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Decision 82 01 50 JAN 5 1982

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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 two 500 kV transmission lines between Mira Loma and Serrano Substations to form the Mira Loma-Serrano 500 kV transmission line and the Lugo-Serrano 500 kV transmission line, and the looping of two existing 220 kV transmission lines into Serrano Substation to form the Chino-Serrano 220 kV transmission line, the San Onofre-Serrano 220 kV transmission line and the Serrano-Villa Park Nos. 1 & 2 220 kV transmission lines and the construction and operation of two additional 220 kV transmission lines between Serrano and Villa Park Substations to form the Serrano-Villa Park Nos. 3 & 4 220 kV transmission lines.	Application 59983 (Filed October 1, 1980)

William T. Elston, Attorney at Law, for Southern California Edison Company, applicant.
Brian T. Cragg, Attorney at Law, and Richard Tom, for the Commission staff.

O P I N I O N

In this application, Southern California Edison Company (Edison or applicant) seeks a certificate of present and future public convenience and necessity to construct and operate the following transmission lines:

1. Two 500 kilovolt (kV) transmission lines between Mira Loma and Serrano Substations,

an approximate distance of 19.2 miles. One of these lines will directly connect with the Lugo-Mira Loma No. 1, 500 kV transmission line at Mira Loma by a cutover program. By constructing the two new lines and rearranging the existing 500 kV line at Mira Loma, a Lugo-Serrano 500 kV line and a Mira Loma-Serrano 500 kV line will be formed.

2. As part of the project, Edison proposes to loop in two existing 220 kV lines into Serrano and to construct two 220 kV transmission lines from a point west of Serrano to the Villa Park Substation, a distance of approximately three miles. One of the Serrano-Villa Park 220 kV lines will replace the 220 kV line that is to be formed in 1984 between Serrano and Villa Park as part of the Devers-Valley-Serrano transmission line project proposed in Application (A.)59982. By looping the two existing 220 kV lines into Serrano, and constructing two 220 kV lines between Villa Park and Serrano, a Chino-Serrano 220 kV line, a San Onofre-Serrano 220 kV and four Serrano-Villa Park 220 kV transmission lines will be formed

A location map is attached as Appendix A.

In compliance with General Order (GO) 131-B, the application contains a Proponent's Environmental Assessment (PEA). Based on the PEA and the scoping meetings held in the area, and an independent assessment by our staff of the environmental impacts associated with applicant's preferred and alternate transmission line routes, a draft Environmental Impact Report (DEIR) was issued (Exhibit 10). Following the receipt of comments, a final EIR (FEIR) was issued on November 13, 1981.

A duly noticed public hearing was held before ALJ John W. Mallory in Anaheim on August 31, 1981 and the matter was submitted subject to the filing of proposed findings of fact and conclusions of law by Edison and our staff, which have been received. Evidence was presented on behalf of Edison by Joel H. Mallory and Mike Hall;

on behalf of our staff by Higino Paula and John Everingham; on behalf of Hills For Everyone by Claire Schlotterbeck; and on behalf of Live Oak Land Company by Gloria Ludwick. Statements on behalf of the Sierra Club/Angeles chapter conservation committee were made by Gordon Ruser and on behalf of Sea and Sage Audubon Society by Ferne Cohen in opposition to the construction of any transmission line along the east and west Weir Canyon corridor route.

Description of the Project

Witness Mallory, a lead engineer for the design of 220 kV and 500 kV transmission lines, presented data concerning the selection of the preferred and alternate transmission line routes, the design and construction of the 500 kV and 220 kV towers and other structures, and the estimated project costs for the proposed and alternate routes.

The witness testified that the initial and ultimate capacity for the 500 kV line is 1,000 megavolt amperes (MVA) for nominal operations and not less than 2,000 MVA for emergency conditions. The initial and ultimate capacity for the 220 kV line is 675 MVA for normal operations and not less than 1,350 MVA for emergency conditions.

The area of the proposed line construction is between Mira Loma Substation, located southwest of Ontario, and Serrano Substation, located in the northern part of the City of Orange. The Villa Park Substation also is located in the City of Orange. Mira Loma and Villa Park are existing substations, which will require modification as part of the project. Serrano is a new substation which will be constructed as part of the proposed Devers-Valley-Serrano project, if approved, or as a part of this project.

The transmission line project is proposed to be constructed in two phases. The first phase will be completed in 1985, and the second phase in 1988. The first phase is as follows:

A new 19.2 mile 500 kV line will be constructed between Mira Loma and Serrano on existing right

of way. The first 11.2 miles out of Mira Loma to the Telegraph Canyon area (San Bernardino County) will be double circuit construction (one side only strung with conductor). The remaining 8 miles from Telegraph Canyon area to Serrano will be single circuit construction.

The existing Chino-Villa Park and San Onofre-Villa Park double circuit 220 kV line (which is on the north side of Serrano) will be looped into the substation. One-half mile of double circuit 220 kV construction will be used.

Twenty miles of the existing single circuit Mira Loma-Villa Park No. 1, 220 kV transmission line from Mira Loma to a point northwest of Serrano will be removed to provide space for the 500 kV line construction.

Eight miles of the existing single circuit Mira Loma-Villa Park No. 2, 220 kV transmission line from Telegraph Canyon area in Chino Hills to a point northwest of Serrano will be removed to provide room for the second 500 kV line to be completed in 1988.

The removal items will be coordinated with several new construction phases starting with the Serrano-Villa Park 220 kV transmission line 1984 construction (Devers-Valley-Serrano project).

The following substation facilities will be installed during the first phase:

Additional 500/220 kV switchyard facilities (power circuit breakers, disconnects, etc.) to terminate the Mira Loma-Serrano 500 kV and three additional 220 kV lines will be installed at Serrano. (First 220 kV line to be constructed in 1984 under the Devers-Valley-Serrano project.)

Additional 500 kV switchyard facilities (power circuit breakers, disconnects, etc.) to terminate the Mira Loma-Serrano 500 kV line will be installed at Mira Loma.

The construction involved in the second phase (1988) is as follows:

The second 500 kV circuit between Mira Loma and Serrano will be added by stringing 11.2 miles on

the vacant side of the double circuit 500 kV (erected in 1985) towers and constructing 8.0 miles of new single circuit line on the existing right-of-way that also includes the 500 kV single circuit construction that was completed in 1985. By use of cutovers at Mira Loma, this line will form a Lugo-Serrano 500 kV transmission line.

A new 220 kV double circuit line on existing right-of-way from a point northwest of Serrano to Villa Park will be constructed to form the Serrano-Villa Park Nos. 3 and 4, 220 kV lines.

The remaining three miles of the two existing single circuit 220 kV lines from a point northwest of Serrano Substation to Villa Park Substation will be removed to provide space for the proposed double circuit 220 kV line construction.

The following substation facilities will be installed during the second phase:

A new 500/220 kV transformer bank and facilities to terminate one new 500 kV and two 220 kV circuits will be installed at Serrano. Facilities will be installed at Villa Park to terminate the Serrano-Villa Park Nos. 3 and 4, 220 kV lines.

