In the Matter of the Application of)
SOUTHERN CALIFORNIA EDISON COMPANY)
for a certificate that the present)
and future public convenience and necessity require or will require)
construction and operation by applicant of a single circuit 500 kV transmission line between Mira Loma and Lugo Substations.

Application No. 57222 (Filed April 11, 1977; amended May 4, 1977)

William T. Elston, Attorney at Law, for Southern
California Edison Company, applicant.
Covington & Crowe, by Samuel Crowe, Attorney at
Law, for Cities of Ontario and Rancho
Cucamonga; Fadem, Berger & Norton, by Gregory M.
Bergman, Attorney at Law, for B.R.S. Land
Investors, Lee H. Martin, and Wallace B. Mathewson;
Alan Stumpf, for the County of San Bernardino; and
Alfred J. Dubiel, for City of Los Angeles, Department
of Airports; interested parties.
William J. Jennings, Attorney at Law, for the
Commission staff.

<u>opinion</u>

Southern California Edison Company (SCE) seeks a certificate of public convenience and necessity for the project described in the title box pursuant to Section 1001 of the Public Utilities Code and the Commission's General Order No. 131-A. Also involved is a Environmental Impact Report (EIR) for which the Commission is the lead agency; Rule 17.1 of the Commission's Rules of Practice and Procedure governs this aspect of the case. The assigned Commissioner in this matter was Commissioner Sturgeon. In his absence, hearings in this matter were conducted by Administrative Law Judge Gilman in San Bernadino on March 28 and 29, 1978.

The Final EIR was prepared, filed, and distributed by the Commission staff on August 16, 1978. The conditions of submission after the hearing in this matter allowed for exceptions and replies to the Final EIR. None having been received, the matter was taken under submission on September 25, 1978.

The EIR was based on an Environmental Data Statement (EDS) originally supplied by the applicant. The staff then prepared a Draft EIR which was circulated; comments were received on that document from the Division of Mines and Geology, the County of San Bernardino's Environmental Improvement Agency, and the City of Ontario. Certain comments raised issues which were considered during the hearings and will be discussed at length in the body of this opinion.

This project is located in western San Bernardino County in southern California; it consists of approximately 36 miles of single circuit 500 kV transmission line running southwesterly from Lugo through the Cajon pass and across the Fontana-Etiwanda area to Mira Loma. The northern terminus is the Lugo Substation located approximately 10 miles south of Victorville in the Antelope Valley. The Mira Loma Substation is southwest of San Bernardino and southeast of Ontario. The proposed 500 kV line involves construction with three existing 500 kV lines to form two rearranged lines and one new line. It was originally hoped to construct the project for completion on June 1, 1980. It is estimated that the total time for construction will consume 16-1/2 months.

The transmission line will be supported by latticework towers of conventional design. There will be approximately 149 such towers including five extras added to reduce the height of the line within the vicinity of the Ontario International Airport. Electrical conductors suspended from the towers will have a non-specular finish and will be approximately two inches in diameter. Each of the three phases will utilize two subconductors in a "bundled" configuration. These conductors will be separated from the tower by "V" shaped strings of insulators, colored gray.

Where the line is not parallel to existing or planned lines, the right-of-way will be 200 feet wide with a transmission line in the center. When constructed in parallel with another transmission line, the combined right-of-way width will normally be 330 feet. However, in the San Bernardino National Forest the right-of-way width will be 380 feet.

Construction will require approximately 33.5 miles of new access roads including temporary roads. Where applicable, regulations of United States agencies will be complied with.

The total cost was originally estimated at \$28,161,000; the addition of the five extra towers will increase the cost to \$28,275,000. The staff's recommendation that 16 towers be painted as an aesthetic mitigation measure would add approximately \$88,000 more to the original cost, plus an unspecified amount for additional maintenance.

Need for the Proposed Project

SCE's two substations, Vincent and Mira Loma, provide the routing to deliver all of SCE's Pacific Intertie power and Eastern Desert coal power to the Los Angeles Basin. This power is now moved over two 500 kV lines running through the Cajon pass to the Lugo Substation. SCE originally projected that a third 500 kV line would be required by 1980 to provide reliable service. Since the filing of this project revised estimates have rolled that target date back to 1981. Under present loading conditions both existing lines could be forced out of service on most days and the company could nevertheless continue to provide service without dropping major load. In the immediate future such an outage would, however, require severe load shedding if it were to occur during peak consumption. Now this consumption level occurs on approximately 40 days per year. By 1981 similar load conditions can be expected on 100 days each year.

