

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



VIA ELECTRONIC MAIL

October 10, 2006

United State Department of Energy
Office of Electricity Delivery and Energy Reliability, OE-20
Attention: EPACT 1221 Comments,
Forrestal Building, Room 6H-050
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Re: Response to U.S. Department of Energy's August 2006 National Electric
Transmission Congestion Study: Comments of the California Energy
Commission

In response to the Department of Energy's August 2006 National Electric Transmission
Congestion Study and possible designation of National Interest Electric Transmission Corridors
("NIETCs"), pursuant to section 1221(a) of the Energy Policy Act of 2005 ("EPAct 05"),¹ the
California Energy Commission ("Energy Commission") submits its comments, below.

Communications concerning the Energy Commission's comments should be addressed to
the following:

Jim McCluskey,
Transmission Program Specialist
Engineering Office, Siting Division
California Energy Commission
1516 9th Street, MS 46
Sacramento, CA 95814-5512
jmclusk@energy.state.ca.us
(916) 654-3911

Kenneth L. Glick,
Staff Counsel
Office of the Chief Counsel
California Energy Commission
1516 9th Street, MS 14
Sacramento, CA 95814-5512
kglick@energy.state.ca.us
(916) 654-3855

¹ Section 1221 of the EPAct 05 provides, in part, that designated NIETCs will be subject to "backstop" siting authority by the Federal Energy Regulation Commission ("FERC") for facilities to be located within these designated corridors.

I. INTRODUCTION

The Energy Commission² has been the State of California's primary energy policy and planning agency for the last 30 years.³ The Energy Commission has taken a keen interest in ensuring adequate transmission infrastructure for the state. The Energy Commission has actively participated in both state and federal efforts to address transmission corridor planning and permitting issues, including the Bureau of Land Management's corridor planning efforts in the 1970's and 1980's, as well as the recent federal corridor designation efforts under EPLAct-05, Section 368. In addition, beginning in 2003, the Energy Commission has made a number of recommendations to both the Governor and the Legislature under the state-mandated *Integrated Energy Policy Report (Energy Report)* and *Strategic Transmission Investment Plan (Strategic Plan)* to improve transmission corridor planning and permitting in California.

The Energy Commission was recently given additional transmission corridor planning and designation authority by Senate Bill (SB) 1059 (Chapter 638, California Statutes of 2006), which was signed into law on September 29, 2006. This new responsibility will allow the Energy Commission to work formally with federal, state, and local agencies, as well as utilities, generators, and the affected public, to set aside appropriate corridors to meet future transmission needs in the state. We look forward to an on-going relationship with the Department of Energy ("DOE") and other federal agencies in providing for adequate transmission corridors and infrastructure in California.

II. GENERAL COMMENTS

The Energy Commission applauds DOE for the timely completion of the Congestion Study. While many parties argued for, and may continue to argue for, more extensive and detailed analysis of individual projects and/or congestion, we believe that DOE has used a sound approach by relying to a large extent on existing congestion and transmission studies to identify areas where transmission infrastructure expansion is needed to address congestion and constraints in California. As we stated in our March 6, 2006, comments in response to DOE's Notice of Inquiry in this matter:

Designations of national interest transmission corridors should be based primarily on current factual information, consistency with state and federal policy, and common sense judgment of where transmission is most needed, with appropriate emphasis on accessing renewable resources currently constrained by transmission limitations.
(Comments at p. 8.)

² The California Energy Commission is also known by its formal name, State Energy Resources Conservation and Development Commission, and is an organizational unit within the State of California Resources Agency.

³ For a more detailed description of the Energy Commission's responsibilities as the principal energy policy and planning agency, see Attachment A, March 6, 2006, Comments of the Energy Commission to the Department of Energy Re: Considerations for Transmission Congestion Study and Designation of National Interest Electric Transmission Corridors, p 1-2.

If we are to move forward in making transmission infrastructure investments in California, it is essential that those transmission projects that have already been studied and deemed needed to achieve California's transmission planning objectives not be subjected to the current system or perpetual analysis.