No new telecommunications sites or facilities will be constructed in conjunction with this project. It will only be necessary to install additional channels to the existing system to provide the requirements for the new lines.

The following is a description of the alternate route:

The alternate route would carry two single circuit lattice steel transmission lines on a generally 330-foot wide right-of-way, 22.3 miles long. The first circuit to be constructed has a scheduled operating date of 6/1/85. The second circuit to be constructed has a scheduled operating date of 6/1/88.

The route begins at the northwestern corner of Mira Loma and heads 1.4 miles due west, crossing Haven Avenue, to an angle point just east of Archibald Avenue. After turning southeast, the route proceeds 3.0 miles, crossing Archibald Avenue, turning south

and crossing two 220 kV transmission line rights-of-way, Edison Avenue, Merrill Avenue, and the San Bernardino-Riverside County line, en route to an intersection with the proposed route. The Cucamonga Creek is paralleled for the last 1.6 miles before reaching the proposed route intersection.

From this intersection, the alternate route jumps 0.7 mile easterly along the proposed route to an angle point just south of Cloverdale Road. Then, the alternate route begins again by heading south through a slight angle for 1.2 miles, crossing Schleisman Road to a sharp angle point that will turn the route southwest.

The route then continues for 6.3 miles, crossing Archibald Avenue again, Hellman Avenue and the San Bernardino-Riverside County line, Cucamonga Avenue, Chino Creek (Prado Flood Control Basin) and State Highway 71 (Chino Freeway) to an angle point in the Chino Hills. Turning due south, the route travels 1.5 miles, reaching an angle point just after crossing Aliso Canyon. The route then heads southwest for 2.3 miles, crossing the San Bernardino-Orange County line, the Santa Ana River and State Highway 91 (Riverside Freeway) to an angle point in the Santa Ana Mountains. Turning further west, the route continues 3.7 miles, crossing Gypsum Canyon, turning an angle to the south and paralleling Weir Canyon to an intersection with Edison's existing 220 kV transmission line right-of-way. After crossing the existing 220 kV double circuit line, the route turns west and parallels contiguously the 220 kV right-of-way for the remaining 2.2 miles over mountainous terrain to Serrano.

The following tables set forth the estimated costs of the transmission line project for the proposed (preferred) route and the alternate route. There is no alternate route for the proposed 220 kV lines between Serrano and Villa Park, or for the 220 kV loop into Serrano. An alternate route is provided for the 500 kV line between Mira Loma and Serrano and between Lugo and Serrano.

TABLE

Mira Loma-Serrano 500 kV
Serrano-Villa Park 220 kV Project

Estimated Cost of the Proposed Transmission Line Project

Item	Mira Loma-Serrano 500 kV Line	Lugo-Serrano 500 kV Line	Serrano-Villa Park Nos. 3&4 220 kV Line	220 kV Loop into Serrano
Footings and Tower Steel	$13,871,400	$2,822,500	$1,483,900	$252,600
Conductor, Insul. and Hardware	4,727,200	5,859,100	1,276,900	252,500
Roads and Trails	112,700	73,500	18,600	-0-
Engineering	534,700	134,900	170,600	24,000
Total Escalated Work Order Cost	19,246,000	8,890,000	2,950,000	529,100
Grand Total Escalated Work Order Cost		31,615,100		
Division Overhead	778,000	324.400	96,100	14,300
Allowance During Const.	984,500	291,000	41,500	4,600
Misc. Construction Expenditures	3,259,900	1,500,100	495,900	88,500
Supply Expense	151,300	184,800	61,400	13,500
Tool Expense	142,800	59.500	17,600	2,600
Total Element Costs	24,562,500	11,249,800	3,662,500	652,600

Grand Total, All Trans. Lines	$40,127,400
Grand Total, Substation Additions	38,615,000
Grand Total, Telecommunications	60.000
Grand Total, Rights-of-Way	1,362,000
Grand Total, Transmission System	80,164,400

TABLE 2

Estimated Cost of the Proposed Transmission Line Project With Mira Loma-Serrano 500 kV Alternate Route

Item	Mira Loma-Serrano Line (Alternate Route)	Lugo-Serrano (Alternate Route)
Footings and Tower Steel	$ 6,197,700	$ 8,015,500
Conductor, Insulator, & Hardware	4,586,700	5,932,600
Roads & Trails	339,600	221,500
Engineering	422,000	530,400
Total Escalated Work Order Costs	11,546,000	14,700,000
Division Overhead	469,400	583,100
Allowance During Construction	590,800	826,600
Misc. Construction Expenditures	1,956,100	2,488,100
Supply Expense	105,000	135,700
Tool Expense	86,100	107,000
Total Elements Costs	14,753,400	18,840,500

Grand Total, All Trans. Lines*	$37,910,000
Grand Total, Substation Additions	38,615,000
Grand Total, Telecommunications	60,000
Grand Total, Rights-of-Way (Alternate Route)	3,433,100
Grand Total, Transmission System with Alternate Mira Loma-Serrano 500 kV Route	80,020,000

*Includes 220 kV line cost (no change from Table 1).

There will be approximately 135 towers in the project. If the proposed route is followed, no new construction roads will be required, as the route follows existing transmission line routes. Helicopters will be used to string conductors, but helicopters will not be used for tower construction. The two 500 kV towers west of State Highway 71 near Chino Airport, seven towers in a 1.5 mile segment between a point 0.36 mile north of the San Bernardino-Riverside county line, and a point 0.23 mile west of Archibald Avenue will be modified to meet Federal Aeronautics Administration (FAA) standards so as not to exceed maximum height limitations.

The witness testified that the proposed route was selected instead of the alternate route for the following reasons:

1. With the exception of a one-half mile segment north of Serrano, the proposed route will use an existing transmission line right-of-way by replacing existing facilities with the proposed facilities and will not require the creation of a new transmission corridor. By contract, approximately 85% of the alternate route would require the establishment of an entirely new transmission corridor.
2. The access roads for the existing transmission line will be used, with a minimum number of new spur roads of about two miles. By contrast, approximately 17 miles of new access roads and 6.5 miles of spur roads would be required for the alternate route.
3. The visual impact of the proposed route will be less than that of the alternate route since it will parallel an existing transmission line for approximately 60% of its length and existing single circuit structures will be replaced with only slightly larger single circuit structures for the remaining portion of the route.
4. The proposed route is approximately 3.1 miles shorter than the alternate route.

Need for the Transmission Line

Edison's witness Hall, a supervising planning engineer, and staff witness Paula, a senior utilities engineer, presented evidence concerning the operational characteristics of the present transmission system and the proposed lines, and the need for the additional transmission capacity.

The witnesses agree that the proposed facilities will be required in the 1982-84 time frame for the following principal reasons:

1. To relieve overloaded facilities at Mira Loma Substation in the mid-1980s.
2. To provide transmission capacity needed for Edison-planned generation resources.
3. To increase interstate power transfer capability, enabling Edison to purchase a greater amount of economical energy to help hold down rates.

