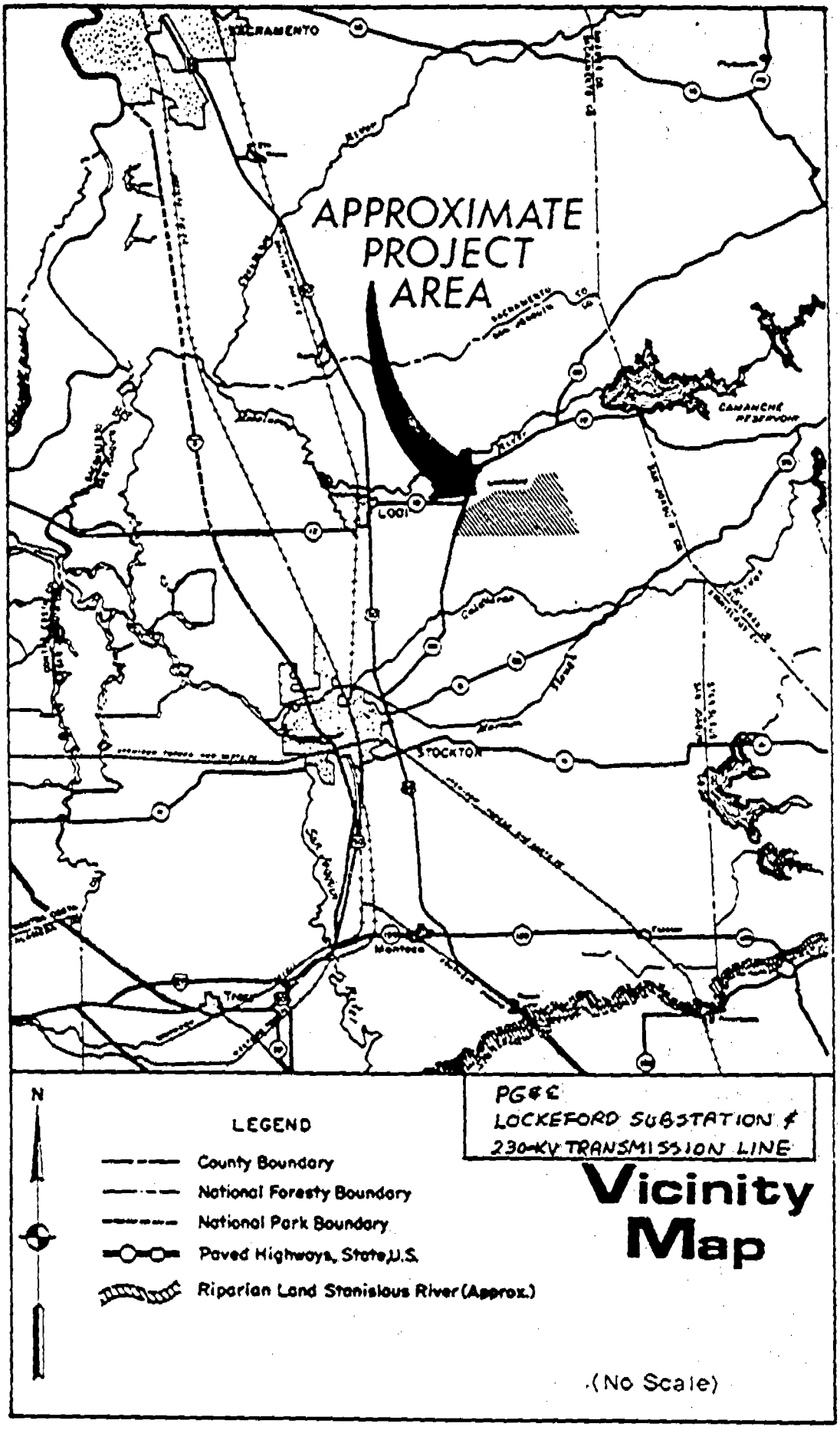
3. [X] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

