

Decision 07-03-045 March 15, 2007

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

In the Matter of the Application of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity Concerning the Antelope-Vincent 500kV (Segment 2) and Antelope-Tehachapi 500kV and 220kV (Segment 3) Transmission Projects as Required by Decision 04-06-010 and as Modified by Subsequent Assigned Commissioner Ruling.

Application 04-12-008  
(Filed December 9, 2004)

(See Attachment C for List of Appearances.)

**OPINION GRANTING A CERTIFICATE OF  
PUBLIC CONVENIENCE AND NECESSITY**

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## **OPINION GRANTING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY**

### **I. Summary**

This decision grants a certificate of public convenience and necessity (CPCN) to Southern California Edison Company (SCE) to construct a transmission facility in the wind rich Tehachapi region of California. Pursuant to §§ 399.25 and 1001 of the Public Utilities Code,<sup>1</sup> this decision grants SCE the authority to construct the Antelope-Vincent (Segment 2) and the Antelope-Tehachapi (Segment 3) transmission line projects, (together the “Tehachapi-Vincent Transmission Project”)<sup>2</sup> in order to ensure access to wind power development in the Tehachapi area and to prevent overloading of existing transmission facilities. The facilities to be constructed pursuant to this decision will be located in Los Angeles and Kern Counties. Our finding of need for this Tehachapi-Vincent Transmission Project implements a series of earlier determinations made by this Commission regarding the need to construct transmission lines to the Tehachapi region to facilitate the Renewables Portfolio Standard (RPS) goals set forth in § 399.11, *et seq.*<sup>3</sup> Those Commission Decisions (D.) include, without limitation, D.03-07-033, D.04-06-010, and D.06-06-034.

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<sup>1</sup> Unless otherwise indicated, statutory references are to the California Public Utilities Code.

<sup>2</sup> The Tehachapi-Vincent Transmission Project has also been referred to as “Segment 2” and “Segment 3” of the “Antelope Transmission Project” or of the “Tehachapi upgrades.” Hereinafter, all the upgrades in the region needed to bring Tehachapi wind to the electric grid will be referred to collectively as the “Tehachapi Renewable Transmission Plan” or “TRTP”.

<sup>3</sup> No party to this proceeding disputes that the project is needed.

Section 399.25 directs the Commission to deem necessary those transmission facilities identified in applications if the proposed facilities are necessary to facilitate achievement of the State's renewable power goals. Section 399.25 also provides a "backstop" cost mechanism allowing the utilities to recover through retail rates any costs of the above facilities that are not approved by the Federal Energy Regulatory Commission (FERC) for recovery through transmission rates.

In D.06-06-034 we, among other things, adopted principles for applying the backstop cost recovery mechanism created by § 399.25. Noting our determination in D.04-06-010 regarding the magnitude and concentration of the renewable resources located in the Tehachapi area and identified in the California Energy Commission's November 19, 2003 "*Renewable Resource Development Report*," (CEC Report)<sup>4</sup> we concluded that the costs associated with high-voltage, bulk-transfer, multi-user transmission facilities proposed to access known, concentrated renewable resource areas are eligible for cost recovery under § 399.25. (D.06-06-034, *mimeo.* at p. 27.)

The Commission made a preliminary finding of need for the project in D.04-06-010. Affirming both D.04-06-010 and D.06-06-034, this decision finds, among other things, that the Tehachapi-Vincent Transmission Project is such a high voltage, bulk-transfer, multi-user facility that is needed to access a concentrated renewable resource area. Consequently, the project is eligible for cost recovery through retail rates under § 399.25, to the extent such cost recovery is necessary.

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<sup>4</sup> "Renewable Resource Development Report," CEC Publication Number 500-03-080F, November 2003.

Pursuant to § 1005.5(a), we adopt cost caps of \$63 million for Segment 2 and \$102.1 million for Segment 3. These costs are in 2005 dollars. SCE may apply for a higher maximum cost if it can provide adequate justification, and must apply for a lower maximum if it appears that actual cost will be lower than the adopted estimated by at least 1%.

The Tehachapi-Vincent Transmission Project would include the construction of 56.8 miles of new 500/220 kilovolt (kV) transmission. Segment 2, a 21.1 mile 500 kV line initially energized at 220 kV, and a 0.6 mile 220 kV line would connect the existing Antelope and Vincent Substations in Los Angeles County. Segment 3A, a 25.6 mile 500 kV line also initially energized at 220 kV, would connect the existing Antelope Substation to a new Substation One to be constructed in Kern County. Segment 3B, a 9.6 mile 220 kV line, would connect the new Substation One to a new Substation Two, also located in Kern County.

The Final Environmental Impact Report (Final EIR) for the Tehachapi-Vincent Transmission Project, was prepared by the Commission pursuant to the California Environmental Quality Act (CEQA).<sup>5</sup> The Final EIR finds that the authorized project has several significant environmental impacts that cannot be mitigated. We adopt the mitigation measures recommended in the Final EIR in order to reduce the environmental impacts to the extent feasible; however, some impacts will remain significant even after the implementation of mitigation. The approved mitigation measures are contained in Attachment A to this decision. The Commission also adopts the mitigation monitoring plan proposed in the Final EIR. SCE must comply with the adopted mitigation measures and mitigation monitoring plan as a condition of accepting its CPCN.

We certify that the Final EIR has been completed in compliance with CEQA. Our formal certification can be found in Section VII below.

Upon balancing the substantial economic, operational, legal, technological, social, and other benefits of the proposed Tehachapi-Vincent Transmission Project against the unavoidable environmental impacts, we find that the project should be approved, with the conditions contained in this decision. By this decision, we adopt the included statement of overriding considerations for the authorized Tehachapi-Vincent Transmission Project, as required by CEQA.

In addition, the EIR identifies an environmentally superior alternative that differs from the SCE's proposal. We are approving the project as proposed by SCE, rather than the environmentally-preferred alternative. This issue is discussed in more detail below.

## **II. Background**

### **A. Procedural History**

SCE filed this application pursuant to Ordering Paragraph 8 of D.04-06-010, which required SCE to "file an application seeking a certificate authorizing construction of the first phase of Tehachapi transmission upgrades consistent with its 2002 conceptual study and the study group's recommendation within six months of the effective date of this order."<sup>6</sup> That order was premised on Finding of Fact 18 of D.04-06-010 which found that the magnitude and concentration of renewable resources identified in the CEC Report justified a

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<sup>5</sup> Public Resources Code § 21000 *et seq.*

<sup>6</sup> By Ruling dated October 21, 2004, in Investigation (I.) 00-11-001, the assigned Commissioner directed SCE to file two separate CPCN applications for the Tehachapi

*Footnote continued on next page*



“first phase of Tehachapi transmission upgrades” to facilitate achievement of the renewable power goals established in Cal. Pub. Util. Code § 399.11 *et seq.*

SCE states that based on its obligation under §§ 210 and 212 of the Federal Power Act (16 U.S.C. § 824(i) and (k)) and §§ 3.2 and 5.7 of the California Independent System Operator (ISO) Tariff, it has determined that the project is needed to interconnect and integrate additional generation from several potential generators north of the Antelope Substation. The addition of a single 300 MW project northwest of Antelope would result in thermal overload of the existing Antelope-Mesa 220 kV transmission line. Segment 2 would prevent that overloading. In addition, Segment 2 would improve overall system reliability by increasing capacity between the Antelope and Vincent Substations, particularly in light of continued load growth in the Antelope Valley.<sup>7</sup>

SCE states that its request for a CPCN for Segments 2 and 3 of the Tehachapi Renewable Transmission Project is conditioned on the establishment of clear cost recovery mechanisms in advance of construction.

SCE sought a declaratory order from the Federal Energy Regulatory Commission (FERC) that the costs of Segment 2 and 3 are eligible for recovery in transmission rates. FERC found Segment 2 eligible for rolled-in rate treatment, but found that Segment 3 is not a network upgrade, but rather appeared to be a gen-tie, which under FERC precedent is not eligible for rolled-in rate treatment.<sup>8</sup>

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upgrades: one CPCN application for Segment 1 and one CPCN application for Segments 2 and 3.

<sup>7</sup> SCE Proponent’s Environmental Assessment (PEA), Volume 1, at page 2-2.

<sup>8</sup> SCE Opening Brief, p. 4, *citing* 113 FERC ¶ 61,143 (2005). SCE also argues that because FERC deferred ruling on SCE’s request for advance prudence, SCE may still be at risk

*Footnote continued on next page*

Accordingly, SCE requests that the Commission find that the prudently incurred costs of Segments 2 and 3 of the Tehachapi Renewable Transmission Project (that are not approved for recovery in network transmission rates by FERC) qualify for recovery in retail rates under § 399.25(b)(4).

The Commission stated in D.04-06-010 that “the need for Tehachapi upgrades has been developed sufficiently to allow us initially to determine for purposes of § 399.25(b)(1) that the first phase of Tehachapi network upgrades would provide benefit to the transmission network.” (D.04-06-010, *mimeo.* at pp. 16-17.) However, the Commission stated that:

... the need determinations in individual CPCN proceedings will relate to the particular projects and upgrades associated with that specific proceeding. In this decision, we are making an initial need determination overall with respect to the necessary contribution of Tehachapi wind in general to meeting RPS [Renewables Portfolio Standard] goals. Thus, these need determinations are separate and severable. (D.04-06-010, *mimeo.* at p. 17.)

The Commission also stated that “[t]he exact nature of the upgrades and the resource potential must still be established to determine if all of the resources can be developed in a way that is cost-competitive, taking into account transmission costs, and that Tehachapi projects are consistent with a best-fit procurement strategy.” (*Id.*, p. 16.) The Commission further stated that, “when a utility files a certificate application for Tehachapi upgrades, we will consider at that time the exact ratemaking treatment contemplated under § 399.25 and will

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for some costs for Segment 2, in addition to having no assurance of cost recovery for Segment 3.

also address project financing, as well as any additions to the record regarding need, as necessary.” (*Id.*, p. 18.)

SCE filed its application on December 9, 2004. PPM Energy submitted a response to the application, expressing general support for the project. Palmdale Hills Property and Anaverde, Inc., submitted protests, both addressing specific routes being considered for the project. On April 7, 2005, the Division of Ratepayer Advocates (DRA; at the time, it was called the Office of Ratepayer Advocates) filed motions for leave to late file protests to A.04-12-007 and A.04-12-008, with the protests attached. The Administrative Law Judge (ALJ) appropriately granted DRA’s request.

However, because the environmental studies in SCE’s Proponent’s Environmental Assessment (PEA) were not complete, SCE submitted an Amended Application and PEA on September 30, 2005. Palmdale Hills Property and Anaverde submitted responses to the Amended Application.

Opening Briefs were filed by SCE, DRA, Palmdale Hills Property, Anaverde, and Oak Creek Energy Systems, Inc. Reply Briefs were filed by SCE, DRA, and Oak Creek.

Finally, SCE filed a motion on January 15, 2007 to reopen the record to provide new information concerning SCE’s contracts for windpower in the Tehachapi area, and additions to the ISO’s interconnection queue in the region. No parties objected to the motion, which is hereby granted.<sup>9</sup>

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<sup>9</sup> Anaverde LLC filed comments in response to the motion, but did not oppose the motion, except to the extent that the new evidence would be used to support a route other than the Proposed Route. As the new evidence does not impact the route of the project, and no party challenged the accuracy of the evidence, we hereby grant SCE’s motion.

## **B. Scope of the Proceeding**

Consistent with the direction provided in D.04-06-010, in this proceeding we consider whether the proposed Tehachapi-Vincent Transmission Project is necessary to facilitate achievement of RPS goals based, in part, on the results of the RPS procurement process and the General Order (GO) 131-D considerations of alternatives to the proposed project. Pursuant to § 399.25(b)(1), we must determine whether the transmission project will provide benefits to the transmission network.

In this proceeding, we also address the requirements of §§ 1001, 1002 and CEQA. Section 1002 provides, in pertinent part, that the Commission, as a basis for granting any CPCN pursuant § 1001, shall give consideration to the following factors: (1) community values, (2) recreational and park areas, (3) historical and aesthetic values, and (4) influence on environment.

Pursuant to CEQA, the Final EIR that was prepared for the proposed project identifies the significant effects on the environment of the project, identifies alternatives to the project, and indicates the manner in which significant environmental effects can be mitigated or avoided. Under CEQA, the Commission cannot approve the proposed project or an alternative unless it mitigates or avoids any significant effects on the environment and makes specific written findings pursuant to Public Resources Code § 21081 (see Attachment B). Where the Commission finds that specific economic, legal, social, technological or other conditions make infeasible the mitigation measures or alternatives identified in the Final EIR, it may not approve the project or an alternative unless it finds that such effects are outweighed by the overriding economic, legal, social technological or other project benefits.

GO 131-D further prescribes that prior to issuing a CPCN, the Commission must find that the project is necessary to promote the safety, health, comfort, and convenience of the public. In addition, Section X of GO 131-D requires that the applicant describe the measures taken or proposed by the utility to reduce the potential exposure to electric and magnetic fields (EMFs) generated by the proposed facilities.

Issues surrounding general project cost-effectiveness, cost estimates and tradeoffs for alternative routes, right of way-acquisition costs, mitigation costs, and adoption of a cost cap are within the scope of this proceeding. In addition, SCE requests that the Commission issue a conclusion of law stating that, if the FERC determines that the facilities are ineligible to be “recovered through general transmission rates,” then the prudently incurred costs are eligible for recovery under § 399.25(b)(4). Therefore, the ratemaking mechanisms and procedures that the Commission may use to implement § 399.25 are also within the scope of this proceeding.

The assigned Commissioner required SCE to serve additional testimony addressing whether the Tehachapi-Vincent Transmission Project is a reasonable investment for California’s, and SCE’s ratepayers. Although the CEC Report indicates that Kern County (Tehachapi) wind alone may satisfy much, if not all, of RPS demand, the study did not address the operational cost of integrating Tehachapi wind resources into the system, the cost-effectiveness of wind resources compared to other renewable resources, or the likelihood of wind projects succeeding in the utilities’ RPS solicitations.

In order to grant a CPCN in the instant application, we must make an affirmative finding that the Tehachapi-Vincent Transmission Project is necessary

to facilitate the achievement of the RPS goals. In order to make such a finding, we must, at a minimum, consider the results of the RPS process to date.

Accordingly, the assigned Commissioner appropriately required supplemental testimony from SCE. This testimony addressed the progress of the RPS Program, including the number of offers or bids submitted by Tehachapi area wind developers, the number and content of informal requests or proposals received by the utilities prior to or between competitive solicitations, and whether any of the Tehachapi wind projects were successful bidders in the RPS or interim solicitations.