Edison's evidence shows the following:

Existing System

Edison's existing system serves over 3,200,000 customers, representing approximately 8,600,000 people, in an area of southern and central California totaling more than 50,000 square miles. The total electrical load within this area is approximately 13,000 megawatts (MW). About 80% of Edison's electrical load is located within the greater Los Angeles Basin area.1/ The area is a single large metropolitan area of about 3,000 square miles, with a total electrical load of approximately 14,500 MW. Approximately

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1/ The greater Los Angeles Basin (Basin) is that area bounded by the Pacific Ocean on the southwest, the Los Angeles/Ventura County line to the west, the San Gabriel and San Bernardino Mountains to the north, the San Jacinto Mountains to the east, and the San Diego County line to the south.

10,400 MW of the load in this area is served by Edison. 4,100 MW of load in this area is served by the Los Angeles Department of Water and Power and other local municipal utility agencies.

The Basin area is served by oil- and gas-fueled generating plants located within the Basin, mostly along the coast, and by power delivered from nuclear, coal, and hydroelectric resources located outside the Basin area. Edison is the leading oil-consuming utility in the nation with a consumption of more than 60 million barrels of oil and gas equivalent in 1980.

Resource Plan

Edison's future generation resource plan is designed to reduce oil usage through development of nuclear, nonoil purchases including coal, and renewable/ alternative resources including hydro, wind, geothermal, solar, and cogeneration. Planned resources and contractual purchases contained in Edison's Future Generation Resource Plan which will significantly increase power flows into Mira Loma Substation include about 900 MW by 1985, increasing to over 2,000 MW by 1988.

Projected Overloads

Power flow studies of 1985 conditions without the proposed transmission facilities, simulating only firm resources and contractual purchases, project overloads of 115% on Mira Loma transformers under single transformer outage conditions. In 1988, without the proposed Lugo-Serrano 500 kV line and Serrano-Villa Park 220 kV lines, transformer overloads above 100% would again occur at Mira Loma under single transformer outage conditions or outage of the Mira Loma-Serrano 500 kV line with only firm resources and contractual purchases on the system.

Functions of 500 kV Lines and Stations

Edison's 500 kV lines function to transport power in large amounts of "bulk power" into Southern California over long distances of several hundred miles. These lines carry power from Edison's own remotely located coal-fired generating plants, hydroelectric power purchased from the northwest, and a wide variety of other firm contractual power purchases and "spot market" economy energy purchases. The 500 kV lines also function as major interconnections between Edison and neighboring utilities.

The primary function of the 500/220 kV substations is to receive bulk power coming in on the 500 kV transmission lines, step it down to the 220 kV voltage level through transformers, and send it out on 220 kV lines for distribution around the 220 kV grid in the Basin area. There are three 500/220 kV substations which perform this function on the Edison system: Mira Loma Substation, Vincent Substation, and Devers Substation, which will be energized in 1982. Mira Loma carries two to three times the power into the Basin than either Vincent or Devers. By 1985, Mira Loma will receive approximately 55% of the power from the 500 kV transmission system while the remaining 45% is shared equally between Vincent and Devers Substations.

Reliability Criteria and Potential Overloads

Edison's transmission reliability criteria require that an outage of a single transmission or substation component will not interrupt service to customers nor load other components in excess of their normal thermal ratings, and that an outage of two transmission lines will not (1) cause a protracted interruption of major load which is defined as 400 MW or more, (2) cause line loadings on other system components in excess of their emergency thermal ratings, nor (3) cause uncontrolled cascading outages of additional electrical facilities.

Monthly peak loading of Mira Loma Substation averaged about 1,700 MW in 1979, increased to about 2,200 MW in 1980, and has averaged about 2,350 MW so far this year. The maximum loading reached in 1981 was 2,570 MW in June. The loading limits of the Mira Loma transformers already have been reached.

The two 500/220 kV transformers that will become operational at Devers in 1982 in conjunction with the Palo Verde-Devers 500 kV line will provide partial relief to the Mira Loma loading problem. In 1984, the planned installation of a 500/220 kV transformer at Serrano Substation in conjunction with the Devers-Valley-Serrano 500 kV line (A.59982) will provide partial relief to Mira Loma if that certificate is granted. By 1985, loadings at Mira Loma are projected to again reach a critical level.

Long-term exposure to overloads of the Mira Loma 500/220 kV transformers would jeopardize the continuity of service to a large portion of the Basin load area. Major relief to the Mira Loma Substation loading problem is needed by 1985.

The proposed project will provide the needed relief to the Mira Loma loading problem by 1985. Power flowing into the basin will be diverted away from the Mira Loma transformers into Serrano Substation. Under heavy power import conditions, the addition of the Mira Loma-Serrano 500 KV line reduces Mira Loma transformer loadings by a total of about 500 MW in 1985.

By 1988, increased flow of power into the Mira Loma-Serrano area from remote generation resources will cause the overloading of the Mira Loma 500/220 kV transformers for single transformer and single line outage contingencies. The Lugo-Serrano 500 kV line in 1988 will route power around Mira Loma to Serrano, thus reducing Mira Loma transformer loadings to acceptable levels. The Lugo-Serrano 500 kV line also provides a third 500 kV line connection to Serrano (provided A.59982 is approved) coincident with initial operation of the second 500/220 kV transformer at Serrano. This third line will avoid the loss of 2,000 MVA of overloadings of Mira Loma for a double line outage.

By 1983, each of the Mira Loma-Villa Park 220 kV transformer lines would be exposed to overload beyond its emergency rating for an outage of the other line and both would be exposed to overloads beyond their emergency ratings for outage of the Chino-Mira Loma Nos. 2 and 3 lines, which are constructed on common towers. The proposed project is to dismantle the overloaded Mira Loma-Villa Park Nos. 1 and 2 220 kV lines in 1983 to be replaced by the proposed 500 kV lines. Without the proposed 500 kV facilities, both 220 kV lines would have to be rebuilt.

If the 500 kV construction is approved, the 220 kV transmission system between Serrano and Villa Park Substations will need to be strengthened. The proposal to loop existing San Onofre-Villa Park, and the Chino-Villa Park 220 kV transmission lines and the construction of the Serrano-Villa Park #3 & #4 220 kV transmission lines will provide the strength required in the 220 kV system.

Increased Transfer Capability

One of Edison's major objectives with the proposed project is to increase the power transfer capability of the 500 kV transmission system. The benefits of increasing the capability of the transmission system are the ability to increase power purchases (including both firm contractual energy purchases and economy energy purchases), increasing the capability for power pooling (which allows a more economical operation of regional generation facilities and increased reserve sharing), and improved reliability and system performance for major disturbances.

Economy Energy Purchases

Generally, Edison has experienced a 25-30 mills/kWh savings by purchasing economy energy rather than generating with oil. Most of the generation planned and under construction by other southwest utilities is base load generation designed for operation at or near full load capacity during all hours that the generating units are available. During off-peak hours and seasons (which exist the majority of the time) these utilities have and will continue to have inexpensive energy to sell.