The existing transmission lines have experienced a higher than normal level of outages. There are at least 20 reported instances where one line was forced out of service for periods ranging from one minute to three days. There are six instances when both lines were out of service for periods ranging from two minutes to almost nine hours. None of these events required any load shedding because of loading conditions at the time of the occurrence. The staff has estimated that the forced outage rate for these existing lines is about four times the average for the remainder of SCE's 500 kV system. It estimates that this unusual outage level is due in part to fire in the San Bernardino National Forest, insulator contamination particularly in the Valley portion of the lines and proximity to Ontario International Airport.

The EDS states that the present total contract power delivery to SCE is approximately 2,600 MW; this delivery is projected to increase to over 3,300 MW by 1980. The major portion of this power will flow over the two existing Mira Loma to Lugo 500 kV lines. During the course of this proceeding, SCE has revised its estimates and now predicts that 3,299 MW of firm 500 kV sources will not be available until 1981. The major items in this additional supply are 468 MW for the Coolwater Combined Cycle Units 3 and 4 (1977-1980) and 300 MW of Northwest purchased power in 1981.

Thus, the original function for this project was to satisfy an immediate need for redundancy and, hence, reliability. Because of anticipated growth in peak load this additional capacity will become critical in the near-term future. SCE will soon be unable to cope with a simultaneous outage of both existing lines without shedding major load.

An additional benefit to be derived from the project surfaced during the course of the hearing. SCE now claims that the additional capacity will increase its capability to import power from neighboring utilities. To the extent that this imported power is less expensive than the power produced by SCE in its oil-fired generation units, savings will be produced which could be flowed through to consumers. SCE estimates that savings in a single one-year period could approximately equal the cost of the line itself. During the course of the hearing SCE also projected another 466 MW of demand to occur in the period from 1980 to 1981. SCE indicates that the presence of this new line will enable the company to continue to aggresively seek additional inexpensive power from other utilities.

None of the parties, including the staff, has introduced any evidence which significantly challenges SCE's projections concerning the need for this project. We will therefore accept and adopt SCE's position and find that the project is justified on both a reliability and cost-effectiveness basis.

Tower Color

The staff witness testified that painted rust-colored towers would be less noticeable when viewed against terrain than the dulled-galvanized surface proposed by SCE. SCE's witness indicated that the painted surface would not be less noticeable.

The extra costs of painting, even though comparatively small, will ultimately be borne by consumers; we would not require such an expenditure without a showing that the results will be appreciated by at least a substantial minority of potential viewers.

The record gives us no assurance on this point. Basically, each witness relied on his own subjective evaluation of what he saw, leaving it to us to determine, unaided, whether or not others would react in the same fashion.

Furthermore, the staff proposal can be found to create an extra hazard. A coat of paint will make more difficult for workmen to ground either themselves or de-energized lines. Even disregarding the increased likelihood of electrical shock, the need for earlier repainting will mean more exposure to falls. While the increase in both hazards may not be substantial, it is not so insignificant that it may be disregarded.

We are thus compelled to reject the proposal for painted towers. Without a showing that there will be an aesthetic benefit to a portion of the public, there is nothing of offset even a minor increase in hazard or cost.

Land Use Considerations

The policy of the County of San Bernardino favors concentration of transmission lines in a single right-of-way. However, this policy is not in conflict with our decision herein. The County recognizes that where overriding concerns are present duplicate parallel transmission rights-of-way are appropriate. In this instance, we have found that the necessity for the redundancy will, in the very near future, become a matter of serious public concern. If all three lines were consolidated on the same right-of-way in the populated Valley area, this redundancy would be seriously compromised. An accident or sabotage, for example, interrupting the two existing lines would, in all probability, also interrupt the third. Separation, as proposed by the company, will provide substantial assurance against forced service outages in SCE's service territory thus providing an overriding concern.

It is obvious that the prescence of two parallel rightsof-way extending through proposed development areas can create
additional problems for local planning agencies. The strip in
between may be appropriate only for rather specialized uses. This
in turn may cause land to be undeveloped for a substantially longer
period. We cannot conclude, on the basis of this record, however,
that development will be impossible or that lack of development is
necessarily an adverse environmental impact.