The Energy Commission is pleased to see that many of the issues and concerns we raised in our earlier comments on national interest electric transmission corridors (a copy of which is attached) are being addressed by DOE. The Energy Commission believes that DOE has made significant steps forward in moving toward the designation of transmission corridors of national interest. We are encouraged that the Congestion Study identifies Southern California as one of the two Critical Congestion Areas in the nation that is being considered for designation as national interest electricity corridors. We also support DOE's identification of the San Francisco Bay Area as a Congestion Area of Concern.

The Energy Commission agrees with DOE's classification of the Southern California region as a "Critical Congestion Area." As described in the report, Critical Congestion Areas are "those areas where it is critically important to remedy existing or growing congestion problems because the current and/or projected effects of the congestion are severe."⁴ The DOE report concludes: "Southern California needs new transmission capacity to reach generation sources outside the region for reliability, economics, and compliance with the state's renewable portfolio standard." While not specifically called out in the Congestion Study, the Energy Commission notes that "the San Diego region's transmission problems are acute and graphically illustrate the importance of adequate transmission."⁵ The Mission-Miguel 230 kV #2 line identified in 2001 by San Diego Gas & Electric Company ("SDG&E") required only minimal regulatory approval. Yet, even under a creatively developed construction plan, it took SDG&E three years to permit and another two years to build this critically needed upgrade. The Energy Commission believes that SDG&E's transmission situation is very precarious and additional transmission infrastructure investments in the San Diego region are necessary.

In addition the Energy Commission agrees with DOE's classification of the San Francisco Bay area as a "Congestion Area of Concern." The DOE defines this as an area "where a large-scale congestion problem exists or may be emerging."⁶ The San Francisco Bay area is described by DOE as needing new transmission and generation to improve the reliability and reduce the local delivered cost of electricity. The Energy Commission agrees that San Francisco Bay Area faces transmission constraints and we previously identified the Trans-Bay Cable Project as a near term solution to "ensure reliability, serve growing loads, and hasten the retirement of aging generators in the San Francisco Peninsula area."⁷

In our March 6, 2006, comments the Energy Commission raised concerns that DOE may be defining congestion too narrowly to accommodate state energy laws and policies. In order to build sufficient transmission capacity in California to access renewable resources to meet State renewable portfolio standards (RPS) targets, we noted that it is vital that "reasonably priced,"

⁴ US Department of Energy, National Electric Transmission Congestion Study, August 2006, p. 39

⁵ Energy Commission, *2005 Integrated Energy Policy Report*, November 2005, p. 92

⁶ US Department of Energy, National Electric Transmission Congestion Study, August 2006, p. 48

⁷ Energy Commission, *2005 Integrated Energy Policy Report*, November 2005, p. 102

“diversity of supply,” and “energy independence” needs identified in federal law (Subsection 1221(a) (4)) are elevated and prominently featured in DOE’s assessment of transmission capacity constraints, congestion, and the subsequent designation of corridors of national interest. The inclusion of the Southern California projects identified in our *Strategic Plan*, including those necessary to meet the state’s renewable portfolio standard, indicates that DOE has used a broader set of criteria for identifying transmission needs that is consistent with California emphasis on renewable resources that reduce our current over-dependence on natural gas for electricity generation.⁸

As we have stated before, the Energy Commission believes it is important to explicitly address state energy laws and policies relating to transmission corridor planning to ensure that DOE’s designation of transmission corridors of national interest both complements these efforts and leverages state expertise. New state law, giving the Energy Commission the authority to plan for and designate transmission corridors in California, lays out critical principles intended to promote the efficient use of the transmission system. To implement these new responsibilities, the Energy Commission will be undertaking a major effort to identify and designate future transmission corridors to meet California’s need to “accommodate the development of renewable resources within the state, facilitate bulk power transactions, ensure access to out-of-state regions that have surplus power available, and reliably and efficiently supply existing and projected load growth [that] is vital to the future economic and social well-being of California.”⁹ The Energy Commission encourages DOE to work closely with us in identifying longer-term needs for transmission corridors for possible future designation as national interest electric transmission corridors.