Based on Edison's short-term forecast and the planned addition of these new base load generating plants throughout the southwest during the 1980s, it is expected that substantial amounts of economy energy will be available for purchase by Edison.

The proposed facilities in this application together with construction of the Devers-Valley and Valley-Serrano 500 kV lines of A.59982 will increase the transfer capability of Edison's eastern interstate 500 kV transmission system by approximately 500 MW. The 500 MW transfer capacity will be available to Edison to import economy energy to Southern California.

The Commission staff generally concurs with the reasons advanced by Edison to show the proposed project is needed. The staff exhibit contains the following information:

Reliability - Mira Loma Substation

The staff study exhibit shows that Mira Loma Substation has a safe capacity of 2,232 MW; Mira Loma has already

exceeded that loading, having experienced a peak load of 2,640 in 1980. The installation of a 500 kV line from Mira Loma to Serrano would raise the reliable load at Mira Loma because 1,000 MW would be shunted to Serrano. If this line is constructed, reliable overload conditions at Mira Loma would not be exceeded before 1991, and physical overload conditions would not occur until after 1996. The staff report states that the projects as proposed will meet all applicable Edison reliability criteria.

The staff report also indicates that Mira Loma has grown too large for substations in its service; the rated capacity of the seven substations served by Mira Loma is 1880 MW. The proposed 500 kV and 200 kV project would permit Mira Loma to serve additional substations and would reroute the input power from Mira Loma to another 500 kV substation.

Network Reliability

The staff report and Edison's evidence shows that the addition of a 500 kV link between Mira Loma and Serrano and the addition of 220 kV lines between Serrano and Villa Park will improve the reliability of Edison's transmission network. This will permit the transmission network, as a whole, to transport more energy.

Economy Energy Purchases

The staff agrees that the project will be needed to provide transmission capability for Edison's alternate energy generation facilities to be constructed in 1988 and thereafter, and to transport spot economy energy purchases. Both of these resources are expected to increase.

FEIR

The FEIR contains descriptions of the project and the project's engineering features, construction procedures, and maintenance procedures. Its environmental analyses cover the physical environment; biological resources; cultural environment; visual resources; land use and transportation; socioeconomics; and public health, safety, and nuisance. The FEIR also contains a summary of environmental consequences and alternatives to the proposed action.

The summary of environmental consequences discusses unavoidable adverse environmental effects; irreversible environmental change and irretrievable commitment of resources; relationships between short-term uses of the environment and maintenance and enhancement of long-term productivity; and growth-inducing impacts.

The FEIR contains recommended mitigation measures for each of the major impacts identified in the report.

We find that the FEIR is a complete document that complies with applicable statutes and conclude that it should be adopted. The mitigation measures described in the FEIR are reasonable and will be adopted, and the order will direct Edison to comply with those measures.

The FEIR contains responses to written comments addressed to the DEIR. Certain FEIR responses indicate that the Commission should address the subject matter of the comments in its decision, which is done in the following paragraphs.

Comments on DEIR

At the hearing comments on the DEIR were made by Ruser on behalf of the Angeles chapter of the Sierra Club; David Myers and Schlotterbeck for Hills For Everyone; and Cohen for Sea and Sage Audubon Society. Written comments are addressed in full in the FEIR. Discussed below are the comments requiring our attention.

Weir Canyon

Ruser stated the Angeles Chapter Conservation Committee of the Sierra Club adopted a resolution recommending that the proposed 500 kV transmission line parallel the existing transmission line (proposed route) across Weir Canyon rather than turn northeast along the main canyon axis (alternate route). The Conservation Committee is opposed to any deviation from the proposed route, as the alternate route would cause visual and other impacts in Weir Canyon.

Cohen, chairman of the Sea and Sage Audubon Committee To Save Weir Canyon and coordinator of the activities to save Weir Canyon of the Sierra Club, stated that Weir Canyon is listed on the Orange County Master Plan of Regional Parks, and the feasibility of making the Weir Canyon area a park is under study by Orange County. Cohen asked that decision in this matter be delayed until after the study's expected completion date by the end of next year. It was explained that the California Environmental Quality Act (CEQA) requires a final decision within one year after the filing date of A.59983.

Chino Hills State Park

Myers and Schlotterbeck oppose the proposed route as that route will go through the center of the new Chino Hills State Park (Chino Hills). Myers pointed out that the California Legislature had recently appropriated $17.8 million to acquire land for Chino Hills. The objection primarily is to the visual impacts that would result from the higher towers for the 500 kV line that would replace the existing 220 kV line.

Schlotterbeck introduced Exhibit 12 which contains two alternate routes proposed by Hills For Everyone which would avoid parts of Chino Hills. The witness pointed out that the funds appropriated by the Legislature were only sufficient to purchase

land for the initial phase of the park acquisition program and that additional lands are planned to be acquired as more funds are made available.

Edison was authorized to submit late-filed Exhibit 15, which contains its analysis of the routes shown in Hills For Everyone's Exhibit 12. Exhibit 15 contains cost analysis of Hills For Everyone's alternate routes, discusses the present status of Chino Hills, and describes the potential environmental impacts that may be encountered on those routes.

Concerning the park status, Exhibit 15 states:

> Proposed Chino Hills State Park
>
> In the "Chino Hills Feasibility Study", dated April 1979, the State of California Department of Parks and Recreation (DPR) identified lands suitable for park purposes and delineated areas which should have priority acquisition status. It should be noted that "the feasibility study does not commit the Department to the planning, acquisition, approval or development of land or facilities identified within the study area". During the development of detailed land acquisition plans, there were some significant deviations from the original feasibility study.
>
> Phase 1 - 1,374 acres for which funding has been authorized and acquisition is underway.
>
> Phase 2 - 2,237 acres for which funding has been authorized and acquisition is underway.
>
> Phase 3 - These lands have only been proposed and acquisition has not yet been funded.
>
> Authorized funding for Phase 1 and Phase 2 acquisition is presently $17,800,000. Funding has not been authorized for Phase 3 acquisition.

Exhibit 15 indicates that the additional costs of the Hills For Everyone alternate routes compared with Edison's proposed

routes range from $5,547,000 to $9,898,000, depending upon whether single circuit or double circuit towers are constructed on the alternate routes.

Exhibit 15 also points out that a portion of one alternate route would traverse a housing development under construction; therefore, Edison selected for analysis a modified alignment for such route.

In order to ascertain the environmental impacts of the alternative routes as proposed by Hills For Everyone (and Edison modifications of one route) EDAW Inc., the contractor for preparation of the EIR, conducted field inspections and a literature search for cultural features. Its assessment of Hills For Everyone's alternate routes in the FEIR is as follows:

1. The physical environment for the alternate routes and Edison's proposed Alternative 1 are the same.

2. The impacts on biological resources are similar to Edison's Alternative 1, but two of the routes which do not require an additional crossing of the Santa Ana River may have less impact.