No one who is familiar with San Francisco's Golden Gate Park could hold that a strip of undeveloped land running between two developed residential areas is necessarily and always a blight on an urban scene. Thus, even if we adopt a worst-case projection that the right-of-way in the area between will never be commercially developed, we could not, based on this record, hold or find that this feature with or without a restriction on circulation patterns is necessarily an adverse environmental impact.

Furthermore, this projection may be unduly dismal. We believe that there may have been a substantial underrating of the ingenuity of the California real estate developer and his ability to turn a problem into a profitable opportunity. While the standard residential development may be difficult to fit in a strip lying between two parallel rights-of-way, we cannot necessarily conclude that all forms of residential, commercial, and industrial development are precluded. Such a determination would require a finding supported by the testimony of persons who have had experience in the promotion of projects involving specialized problem areas.

Nor are we discouraged about finding uses for the rightsof-way which are not only compatible with future community development,
but may actually improve the community's potential as attractive places
to live or work. It is not beyond the realm of possibility that the
rights-of-way can develop secondary commercial uses, such as for a
driving range or other recreational facilities which would provide
additional support for local economy as well as rate-reducing extra
income to the utility.

We can adopt a projection that there may be a reduction in the number of streets corssing SCE's rights-of-way. Unlike conventional developers, SCE does not need local permits or other authority in order to utilize and obtain economic benefits from the land within its rights-of-way. Consequently, it is under no compulsion to "contribute" land and money to the cities for the purpose of constructing streets. On the other hand, since its land, whether undeveloped or occupied by power lines, does not generate traffic, this difference in treatment may be economically justifiable.

In any case, however, the fact that a city may not have a ready source of funds to develop streets across a utility right-of-way does not appear to be a matter within the scope of CEQA or General Order No. 131 or an effect which this Commission can require to be mitigated.

First, the result is not caused by any activity which can be labeled a "project". The relevant activity is not the construction of the power lines, rather it is SCE's activities in purchasing real estate. There is no basis for a finding that any of these purchases occured subsequent to the enactment of CEQA. Even if some of the purchases were sufficiently late to be covered by CEQA, they are activities, preliminary to the construction of a line, which do not require the issuance of any grant or license from this Commission or any other regulatory body. Furthermore, it is questionable whether they are environmentally related or whether the impact is one that is subject to CEQA. The impact is basically economic and is a function of the fact that a utility does not need local authority for its activities. Nor is the impact a unique corallary of a utility function; any land owner, as long as he is willing to allow his land to remain in a state which does not require the exercise of local jurisdiction, can create a similar barrier to circulation.

Thus, we conclude that SCE can not be required, as a condition to the authority granted herein, to contribute money for the construction of streets.

SCE is, of course, free to voluntarily donate land and/or money for the construction of streets across its right-of-way. However, unless it can demonstrate that it was under compulsion or legal obligation to do so, the Commission may be unable to recognize such expenditures in calculating the company's rate base or expenses. We may be required to disallow the cost of land or any monies donated for such purpose to the same extent as we would be required to disallow donations to a charity. (PT&T Co. v P.U.C. (1965) 62 Cal 2d 634.)

SCE 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 in any respect limited as to the number of rights which may be given.

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.

Findings

- 1. The project is required by public convenience and necessity.
- 2. Pursuant to General Order No. 131-Series, the proposed facility:
 - a. Is reasonably necessary for future reliable economic and reliable service. If the facility is not constructed, SCE will not be able to avoid shedding major load when there is a simultaneous interruption of service on the two existing 500 kV lines, and will be less able to import supplies of low-cost power.

b. Will not impose an unreasonable burden on national resources, aesthetics, public health, and safety; air and water quality; park, recreational, and scenic areas; or historic or archeological sites as more particularly set forth in the Rule 17.1 findings which follow.

The Commission has carefully considered the Final EIR filed in this matter and, pursuant to Rule 17.1 (j)3, adopts the following additional findings:

3. Environmental Effects

The topography of the area will be altered through construction activities. Surface geologic features will be affected to a very minor degree by soil disturbance and erosion. Construction activities will result in the removal and trampling of vegetation. This adverse impact will be permanent in areas devoted to permanent access roads and tower footings. There will be a resulting alteration to a minor degree of existing ecological communities. Wildlife may be temporarily affected by construction activities and by loss of habitat. However, the area occupied by permanent structures and roads will be less than 0.10 percent of the total right-of-way area. There is one known archeological site consisting of a sparse scatter of stone tools and waste flakes and one fossil yielding site. The archeological site will be mapped and surface will be collected prior to construction. There will be short-term noise impact from construction activities. There will also be some noise emitted from the transmission lines particularly during inclement weather. line will result in radio interference within 300 feet of the edge of the right-of-way. The impact on land use in populated areas is significant but acceptable and unavoidable in order to accomplish the overriding public purposes of the project. The proposed transmission line will be visible from a number of locations. It is not considered, however, that the visual impact is so adverse as to require significant modification or mitigation.