### **III. Project Need Pursuant to § 399.25**

#### **A. Background**

SCE seeks a CPCN pursuant to § 1001 and related sections. In order to award a certificate under § 1001, the Commission must find that the present or future public necessity require or will require construction of the project. SCE argues that it needs the project to deliver power generated by wind turbines that will or may be built in the Tehachapi area.

SCE asks the Commission to find that the proposed facilities are necessary to facilitate the goals of § 399.11 *et seq.*, which establishes the California RPS program. Part of that statutory scheme is § 399.25 which, in part, states that the Commission must find that a project is needed when it finds that the project is “necessary to facilitate achievement of” the RPS goals. The question before us is whether the proposed project meets this test.

#### **B. Project Need Based on the Record and SCE’s Arguments**

As SCE points out, no party to the proceeding disputes the need for the facilities. At the direction of the assigned ALJ and the assigned Commissioner,

SCE provided testimony to describe its prospects for purchasing windpower in the Tehachapi area.

The Tehachapi-Vincent Transmission Project will assist the achievement of RPS goals by facilitating the connection of several potential alternative energy projects to SCE's electrical system. As stated above, SCE cites §§ 210 and 212 of the Federal Power Act (16 U.S.C. §§ 824(i) and (k)) and §§ 3.2 and 5.7 of the California ISO Tariff for the obligation to interconnect and integrate generation projects. Because the project will facilitate the development of renewable energy resources in northern Los Angeles County and Kern County, it will assist in meeting the legislatively-mandated RPS goals required by § 399.11 *et seq.*

SCE identified potential projects that have applied to the ISO for interconnection, have participated in a collaborative study process, or have identified themselves to the CEC. The 500 kV portions of the Tehachapi-Vincent Transmission Project would be energized initially at 220 kV, which would be adequate to support moderate growth in wind generation in the Tehachapi area, such as ISO Queue Project 2 (300 MW), located northwest of Antelope. However, the use of ISO-approved interconnection using 500 kV design and construction standards would allow for upgrades that will eventually accommodate up to 4,400 MWs of potential wind generation located north of Antelope.

Making the line 500 kV-capable would avoid the need to construct, tear down, and replace multiple 220 kV facilities with 500 kV facilities in the future. The ISO determined that constructing the facility to 500 kV standards and energizing at 220 kV was necessary, considering the potential magnitude of additional renewable resources that may develop in the Tehachapi area, separate and above the 300 MW project mentioned above.

The Segment 2 upgrades would prevent overloading of existing facilities and, as a network facility, the upgrades would increase the transfer capability south of Antelope Substation to accommodate not only the 300 MW generation resource near Antelope Substation, but also additional generation north of the substation, along with increased customer demand in the Antelope Valley (Palmdale/Lancaster areas). The ultimate configuration of the proposed line addresses not only the current need for interconnection of specific resources, but also the future need to interconnect multiple facilities in the Tehachapi area. Thus, the line is consistent with our description in D.06-06-034 of “high-voltage, bulk-transfer, multi-user transmission facilities ... proposed to access known, concentrated renewable resource areas...” (D.06-06-034, *mimeo.* at p. 27.)

On January 10, 2007, SCE offered an affidavit from its Renewable and Alternative Power Department Manager, Gary L. Allen, providing the following updated information regarding the need for Segments 1, 2, and 3 of the Tehachapi Renewable Transmission Project:

- On November 15, 2006, SCE signed four energy procurement contracts, two contracts each with Caithness 251 Wind and Ridgetop Energy, totaling a minimum of 31.1 MWs to a maximum of 68.8 MWs of wind power that SCE will provide to its customers from the Tehachapi area.
- On December 21, 2006, SCE entered into a wind energy contract with Alta Windpower Development L.L.C, a subsidiary of Allco Financial Group Inc. This contract doubles SCE’s wind portfolio, and will provide a minimum of 1,500 MWs to a maximum of 1,550 MWs of power for SCE customers.<sup>10</sup>

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<sup>10</sup> SCE may request Commission approval of these contracts. Nothing in today’s decision prejudices those applications.



- The Alta Windpower contract and the expansion of the four contracts signed on November 15, 2006, totaling between 1,537 and 1,587 MWs, would utilize the Antelope-Pardee [Transmission Project], and/or Segments 2 or 3.
- Without Segments 1, 2, and 3, SCE can use none of this renewable generation to serve California load.
- These projects are part of the ISO transmission queue. Furthermore, 11 other items in that queue would require transmission in the Antelope area. The new contracts and the other items in the queue relying on Antelope transmission capacity exceed 4,000 MWs.

### **C. The Standard**

Normally, the Commission does not approve a new transmission project unless the present or future need is clear and certain. Section 399.25 recognizes that in order to achieve RPS goals, it may be necessary for the Commission to approve new transmission projects in anticipation of future renewable energy projects, and to provide unusual assurances of recovery of reasonable construction costs. These are extraordinary steps to take, and the Commission must use these tools with great care.

In order to demonstrate that a particular transmission line meets the standard in § 399.25, the Commission must find that it is “necessary to facilitate achievement” of the RPS goals. Merriam-Webster describes “necessary” as “inevitable,” “inescapable,” and “logically unavoidable.”<sup>11</sup> It is hard to imagine any project that could pass such a test. Yet, the statute requires that the line be necessary to “facilitate” RPS compliance. To Merriam-Webster, that would mean

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<sup>11</sup> Merriam-Webster’s Collegiate Dictionary, 10<sup>th</sup> Edition (2001), p. 774.

“to make easier” or “to help bring about.”<sup>12</sup> As long as a proposed line would connect the grid with an area capable of producing renewable power, it is hard to imagine that it would fail to clear such a low threshold.

Because § 399.25 exists in a broader statutory context – one that requires ambitious renewable portfolio development, reasonable rates, and environmental protection -- we must interpret this code section in a manner that strikes a reasonable balance. We faced a similar challenge in establishing the circumstances under which a project would be eligible for cost recovery through retail rates under § 399.25(b)(4). There we identified two types of transmission projects that could be needed to facilitate RPS compliance and were therefore eligible for cost recovery. Relevant here, those projects included “high-voltage, bulk-transfer, multi-user transmission facilities ... proposed to access known, concentrated renewable resource areas...” (D.06-06-034, *mimeo.* at p. 27.)

However, we also noted that the degree of certainty required for a showing of RPS need “will depend on the magnitude of costs at stake,” and that “in certain cases it will be necessary to consider the status of the RPS compliance to date...” (*Id.* at p. 28.) In that case, we noted that the Commission had already approved some cost recovery for Tehachapi-related studies because of the certainty of development of RPS-eligible resources in that area, but clarified: “We are unwilling to open the ratepayers’ pockets for transmission facilities in areas that do not rise to this level of certainty, since study and permitting costs for facilities in unexplored areas will be large.” (*Id.* at p. 30.)

Section 399.25 does not offer the only means of establishing project need. Historically, under § 1001, need for a transmission project could be established

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<sup>12</sup> *Id.*, p. 415.

based upon a project's contribution to reliability or the ratepayer savings it would produce. However, in order to rely on § 399.25 to establish the need for a project, we find that a proponent must demonstrate: (1) that a project would bring to the grid renewable generation that would otherwise remain unavailable; (2) that the area within the line's reach would play a critical role in meeting the RPS goals; and (3) that the cost of the line is appropriately balanced against the certainty of the line's contribution to economically rational RPS compliance. A showing that a proposed project fits into one of the two categories identified in D.06-06-034 is the first step. As that decision recognized, a Commission finding of necessity in a CPCN proceeding must necessarily consider additional factors.

#### **D. Discussion**

As we have recognized in our prior decisions, transmission to the wind rich Tehachapi area is almost unique in its ability to qualify under the standard set forth above because of the size of the wind resource in this area, the constraints on the existing transmission system, and the level of interest on behalf of both utilities and merchant providers aspiring to develop projects there. Wind provides one of the most economical sources of renewable power, and the Tehachapi area offers the largest wind resource in California.<sup>13</sup> It has the undeveloped potential of generating about 1,400 gigawatt-hours per year, with about 4,500 MWs of installed capacity.<sup>14</sup> To capture this potential, the lines must go where the wind blows – there is no other choice.

The project represents California's first effort, since adoption of the RPS, to build transmission to specifically develop a concentrated renewable resource

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<sup>13</sup> See, e.g., CEC Report, D.04-06-010, and D.06-06-034.

area. As D.06-06-034 explained, we adopted Resolution E-3969, allowing SCE to record and recover certain RPS-related study costs, “because studies had already demonstrated that Tehachapi is an especially rich resource area for renewables and development of that area is almost certainly necessary to meet the 20% RPS goal.” (D.06-06-034, *mimeo.* at p. 30.)

The record shows that without system improvements, SCE and others could not deliver growing amounts of wind power from the Tehachapi region. The Tehachapi-Vincent Transmission Project provides a portion of the infrastructure necessary to meet this need, and no one has proposed a meaningful alternative to the project. Meanwhile, industry commitment to develop the area for RPS purposes is significant; utilities have received winning bids from, and SCE has signed contracts with developers of wind projects, the output of which cannot be fully delivered without increased transmission capacity. In total, the wind projects in the current ISO queue for Tehachapi exceed 4,000 MWs in capacity.<sup>15</sup>

The Tehachapi-Vincent Transmission Project is a logical step in a series of transmission upgrades related to the potential wind projects in the Tehachapi area. It would accommodate output from an anticipated 300 MW wind facility northwest of the Antelope substation. It would increase the take-away capacity for power from Tehachapi through the Antelope substation and toward load

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<sup>14</sup> See, e.g., CEC Report.

<sup>15</sup> Exhibit 31, p. 2. For additional context, the ISO reports that it has received a total of 36 interconnection study requests since mid 2002 from renewable resource developers, totaling 4,112 MWs. The Tehachapi requests represent 19 percent of the proposed projects and 32 percent of the potential installed capacity. In addition, see the Affidavit of Gary L. Allen submitted January 10, 2007.

centers in Southern California. The present and expected load on the existing transmission facilities in the Antelope area does not allow for significant expansion of generation in the Tehachapi area. Accordingly it is necessary to increase the capacity of those facilities in order to receive the full benefits of the anticipated wind power development.

As set forth below, we adopt cost caps of \$63 million for Segment 2 and \$102.1 million for Segment 3. We find that this cost is justified based upon the high degree of the certainty we have that the project is critically needed to ensure development of RPS resources in the Tehachapi area. However, we note that the record in the CPCN proceedings for projects based on need pursuant to § 399.25 should more fully address the value of those projects to California ratepayers.

Based on the evidence in the record, we find that the project is necessary to facilitate achievement of the renewable power goals set forth in § 399.11, *et seq.* Therefore, construction of the Tehachapi-Vincent Transmission Project is deemed necessary pursuant to §§ 399.25 and 1001.

#### **IV. Alternatives to the Proposed Project and the No Project Alternative**

Our evaluation of whether SCE should be granted a CPCN to construct the Tehachapi-Vincent Transmission Project would not be complete without consideration of alternatives to the proposed project. Additionally, in accordance with CEQA requirements, the Final EIR evaluates the No Project alternative. In essence, the No Project alternative examines impacts if the proposed project, or a variation thereof, is not approved and built.

##### **A. Alternatives to the Proposed Project**

Transmission of wind power from the Tehachapi and Antelope Valley areas is currently restricted by limited capacity and reliability of the existing SCE

transmission system. As discussed in Section A.2 of the Final EIR, the existing Antelope-Mesa 220-kV transmission line is restrictive to wind power transmission due to limited capacity. This transmission line would overload with the addition of new power to the system, including that received from wind generation. Overloading of the Antelope-Mesa transmission line would cause widespread system instability and reliability issues.

Meanwhile, there is ongoing development of wind power generation projects in the Tehachapi region, north of Antelope Substation. Because SCE is obligated to allow connection of new wind projects to its system, upgrades must be implemented to mitigate identified overload of the Antelope-Mesa transmission line in order to maintain system reliability as required by the National Electric Reliability Council (NERC) and the Western Electric Coordinating Council (WECC) planning standards as well as the ISO planning standards.

The proposed Project would provide needed transmission capacity to mitigate the potential overload of the existing Antelope-Vincent 220-kV transmission line, and would reduce loading on the Antelope-Mesa 220-kV transmission line to within the allowable line conductor thermal limits.

The proposed Project would also increase transmission capability south of the Antelope Substation and allow power generated in the Antelope Valley and Tehachapi areas to be safely transferred, thus serving system load on the SCE grid.

The proposed Project would initially be operated at 220 kV in order to meet near-term transmission needs associated with ongoing wind development. However, the line would be built to 500-kV standards so that as renewable power loads increase, future overloading of transmission facilities would be

avoided. The ISO, which manages transmission grid reliability for the State of California, has approved the proposed project using a 500-kV transmission line. The CAISO maintains that the use of 500-kV standards for the proposed project will avoid the future need to construct and/or tear down and replace multiple 220-kV facilities with 500-kV facilities to meet growing power generation and transmission needs.

Moreover, as load grows due to increased electrical demand and power is received from other sources of generation, transmission overloading would occur in the vicinity of the proposed project. The Antelope-Mesa 220-kV transmission line could experience thermal overload if current power loads are increased, which is expected to occur as Southern California's population continues to grow at projected rates.

The proposed Tehachapi-Vincent project is needed now to accommodate wind generation projects that have applications pending before Kern County or Los Angeles County, or that may submit applications in the near future. However, the proposed project is also needed in order to increase reliability of the SCE transmission grid by increasing capacity to serve demand from planned development in the Antelope Valley.

Based on the foregoing uncontroverted evidence, we conclude that the Tehachapi-Vincent Transmission Project is needed to meet the demands of electricity customers south of Antelope Substation by increasing the capacity of the SCE system to a level that would accommodate proposed or planned wind energy projects, and there is no feasible alternative to the proposed project that can meet this need.

We accordingly conclude that, even with an increasing emphasis on energy efficiency and demand response, investments in transmission projects

such as the proposed Tehachapi-Vincent Transmission Project will be needed both to enable California to meet RPS goals as well as to assure the continuing reliability and safety of the transmission grid in Southern California as renewable power generation and SCE customer demands increase. We further conclude that there is no alternative to the proposed Tehachapi-Vincent Transmission Project that can meet these needs better than the proposed Tehachapi-Vincent Project.<sup>16</sup>

### **B. The No Project Alternative**

Under the No Project alternative considered in the Final EIR, the proposed Tehachapi-Vincent Transmission Project would not be built, and the existing transmission grid and power generating facilities would continue to operate. To serve the expected continued growth in electricity consumption and peak demand within California, additional electricity would need to be generated within California or imported into California by existing transmission facilities. In the No Project alternative, there could be supply-side actions, including accelerated development of conventional, renewable, and distributed generation, or other major transmission projects. Additional energy conservation or load management could also be pursued.