3. The impact on visual resources of the two northern alternatives would be considerably less because a new corridor crossing State Highway 91 and the Santa Ana Canyon would not be required.

4. Concerning land use, the FEIR states as follows:

   Land Use--General land uses for the additional alternatives are like those described for Alternative 1, with the surrounding area exhibiting mostly open space with some agricultural and residential developments. The Edison northern alternative presents the fewest conflicts with existing and proposed land uses. It is entirely within open space lands used for livestock grazing. The Hills' northern alternative

> appears to present the greatest conflict with land uses by traversing the Lomas de Yorba Development Area which is proposed for a combination of relatively high density residential, commercial and industrial uses. Housing units have already been built immediately north and northwest of Horeshoe Bend in an area crossed by those routes.
>
> The central portion of Hills' southern alternative also passes through the Lomas de Yorba Development Area and would create similar land use conflicts. At its eastern and western ends this alternative is within open space and rural use areas. The impacts associated with land use conflicts would be the same as those described for Alternative 1. Mitigation measures are similar to those for the proposed route.

The FEIR contains the following conclusions concerning Hills For Everyone's alternate route and Edison's modification:

> The Hills For Everyone's northern alternative is in direct conflict with the Lomas de Yorba development and would be an undesirable alternative.
>
> The Hills For Everyone's southern alignment would also have significant land use conflicts associated with it. In addition, it does not have the advantage of reducing potential biological and visual impacts.
>
> All alternatives pass through the proposed Chino Hills. Both Hills For Everyone's alternatives and the Edison modification pass through the park near the proposed primary access point, exposing views of the line to the maximum number of park visitors. The proposed route passes through approximately three and one-half miles of park; the Hills For Everyone routes pass through approximately one and one-half miles of park. However, the increased length along new rights-of-way will cause additional environmental impacts to undisturbed areas. Therefore, neither of the two Hills For Everyone proposals nor the Edison modification cause significantly fewer environmental impacts than the proposed route.

Based on the FEIR's analyses and conclusions stated above, and the additional costs associated with Hills For Everyone's proposed routes (or Edison's alternative), we conclude that the

proposed route would be preferable to any of the routes shown in Exhibits 12 or 15. We point out that tower access roads already are in place for the proposed route, as that route contains an existing 220 kV lines. The additional visual impact from the higher 500 kV lines is offset by the alleviation of potential biological, ecological, and other environmental impacts resulting from not having to create new tower roads within the confines of Chino Hills. Moreover, substantial additional construction and land acquisition costs will be avoided by using the existing 220 kV route through Chino Hills as proposed by Edison. The adoption of applicant's proposed routes also avoids Weir Canyon. Applicant's alternate Route 1 passes through Weir Canyon. Weir Canyon is now on the Master Plan of Regional Parks and is currently being studied by the County of Riverside.

Towers in Vicinity of Airports

The California Department of Transportation (CalTrans), Division of Aeronautics (Aeronautics) and the City of Chino commented on the location and size of towers adjacent to the Chino Airport. The United States Department of Transportation, FAA asks that Edison file with it the notice required by Federal Aviation Regulation Part 77 before construction begins concerning new construction or alteration of existing towers.

The FEIR describes on pages F-5 and F-6 the mitigation measures which are appropriate and acceptable for air space safety in the vicinity of Chino Airport. Those mitigation measures, which include design of towers to meet FAA required obstacle clearance criteria, are adopted. We also acknowledge the concerns expressed by Aeronautics, and we direct Edison to consult with Aeronautics concerning the lighting and obstruction marking of appropriate towers in the vicinity of Chino Airport necessary to enhance the visability of the potential hazard.

State Highways

The City of Chino states that any plan to upgrade lines crossing Highway 71 should address the future impact when the highway is upgraded to freeway status. CalTrans asks that it be contacted regarding upgrading plans and that Edison secure a permit from that agency. Also, CalTrans asks that certain procedures be adopted.

In response to CalTrans' comments, the following is adopted for facilities proposed within state highway rights-of-way:

1. Lines parallel to the highway should be placed outside of the state highway right-of-way, particularly controlled access facilities.
2. Transverse lines should cross the highway as near right angles as possible.
3. Proper precautions will have to be taken during installation of overhead lines to ensure protection of the traveling public.

We also adopt CalTrans' comments that Edison should undertake early and continuous liaison with CalTrans on proposed construction plans that could affect state highways, and that Edison obtain the required encroachment permit(s) prior to the start of any work within state highway rights-of-way.

Electromagnetic Effects

Steven Litwin of Corona objected to the project on the ground that it is hazardous to the environment. Attached to his comments is a transcript of the Columbia Broadcasting System "60 Minutes" program dealing with the asserted unhealthy effects of the electromagnetic fields of 750 MW transmission lines.

The FEIR states that the author of the EIR believes that it adequately addresses this issue and that the concerns expressed will be considered in this decision.

We have carefully reviewed the section of the FEIR dealing with this subject, and conclude that the discussion of

the effects of electric fields associated with current transmission lines and the effects of Corona discharge are adequate. That discussion indicates the scientific community differs in its opinion on these effects on humans, animals, and plants; and existing literature does not conclusively show that high voltage transmission lines are detrimental to animal or plant life.

The FEIR states that there is a limited and conflicting state of knowledge in the potential biological health effects of high voltage transmission lines. The limited data which could tend to show that electric and magnetic fields from such lines are contradicted by other experimental evidence. The available data are insufficient to show that high voltage lines will cause biological effects (see also Pacific Gas & Electric Company Lakeville-Sobrante 230 kV Transmission Line D.92864 dated April 7, 1981, memo page 23).

The FEIR also discusses the potential interference of high voltage lines with cardiac pacemakers. It concludes that, although possible, it is unlikely that pacemaker wearers would be adversely affected near the proposed 500 kV lines.

Appropriate mitigation measures for any potential hazards are set forth in the FEIR.

Fire Prevention

The California Resources Agency, Department of Forestry (Forestry) commented that a portion of the proposed route traverses a portion of a hazardous fire area within San Bernardino County. Forestry asks that Edison observe all fire laws and coordinate with local fire authorities during construction.

Edison will be directed to fully comply with all applicable fire laws and regulations. Edison should designate the person who will act to coordinate its fire prevention activities with fire authorities of jurisdiction.

Mitigation of Impacts During Construction

The construction plans presented by Edison appear to provide adequate mitigation measures of unavoidable environmental impacts. Edison will be ordered to adhere to its proposed mitigation measures and to report to the Commission staff at appropriate stages in the construction process. The mitigation measures proposed by Edison are as follows:

1. After the tower locations for the selected route are determined and plotted, the survey crew stakes the towers to locate the center position and footing locations.