In designating future transmission corridors in California, state law sets priorities to promote the efficient use of transmission, which include:

- Encouraging the use of existing rights-of-way, the expansion of existing rights-of-way and the creation of new rights-of-way in that order.
- Promoting the efficient use of new rights-of-way, where needed, to improve system efficiency and the environmental performance of the transmission system.¹⁰

An explicit task assigned to the Energy Commission in planning for transmission corridors is to “work with stakeholders, appropriate federal, state, and local agencies, and the public to study transmission corridor zone alternatives and designate appropriate transmission

⁸ The four Southern California transmission projects include: Palo Verde-Devers No. 2 500kV Project (reduces congestion on lines connecting California and Arizona); Sunrise Powerlink 500kV Project (allows interconnections with renewable resources located in California’s Imperial Valley, reduces congestion and improves system reliability); Tehachapi Transmission Plan Phase I - Antelope Transmission Project (allows interconnections with wind energy generated in the Tehachapi area of Southern California); and Imperial Valley Transmission Upgrade (provides interconnection with renewable energy resources, to meet future load growth, and provide reliability benefits).

⁹ SB 1059, Chapter 638, California Statutes of 2006

¹⁰ SB 1059, Chapter 638, California Statutes of 2006

corridor zones for future use to ensure reliability and efficient delivery of electricity for California's residents."¹¹ As such, we look forward to working with DOE on section 1221 national interest electric transmission corridors, as well as with the other federal agencies engaged in section 368 energy corridor planning process.

In our March 6, 2006, comments to DOE, the Energy Commission called for a process to identify environmentally sensitive areas, acceptable areas, and areas where urban encroachment into transmission rights-of-way could pose problems. In comments on the Section 368 federal energy corridor process, several groups representing California environmental and wilderness interests identified sensitive lands – including state and national parks, federal and state designated wilderness and wilderness study areas, and critical inventoried roadless areas in national forests – which they believe are not appropriate locations for energy corridors. (See listing at Appendix B.) The Energy Commission continues to strongly recommend that DOE, as part of its NIETC efforts, develop a process to identify and protect from designation lands, including those identified in the section 368 process, that are unsuitable for transmission corridors.

The Energy Commission recognizes that there may be specific cases where federal back-stop siting authority might be justified and welcomed on a case by case basis. The lack of timely permitting for transmission in California continues to be of concern to the Energy Commission. While the state will not easily cede its sovereignty over land-use decisions relating to transmission development in California, in cases of national significance where the State has been unable to make progress in approving vital transmission projects, federal back-stop siting would be beneficial. DOE should focus its efforts on how such a process would be coordinated with state and regional entities.

Finally, the Energy Commission applauds DOE's recognition of the criticality of cost allocation issues, especially for renewable transmission projects, as potential impediments to the development of transmission capacity within designated corridors. DOE's commitment to work with the Federal Energy Regulatory Commission ("FERC") and congestion area stakeholders to facilitate agreements about cost allocation and cost recovery¹² is a component that, if successful, will potentially yield tangible benefits in the form of congestion-relieving facilities within designated corridors. Accordingly, the Energy Commission urges DOE to intervene and actively participate in FERC proceedings to address cost allocation and rate design when placed at issue in proceedings arising in connection with the construction, or proposed construction of transmission facilities within designated corridors.

III. ANSWERS TO DOE'S SPECIFIC QUESTIONS

For clarity, the Energy Commission's comments are organized in question/answer format, following the order in which these questions appear in Section 6.1 of the Congestion Study.

¹¹ SB 1059, Chapter 638, California Statutes of 2006

¹² US Department of Energy, National Electric Transmission Congestion Study, August 2006., p. x .

Question No. 1: *Would designation of one or more National Corridors in these areas be appropriate and in the public interest?*

Yes, as long as DOE's designation of corridors considers the broad concept of transmission need based on California transmission planning objectives, identified and recommended transmission projects and project investments, and transmission planning studies to meet those objectives. In this context, California believes that there is a significant overlapping of national and state interests so that DOE's consideration of state transmission policy objectives in its potential designation of NIETCs will assist DOE in achieving national policy objectives as well. In addition to these objectives, California interests could be served by the federal NIETC corridor planning and permitting processes under certain limited conditions, given the State's history of impediments in developing needed transmission capacity.