Under the No Project alternative, none of the associated project activities would occur and the environmental impacts associated with the proposed project, as described in Section C of the Final EIR would not occur, and the Tehachapi-Vincent Transmission Project's objectives, purpose, and need would

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<sup>16</sup> The route alternatives to SCE's proposed project are discussed in detail in Section V below.



remain unfulfilled.<sup>17</sup> For example, the 350 MWs of initial transmission capability, when energized to 220 kV, would not be added between the Antelope and Pardee Substations, and the improved system reliability and operating flexibility associated with the proposed project would not occur.

As discussed in Section D.3.5 of the Final EIR, in the absence of the proposed project, SCE would still be required to interconnect and integrate power generation facilities into its electric system, as required under §§ 210 and 212 of the Federal Power Act (16 U.S.C. §§ 824 [i] and [k]) and §§ 3.2 and 5.7 of the ISO's Tariff. Several wind generation projects either have applications pending before Kern County or are in the advanced planning stage and expected to submit applications in the near future. Due to their locations, these upcoming wind generation projects will need to interconnect to the SCE transmission system via Antelope Substation or some other new substation located in the vicinity to allow power to be delivered to load in the Los Angeles area. However, these wind generation projects cannot be interconnected to the SCE transmission system without additional transmission infrastructure north of Antelope Substation and an increase in transmission capacity south of the Antelope Substation. Transmission of wind power from the Tehachapi and Antelope Valley areas is currently constrained by the existing Antelope-Mesa 220 kV transmission line, which would be overloaded by the addition of new wind generation. Therefore, without upgrades to the existing system, as new wind generation facilities are added to meet RPS Program requirements and Southern California's growing power needs, SCE's system would experience

system-wide power flow and reliability problems due to overloading of the existing system, such as curtailed generation, thermal overload, and blackouts.

Under the No Project alternative, although connection to the transmission systems of other power utilities (such as PG&E or Los Angeles Department of Water and Power (LADWP)) is possible, this would not meet SCE's objectives for the Tehachapi-Vincent Transmission Project and would not satisfy the requirements of D.04-06-010.

Under the No Project alternative, the following scenarios related to the electric power system in Southern California can reasonably be expected to occur in the foreseeable future:

- Initial wind projects in the Antelope Valley and Tehachapi areas would be postponed or cancelled, as additional transmission capacity would not be available, or these proposed wind projects would have to find alternate means to connect to SCE's transmission system without compromising system reliability;
- The requirement of the RPS, which requires retail sellers of electricity such as SCE and PG&E to increase their sale of electricity produced by renewable energy sources to 20 percent by 2010 may not be achieved as access to renewable energy from the Antelope Valley-Tehachapi region would either not be provided or would be delayed;
- Other renewable energy resources would need to be identified and transmission studies conducted to connect these newly identified sources to the transmission grid, which would likely further limit achievement of the RPS goal by the 2010 deadline;
- The conceptual plan recommended by the Tehachapi Collaborative Study Group (TCSG)<sup>18</sup> would not be fully

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<sup>18</sup> The first TCSG Report was filed in I.00-11-001 on March 16, 2005 and a second TCSG Report was filed in the successor to I.00-11-001, I.05-09-005, on April 19, 2006.

implemented. This plan is intended to collect power from Tehachapi area wind projects, interconnect facilities into the State's backbone grid, and upgrade the network to reliably deliver that power to load centers. The conceptual plan, which would allow for the transmission of over 4,000 MWs of wind power, would not be fully achieved because the initial capacity that would have been provided by the proposed Tehachapi-Vincent Transmission Project would not be achieved; and

- Transmission providers such as SCE, PG&E, or LADWP would need to accommodate the power load by upgrading existing transmission infrastructure or building new transmission facilities along a different alignment or developers of wind generation facilities would build their own transmission facilities to connect to the transmission grid.

Finally, the Final EIR does not find that the No Project alternative would be environmentally preferable to the Environmentally Superior configuration of the proposed project. As we discuss above, because of the need both to enable California to meet the RPS as well as to assure the continuing reliability and safety of the transmission grid in Southern California as renewable power generation increases and SCE customer demands increase, the No Project scenario is not a desirable alternative to the proposed Project.

## **V. Tehachapi-Vincent Transmission Project and Route Alternatives**

As the Final EIR notes, an important aspect of the environmental review process is the identification and assessment of a reasonable range of alternatives. The State CEQA Guidelines, at § 15126.6(d), require the selection of a reasonable range of alternatives to the proposed Project, including a No Project alternative. At the same time, CEQA does not require an EIR to consider every conceivable alternative to a project. See, CEQA Guidelines § 15126.6(a).

In its application and PEA, SCE identified several alternative routes for portions of the Tehachapi-Vincent Transmission Project. During the EIR scoping process, additional alternatives to the proposed project were identified, including minor routing adjustments, alternative energy technologies, and non-wires alternatives. The initial 10 suggested alternatives were then screened according to CEQA guidelines to determine which alternatives to carry forward for analysis in the EIR. The methodology used for screening these alternatives is described in detail at pages D-1 to D-21 of the Final EIR. It was determined that 4 of these alternatives met the applicable CEQA criteria for analysis. A detailed discussion of the results of this screening analysis and of the alternatives that were eliminated from further review is set forth at pages B-53 to B-66 of the Final EIR. The Final EIR provides a detailed analysis of these 4 alternatives to portions of the proposed Tehachapi-to-Vincent route.

Based on comparison of the environmental impacts of the proposed project and alternatives, the Final EIR identifies Alternative 3, the Antelope-Vincent Re-route 1, to be the environmentally superior alternative by a narrow margin. However, we find that this “environmentally superior” alternative creates a number of very serious adverse economic impacts, which, in the aggregate, far outweigh its limited environmental advantages over the route proposed by SCE.<sup>19</sup> Accordingly, we approve the project route proposed by the Applicant, SCE. However, in order to eliminate the need for SCE to condemn three existing homes, we also direct SCE to implement the minor route deviation described as “Option A.”

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<sup>19</sup> These adverse economic impacts are explained in detail in section VIII.A below.

In the following subsections, we address the route proposed by SCE as well as the various alternative routes that were studied in detail in the Draft and Final EIR.

### **A. Description of Proposed Route**

The proposed project includes Segments 2 and 3 of the Antelope Transmission Project, which were addressed together in SCE's CPCN application. The proposed project would involve construction of a new transmission line and related infrastructure between the Tehachapi Wind Resource Area, located in southern Kern County, California, and SCE's existing Vincent Substation, located near Acton in unincorporated Los Angeles County, California. The proposed Project would connect through SCE's existing Antelope Substation in the City of Lancaster, with Segment 2 consisting of the portion of the proposed Project south of Antelope Substation and Segment 3 consisting of the portion of the Project north of Antelope Substation.

The proposed Project would consist of the following major components:

- Substation Two, a 500/220/66-kV substation located near SCE's existing Monolith Substation, northwest of SCE's existing Cal Cement Substation in the Tehachapi Wind Resource Area, which has been designated by Kern County as the Eastern Wind Resource Area (Segment 3);
- A 220-kV transmission line from Substation Two, traveling 9.6 miles southeast to Substation One in the Tehachapi Wind Resource Area of southern Kern County (Segment 3). This portion of the proposed Project would require 1.7 miles of entirely new ROW and 7.9 miles of adjacent ROW;
- Substation One, a 500/220/66-kV substation located near Cal Cement Substation in the Tehachapi Wind Resource Area (Segment 3A);
- A 500-kV transmission line, initially energized to 220 kV, from Substation One in the Tehachapi Wind Resource Area,

traveling 25.6 miles south to the existing Antelope Substation in the City of Lancaster (Segment 3). This portion of the proposed project would require 23.1 miles of entirely new right of way (ROW) and 2.5 miles of adjacent ROW;

- A 500-kV transmission line from Antelope Substation in the City of Lancaster, traveling approximately 21.1 miles south towards the Vincent Substation near Acton in unincorporated Los Angeles County (Segment 2), initially energized to 220 kV. Two routing options (Options A and B) were also considered for this portion of the alignment. These routing options are discussed in Section B below. The 500-kV portion (energized at 220 kV) would require approximately 2.5 miles of entirely new ROW and 18.5 miles of adjacent ROW;
- A 0.6-mile 220-kV transmission line providing electrical interconnection of the 500-kV line (energized at 220 kV) to Vincent Substation (Segment 2). The 220-kV line connecting to Vincent Substation would be constructed within an existing, adjacent ROW;
- Installation of associated telecommunication infrastructure (Segments 2 and 3); and
- Establishment of 27.3 miles of new utility ROW and 29.5 miles of adjacent utility ROW.<sup>20</sup>

A detailed discussion of the proposed facilities and modifications associated with the entire proposed project can be found at pages B-7 to B-19 of the Final EIR. See also Figure B.2-1 in the Final EIR for a detailed graphic

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<sup>20</sup> As described above, Segment 2 includes the portion of the proposed project located south of Antelope Substation and Segment 3 includes the portion located north of Antelope Substation. In order to more specifically distinguish different aspects of the proposed project, the northern portion of Segment 3, which includes Mile S3-0.0 to Mile S3-9.6 (including Substation Two), is referred to as Segment 3B. Segment 3B is a proposed 220-kV line. The southern portion of Segment 3, from Mile S3-9.6 to Mile S3-35.2, is referred to as Segment 3A (including Substation One). Segment 3A is a proposed 500-kV line.

representation of the proposed route. A detailed description of the various components of the proposed project is set forth at pages B-2 to B-4 of the Final EIR. Furthermore, a detailed description of project construction activities is set forth at pages B-19 to B-47 of the Final EIR.

## **B. Alternatives Presented in the Draft EIR**

The Final EIR presents detailed information on two minor re-routes, referred to as “Option A” and “Option B,” both of which were included in SCE’s filings with the Commission, as well as four specific alternative routes that were identified during the EIR scoping process.

### **1. Option A (Segment 2)**

This option was included in SCE’s Amended PEA as Antelope-Vincent 1 (AV1). Option A is identical to the proposed project except between approximately Mile S2-5.7 and Mile S2-7.87, where the alignment deviates from the proposed ROW to avoid three existing homes located north of Elizabeth Lake Road. As shown in Figure B.2-24 of the Final EIR, Option A deviates from the proposed project at Mile S2-5.7 by proceeding east for approximately 0.15 miles, crossing the existing transmission line corridor, including two 66-kV lines, the Antelope-Mesa 220-kV line, the Antelope-Vincent 220-kV line, and Midway-Vincent No. 3,500-kV line, before turning southeast paralleling the proposed project route until Mile S2-7.6. At this point, the transmission line turns south, again crossing the existing transmission line corridor, rejoining the proposed project route at Mile S2-7.8 (proposed project Mile S2-7.7). This minor re-route is 2.1 miles in length and increases the alignment of Segment 2 by 0.1 miles. In other regards, Option A is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Option A is included with the discussion of the facilities needed to construct the project itself at pages B-7 to B-47 of the Final EIR.

## **2. Option B (Segment 2)**

This option was the proposed Segment 2 route in SCE's December 2004 CPCN filing, and is included in SCE's Amended PEA as Antelope-Vincent 2 (AV2). Option B is identical to the proposed project except between Mile S2-8.1 and Mile S2-14.9.

As shown in Figure B.2-25 of the Final EIR, Option B deviates from the proposed project at Mile S2-8.1 by continuing in a southeasterly direction parallel to the existing Antelope-Vincent corridor through the Ritter Ranch and Anaverde community development areas, rejoining the proposed project route at Mile S2-11.2 (proposed Project Mile S2-14.9). Option B would also connect to the existing Midway-Vincent No. 3 transmission line and use the existing Midway-Vincent No. 3 infrastructure that travels towards Vincent Substation beginning at approximately Option B-Mile S2-10.0, as well as cut east on new infrastructure, traveling underneath the existing transmission lines in the existing Midway-Vincent ROW, and run parallel and east of its former alignment to Vincent Substation (see Figure B.2-21).

This minor re-route is 3.1 miles in length and decreases the Segment 2 alignment by approximately 3.7 miles. In other regards, Option B is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Option B is included with the discussion of the facilities needed to construct the project itself at pages B-7 to B-47 of the Final EIR.



### **3. Alternative 1: Substation 2C to Substation One via Cameron Canyon Road (Segment 3B)**

This alternative was included in SCE's Amended PEA as Alternative C (Substation One to Substation Two), except instead of starting at alternative Substation 2B north of Tehachapi Boulevard, this alternative would start at alternative Substation 2C located immediately north of Substation Two.

As shown in Figure D.3-1 in the Final EIR, this alternative begins at Alternative Substation 2C and continues south and east to Substation One paralleling the existing Cal Cement-Goldtown-Monolith-Windlands 66-kV line, which runs through the hills within an existing wind farm and then along Cameron Canyon Road. Alternative 1 heads south from Substation 2C (Mile 0.0) for approximately 0.2 miles, then east-southeast for 1.5 miles, and then turns generally south for the next 3.7 miles, rejoining the proposed project route at Mile S3-5.3 (proposed project Mile S3-5.2).

This re-route is 5.3 miles in length and increases Segment 3B by 0.1 miles (9.7 miles total), resulting in one additional 500-kV single-circuit transmission tower. From Substation One to Vincent Substation (southern termination point), Alternative 1 is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Alternative 1 is set forth at pages D-34 to D-53 of the Final EIR.

### **4. Alternative 2: Substation 1B to Antelope via 100th Street (Segments 3A/3B)**

This alternative generally follows the proposed Segment 3 route from SCE's December 2004 CPCN filing, which is included in SCE's Amended PEA as Alternative A (Antelope to Substation One); however this alternative would utilize alternative Substation 1B and would be re-routed south of Truman Road to avoid homes.

Alternative 2 is identical to the proposed project, except between Mile S3-9.5 and S3-22.1 and between Mile S3-25.3 and S3-30.6. As shown in Figure D.3-2 of the Final EIR, Alternative 2 deviates from the proposed project at Mile S3-9.5 by continuing east 0.5 miles and then south 0.1 miles to connect to alternative Substation 1B. Segment 3B increases by 0.5 miles. From alternative Substation 1B (Mile S3-10.1) the transmission line would continue south approximately 0.9 miles and then southwest for approximately 2.8 miles, crossing the private Sagebrush 220-kV transmission line at approximately Mile S3-12.4. At Mile S3-13.8, Alternative 2 would turn south paralleling 100<sup>th</sup> Street West for approximately 8.5 miles (Mile S3-22.3). Between Mile S3-13.8 and Mile S3-16.9 the transmission line would be placed adjacent to an existing 66-kV line (3.1 miles adjacent ROW). Between Mile S3-22.1 and S3-22.3 (near Truman Road), Alternative 2 would turn southwest and run parallel and east of a LADWP Easement for 0.5 miles before rejoining the proposed project at Mile S3-22.8 (proposed project Mile S3-22.1).