   The Transmission Project Engineer along with representatives from the following organizations inspect each tower site.

   a. Transmission Division and Transmission Field Division, Power Supply Department (for operation and maintenance).

   b. Construction Engineering Department (for road and footing construction and tower installation).

   c. Geotechnical Engineering, Engineering Design Organization (for footing design, and road and tower location).

   d. Environmental Affairs, System Development Department (for biological and cultural resources impact). Tower surveys for biology are not performed in areas which do not have known significant sensitivity.

   e. Survey Section, R/W and Land Department (for locating tower sites in the field and restaking). If a tower location is found unsuitable, an alternate location is specified by the Project Engineer at the field meeting with concurrence by the other organization representatives.

   In addition, a 100% archeological/historical survey of the right-of-way will be completed by applicant. Significant cultural resources identified through these and the

previous surveys and subject to project impacts will be avoided if feasible. In circumstances where impacts to significant cultural resources cannot be avoided, appropriate measures to mitigate those impacts to acceptable levels will be undertaken by applicant.

2. As discussed in the PEA, no new main access roads will be required for this project; however, it will be necessary to refurbish approximately five miles of permanent main access roads and construct two miles of new spur access roads along the transmission line route. These roads will be constructed with proper drainage in accordance with applicant's standard specifications for transmission line access roads, which include requirements for roads on both publicly held and privately owned lands. All access roads will be constructed within the right-of-way, except where the topography dictates otherwise.

3. Upon completion of construction, any drainage deficiencies will be corrected to prevent future erosion, and cut and fill areas will be stabilized and restored to approximately their preconstruction condition.

4. All excavations, haul roads, access roads, waste disposal areas, and other work areas shall be maintained free from dust.

5. Tower assembly and conductor pulling will not require ground clearing except in areas where the terrain would so dictate. All trees and shrubbery which do not have to be cleared or removed for construction purposes will be preserved and protected. Trees and brush will be cleared only when necessary to provide electrical clearance, line reliability, or suitable access for maintenance and construction.

6. When work is to be performed in areas covered with flammable ground cover, every reasonable precaution against starting fires shall be used.

7. As each phase of construction is completed, all excess materials will be removed from the right-of-way and disposed in a manner such that the area will

be returned, as near as possible, to its pre-construction appearance. The debris will be deposited at sites designated by the appropriate governmental agency or at the nearest county or city dump when constructing over private lands.

Discussion

The record clearly demonstrates the need for the proposed project. No opposition to the project was presented at the hearing. The staff of our Utilities Division and Legal Division strongly support the project. The public safety, health, comfort, convenience, and necessity require the installation, maintenance, operation, and use of the project. The project does not compete with any person, firm, or public or private corporation in the public utilities business for furnishing or supplying electric service to the public in or adjacent to the territory in which the project shall be located.

The construction of the 500 kV portion of the project within the existing right-of-way of Edison's 220 kV transmission line would result in substantially less environmental impact than construction using the alternate routes in the PEA or those proposed by Hills For Everyone. The FEIR fully describes and supports the proposed route. There are no transmission lines, existing or proposed, which could provide transmission service of the type for which the project is designed. Edison's proposed route is found to be the most feasible and reasonable route and should be adopted. The mitigation measures recommended in the FEIR and referred to in this opinion have been designed to reduce project impacts and are adequate to protect the environment. We conclude that the project should be authorized subject to implementing the mitigation and monitoring measures in the FEIR, and in this opinion.

Project Costs

We are concerned that the estimated costs for this project, like other large-scale utility construction projects, may be substantially exceeded by cost overruns. Our concern is fully expressed in D.93785 of December 1, 1981, in which we authorized San Diego Gas & Electric Company (SDG&E) to construct its Eastern Connection 500 kV transmission line project. In that decision we required SDG&E to file with our staff current cost estimates (including all adopted mitigation measures) before commencing construction, on the basis that eventual rate base treatment of the project facilities will be limited to such current cost estimates.

To further ensure that only prudent levels of project expenditures are incurred, D.93785 directed the Executive Director to investigate possible cost-monitoring mechanisms for this project. The decision stated that his investigation should include the explicit consideration of a "milestones" approach to project cost monitoring, in which estimates of costs for the various phases of the project's development are secured prior to project construction and then actual costs for each phase are obtained as the project unfolds. Goal-oriented monitoring mechanisms such as this should provide greater incentives for utility cost control than existing procedures wherein our staff reviews the prudency of construction expenditures after a project is completed.

The procedures adopted in D.93785 should also be appropriate for this project and will be adopted.

Findings of Fact

1. Edison seeks authorization to construct two 500 kV transmission lines between Mira Loma and Serrano Substations, an approximate distance of 19.2 miles; and to loop in two existing

220 kV transmission lines from a point west of Serrano Substation to Villa Park Substation and to construct two 220 kV lines between Villa Park and Serrano.

2. By constructing the two new 500 kV lines and rearranging the existing 500 kV line at Mira Loma, a Lugo-Serrano 500 kV line will be formed.

3. By looping the two existing 220 kV lines into Serrano, and by constructing two 220 kV lines into Serrano, and constructing two 220 kV lines between Villa Park and Serrano, a Chino-Serrano 220 kV line, a San Onofre-Serrano 220 kV line and four Serrano-Villa Park transmission lines will be formed.

4. Serrano is a new substation.

5. Edison has only two substations (Mira Loma and Vincent) which receive bulk power in 500 kV transmission lines and step it down to 220 kV through transformers for distribution in Edison's 220 kV grid in the Basin area. Devers Substation will be in operation for this purpose in 1982.

6. Mira Loma carries two to three times more of the bulk power in the basin area than Vincent or Devers. By 1985 Mira Loma will receive approximately 55% of the power from Edison's 500 kV system, while the remaining 45% will be shared equally by Vincent and Devers.

7. Monthly peak loadings at Mira Loma averaged about 1,700 MW in 1979, increased to 2,200 in 1980 and has averaged about 2,350 MW in 1981. The maximum peak loading in 1981 was 2,750 MW in June.

8. Mira Loma Substation has been exceeding reliable load ratings since 1979 and may reach physical overload in 1985.

9. Power flows in Mira Loma Substation are expected to increase by about 500 MW in 1985, 2,000 MW in 1988 and 2,400 by 1992. Without construction and operation of the project described

in Findings 1 through 3, overloads of 115% on Mira Loma transformers are projected from transmission of firm resources and contractual purchases in the 1982-85 time frame.

10. The loading limits expected in 1985 have already been reached on several occasions in 1981. Long-term exposure to overloads of the Mira Loma 500/220 kV transformers will jeopardize the continuity of service to large portions of the Basin load area. The proposed Mira Loma-Serrano project will provide needed relief to Mira Loma in the 1985 time frame.

11. The completion of Units 2 and 3 of the San Onofre Nuclear Generating Station (SONGS) will decrease load flow through Mira Loma. However, even with Units 1, 2, and 3 of SONGS operating, Mira Loma is expected to reach maximum reliable load ratings by 1983.

12. With construction of the proposed 500 kV transmission line between Mira Loma and Serrano, reliable load ratings at Mira Loma would not be exceeded until 1991 and physical overload would be delayed until 1996.

13. With construction of the second proposed 500 kV transmission line between Mira Loma and Serrano, to connect with the existing Lugo-Mira Loma 500 kV line to form the Lugo-Serrano line, reliable load ratings at Mira Loma would not be exceeded until 1996 and physical overload be delayed until 2002.