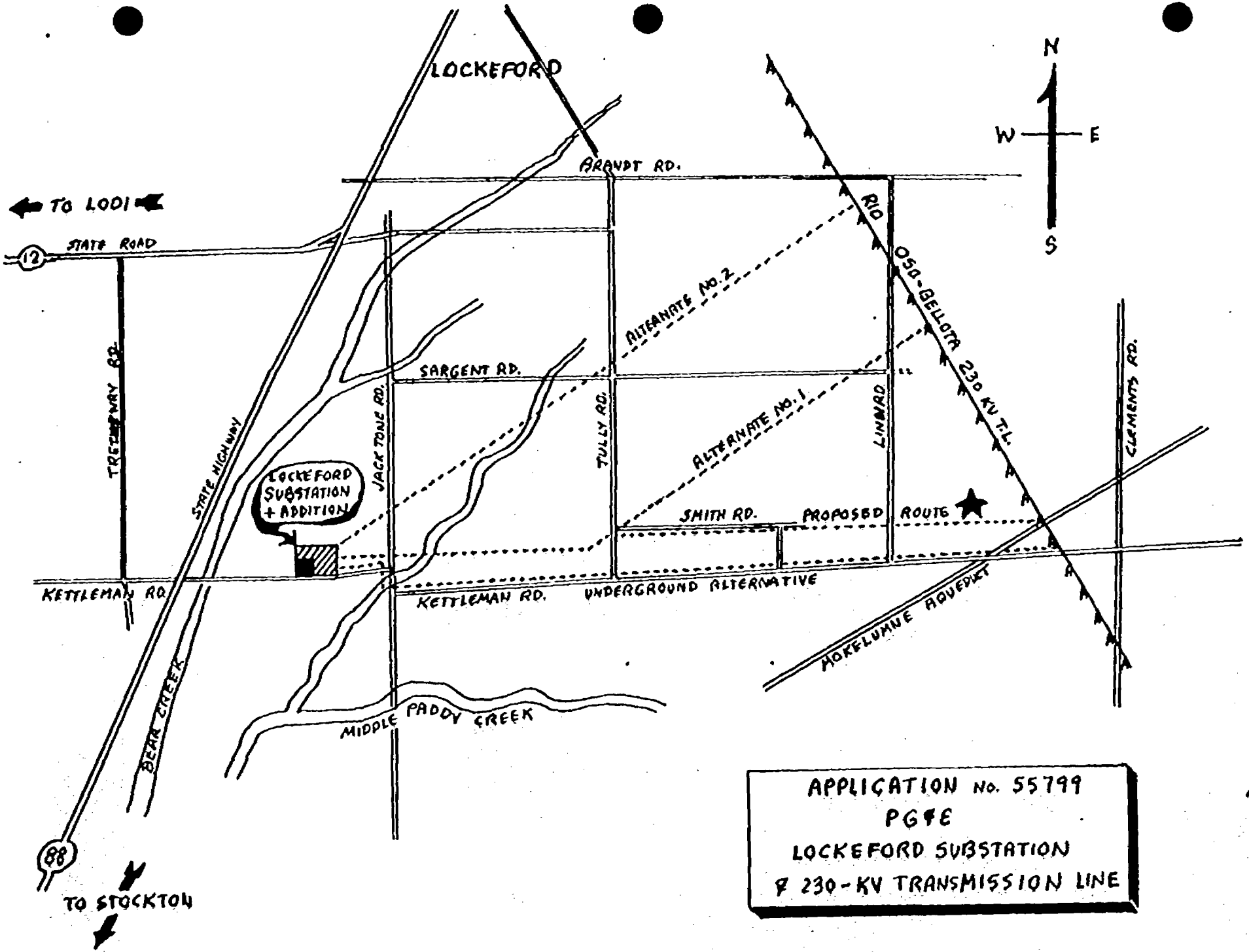
   [ ] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. A copy of the Negative Declaration is attached.

Date Received for Filing

Signature: Frederick E. John ✓
Executive Director
Title

Date


APPROXIMATE PROJECT AREA
SACRAMENTO
LODI
STOCKTON
COMANCHE RESERVOIR
N
LEGEND
County Boundary
National Forest Boundary
National Park Boundary
Paved Highways, State, U.S.
Riparian Land Stanislaus River (Approx.)
PG&E
LOCKEFORD SUBSTATION &
230-KV TRANSMISSION LINE
Vicinity Map
(No Scale)



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APPENDIX B
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