Alternative 2 would follow the proposed project alignment within the LADWP Easement for an additional 1.1 miles (Total of 1.6 miles adjacent ROW). At Mile S3-23.9, Alternative 2 (and the proposed project) would leave the LADWP Easement and turn south along 107<sup>th</sup> Street West for approximately 2.1 miles, again crossing the private Sagebrush 220-kV transmission line at approximately Mile S3-25.1. At Mile S3-26.0 (proposed project Mile S3-25.3), the transmission line would again deviate from the proposed project. Alternative 2 would turn east, following Hawk Avenue for approximately 0.7 miles, before turning south and once again realigning itself with 100<sup>th</sup> Street West. The transmission line would then travel south along 100<sup>th</sup> Street for 5.3 miles (Mile S3-32.0), before turning west along West Avenue F for 0.6 miles, rejoining

the proposed project route at Mile S3-32.6 (proposed project Mile 30.6).

Segment 3A would increase by 1.5 miles.

This re-route, including the portion that follows the proposed project route, is 23.1 miles in length and would increase the overall Segment 3 (3A+3B) alignment by approximately 2.0 miles (37.2 miles total). In other regards, Alternative 2 is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Alternative 2 is set forth at pages D-53 to D-68 of the Final EIR.

### **5. Alternative 3: Antelope-Vincent Re-route 1 (Segment 2)**

This alternative is similar to a combination of Options A and B of the proposed project, except the transmission line would remain east of the existing Antelope-Vincent transmission corridor. Alternative 3 is identical to the proposed project, except between Mile S2-5.7 and Mile S2-14.8.

As shown Figure D.3-3 of the Final EIR, Alternative 3 deviates from the proposed project at Mile S2-5.7 by proceeding east for approximately 0.15 miles, crossing the existing transmission line corridor, including two 66-kV lines, the Antelope-Mesa 220-kV line, the Antelope-Vincent 220-kV line, and Midway-Vincent No. 3 500-kV line, before turning southeast, paralleling the proposed project route for approximately 2.3 miles. Alternative 3 would continue to remain east and parallel to the existing Antelope-Vincent corridor through the Ritter Ranch and Anaverde Ranch community development areas, rejoining the proposed project route at Mile S2-11.2 (proposed project Mile S2-14.8).

This re-route is 5.5 miles in length and decreases the Segment 2 alignment by approximately 3.6 miles (18.0 miles total). In other regards, Alternative 3 is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Alternative 3 is set forth at pages D-68 to D-81 of the Final EIR.

#### **6. Alternative 4: Antelope-Vincent Re-route 2 (Segment 2)**

This alternative re-routes the transmission line between the Antelope and Vincent Substations to avoid both the northern portion of the Ritter Ranch community development area, where a proposed school site is located, and homes along the proposed project route.

As shown in Figure D.3-4 of the Final EIR, Alternative 4 deviates from the proposed project at Mile S2-3.4 and heads south for approximately 1.9 miles, crossing the California Aqueduct and the Portal Ridge mountain range, and then continues southwest 0.6 miles, crossing Elizabeth Lake Road in Leona Valley. This alternative would continue south 0.5 miles, remaining west of Bouquet Canyon Road and east of 86th Street West, then southwest for 0.6 miles, and south again for 1.2 miles, crossing Bouquet Canyon Road. At this point, the transmission line would turn east paralleling the Midway-Vincent No. 1 corridor for 2.0 miles (2.0 miles adjacent ROW) to rejoining the proposed project at Mile S2-10.2 (proposed Project Mile S2-10.7).

This re-route is 6.8 miles in length and decreases the Segment 2 alignment by approximately 0.5 miles (21.1 miles total). In other regards, Alternative 4 is identical to the proposed project.

A detailed discussion of the facilities needed to construct the project under Alternative 4 is set forth at pages D-81 to D-96 of the Final EIR.

## **VI. Environmental Impacts of the Tehachapi-Vincent Transmission Project and Route Alternatives**

The Final EIR evaluated the environmental impacts of the proposed project and alternatives, classifying the impacts as Class I (significant and unavoidable or unmitigable), Class II (significant but mitigable to less than significant), Class III (adverse but less than significant), and Class IV (beneficial). The Final EIR found that the proposed project would have significant unmitigable impacts on visual resources, land use and public recreation, agricultural resources, population and housing, noise levels, and air quality.

The conclusions in the Final EIR regarding environmental impacts of the proposed project and its alternatives assume that the impact-reduction measures proposed by SCE in the PEA, called Applicant Proposed Measures or APMs, together with the additional mitigation measures recommended in the Final EIR, will be implemented. The applicable APMs and Final EIR mitigation measures for the proposed project are included as part of this Decision in Attachment A. We adopt the mitigation measures included in Attachment A as if fully set forth herein. Implementation of all of the applicable APMs and all mitigation measures recommended in the Final EIR is a condition of our approval of this project.

A summary comparison of the project as proposed by SCE and the alternatives that were studied in detail in the Final EIR can be found at pages ES22 to ES-28 of the Final EIR. A detailed issue area by issue area comparison, running over 350 pages in length, can be found in Section C of the Final EIR.

In describing the environmental impacts of the proposed project below, we focus on the significant unmitigable (Class I) impacts, since we expect that the adopted mitigation measures will eliminate or reduce to less-than-significant

levels other adverse environmental impacts of the Tehachapi-Vincent Transmission Project of the project that were determined to be significant but mitigable to less than significant (Class II) levels. Accordingly, the description below does not include any detailed discussion of those issue areas for which all identified significant or potentially significant environmental impacts can be mitigated to a level of insignificance by implementation of the mitigation measures set forth in Attachment A. A more detailed discussion of all identified significant or potentially significant environmental impacts of the proposed project and the alternative routes studied in the Final EIR is set forth in the CEQA Findings of Fact included in Attachment B.

#### **A. Impacts on Visual Resources**

The proposed project would begin near the Tehachapi Wind Resource Area in the Tehachapi Mountain Range west of the town of Mojave which is in the Mojave Desert. The project would cross the Pacific Crest National Scenic Trail in the Tehachapi Wind Resource Area. Two new substations (No. 2 and No. 1) would be constructed in this vicinity of hundreds of wind turbine generators. The project would proceed south from new Substation One, across the high desert plain of the Antelope Valley to the Antelope Substation, located at the western edge of the City of Lancaster, then would cross the rolling hills of Portal Ridge, across the San Andreas Rift Zone, and proceed across the steep mountains of the Sierra Pelona Ridge, and terminate at the Vincent Substation, south of the City of Palmdale and near Acton in unincorporated Los Angeles County. Such varied terrain and landscape characteristics are accompanied by many potentially sensitive viewing opportunities by residents, agricultural workers, and recreational travelers on local roads, and back-country recreationists, including hikers and equestrians.

The Final EIR, at pages C.11-1 through C.11-74, provides a detailed discussion of the potential effects the proposed project and alternatives could have on visual resources as well as numerous photographic visual simulations. An extensive set of mitigation measures has been proposed to address the potentially significant and significant visual impacts of the proposed project and its alternatives. These include measures V-1a through V-1f, V-5, V-9, V-15 and V-16a through V-16d, all of which are fully set forth in Attachment A.

Notwithstanding the implementation of these mitigation measures, the Final EIR reports that the proposed project would have an unmitigable significant impact (Class I) on visual resources along one portion of the proposed route, along Elizabeth Lake Road, from Mile S2-6.7 to Mile S2-7.9 of the project route. From a strictly visual resource perspective and as seen from this nearby road, construction of new 500-kV lattice steel towers and conductors would create moderate visual contrast, because the existing transmission lines have created visual contrasts and clutter in the Midway-Vincent ROW. However, because three existing inhabited residences would be removed along this portion of the proposed route, the visual impact is high for all accounts. The view from these sensitive receptor locations would be permanently disrupted and the viewer platforms would be removed. The proposed project would add visual clutter and industrial character to this pastoral landscape, but more importantly, the proposed alignment would eliminate three existing houses from three different ranchettes, creating high visual contrast, dominance, and view blockage, as well as land use impacts and increase of industrial character.

However, the selection of Option A would mitigate these otherwise significant, unavoidable adverse visual impacts to a level of insignificance. Option A would be sited approximately 1,000 feet east of the proposed project

alignment from approximately Mile S2-5.7 to Mile S2-7.7, and therefore would be located away from three existing residences located along Elizabeth Lake Road. The effect of implementing Option A would be that three existing houses would remain in a pastoral setting. Under Option A, the transmission line would be completely screened by landforms and would be located 1,000 feet farther away from the key observation position where the unmitigable significant visual impacts would otherwise occur; thus, the transmission line would not be visible from Elizabeth Lake Road or residences along both sides of Elizabeth Lake Road. This landform screening would also prevent viewers from seeing the transmission line from any other locations. No recreational resources or sensitive receptors would be traversed by the approximately 2.1-mile portion of Option A that deviates from the proposed project route.

For these reasons, Option A is the preferable route from the standpoint of mitigating the potentially significant and significant visual impacts of the proposed project.

## **B. Land Use and Public Recreation/Population and Housing**

The Final EIR reports that the proposed project would have certain unmitigable significant impacts on land use and public recreation. The Final EIR, at pages C.8-1 through C.8-23, provides a discussion of the potential effects the proposed project and alternatives would have on existing and proposed land uses in addition to sensitive land uses that have the potential to be affected by the proposed project and alternatives. Also, at pages C.13-1 through C.13-10, the Final EIR provides a discussion of the potential effects the proposed project and alternatives would have on existing population and housing. Various mitigation measures have been proposed to address the potentially significant and



significant impacts of the proposed project and its alternatives on land use and public recreation. These include measures L-1a through L-1c, L-5, N-3a and N-3b, all of which are fully set forth in Attachment A.

Notwithstanding the implementation of these mitigation measures, the Final EIR reports that the proposed project could have an unmitigable significant impact (Class I) on existing land uses, in that (1) the proposed project route and various alternatives would require the displacement of existing residences; (2) the selection of Option B or Alternative 3 would adversely impact planned development within Ritter Ranch and Anaverde Ranch; and (3) the selection of Option B or Alternative 3 would preclude the development of a planned school.

### **1. Elimination of Existing Residences**

The proposed project would require an easement that would vary in width from 160 feet (Mile S3-0.0 to S3-9.6), to 180 feet (Mile S3-33.4 to S3-35.2, Mile S2-0.0 to S2-8.1, Mile S2-10.6 to S2-21.6), to 200 feet (Mile S3-9.6 to S3-33.4, Mile S2-8.1 to S2-10.6). This easement would extend over privately owned parcels and would restrict future use of the property within the proposed easement; the removal of some existing structures would be required and no new structures would be permitted within the easement during project operation. Of particular concern, the proposed easement would traverse a minimum of three existing residences in unincorporated Los Angeles County along Cherry Tree Lane (Mile S2-7.4), and would require the displacement and relocation of these residences for construction and operation of the project.

Moreover, in addition to the residential structures identified within SCE's proposed route that would need to be removed, both Alternatives 1 and 2 would require additional existing residential housing be removed. Specifically, Alternative 1 would require the removal of three single-family residences

(ranchettes with horse stables) two of which are located west of the proposed Alternative 1 ROW and one of which is located east of the proposed Alternative 1 ROW on Cameron Canyon Road in unincorporated Kern County.

Alternative 2 would require several existing residences to be removed: a single-family residence at 10085 Hamilton Road, in unincorporated Kern County, and a number of single-family residences at 100th Street West, in unincorporated Kern County (on the east Side, 2 homes north of Rosamond Boulevard, 16 homes north of Avenue A and 1 home north of Avenue B, and on the west Side, several homes along Leslie Ave off 100th Street West and 6 homes north of Avenue A).

The removal of existing residences and/or the restriction of current or future land uses on private property is considered a significant and unavoidable impact (Class I).

The unavoidable significant impact of SCE's proposed project route can be avoided with a re-route around the residences along Cherry Tree Lane, such as the routes presented in Option A and in Alternative 4. Moreover, the unavoidable significant impact of removing existing residences under Alternative 1 or Alternative 2 can be avoided by not selecting either of those alternatives. Thus, the selection of Option A would avoid this otherwise unavoidable adverse impact on existing residences.

For the foregoing reasons, Option A is the preferable route from the standpoint of mitigating the potentially significant and significant impacts of the proposed project on existing housing.

## **2. Adverse Impacts to Planned Development**

Implementation of either Option B or Alternative 3 would preclude planned development within portions of Ritter Ranch and Anaverde Ranch.

Both Option B and Alternative 3 would travel across the Ritter Ranch and Anaverde Ranch developments for which home sites, parks, open space areas and other facilities have been planned. Thus, construction and operation of Option B or Alternative 3 would preclude the use of land parcels within the 180-foot expanded ROW that have already been approved as future residential sites.

Proposed Mitigation Measure L-3 would minimize the effects of Option B and Alternative 3 to planned development at Ritter Ranch and Anaverde Ranch. However, the coordination with Ritter Ranch and Anaverde Ranch called for under this mitigation measure may not avoid impacts to planned residential development, and as such, the impacts of Option B and Alternative 3 on this planned development would be significant and unavoidable (Class I).

Neither the proposed project route nor Option A would traverse planned residential development within Ritter Ranch and Anaverde Ranch. Thus, the selection of SCE's proposed route or Option A will avoid this otherwise unavoidable adverse impact on planned residential development within Ritter Ranch or Anaverde Ranch.

For the foregoing reasons, either SCE's proposed route or the proposed route as modified by Option A is the preferable route from the standpoint of mitigating the potentially significant and significant impacts of the proposed project on planned residential development within Ritter Ranch and Anaverde Ranch, and both Option B and Alternative 3 are the least preferable alternatives.

### **3. Adverse Impacts to Planned School Sites**

Option B and Alternative 3 would travel across the Ritter Ranch and Anaverde Ranch developments. Both of these routes would restrict the use of

proposed school sites in both Ritter Ranch and Anaverde Ranch, and would therefore affect the screening process required by the California Department of Education for the selection of new school sites proposed for development.

Proposed Mitigation Measure L-3 would minimize the effects of Option B and Alternative 3 to planned school site development at Ritter Ranch and Anaverde Ranch. However, the coordination with Ritter Ranch and Anaverde Ranch called for under this mitigation measure may not avoid impacts to planned school site development, and as such, the impacts of Option B and Alternative 3 on this planned school site development would be significant and unavoidable (Class I).