14. Expected growth in load through the Villa Park Substation, to 1,150 MW in 1988, will require additional transmission capacity between Mira Loma and Villa Park.

15. Expected growth in load through the Villa Park Substation justifies the construction of four 220 kV transmission lines between Villa Park and the proposed Serrano Substation.

16. The construction of the 220 kV transmission lines between Villa Park and Serrano, in conjunction with the proposed looping

of the two existing 220 kV lines into the proposed Serrano Substation to form the Chino-Serrano and San Onofre-Serrano lines, will improve the capability of the 22 kV grid system in the Basin.

17. Economy energy purchases by Edison, of generation facilities in Arizona, Nevada, and other southwestern states are less costly than oil generation by Edison's plants in California. Edison expects that large-scale off-peak economy energy purchases can be made in the 1985-1988 time frame.

18. Construction of the 500 kV project will improve the transfer capability of Edison's transmission system and, thus, will permit it to purchase and transmit economy energy from out-of-state generation facilities.

19. The proposed project will reduce Edison's dependence on oil- and gas-fired generation.

20. The proposed project will enhance system transmission capability and system reliability.

21. The estimated cost of the project, including transmission lines and ancillary facilities, including substation equipment, is $80,164,400.

22. There are no transmission lines, existing or proposed, which could provide transmission service similar to the proposed project.

23. Edison's preferred route crosses the proposed Chino Hills.

24. For Edison's preferred route, the proposed Mira Loma-Serrano and Lugo-Serrano 500 kV transmission lines would replace two existing 220 kV transmission lines and would be constructed on applicant's existing right-of-way through the proposed Chino Hills.

25. Eight towers would be constructed in the proposed Chino Hills if the preferred route were built.

26. Reducing the height of the proposed towers in the Chino Hills would require construction of more towers and more access roads within the park, and would result in greater expense and greater environmental impact.

27. The alternative route identified as Alternate I in the FEIR crosses Weir Canyon, an area which is being considered for a regional park.

28. Construction of two single circuits instead of the proposed double circuit would reduce visual impacts of the proposal, but would require additional towers, additional stub roads, and a wider right-of-way.

29. The route proposed by Hills For Everyone will cross land selected for Phase II of the Chino Hills acquisition program, and, depending on the alignment, will cross either the Santa Ana River floodplain or a housing development currently under construction. Both of the alignments proposed by Hills For Everyone and Edison's modification of the proposal of Hills For Everyone will require acquisition of new right-of-way and will have greater environmental impact than the preferred route.

30. Edison's preferred route will have the least environmental impact of any of the proposed routes, and is the most feasible and reasonable route.

31. The route designated as Alternate I in the FEIR is estimated to be slightly less expensive than Edison's preferred route, but because Alternate I would be constructed on new right-of-way, its environmental impact is greater than the preferred route.

32. The proposed project, as modified by Edison, will limit the height of towers in the vicinity of the Chino Airport to the elevation of existing 220 kV towers.

33. Undergrounding of either the 220 kV or 500 kV lines is not an economically feasible alternative to overhead construction.

34. Mitigation measures required to minimize the environmental impact of the project, as set forth in the FEIR and in this opinion, are reasonable.

35. The proposed project is essential to meet the present and future public convenience and necessity.

36. The proposed project could have a significant effect on the environment; however, such effect is outweighed by the beneficial effects of the project.

37. Based on the analysis in the FEIR, the proposed route is the environmentally preferred route. This route is economically feasible and is adopted.

38. Exposure to electrostatic and magnetic fields in the project right-of-way will not induce detrimental health effects.

39. The Commission has reviewed the record, the FEIR of November 13, 1981, and the comments to the DEIR, and finds that the project, subject to the mitigation measures set forth in the FEIR and in this opinion, will not produce an unreasonable burden on natural resources, esthetics of the area in which the proposed facilities will be located, public health and safety, air and water quality in the vicinity of park, recreational, and scenic areas, or historical sites and buildings, or archeological sites.

Conclusions of Law

1. Edison should comply with measures listed in the FEIR and the preceding opinion to mitigate unavoidable environmental impacts.

2. Edison should observe all fire laws and should coordinate with local fire authorities during construction. Edison

should designate the person who will act to coordinate its fire prevention activities with fire authorities of jurisdiction.

3. Edison should comply with the following requirements with respect to facilities constructed within state highways rights-of-way:

a. Lines parallel to the highway should be placed outside of the state highway right-of-way, particularly controlled access facilities.

b. Transverse lines should cross the highway as near right angles as possible.

c. Proper precautions will have to be taken during installation of overhead lines to ensure protection of the traveling public.

4. Edison should undertake early and continuous liaison with CalTrans on proposed construction plans that could affect state highways, and Edison should obtain the required encroachment permit(s) prior to the start of any work within state highway rights-of-way.

5. Edison should file with the FAA the notice required by Federal Aviation Regulation Part 77 before construction begins concerning new construction or alteration of existing towers.

6. Edison should consult with the FAA concerning the placement, height, and design of transmission towers in the vicinity of Chino Airport, and should comply with all requirements of the FAA.

7. Edison should consult with Aeronautics concerning the lighting and obstruction marking of appropriate towers in the vicinity of the Chino Airport to enhance the visability of the potential hazard.

8. Edison should comply with measures listed in the FEIR to mitigate the electrostatic and magnetic field effect of the project.

9. Edison should undertake the site-specific mitigation measures to which it has committed, which are listed in the FEIR.

10. Edison should undertake all site-specific studies listed in the FEIR prior to construction.

11. The present and future public convenience and necessity require the construction and operation of the project.

12. The Commission certifies that the FEIR has been completed in compliance with the CEQA and the Guidelines under CEQA. We have reviewed and considered the information contained in the FEIR in reaching this decision. The Notice of Determination for the project is attached as Appendix B to this decision.

13. Potential environmental impacts have been or will be equally mitigated by project design, proposed construction and operation methods, modifications of the project during this proceeding, and by conditions imposed in the FEIR and this opinion.

14. The mitigation measures contained in the FEIR and in this opinion should be a required condition of our authorization.

15. Any remaining environmental impacts are outweighed by the beneficial effects of the project.

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

17. Under PU Code Section 1001, the transmission lines along the routes proposed in A.59983 should be authorized in the manner set forth in the following order.

18. All mitigation measures which can reasonably be implemented to reduce or avoid significant environmental effects have been identified and will be required by this order.

O R D E R

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to Southern California Edison Company (Edison) to construct and operate two 500 kV transmission lines between Mira Loma and Serrano Substations, to loop two existing 220 kV lines into Serrano Substation, and to construct two 220 kV transmission lines from a point west of Serrano Substation to Villa Park Substation, substantially as proposed in A.59983 subject to the mitigation measures recommended in the FEIR and described in the Conclusions of Law 1 through 13 of the preceding opinion.