4. Adverse Environmental Effects Which Cannot be Avoided If the Proposal is Implemented

The visual impact cannot be avoided if the project is implemented, except by undergrounding of the project.

- 5. Mitigation Measures Proposed to Minimize the Impact
- a. Voluntary contributions by SCE to cities for the purpose of constructing streets and highways across the right-of-way could mitigate the barrier effect of right-of-way land use. No such contributions will be required by this Commission.
- b. SCE will be expected to cooperate fully with local communities in developing supplemental uses for land within its rights-of-way which will produce beneficial effects for those communities.
- c. It has not been shown that painting towers will significantly mitigate the visual impact.
 - 6. Alternatives to the Proposed Project
- a. Undergrounding the entire line would be prohibitively expensive.
- b. SCE's proposal does parallel the existing circuits for most of the distance from Lugo to Nealy's Corner. If paralleling were used from there on, the present right-of-way would require expansion to accommodate another line and could interfere with existing residential and industrial developments. Alternative Route I would cause more habitat loss; the U.S. Forest Service found this route less acceptable on visual and environmental grounds. EDS Alternative No. 2 is substantially more expensive and is subject to some environmental criticism. The Tri-Community Advisory Committee suggested that the segment from Devore Freeway to Day Creek could be located closer to existing Los Angeles Department of Water and Power lines. This would remove the line from the areas most subject to early development in Rancho Cucamonga. However, it could reduce reliability because of the possibility of a catastrophic accident which would destroy all three lines.

- c. If we were to select the "no-project" alternative, SCE would be unable to render reliable service and meet community demands for electrical power to the extent that imported power and hydropower can be imported over this line. A no-project alternative would induce the burning of irreplaceable reserves of fossil fuel.
 - 7. Relationship Between Local Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity.

To the extent that this project allows the substitution of hydropower for fossil fuel power, it has a beneficial impact, avoiding irreversible consumption. There are no irreversible adverse impacts on the project except for the utilization of natural resources and labor associated with construction and operation.

8. Growth-inducing Impact

Construction and operation of the project will have minimal growth-inducing impact resulting from the addition of construction employees during the construction. The availability of more reliable power may have a minor additional growth-inducing impact in SCE's service area.

9. Safety

- a. By not painting any towers SCE will avoid a measurable hazard to its employees.
- b. By its modified proposal reducing the height of the project in the vicinity of Ontario airport, SCE will be able to avoid hazards to air traffic.

10. Environmental Assessment in the Aggregate

The adverse, unmitigable environmental impacts are not significant and are far outweighed by the beneficial impacts of the project.

The Commission hereby certifies that the Final ETR in this proceeding has been completed in compliance with CEQA and the Guidelines and that it has reviewed and considered the information contained in that ETR in reaching this decision.

Conclusions

- 1. The project should be authorized in the manner and to the extent set forth in the following order.
- 2. SCE cannot be compelled by this Commission to make contributions for the construction of streets through or across its rights-of-way.

ORDER

IT IS ORDERED that a certificate of public convenience and necessity is issued to Southern California Edison Company to construct and operate the Mira Loma-Lugo 500 kV transmission line together with related and supporting facilities as finally proposed by Southern California Edison Company in this proceeding.

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

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

, California, this 1964 Dated at San Francisco day of _________________

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APPENDIX A

NOTICE OF DETERMINATION

ro:	Secretary for Resources	PROM: (Public Agency)
	1416 Ninth Street, Room 1311 Sacramento, CA 95814	California Public Utilities Commission
	7,7024	350 McAllister St. San Francisco, CA
	County Clerk County of	94102
SUBJECT:		in compliance with Section 21108 or
•	21152 of the Public Resources Cod	le.
Project 1	Mira Loma-Lugo 500 kV	Transmission Line
	earinghouse Number (If submitted to 77112153	
Contact E	J. D. McMahon	Telephone Number (415) 557-1259
Project I	San Bernardino County. Description	, California
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Reference: California Administrative Code, Title 14, Sections 15035, 15083(f), 15083(h), 15085(i).