However, neither the proposed project route nor Option A would traverse planned school site development within Ritter Ranch and Anaverde Ranch. Thus, the selection of SCE's proposed route or Option A will avoid this otherwise unavoidable adverse impact on planned school site development within Ritter Ranch or Anaverde Ranch.

For the foregoing reasons, either SCE's proposed route or Option A is the preferable route from the standpoint of mitigating the potentially significant and significant impacts of the proposed project on planned school site development within Ritter Ranch and Anaverde Ranch, and both Option B and Alternative 3 are the least preferable alternatives.

### **C. Agricultural Resources**

The proposed Project would construct lattice steel towers and new access and spur roads across lands classified as Prime Agricultural Land and Mixed Acreage Parcels under the California Land Conservation Act of 1965 (Williamson Act). More specifically, Segment 3 of the proposed project would involve the siting of the 20.2-acre Substation Two on Mixed Acreage Parcels.

The Final EIR, at pages C.9-1 through C.9-24, provides a detailed discussion of the potential effects the proposed project would have on agricultural resources. This discussion includes a number of detailed maps. Several mitigation measures have been proposed to address the potentially significant and significant impacts of the proposed project and its alternatives on agricultural resources. These include measures AG-3, AG-4 and N-3a, all of which are fully set forth in Attachment A.

Notwithstanding the implementation of these mitigation measures, the Final EIR reports that the proposed project could have an unmitigable significant impact (Class I) on land that is currently the subject of a contract under the Williamson Act. In total, operation of the proposed project (*i.e.*, tower footings, access and spur roads, substation pad) would permanently remove approximately 1.0 acre of Prime Agricultural Land and 28.6 acres of Mixed Acreage Parcels. Given that Mixed Acreage Parcels include Prime Agricultural Land in addition to Non-Prime Williamson Act lands, the total amount of Prime Agricultural Land that would be permanently disturbed may exceed the 10 acres for Prime Farmland that has been established as the threshold level of significance for conflicting with a Williamson Act contract, thereby resulting in significant and unavoidable impacts (Class I).

This impact can only be avoided with a relocation of proposed Substation Two, such as the alternative Substation 2C site that has been proposed as part of Alternative 1.

For this reason, Alternative 1 the preferable route from the standpoint of mitigating the potentially significant and significant impacts of the proposed project on agricultural resources, specifically, lands under a Williamson Act contract.

#### **D. Noise**

The Final EIR reports that noise associated with the operation of the proposed project would violate local noise standards and that permanent noise levels along the project ROW would increase due to corona noise from the operation of the transmission lines. The Final EIR, at pages C.10-1 through C.10-22, describes the various noise impacts of the proposed project. Several mitigation measures have been proposed to address the potentially significant and significant noise impacts of the proposed project and its alternatives. These include measures N-1, N-3a and N-3b, all of which are fully set forth in Attachment A.

Sensitive noise receptors are located along the proposed project route, immediately adjacent to the proposed transmission ROW (within 0.2 miles), as well as along the proposed alternative routes. The most stringent land use noise standards of all the local jurisdictions in the project area are included within the Los Angeles County Noise Ordinance, which contains a noise standard of 45 dBA for noise-sensitive areas such as residential land uses along the route within Los Angeles County. The level of worst-case wet weather and heavy load noise would likely be between 55 and 65 dBA along the corridor. Therefore, operational corona noise levels at these locations would exceed Los Angeles County Ordinance Standards and would therefore result in a significant and unavoidable impact (Class I). No mitigation measures have been identified to reduce this impact.

Similarly, corona discharge associated with high-voltage power transmission lines is heard near an energized line as a crackling or hissing sound. SCE did not forecast a specific level of audible corona noise for the proposed transmission line. According to SCE, the wet-conductor generated acoustic

power (dB) of a single circuit 500 kV transmission line (baseline) is calculated to be 55.9 dB, at the edge of the ROW. The dB level with the addition of another parallel 500 kV transmission line is calculated to be 57.0 dB, at the edge of the ROW. The heavy-rain generated acoustic power (dB) of a single circuit 500 kV transmission line (baseline) is calculated to be 62.0 dB, at the edge of the ROW, with an increase to 63.1 dB at the edge of the ROW with the addition of another parallel 500 kV transmission line. Corona noise would occur along the entire corridor of SCE's proposed route as well as the alternative routes, all of which are, along certain lengths of their respective routes, in close proximity to sensitive receptors. Thus, the proposed project, under any of the alternatives studied, would create ambient noise levels greater than the noise occurring under existing conditions. This would cause significant operational noise impacts to adjacent sensitive uses. The level of worst-case wet weather and heavy load noise would likely be between 55 and 65 dBA along the corridor, meaning that introduction of new corona noise could result in a substantial (more than five dBA) increase to the ambient noise levels of nearby receptors. For any homes or other sensitive receptor within about 200 feet of the ROW, this would violate local standards or policies. This increase in ambient noise levels to sensitive receptors immediately adjacent to the proposed ROW would constitute a significant and unavoidable (Class I) impact.

No mitigation measures have been identified that would reduce these noise impacts to a less-than-significant level. Moreover, there are sensitive receptors located nearby to SCE's proposed route as well as nearby to all of the alternative routes studied in the Final EIR. Consequently, there would be significant and unavoidable noise impacts under all alternatives, and none of the

alternatives studied would be preferable from the standpoint of mitigating such impacts.

### **E. Air Quality**

The Final EIR reports that essentially all air quality impacts associated with the proposed project would occur during project construction. The Final EIR, at pages C.2-1 through C.2-25, describes expected dust and exhaust emissions during construction of the proposed project. Construction is tentatively scheduled for March 2008 to June 2009. Temporary construction emissions would result from on-site activities, such as surface clearing, excavation, foundation construction, steel construction, etc.; and from off-site activities such as construction-related haul trips and construction worker commuting. Pollutant emissions would vary from day to day depending on the level of activity, the specific operations, and the prevailing weather.

Most of these identified impacts can be mitigated to a level of insignificance by the adoption and implementation of mitigation measures A-1a through A-1i, all of which are fully set forth in Attachment A.

However, even with all recommended mitigation measures, dust and exhaust emissions during construction would still exceed the regional emission thresholds of the Antelope Valley Air Quality Management District (AVAQMD). Accordingly, the Final EIR reports that, even with the recommended mitigation measures, the proposed project would cause significant and unavoidable (Class I) impacts in that construction emissions would exceed daily regional emission thresholds in the AVAQMD.

No mitigation measures have been identified that would reduce these air quality impacts to a less-than-significant level. Moreover, there would be



essentially identical impacts in connection with all of the alternative routes studied in the Final EIR. Consequently, there would be significant and unavoidable air quality impacts under all alternatives, and none of the alternatives studied would be preferable from the standpoint of mitigating such impacts.

## **VII. Project Authorization, CEQA Certification and Statement of Overriding Considerations**

The Final EIR must contain specific information according to the CEQA Guidelines, §§ 15120 through 15132.<sup>21</sup> The various elements of the Final EIR satisfy these CEQA requirements. The Final EIR consists of the Draft EIR, with revisions in response to comments and other information received. Volume 2 of the Final EIR contains the comments and recommendations received on the Draft EIR and individual responses to these comments, and a list of persons, organizations, and public agencies commenting on the draft.<sup>22</sup>

The Commission must conclude that the Final EIR is in compliance with CEQA before approving SCE's request for a CPCN. The basic purpose of this determination is to ensure that the environmental document is a comprehensive, accurate, and unbiased tool to be used by the lead agency and other decision makers in addressing the merits of the proposed project. The document should embody "an interdisciplinary approach that will ensure the integrated use of the

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<sup>21</sup> California Code of Regulations, Title 14, Chapter 3, §§ 15120 through 15132.

<sup>22</sup> *Id.*, § 15132.

natural and social sciences and the consideration of qualitative as well as quantitative factors.”<sup>23</sup> It must be prepared in a clear format and in plain language.<sup>24</sup> It must be analytical rather than encyclopedic, and emphasize alternatives over unnecessary description of the project.<sup>25</sup> Most importantly, it must be “organized and written in such a manner that [it] will be meaningful and useful to decision makers and the public.”<sup>26</sup>

The CPUC hereby certifies the Antelope Transmission Project, Segments 2 and 3, Final EIR, State Clearinghouse No. 2006041160. In accordance with State CEQA Guidelines § 15090, the CPUC, as California Lead Agency for the Project, certifies that:

- (1) The Final EIR has been completed in compliance with the California Environmental Quality Act;
- (2) The Final EIR was presented to the Commission, and the Commission has received, reviewed, and considered the information contained in the Final EIR and hearing documents prior to approving the project; and
- (3) The Final EIR reflects the CPUC’s independent judgment and analysis.

We find that the Final EIR/EIS is a comprehensive, detailed, and complete document that discusses clearly the advantages and disadvantages of the environmentally superior route, SCE’s proposed route, and various alternatives. We find that the Final EIR is a competent and comprehensive informational tool, as CEQA requires it to be. The quality of the information in the Final EIR is such

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<sup>23</sup> *Id.*, § 15142.

<sup>24</sup> *Id.*, §§ 15006(q) and (r), 15120, 15140.

<sup>25</sup> *Id.*, §§ 15006, 15141; Pub. Res. Code § 21003(c).

<sup>26</sup> Pub. Res. Code § 21003(b).

that we are confident of its accuracy. We have considered the information in the Final EIR in approving the Tehachapi-Vincent Transmission Project as described in this Decision. Accordingly, we certify the Final EIR.

#### **A. Environmentally Superior Alternative**

In accordance with CEQA requirements, an “environmentally superior alternative” must be identified among the alternatives analyzed in the EIR. The environmentally superior alternative is the alternative found to have an overall environmental advantage compared to the other alternatives based on the impact analysis in the EIR.

If the environmentally superior alternative is the “no project” alternative, the EIR must identify an environmentally superior alternative among the other alternatives. As described in Section D.4.5 of the Final EIR, the locations and development schedules for construction and operation of new power plants and transmission infrastructure that would be constructed if the proposed project is not implemented cannot be predicted and, as such, it is impossible to identify the impacts that would occur from alternative energy projects under the No Project Alternative; therefore, the No Project Alternative was not considered as part of the environmentally superior alternative analysis in the EIR.

Accordingly, the Final EIR for the proposed project provides a comparison of the proposed project and alternatives by environmental issue area, based on the detailed analyses contained in Sections C.2 to C.13 and D of the Final EIR. A detailed table summarizing this comparison can be found at pages D-100 through D-106, and also at pages ES-22 to ES-28 of the Final EIR. In that comparative analysis, noteworthy differences between the alternatives, and the alternative(s) which would have the least environmental impact, are identified on an issue-by-issue basis. That analysis is provided to support the

recommendation for the environmentally superior alternative, which is provided at pages D-107 to D-116, and also at pages ES-28 to ES-36 of the Final EIR.

Determining which of the alternatives is environmentally superior involves judgment and depends on many factors. As shown in Table D.5-1 of the Final EIR, different alternatives are superior in certain environmental issue areas, while in other issue areas there are only slight differences among the alternatives, which ultimately do not alter the significance determinations for the impacts. In order to meet the CEQA requirements to identify an environmentally superior alternative, we must consider those issue areas that have the greatest potential to result in long-term, significant impacts, which include visual resources, biological resources, cultural resources, land use, and public recreation. Consideration must also be given to community concerns, such as air quality and noise. Impacts associated with construction (i.e., temporary or short term) or those that are easily mitigated to less-than-significant levels were also considered. Pursuant to CEQA Guidelines Section 15126.6(b), alternatives with potential for avoiding or substantially lessening the significant impacts may be considered even if they are more costly.

As shown in the comprehensive alternatives comparison matrix in Table D.5-2 of the Final EIR (a side-by-side comparison of the proposed project and alternatives), several of the alternatives have closely matched impacts, or would have fewer impacts for some issue areas while having greater impacts in other issues area, making a clear demonstration of the environmental superiority of one alternative difficult. In general, many environmental impacts are reduced as a result of decreasing the length of the new transmission line, ability to avoid existing homes, and placement of the new transmission line next to existing

transmission corridors providing for use of existing access roads and similar visual setting.

From the comparison of the proposed project and alternatives by environmental issue area provided in the Final EIR, and considering long-term impacts to the environment, the environmentally superior alternative, by a slight margin, is Alternative 3. Alternative 3 is preferred from the standpoint of air quality, as it would reduce the average unpaved road travel distance, resulting in a reduction in fugitive dust emissions. Alternative 3 is preferred from the standpoint of biological resources, as it would parallel an existing transmission line corridor throughout Segment 2, where the lands traversed have generally been previously degraded and would result in the least amount of completely new ROW in native habitats. Alternative 3 is preferred from the standpoint of geology, soils and water quality, as it would cross less landslide prone area, decreasing the potential severity of impacts from seismically induced slope failures in comparison to the proposed project; furthermore, the shorter transmission line route would result in crossing less erosion prone soils.

However, Alternative 3 would have greater long-term significant impacts related to land use and recreation, noise, traffic and transportation, and population and housing, and would also increase some impacts related to biological resources and geology and soils. Alternative 3 would preclude planned residential development in the Ritter Ranch and Anaverde Ranch community development areas, and permanently affect recreational access to the Pacific Crest Trail (PCT) due to parking constraints. Construction and operational noise impacts would increase for residences along Godde Hill Road, Hacienda Ranch Road, Cherry Tree Lane, in addition to which nearby sensitive receptors in the Ritter Ranch and Anaverde Ranch community development

areas would be affected. Alternative 3's transmission line route through a portion of the Ritter Ranch development area would also affect traffic on area roadways, and construction could impede pedestrian movements and bike paths within this area. In addition to the above, Alternative 3 would increase the impact to aquatic habitat for the southwest pond turtle and two-striped garter snake, as well as the severity of impacts from liquefaction.

For nearly all of the issue areas noted in the Final EIR where Alternative 3 is nominally the environmentally preferable alternative, there are no significant or potentially significant project impacts that cannot be mitigated to a level of insignificance by the implementation of the mitigation measures being adopted in connection with our approval of this project. In sharp distinction to this, we note that Alternative 3, and the similar Option B, would both cause one of the most serious and significant of the unavoidable significant impacts associated with any of the project alternatives, namely, the adverse impact on planned residential and school site development at Ritter Ranch and Anaverde Ranch that was discussed in Section VI.B.2. above.