In the *2004 Integrated Energy Policy Report Update*, the Energy Commission noted longstanding, continuing, and widespread criticism of California's permitting process and strongly restated the *2003 Energy Report* recommendation that permitting jurisdiction be urgently addressed. The Energy Commission did note that the California Public Utilities Commission ("CPUC") reached favorable decisions on several important transmission projects, including the Mission-Miguel 230 kV #2 line and Pacific Gas & Electric Company's ("PG&E") Jefferson-Martin 230 kV Transmission Line projects. Since adoption of the *2004 Integrated Energy Policy Report Update*, the CPUC approved the Otay Mesa Power Plant Transmission Project and approved temporary modifications allowing the Mission-Miguel transmission upgrade to partially come on-line a year ahead of schedule. In the *2005 Energy Report* the Energy Commission reiterated the need to address transmission permitting issues in California. Three additional critical transmission lines have Certificate of Public Convenience and Necessity ("CPCN") applications pending before the CPUC, including three segments to enhance the Tehachapi, the SDG&E Sunrise Powerlink, and Palo-Verde Devers No. 2 (PVD2) transmission lines.

Governor Schwarzenegger recently reiterated his agreement with the *2003 Energy Report* and *2004 Integrated Energy Policy Report Update* recommendations to consolidate generation and transmission permitting within the Energy Commission. In his September 29, 2006, veto of Assembly Bill 974, which focused on additional reporting requirements under the existing CPUC transmission permitting process, he made the following statement to Members of the California Assembly:

To the Members of the California State Assembly: I am returning Assembly Bill 974 without my signature. This measure focuses on the California Public Utilities Commission internal siting process, much of which the commission could do administratively without legislation. However, this measure does nothing to eliminate duplication between agencies, streamline the process, provide consistency or increase certainty. In my response to the 2003 Integrated Energy Policy Report (IEPR) I outlined a program to streamline the transmission permitting process. This proposal included consolidating transmission and generation siting in the same agency, develop a corridor planning process as proposed to be established in SB 1059 currently pending my approval, and

increasing transmission investment from both the utility and merchant sector. California needs a one-stop permitting process for bulk transmission lines, which is integrated with energy planning. Agency functions would be consolidated, efficiency in state government promoted, public involvement in permitting decisions enhanced, and permitting decisions would be made in a timely manner. This bill fails to resolve the current disconnect between transmission planning and permitting and it creates duplicative filing requirements between the investor-owned utilities and the California Independent System Operator.

In addition, California recently enacted legislation (SB 1059, Chapter 638, California Statutes of 2006) establishing an electric transmission corridor designation process under the jurisdiction of the Energy Commission that is designed to bring the state transmission corridor planning and permitting processes closer together and help address future problems with transmission permitting in California. While designation of NIETC corridors in the state, consistent with transmission needs identified in the *2005 Strategic Plan*, can be an important contribution, it will be important for any geographical designations with center lines and lateral boundaries to be determined consistent with the designation principles expressed in the state's new SB 1059 designation process. In geographical designation of land use corridors on other than federal land to accommodate NIETC projects that would be subject to a federal backstop permitting process, DOE should incorporate those designation principles in any process used to identify a corridor with a centerline and boundaries (see response to question 2).

Question 1.A: *Does a major transmission congestion problem exist?*

There are transmission constraints that limit attainment of California transmission planning objectives that include, but are not limited to, transmission congestion. In its *2005 Strategic Plan* the Energy Commission noted that due to the lack of transmission investment and the current market design California experienced significant transmission congestion costs that, including both reliability must-run (RMR) and inter-zonal costs, were over \$1 billion as of 2004.¹³ Even assuming that proposed transmission facilities, for example PVD2 and SDG&E Sunrise Powerlink, can mitigate a significant part of these congestion costs, the Energy Commission believes DOE should take a broad view of transmission expansion objectives that goes beyond congestion and its mitigation. This view should include transmission expansions to meet state policy goals and targeted objectives such as meeting state renewable portfolio standard goals, which are discussed in greater detail in our March 6, 2006, comments to DOE (See Attachment 1).