2. Within 60 days, the Executive Director shall formulate and implement a procedure through which Edison will provide detailed preconstruction cost estimates (including mitigation measures) for evaluation by Commission staff.

3. The Executive Director shall evaluate the need for a construction cost-monitoring program prior to commencement of this project and shall implement such a program as he sees fit. His evaluation shall include the explicit consideration of a goal-oriented "milestones" approach to cost monitoring, wherein estimates of costs for the various phases of the project are compared with actual costs as the project unfolds.

4. Edison shall comply with all filing requirements for cost information and shall cooperate fully with the staff's subsequent evaluation efforts and with any cost-monitoring program that is developed.

5. The authorization granted in this decision shall expire if construction is not commenced within three years after the effective date of this order.

6. The Executive Director of the Commission shall file a Notice of Determination for the project as set forth in Appendix B to this decision with the Secretary of Resources immediately upon the exhaustion of administrative remedies by parties to this proceeding.

7. Within 30 days of completion of each phase of the project, Edison shall file with the Commission staff a report as to the implementation of the required mitigation program. The staff shall review that report and inform the Commission of any instances in which Edison fails to comply with the mitigation required herein.

This order becomes effective 30 days from today.

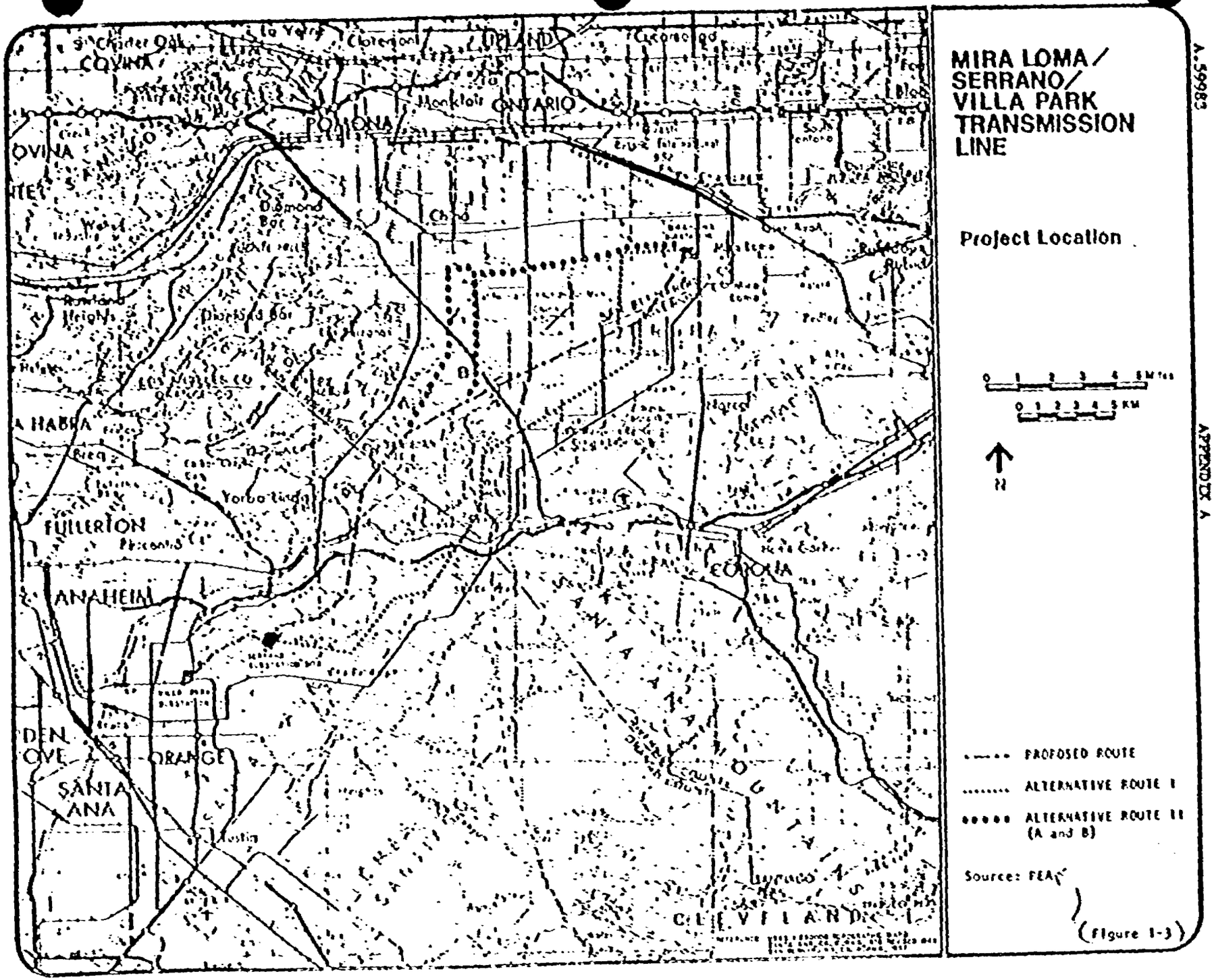
Dated January 5, 1982, at San Francisco, California.

JOHN E. BRYSON
President
RICHARD D. GRAVELLE
VICTOR CALVO
PRISCILLA C. GREW
Commissioners

Commissioner Leonard M. Grimes, Jr., being necessarily absent, did not participate.

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY.

Joseph E. Bodovitz, Executive Director


MIRA LOMA / SERRANO / VILLA PARK TRANSMISSION LINE
Project Location
0 1 2 3 4 5 Miles
0 1 2 3 4 5 KM
N
PROPOSED ROUTE
ALTERNATIVE ROUTE I
ALTERNATIVE ROUTE II (A and B)
Source: FEA
(Figure 1-3)
A.59983
APPENDIX A
COVINA
POMONA
ONTARIO
UPLAND
FULLERTON
ANAHEIM
CORONA
SANTA ANA
ORANGE

APPENDIX B

NOTICE OF DETERMINATION

TO: Secretary for Resources
1416 Ninth Street, Room 1312
Sacramento, CA 95814

FROM: 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

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Project Title

Mira Loma - Serrano 500 kV and Serrano - Villa Park 220 kV Transmission Line Project.

State Clearinghouse Number (If submitted to State Clearinghouse)

SCH 80110653

Contact Person

Richard Tom

Telephone Number

(415) 557-3241

Project Location

Mira Loma Substation; San Bernardino County to Villa Park Substation: Orange County.

Project Description

Two 500 kV transmission lines between Mira Loma substation and the proposed Serrano Substation; one double circuit 220 kV transmission line between Serrano Substation and Villa Park Substation; and the looping of an existing double circuit 220 kV line into Serrano Substation to form three new 220 kV lines.

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

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

   The EIR or Negative Declaration and record of project approval may be examined at 350 McAllister St., San Francisco, CA
3. Mitigation measures [X] were, [ ] were not, made a condition of the approval of the project.
4. A statement of Overriding Considerations [ ] was, [X] was not, adopted for this project.

Date Received for Filing _____

Executive Director

Date _____