In connection with this unavoidable significant environmental impact of Alternative 3 on land use at Ritter Ranch and Anaverde Ranch, we are particularly concerned about the associated adverse economic impact of Alternative 3. The uncontroverted testimony in this proceeding of Jora Sarkissian, Ritter Ranch's Project Manager, demonstrates that our selection of Alternative 3 would have drastic financial impacts on Ritter ranch development. Mr. Sarkissian testified that adoption of Alternative 3 could cost

Ritter Ranch “upwards of \$80 million.”<sup>27</sup> Even discounting this soft number, Mr. Sarkissian provided compelling testimony that the hard cost to Ritter Ranch’s developers of losing the 117 lots and 89 detached condo units that would necessarily not be able to be developed if Alternative 3 is selected would be “close to \$19 million.”<sup>28</sup> Moreover, this \$19 million figure does not include the costs incurred to date by Ritter Ranch’s developers for project planning, permitting and preliminary site work (including some \$6 million in costs to undo the actual site preparation work that has been carried out to date for the lots and units that would be lost to Alternative 3),<sup>29</sup> none of which these developers would be able to recoup in connection with the portion of their approved development project that would be lost if SCE were allowed to proceed with Alternative 3.

For these reasons, we reject Alternative 3 as infeasible, as discussed in Attachment A, CEQA Findings of Fact, and approve the route proposed by SCE, as modified by Option A, which eliminates the otherwise unmitigable project impacts to visual resources, and which eliminates the need for any existing residences to be taken in connection with the construction and operation of the proposed project.

## **B. Project Authorization**

Based on the foregoing considerations, we authorize SCE to construct the Tehachapi-Vincent Transmission Project according to the route it proposed, subject to the following minor routing deviation:

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<sup>27</sup> See, Testimony of Jora Sarkissian, at 12.

<sup>28</sup> *Id.*

<sup>29</sup> *Id.*, at 13.

Between approximately Mile S2-5.7 and Mile S2-7.87, for a length of approximately 2.1 miles, the project route alignment shall deviate from the ROW proposed by SCE to avoid three existing homes located north of Elizabeth Lake Road (Option A).

The Final EIR has identified unavoidable significant impacts that will result from construction and operation of the authorized project. Section 15093(b) of the CEQA Guidelines<sup>30</sup> provides that, when the decision of the public agency allows the occurrence of significant impacts which are identified in the EIR but are not at least substantially mitigated, the agency must state in writing the reasons to support its action based on the completed EIR and/or other information in the record. CEQA Guidelines § 15093(b) requires that the decision-maker adopt a Statement of Overriding Considerations at the time of approval of the project if it finds that significant adverse environmental effects have been identified in the EIR that cannot be substantially mitigated to an insignificant level or be eliminated.

The following impacts are not mitigated to a less than significant level for the proposed project:

- Agricultural impacts associated with the permanent removal of approximately 1.0 acre of Prime Agricultural Land and 28.6 acres of Mixed Acreage Parcels, as discussed in Section VI.C above;
- Noise impacts of project operation, as discussed in Section VI.D above; and
- Air quality impacts of project construction, as discussed in Section VI.E above.

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<sup>30</sup> The CEQA Guidelines are set forth at California Code of Regulations, Title 14, Chapter 3.



Adoption of the project approved by the Commission in this decision has eliminated certain other impacts, noted in Section VI above, that could not otherwise have been mitigated to a level of insignificance had other alternatives been approved. Furthermore, none of the other alternatives studied could mitigate the noise and air quality impacts referenced just above to a level of insignificance. Only the Commission's adoption of Alternative 1 would avoid the agricultural impact noted above, and, as discussed in Section VI.B.1 above, Alternative 1 would have required the taking of three existing residences, itself an unavoidable significant adverse environmental impact.

In addition, the Commission's adoption of Option A will eliminate otherwise unavoidable visual, land use and population and housing impacts, without itself creating any new, or additional, adverse impacts.

Pursuant to Public Resources Code § 21080 and CEQA Guidelines § 15091, we may not approve or carry out a project for which an EIR has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless we make one or more of the following findings with respect to each significant effect:

- Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment;
- Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency; or
- Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.

In compliance with these requirements, we have made one or more of the findings set forth above with respect to each significant effect identified in the Final EIR. These findings are incorporated as part of this Decision as Attachment B, CEQA Findings of Fact. We adopt the CEQA Findings of Fact included in Attachment B as if fully set forth herein.

Additionally, the Commission adopts the following Statement of Overriding Considerations.

### **C. Statement of Overriding Considerations**

The Commission recognizes that significant and unavoidable impacts will result from implementation of the proposed Tehachapi-Vincent Transmission Project. Having (i) adopted all feasible mitigation measures, (ii) adopted a routing alternative that reduces the impacts of the proposed project, (iii) rejected as infeasible other alternatives to the project, (iv) recognized all significant, unavoidable impacts, and (v) balanced the benefits of the project against the project's significant and unavoidable impacts, the Commission hereby finds that specific economic, legal, social, technological and other benefits outweigh and override the significant unavoidable environmental impacts for the reasons stated below.

The project will:

- (1) enable compliance with the State's RPS Program, which requires retail sellers of electricity such as SCE and PG&E to increase their sale of electricity produced by renewable energy sources to 20 percent by 2010;
- (2) enable the interconnection of various wind generation projects in the Antelope Valley-Tehachapi region to the SCE transmission system;
- (3) eliminate existing constraints to the transmission of renewable energy from the Tehachapi and Antelope Valley areas to Southern California; and

- (4) eliminate potential system-wide power flow and reliability problems due to overloading of the existing transmission system.

We set forth in detail the reasons for finding these substantial benefits in Section III above. Specifically, without system improvements provided by the Project, SCE and others could not deliver the necessary significant amounts of wind power from the region. As discussed above, wind provides one of the most economical sources of renewable power, and the Tehachapi area offers the largest wind resource in California and has the undeveloped potential of generating about 1,400 gigawatt-hours per year, with about 4,500 MWs of installed capacity. Additionally, there is significant industry commitment to develop the area for RPS purposes; utilities have received winning bids from, and SCE has signed contracts with, developers of wind projects, the output of which cannot be fully delivered without increased transmission capacity that the proposed project will provide.

The Commission finds that the Tehachapi-Vincent Transmission Project's unavoidable impacts are acceptable in light of these substantial benefits. Each benefit set forth above constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

We also find that although the Final EIR identifies Alternative 3 as the "environmentally superior alternative," we should not, and do not, approve that alternative, because: (i) the alternative that we do approve (SCE's proposed route, as modified by Option A) does not pose certain unavoidable adverse significant impacts that Alternative 3 would pose; and (ii) Alternative 3 would result in very serious adverse economic impacts.

As noted in subsection A above, the uncontroverted testimony in this proceeding of Ritter Ranch's Project Manager, demonstrates that our selection of Alternative 3 would have drastic financial impacts on Ritter Ranch development. Such concrete, adverse financial and socioeconomic impacts must and do outweigh and override any justification for selecting an alternative that is nominally "environmentally superior" when, as is the case here, that alternative (i) itself has unmitigable adverse impacts that the selected alternative avoids; and (ii) does essentially nothing more than incorporate a slightly shorter route that will have somewhat fewer "potential" adverse impacts. The choice to allow a financial consideration to override a nominally better environmental choice is especially compelling when, as in this case, all of those "potential" adverse impacts have been demonstrated in the Final EIR to be mitigable to a level of insignificance.

In the end, our decisions must be guided by common sense. It is simply not sensible for us to force a legitimate business to suffer millions of dollars in unnecessary costs solely because a comparative evaluation of potential adverse impacts, which is itself necessarily an exercise in judgment, not a hard calculation, suggests that the alternative choice that would impose such unnecessary costs may be marginally preferable to a different alternative that would not impose those unnecessary costs.

#### **D. Mitigation Monitoring**

Consistent with Public Resources Code § 21081.6 and CEQA Guidelines § 15097, the Commission must adopt a Mitigation Monitoring Program when it approves a project that is subject to preparation of an EIR and where the EIR identifies significant adverse environmental effects.

The Final EIR includes a proposed Mitigation Monitoring, Compliance, and Reporting Program for the mitigation measures it recommends for the proposed project. It recommends a framework for implementation of the Mitigation Monitoring Program by this Commission as the CEQA lead agency. Accordingly, we hereby approve and adopt the Mitigation Monitoring Program set forth in Appendix 9 of the Final EIR.

## **VIII. EMF Issues**

### **A. Background**

The Commission first established EMF policies in D.93-11-013. In our recent review of EMF issues, the Commission stated in D.06-01-042 that, “at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences.” We affirmed in D.06-01-042 that the Commission’s EMF policy is one of prudent avoidance, with application of low-cost/no-cost mitigation measures to reduce EMF exposure for new and upgraded utility transmission and substation projects. The Commission has adopted a benchmark of 4% of total project cost for low-cost EMF mitigation measures, with flexibility to allow expenditures above the 4% benchmark if justified by a project’s unique circumstances. In D.06-01-042, the Commission stated that, as a guideline, low-cost EMF mitigation measures should reduce EMF levels by at least 15% at the utility right of way.

The Final EIR provides information regarding EMF associated with the proposed project. It does not consider magnetic fields<sup>31</sup> in the context of CEQA and determination of environmental impact because there is no agreement among scientists that EMF creates a potential health risk, and there are no defined or adopted CEQA standards for defining health risk from EMF.

### **B. EMF Management Plan for the Tehachapi-Vincent Transmission Project**

Consistent with its obligations under G.O. 131-D, SCE included an EMF Field Management Plan with its application. In accord with Commission policy, SCE proposes to incorporate “no-cost” and “low-cost” magnetic field reduction steps in the proposed transmission and substation facilities. The measures proposed by SCE that would reduce magnetic fields are as follows:

#### **Segment 2**

- Phasing the proposed Antelope-Vincent 500-kV transmission line for magnetic field cancellation with existing transmission lines and subtransmission lines;
- Constructing the relocated Antelope-Anaverde 66-kV line and the Antelope-Acton-Palmdale-Shuttle 66-kV on 75-foot-tall steel poles that are 5 feet taller than existing structures;
- Constructing the relocated Antelope-Anaverde 66-kV line and the Antelope-Acton-Palmdale-Shuttle 66-kV utilizing compact TO 352 construction meeting the preferred design specification for 66-kV lines as defined in SCE’s EMF Design Guidelines;

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<sup>31</sup> Because electric fields are shielded effectively by materials such as trees and walls, the emphasis in the Commission’s consideration of EMF is on exposure to magnetic fields.

- Phasing the relocated Antelope-Anaverde 66-kV line and the Antelope-Acton-Palmdale-Shuttle 66-kV for magnetic field cancellation with existing and proposed transmission lines;
- Widening the existing ROW by 180 feet;
- Routing portions of the proposed 500-kV transmission line further away from future residential development;
- Phasing the replacement for the Midway-Vincent 500-kV No. 3 transmission line for magnetic cancellation with existing transmission lines (Transpositions would be required to phase portions of the transmission line routes for field reduction. The cost for these transpositions would be below 4% of the project cost.); and
- Placing the replacement for the existing Midway-Vincent 500-kV No. 3 transmission line between the Sagebrush 220-kV transmission line ROW and the existing SCE 200-kV transmission lines for portions of the line route.

### **Segment 3**

- Phasing the proposed Antelope-Substation One 500-kV transmission line for magnetic field cancellation with existing transmission lines and subtransmission lines;
- Utilizing compact conductor configuration (500-kV tubular steel poles) for portions of the line route;
- Routing the proposed Antelope-Substation One 500-kV transmission line and Substation One-Substation Two 220-kV transmission line away from residences;
- Phasing the proposed Substation One-Substation Two 220-kV transmission line for field cancellation with the existing Sagebrush-Skyriver 220-kV transmission line and subtransmission lines (Transpositions would be required to phase portions of the transmission line routes for field reduction. The cost for these transpositions would be low-cost);
- Widening existing subtransmission ROWs by 160 feet for the proposed Substation One-Substation Two 220-kV transmission line route;

- Locating transformers to maintain distances greater than 50 feet away from the substation property lines at Substation One and Substation Two; and
- Locating switchracks, capacitors and busses to maintain distances greater than 40 feet away from the substation property lines at Substation One and Substation Two.

SCE's plan for reducing magnetic fields for the proposed project is consistent with the CPUC's EMF policies and also with recommendations made by the U.S. National Institute of Environmental Health Sciences. Furthermore, the recommendations above meet CPUC-approved EMF Design Guidelines as well as all national and state safety standards for new electric facilities. We hereby order SCE to construct the Tehachapi-Vincent Transmission Project consistent with the proposals in its EMF Field Management Plan.

## **IX. Cost Recovery Issues Raised by § 399.25**

### **A. Background**

SCE states that its request for a CPCN for the Tehachapi-Vincent Transmission Project is conditioned on the establishment of clear cost recovery mechanisms in advance of construction. In 2005, SCE filed a petition with FERC for a declaratory order finding that the costs of Segments 1, 2, and 3 of the Tehachapi Renewable Transmission Project were eligible for recovery in transmission rates.<sup>32</sup> In response, FERC provided the cost recovery assurance sought by SCE for Segments 1 and 2, granting rolled in rate-treatment for all prudently incurred costs, regardless of abandonment or cancellation of the

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<sup>32</sup> See Southern California Edison Company Petition for Declaratory Order in FERC Docket No. EL05-80, March 23, 2005.



project facilities.<sup>33</sup> FERC's willingness to authorize cost recovery was based on its view that Segments 1 and 2 are appropriately considered network upgrades and the fact that SCE did not have control over the ultimate materialization of the anticipated future generators. This FERC order significantly limits retail ratepayer risk for Segment 2.

For Segment 3, however, FERC found that it appeared to be a generation-tie facility rather than a network upgrade, and accordingly Segment 3 was not eligible for rolled-in rate treatment under FERC precedent. (SCE Opening Brief, p. 4.)

Following the FERC order, we issued D.06-06-034 finding:

[I]n light of our determination in D.04-06-010 regarding the magnitude and concentration of the renewable resources located in the Tehachapi area...we find that the costs associated with high-voltage, bulk-transfer, multi-user transmission facilities, whether classified as "network" or "gen-tie," proposed to access known, concentrated renewable resource areas...are eligible for cost recovery under § 399.25. (D.06-06-034, *mimeo.* at p. 23.)

However, we also reiterated our intent in D.06-06-034 to address cost recovery, and the nature of the proposed facilities, on a project-specific basis within the context of a CPCN proceeding.<sup>34</sup> As we recognized in D.04-06-010, a

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<sup>33</sup> FERC Order on Petition for Declaratory Order, Commission Determination, order F. (112 FERC 61,014) This represents a departure from the conventional rules applied to abandoned plant which limit the utilities ability to recover prudently incurred costs for abandoned or cancelled facilities to 50%.

<sup>34</sup> Decision 03-07-033, D.04-06-010 and D.06-06-034 all contemplated that a specific project's eligibility for cost recovery under § 399.25 would be determined within the context of the project's CPCN proceeding. However, where a transmission project does not require a CPCN or Permit to Construct, D.06-06-034 provides a separate process for

*Footnote continued on next page*

project-specific review in the context of a CPCN proceeding is necessary because “[t]he exact nature of the upgrades and the resource potential must still be established to determine if all of the resources can be developed in a way that is cost-competitive, taking into account transmission costs, and that Tehachapi projects are consistent with a best-fit procurement strategy.” (D.04-06-010, *mimeo.*, p. 16). Further, we also committed in D.04-06-010, to address Tehachapi upgrade cost recovery here:

...[W]hen a utility files a certificate application for Tehachapi upgrades, we will consider at that time the exact ratemaking treatment contemplated under § 399.25 and will also address project financing, as well as any additions to the record regarding need, as necessary.” (*Id.*, p. 18.)

## **B. Discussion**

Section 399.25 (b)(4) ensures retail rate recovery of prudently-incurred costs for projects the Commission finds to be necessary to facilitate RPS compliance, to the extent that cost recovery is not otherwise available. Pursuant to the specific direction of D.04-06-010, the parties submitted briefs on the cost recovery issue in this proceeding. Rather than disputing this project’s eligibility for cost recovery, the briefs focus on the appropriate treatment of the project costs if the backstop recovery mechanism is employed. The briefs in this proceeding were submitted after the Commission issued D.06-06-034, and accordingly reflect that Decision, but request some modifications. We reiterate that D.06-06-034 continues to be the controlling decision in this area, and the

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a need determination to provide assurance of cost recovery. *See, e.g.*, D.06-06-034, *mimeo.* at pp. 18-20.

determinations made in D.06-06-034 regarding implementation of the cost recovery provisions of § 399.25 apply here.

There is no question that the Tehachapi-Vincent Transmission Project qualifies for cost recovery under §399.25(b)(4). As discussed above, D.06-06-034 defined certain types of facilities that would qualify for cost recovery under § 399.25(b)(4), including:

High voltage, bulk-transfer transmission facilities, whether classified as network or gen-tie, that are designed to serve multiple RPS-eligible generators where it has been established that the amount of added transmission capacity will likely be utilized by RPS-eligible generation projects within a reasonable period of time .... (D.06-06-034, *mimeo.*, Finding of Fact 8.)

As set forth in Section III above, we find that the Tehachapi-Vincent Transmission Project is necessary, in part because it qualifies as such a high-voltage, bulk transfer facility that will be used imminently to serve multiple RPS-eligible generators. Consequently, it is appropriate to provide SCE assurance of recovery of prudently incurred costs, and we do so here.

Section 399.25 also requires the Commission to direct “the utility ... to seek the recovery through general transmission rates of the costs associated with the transmission facilities.” Therefore, we direct SCE to first seek cost recovery at FERC through general transmission rates, as appropriate and consistent with prior FERC decisions. Further, we reiterate the holding of D.06-06-034: “§ 399.25 is not meant to substitute for the existing cost recovery mechanisms available to support transmission development, nor is it intended to change the ultimate cost responsibility of generators and utility ratepayers.” (*Id.* at p. 28.) “Nothing in this decision is intended to relieve renewable generators from their responsibility

for their fair share of the costs of non-network transmission facilities necessary to interconnect the generator with the network.” (*Id.* at Finding of Fact 7.)

We affirm, consistent with D.06-06-034, that, notwithstanding the great likelihood of cost recovery through FERC wholesale rates for Segment 2, it is appropriate for SCE to continue to track its project costs through the memorandum account approved by the Commission in response to SCE Advice Letter 1833-E filed on December 13, 2004. Both the statute and D.06-06-034 anticipate that first FERC would act, and that this Commission would step in only if FERC disallows recovery of some costs. Thus, any consideration of cost recovery by this Commission would only come after FERC had finished its work.

The issues between SCE and DRA, regarding use of the ERRA proceeding to audit accounts and to move costs from the memorandum account to a balancing account, were appropriately resolved in D.06-06-034, which concluded that, to the extent applicable, review or audit of costs should occur in the utility’s rate case, and not in the ERRA. We affirm that determination here. Until that time, the costs should remain in the memorandum account.<sup>35</sup>

Similarly, we find that general ratemaking treatment for this project should also occur in a general rate case, rather than being deferred to a later proceeding incorporating a prudence review.<sup>36</sup>

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<sup>35</sup> See D.06-06-034, *mimeo.* at p. 32.

<sup>36</sup> While a prudence review is appropriate, it is a less suitable forum than a general rate case for examining rate design and general cost allocation issues.

**X. Maximum Cost Pursuant to Pub. Util.  
Code § 1005.5(a)**

While the Federal Energy Regulatory Commission ultimately will decide how much of the costs for this project SCE may recoup in transmission rates, we have jurisdiction pursuant to § 1005.5(a) and the responsibility to specify in the CPCN a “maximum cost determined to be reasonable and prudent” for the Tehachapi-Vincent Transmission Line Project.

In its Amended Application, SCE estimated a cost for constructing Segment 2 of \$63 million, and a cost for constructing Segment 3 of \$102.1 million. No party disputed these estimates. SCE did note, however, that these were preliminary estimates, as full detailed engineering and cost estimates have not yet been completed.

In setting the maximum reasonable cost, the Commission is to take several factors into consideration, including the design of the project, the expected duration of construction, an estimate of the effects of economic inflation, and any known engineering difficulties associated with the project.

The Commission has previously recognized the need for adjustments to cost caps in other decisions granting CPCNs. For example, the 1988 decision adopting an estimate of the maximum reasonable and prudent cost for the Devers-Palo Verde 2 project<sup>37</sup> and more recently the decision on PG&E’s Jefferson-Martin 230 kV transmission project<sup>38</sup> both allowed for adjustments to the estimate of maximum reasonable cost. SCE requests that the Commission use SCE’s cost estimates as the basis for a cost cap, but allow SCE to seek

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<sup>37</sup> D.88-12-030, 1988 Cal. PUC LEXIS 774 (30 CPUC 2d 4).

<sup>38</sup> D.04-08-046, 2004 Cal. PUC LEXIS 391.

adjustments based on changes in the cost estimate once final, detailed design-based construction estimates are completed.

DRA also recommends that the Commission use SCE's estimates of \$63 million for Segment 2 and \$102.1 million for Segment 3 as cost caps, and concedes SCE's ability to come back to the Commission to request an increase in the adopted cost cap. Citing our Jefferson-Martin decision, DRA argues that SCE should be required to seek a downward adjustment if its costs will be materially lower (*i.e.* 1% or more) than the adopted cost caps.

We adopt cost caps of \$63 million for Segment 2 and \$102.1 million for Segment 3. These costs are in 2005 dollars. SCE may apply for a higher maximum cost if it can provide adequate justification, and must apply for a lower maximum if it appears that actual cost will be lower than the adopted estimated by at least 1%.

## **XI. Comments on Proposed Decision**

The proposed decision of the assigned Commissioner in this matter was mailed to the parties in accordance with § 311(d) and Rule 14.2 of the Commission Rules of Practice and Procedure. Comments were filed on March 5, 2007 by SCE, by Palmdale Hills Property, LLC (PHP), Anaverde LLC (Anaverde) and Marcy Watton, *et al.* (collectively, Leona Valley Residents).<sup>39</sup> No reply comments were filed. All of the parties commenting on the proposed decision indicated general support for the recommendation in the proposed decision to approve the Project as proposed by SCE with the route deviation identified as "Option A."

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<sup>39</sup> The Leona Valley Residents moved to intervene in this proceeding on October 5, 2006. That motion to intervene is hereby granted.

PHP and Anaverde suggest that the proposed decision erred in finding Alternative 3 to be the “environmentally superior” alternative; however, in view of the proposed decision’s finding that this alternative is infeasible, they characterize this error as harmless. We note that the EIR found Alternative 3 to be only nominally superior to SCE’s proposed route because Alternative 3 was shorter and would pass through already disturbed land. We find that these minor advantages to Alternative 3 do not outweigh the adverse economic impacts to PHP and Anaverde if Alternative 3 were chosen. Finally, we note that the Commission is under no obligation under CEQA to choose the “environmentally superior” alternative if there are other compelling policy reasons not to do so. This decision explains, in Sections VII.A and VII.C, why we have determined that Alternative 3 is infeasible.

The Leona Valley Residents support the proposed decision’s finding that Alternative 4 is infeasible and should not be selected. However, they claim that the Final EIR is defective because fails to explain all of the ways in which Alternative 4 is inferior, and they request the findings on this issue to be augmented. We are persuaded that some of the augmentation urged by the Leona Valley Residents is justified, and we have accordingly added text to Section VII.4 of Attachment B and revised Section VI.B.1 of this decision.

The Leona Valley Residents also claim that the environmental analysis for the Tehachapi Transmission Projects is improperly piecemealed, thereby preventing an adequate analysis of cumulative impacts. We disagree. All of the transmission projects previously proposed for the Tehachapi area have received full environmental review under CEQA through the preparation and circulation of an EIR (as is the case here for the Tehachapi-Vincent Transmission Project). Projects that are just now coming to fruition will be subjected to full

environmental review once a CPCN application is filed with this Commission. While the future development of the Tehachapi area may appear to be a certainty today, it was a speculative venture when SCE submitted its application for this CPCN at the end of 2004, and no one could have predicted the configuration of the expansion that is now contemplated for the area. In addition, as noted above in Section III of this decision, the Tehachapi-Vincent Transmission Project has utility independent of any other planned transmission project that would accommodate the development of renewable energy resources in the Tehachapi area. Moreover, the EIR that we are approving in this decision incorporates a thorough analysis of the cumulative impacts of the proposed project, including a discussion of possible future energy and transmission projects. See, Section E.4 of the Final EIR. We accordingly conclude that there is no improper piecemealing of the environmental analysis associated with this project.

Finally, SCE's comments recommend minor changes to the proposed decision and to the mitigation measures set forth in Attachment A to the proposed decision. We shall address each of these recommendations separately.

**A. Mitigation Measures V-16b, V-16c and V-16d**

SCE has requested that these mitigation measures be deleted, because they are unnecessary in connection with the route being approved in this decision. We disagree with SCE's request, as the project does include substation construction, and these mitigation measures were developed to address potential visual impacts at or around such facilities.

**B. Mitigation Measure V.1a**

SCE has requested that this mitigation measure be modified because it is, in SCE's view, overly burdensome and could result in significant schedule



delays. We agree with SCE that all reasonable steps need to be taken to move the construction of the project along once it is approved. We note that Mitigation Measure V-1a only requires the installation of tubular steel poles where they will reduce visual impacts and are feasible to construct without reducing reliability. With respect to the possible use of tubular steel poles, the CPUC is committed to work with SCE to accelerate its review of SCE's plans under this mitigation measure to the fullest extent possible. We accordingly do not believe that a change in the mitigation measure is needed.

**C. Mitigation V-1e**

This mitigation measure requires SCE to treat surfaces with appropriate colors, finishes and textures. The CPUC agrees with SCE that it would be best to avoid coating processes that must be re-applied over time or that could result in deterioration of the structure material. If SCE can demonstrate that the colors that can be produced in the galvanizing process (presumably darker colors) can accomplish the intent of Mitigation Measure V-1e, the CPUC will be satisfied. Accordingly, we do not believe that any change is required to this mitigation measure.

**D. Mitigation Measure V-1f**

This mitigation measure requires SCE to establish an evergreen vegetative screen around the substations that are part of the proposed project. SCE requests that this mitigation measure be modified because the desert terrain and vegetative types in the vicinity of the substations make the use of evergreens infeasible. We agree with SCE's concern and will modify the mitigation measure to delete the word, "evergreen."

**E. Mitigation Measure V-5**

This mitigation measure requires SCE to match existing structures and spans as closely as possible in order to reduce visual complexity. SCE requests that this mitigation measure be modified to limit its applicability to areas where there will be construction adjacent to existing towers. We agree with SCE that this is a reasonable request, and we shall clarify this mitigation measure accordingly.

**F. Mitigation Measure AG-4**

This mitigation measure requires SCE to site transmission towers and pulling/splicing stations in locations that minimize impacts to agricultural operations. SCE requests that this mitigation measure be modified to incorporate feasibility constraints. As to this “feasibility” language that SCE requests, we note that mitigation measures must, by definition, be feasible. Thus, if this measure cannot be feasibly implemented in certain locations, SCE should be able to present evidence supporting such a determination to CPUC staff. Thus, we see no need to change the mitigation measure to include “feasibility” language.

**G. Mitigation Measure N-1**

This mitigation measure requires that when using equipment within 600 feet of project construction, SCE must use temporary shields. SCE requests that this mitigation measure be clarified to apply 300 feet on either side of construction. We agree with SCE’s requested clarification and will modify the mitigation measure accordingly.

**H. Mitigation Measure N-3a**

This mitigation measure requires advance notification to all single-family residences within 600 feet of project construction. SCE requests that this be modified to limit this notification to residences and businesses within 300 feet of

project construction. We cannot grant SCE's request, because the language of this measure reflects the specific distance standards contained in Los Angeles County's noise ordinance.

#### **I. Mitigation Measure H-1b**

This mitigation measure limits slope gradients applicable to new roadways. SCE has requested a modification to allow a steeper gradient if it can be demonstrated to result in fewer impacts. We agree with SCE's request. If SCE can in fact demonstrate that a steeper gradient would result in fewer environmental impacts than a longer roadway with a gentler gradient, SCE should be able to use the steeper gradient. We note that this modification does not reduce the environmental benefits associated with the mitigation measure; to the contrary, the intent of the modification is to maximize the reduction in environmental impacts associated with road construction.

#### **J. Other Requested Changes to the Proposed Decision**

SCE has requested the addition of a Finding of Fact and a Conclusion of Law addressing the need to keep project construction on schedule. This Commission is as committed to the rapid implementation of the State's Renewable Portfolio Standards as is SCE, and, at various points in this decision, we have made statements indicating that we expect CPUC staff to undertake its best efforts to work with SCE to accelerate the review of any SCE plans and activities that are submitted for staff approval. We do not believe that any further findings or conclusions are needed as evidence of our expectations and commitment and accordingly will not grant SCE's request in this regard. Finally, SCE requests that we delete a sentence at page 22 of the proposed decision that refers to the value of future transmission projects associated with the

development of the Tehachapi wind resource. We agree with SCE that this language does not relate to the issues in this proceeding and have modified it to delete the reference to specific future projects.

## **XII. Assignment of Proceeding**

Dian M. Grueneich is the assigned Commissioner and Julie Halligan is the assigned ALJ in this proceeding.

### **Findings of Fact**

1. The Tehachapi-Vincent Transmission Project is necessary to promote the safety, health, comfort, and convenience of the public.
2. Transmission to the wind rich Tehachapi area is almost unique in its ability to qualify under the standard set forth in this Decision for a determination of need under § 399.25 because of the size of the wind resource in the area, the constraints on the existing transmission system, and the level of interest on behalf of both utilities and merchant providers aspiring to develop projects there.
3. The Tehachapi area offers the largest wind resource in California. It has the undeveloped potential of generating about 1,400 gigawatt-hours per year, with about 4,500 MWs of installed capacity. To capture this potential, the lines must go where the wind blows – there is no other choice.
4. Without system improvements, SCE and others could not deliver significant amounts of wind power from the region.
5. No other entity has proposed a line to reach the Tehachapi wind resources.
6. Industry commitment to develop the Tehachapi area for RPS purposes is significant; utilities have received winning bids from, and SCE has signed contracts with developers of wind projects, the output of which cannot be fully delivered without increased transmission capacity.

7. In total, the wind projects in the current ISO queue for Tehachapi exceed 4,000 MWs in capacity.

8. The Tehachapi-Vincent Transmission Project is part of a series of high-voltage, bulk transfer, transmission upgrades designed to serve multiple RPS-eligible wind projects in the Tehachapi region, as contemplated under D.06-06-034.

9. The Tehachapi-Vincent Transmission Project would accommodate output from an anticipated 300 MW wind facility west of the Antelope substation. It would increase the take-away capacity for power from Tehachapi through the Antelope substation and toward the load center in Southern California.

10. Segment 2 would improve overall system reliability by increasing capacity between the Antelope and Vincent Substations, particularly in light of continued load growth in the Antelope Valley.

11. The initial cost of the Tehachapi-Vincent Transmission Project is capped at \$63 million for Segment 2 and \$102.1 million for Segment 3.

12. The cost of the Tehachapi-Vincent Transmission Project is justified based upon the high degree of the certainty we have that the project is critically needed to ensure development of RPS resources in the Tehachapi area.

13. The Tehachapi-Vincent Transmission Project is needed to facilitate compliance with the RPS program.

14. The project satisfies the requirements of § 399.25, and therefore satisfies the need requirement implicit in § 1001.

15. The environmentally superior alternative for the Tehachapi-Vincent Transmission Project consists of a combination of alternative route segments identified as Alternative 3 in the Final EIR.

16. The environmentally superior route poses marginally less harm to the environment than do the other routes proposed by SCE and/or considered in the Final EIR.

17. However, the environmentally superior route will cause unavoidable adverse impacts that can be avoided by other alternatives, and will impose an unreasonable financial burden on the developers of Ritter Ranch and Anaverde Ranch.

18. The Commission has reviewed and considered the information in the Final EIR before approving the project.

19. In determining whether to grant a CPCN for the proposed project, we have given express consideration to community values, recreational and park areas, historic and aesthetic values, and influence on the environment, all of which factors are addressed in detail in the Final EIR.

20. The Final EIR identifies significant environmental effects of the route we approve that can be mitigated or avoided to the extent that they become not significant. The Final EIR describes measures that will reduce or avoid such effects.

21. Specific findings with respect to all significant or potentially significant environmental effect of the project as proposed and of the various alternative routes studied in the Final EIR are set forth in Attachment B to this Decision, CEQA Findings of Fact. We adopt the CEQA Findings of Fact included in Attachment B as if fully set forth herein.

22. The environmental mitigation measures identified in the Final EIR, and set forth in detail in Attachment A to this Decision, are feasible and will avoid significant environmental impacts.

23. In response to comments on the proposed decision, the Commission has made several minor modifications to certain of the environmental mitigation measures set forth in Attachment A to this Decision.

24. These minor modifications to certain environmental mitigation measures provide an equivalent or greater degree of environmental mitigation than would have occurred had these modifications and deletions not been made; moreover, these minor modifications to, and deletions of, certain environmental mitigation measures will themselves not cause any significant environmental impacts.

25. The Mitigation Monitoring, Compliance, and Reporting Plan set forth in Appendix 9 to the Final EIR conforms to the recommendations of the Final EIR for measures required to mitigate or avoid those environmental effects of the project that can be reduced or avoided.

26. Notwithstanding the adoption in this Decision of all feasible mitigation measures identified in the Final EIR, and set forth in detail in Attachment A, there are certain adverse environmental impacts of the project being approved in this Decision that cannot be mitigated to a less than significant level. The project's unavoidable adverse environmental impacts are acceptable in light of these substantial benefits, which constitute an overriding consideration warranting approval of the project, despite each and every unavoidable impact.

27. As State lead agency under CEQA, the Commission is required to monitor the implementation of mitigation measures adopted for this project to ensure full compliance with the provisions of the monitoring program.

28. The Commission will develop a detailed implementation plan for the Mitigation Monitoring, Compliance, and Reporting Plan.

29. It is reasonable to approve SCE's EMF Field Management Plan for the project, as described in Section VIII.B.

30. The maximum reasonable and prudent cost for the approved project is \$63 million for Segment 2 and \$102.1 million for Segment 3, as discussed in Section X above.

### **Conclusions of Law**

1. The Commission has jurisdiction over the proposed project pursuant to, *inter alia*, Pub. Util. Code §§ 399.25 and 1001 *et seq.*

2. In order to award a certificate under § 1001, the Commission must find that the present or future public necessity require or will require construction of the line.

3. Section 399.25 directs the Commission to deem necessary those transmission facilities identified in applications if the proposed facilities are necessary to facilitate achievement of the State's renewable power goals.

4. Section 399.25 recognizes that in order to achieve RPS goals, it may be necessary for the Commission to approve new transmission projects in anticipation of future renewable energy projects, and to provide unusual assurances of recovery of reasonable construction costs.

5. Because § 399.25 exists in a broader statutory context – one that requires ambitious renewable portfolio development, reasonable rates, and environmental protection -- we must interpret this code section in a manner that strikes a reasonable balance.

6. We faced a similar challenge in establishing the circumstances under which a project would be eligible for cost recovery through retail rates under § 399.25(b)(4). In D.06-06-034 we identified two types of transmission projects that could be needed to facilitate RPS compliance and were therefore eligible for cost recovery. Those projects included “high-voltage, bulk-transfer, multi-user



transmission facilities ... proposed to access known, concentrated renewable resource areas..." (D.06-06-034, *mimeo.* at p. 27).

7. Decision 06-06-034 also noted that the degree of certainty required for a showing of RPS need "will depend on the magnitude of costs at stake," and that "in certain cases it will be necessary to consider the status of the RPS compliance to date..." (*Id.* at p. 28.)

8. Section 399.25 does not offer the only means of establishing project need.

9. Historically, under § 1001, need for a transmission project could be established based upon a project's contribution to reliability or the ratepayer savings it would produce.

10. In order to rely on § 399.25 to establish the need for a project, we find that a proponent must demonstrate: (1) that a project would bring to the grid renewable generation that would otherwise remain unavailable; (2) that the area within the line's reach would play a critical role in meeting the RPS goals; and (3) that the cost of the line is appropriately balanced against the certainty of the line's contribution to economically rational RPS compliance.

11. A showing that a proposed project fits into one of the two categories identified in D.06-06-034 is the first step. A Commission finding of necessity in a CPCN proceeding must necessarily consider additional factors.

12. The Tehachapi-Vincent Transmission Project satisfies the requirements of Pub. Util. Code §§ 399.25 and 1001.

13. The Tehachapi-Vincent Transmission Project should be constructed consistent with SCE's proposed EMF management plan.

14. The Final EIR should be approved.

15. Project approval should be conditioned upon construction of Option A as described in the Final EIR.

16. Project approval should be conditioned upon the completion of the mitigation measures set forth in Attachment A. These mitigation measures are feasible and will minimize or avoid significant environmental impacts. Those mitigation measures should be adopted and made conditions of project approval.

17. The minor modifications to, and deletions of, certain environmental mitigation measures that the Commission has made in response to comments on the proposed decision should be made, because these modifications and deletions provide an equivalent or greater degree of environmental mitigation than would have occurred had these modifications and deletions not been made.

18. After considering and weighing the values of the community, the impacts to parks and recreational areas, the impacts on historical and aesthetic values, and the environmental impacts caused by the project, we conclude that the CPCN for the Tehachapi-Vincent Transmission Project as described in this decision should be approved.

19. Based on the completed record before us, we conclude that other alternatives identified in the Final EIR are infeasible, pose more significant environmental impacts, or are less consistent with community values than the route we select in this decision.

20. Section 399.25 (b)(4) ensures retail rate recovery of prudently-incurred costs for projects the Commission finds to be necessary to facilitate RPS compliance to the extent that cost recovery is not otherwise available.

21. Decision 06-06-034 addressed the Commission's principles and process for cost recovery under § 399.25.

22. The determinations made in D.06-06-034 regarding implementation of the cost recovery provisions of § 399.25 apply to this project.

23. Section 399.25 requires the Commission to direct SCE to seek the recovery through general transmission rates of the costs associated with the transmission facilities.

24. Section 399.25 is not meant to substitute for the existing cost recovery mechanisms available to support transmission development, nor is it intended to change the ultimate cost responsibility of generators and utility ratepayers. Consequently, nothing in this decision is intended to relieve renewable generators from their responsibility for their fair share of the costs of non-network transmission facilities necessary to interconnect the generator with the network.”

25. Notwithstanding the likelihood of cost recovery through FERC wholesale rates, it is appropriate for SCE to continue to track its project costs through the memorandum account approved by the Commission in response to SCE Advice Letter 1833-E filed on December 13, 2004.

26. Both § 399.25 and D.06-06-034 anticipate that first FERC would act, and that this Commission would step in only if FERC disallows recovery of some costs. Thus, any consideration of cost recovery by this Commission would only come after FERC had finished its work.

27. The Commission has authority to specify a “maximum cost determined to be reasonable and prudent” for the Tehachapi-Vincent Transmission Project pursuant to Pub. Util. Code § 1005.5.

28. The Commission should approve a maximum reasonable and prudent cost of \$63 million for Segment 2 and \$102.1 million for Segment 3.

29. Commission approval of SCE’s application, as modified herein, is in the public interest.

30. This order should be effective today so that SCE may proceed expeditiously with construction of the authorized project.

## **O R D E R**

### **IT IS ORDERED** that:

1. A Certificate of Public Convenience and Necessity is granted to Southern Edison Company (SCE) to construct the Tehachapi-Vincent Transmission Project, following the route proposed by SCE, as modified by Option A, as described in the Final EIR.
2. SCE shall, as a condition of approval, comply with all applicable mitigation measures specified in Attachment A hereto, and as directed by the Commission's Executive Director or his designee(s). SCE shall work with the Commission's Energy Division to create detailed maps for use in construction and mitigation monitoring.
3. SCE's proposed electric and magnetic field (EMF) Field Management Plan for the Tehachapi-Vincent Transmission Project, as described in Section VIII of this order, is adopted.
4. SCE shall, as a condition of approval, build the project in accordance with these modifications.
5. Pursuant to Pub. Util. Code § 1005.5(a), the maximum cost (in 2005 dollars) determined to be reasonable and prudent for the Tehachapi-Vincent Transmission Project, including Allowance for Funds Used During Construction, pension and benefits, and administrative & general expenditures, is \$63 million for Segment 2 and \$102.1 million for Segment 3.

6. SCE may apply for a higher maximum cost, and must apply for a lower maximum if it appears that actual cost will be lower than the adopted estimated by at least 1%.

7. The Executive Director shall supervise and oversee construction of the project insofar as it relates to monitoring and enforcement of the mitigation measures described in the Final EIR and in Attachment A to this decision in accordance with the Mitigation Monitoring Plan set forth in Appendix 9 of the Final EIR. The Executive Director may delegate his duties to one or more Commission staff members or outside staff. The Executive Director is authorized to employ staff independent of the Commission staff to carry out such functions, including, without limitation, the on-site environmental inspection, environmental monitoring, and environmental mitigation supervision of the construction of the project. Such staff may be individually qualified professional environmental monitors or may be employed by one or more firms or organizations. In monitoring the implementation of the environmental mitigation measures described in the Final EIR and in Attachment A, the Executive Director shall attribute the acts and omissions of SCE's employees, contractors, subcontractors, or other agents to SCE. SCE shall comply with all orders and directives of the Executive Director concerning implementation of the environmental mitigation measures described in Attachment A.

8. The Energy Division shall supervise and oversee the construction of the Tehachapi-Vincent Transmission Project insofar as it relates to monitoring and enforcement of the mitigation measures described in the Final EIR. The Energy Division may designate outside staff to perform on-site monitoring tasks. The Commission project manager (Energy Division, Environmental Projects Unit) shall have the authority to issue a Stop Work Order on the entire project, or

portions thereof, for the purpose of ensuring compliance with the mitigation measures described in the Final EIR. Construction may not resume without a Notice to Proceed issued by the Environmental Projects Unit of the Energy Division.

9. SCE's right to construct the Tehachapi-Vincent Transmission Project as set forth in this decision shall be subject to all other necessary state and local permitting processes and approvals.

10. SCE shall file a written notice with the Commission, served on all parties to this proceeding, of its agreement, executed by an officer of SCE duly authorized (as evidenced by a resolution of its board of directors duly authenticated by a secretary or assistant secretary of SCE) to acknowledge SCE's acceptance of the conditions set forth in the Ordering Paragraphs of this decision. Failure to file such notice within 75 days of the effective date of this decision shall result in the lapse of the authority granted by this decision.

11. Consistent with Pub. Util. Code § 399.25, the Commission shall ensure that SCE can recover, through rates, any reasonable costs related to the Tehachapi-Vincent Transmission Project that the Federal Energy Regulatory Commission determines not to reflect in authorized transmission rates. SCE shall account for these costs, and seek any needed future recovery, in the manner described in Section IX of this decision.

12. The Final EIR for the Tehachapi-Vincent Transmission Project is certified pursuant to the California Environmental Quality Act (CEQA).

13. The Executive Director shall file a Notice of Determination for the project as required by the CEQA and the regulations promulgated pursuant thereto.

14. Upon satisfactory completion of the project, SCE shall file a notice of completion with the Executive Director by the Energy Division.

15. Application 04-12-008 is closed.

This order is effective today.

Dated March 15, 2007, at San Francisco, California.

MICHAEL R. PEEVEY

President

DIAN M. GRUENEICH

JOHN A. BOHN

RACHELLE B. CHONG

TIMOTHY ALAN SIMON

Commissioners