Question 1.B: *Are key transmission constraints creating the transmission congestion?*

Yes, physical system constraints and institutional barriers do exist. To address physical constraints, the utilities have proposed short-term solutions to address these problems. Some of the existing problems facing the transmission system in California include congestion on major paths into Southern California (which prevents optimal economic operation of the system) and

¹³ Energy Commission, *Strategic Transmission Investment Plan* ("STIP"), November 2005, p. 60.

constraints in major load centers such as San Diego and San Francisco which affect both the economic and reliable operation of the system.

While the recent completion of the Path 15 upgrade project increased the transfer capability between Northern and Southern California, transmission congestion persists in Southern California. Increasing transfer capability between Southern California and Arizona would help to reinforce not only the California Independent System Operator Corporation (“CA ISO”)-controlled transmission system, but also facilitate bulk power markets between California and the Southwestern United States.

Southern California Edison Company (“SCE”) and wind generators in the Tehachapi region have been working on a solution to transmission congestion in Southern California for many years. There is currently not enough transmission in the area to deliver existing and future wind generation to serve loads in the SCE, PG&E and SDG&E service territories. Transmission upgrades in the area are necessary to solve both current and future congestion and constraint problems caused by the further development of wind resources as part of the state’s RPS requirements.

The San Diego area experienced severe reliability and congestion problems in 2000 and early 2001. While these problems have not recurred recently, although the 2004 fire season was a near miss, both the CA ISO and SDG&E anticipate future problems unless transfer capability into San Diego is increased to address both the physical system and congestion issues. In addition, transmission upgrades to the east would allow SDG&E greater access to renewable resources in the Imperial Valley that are necessary to meet the state’s RPS requirements.

Power transfer to San Francisco is limited by geographical constraints since the city is at the tip of a long peninsula. Existing major transmission lines importing power into the area are located in a single corridor along the peninsula to the south. Even with the addition of the Jefferson-Martin project, additional transfer capability into San Francisco is likely needed in the near-term to meet local reliability requirements.

There are also institutional constraints that have limited transmission investment in California over the past 20 years and continue to limit the implementation of transmission projects, including project financing, cost allocation, and corridor availability issues.

- **Project Financing.** Project financing and cost allocation issues have arisen recently as a result of FERC’s refusal to treat Segment 3 of Phase 1 of the Tehachapi Transmission Wind Project Plan, designated by SCE as a new category called a “Trunk Line,” as a network facility, thus disallowing rolled-in rate treatment that would have allocated project costs among all CA ISO ratepayers. This FERC decision has created serious uncertainty for potential wind developers that are considering project developments in this area.
- **Corridor Availability.** Uncertainty over the availability of transmission corridors potentially limits the development of both the Sunrise Powerlink and Tehachapi wind resources projects. Additional uncertainty, in the context of potential section 1221

corridor designation, is that it is unclear whether the Tehachapi and Imperial areas are treated as part of the Southern California critically congested area or as a separate conditional area in the congestion study. We believe both should be treated as a part of the Southern California critically congested area because of their contributions toward helping meet state resource diversity and RPS objectives, as well as their potential contribution to transmission capacity in this area.

Question 1.C: *What is the magnitude of the problem?*

We believe the congestion study has correctly recognized the magnitude of the problem in Southern California and has appropriately classified Southern California as a Critical Congestion Area, one of two in the United States. Its critical status is based on the fact that California has the world's sixth largest economy, while Southern California has two-thirds of California's population and "contains important economic, manufacturing, military, and communications centers – in total, an infrastructure that affects the economic health of the U.S. and the world."¹⁴

As noted in our response to question 1.A, in our *2005 Strategic Plan* the Energy Commission noted that, due to the lack of transmission investment, California experienced significant transmission congestion costs, which, including both RMR and inter-zonal costs, exceeded \$1 billion as of 2004.¹⁵

Also as previously discussed, expansion of the transmission system in California must be responsive to the state's aggressive approach to accelerating the development of renewable generation via its RPS program. Without adequate transmission upgrades, the wind resource potential of approximately 4,500 megawatts ("MW") in the Tehachapi area,¹⁶ and approximately 2,200 MW¹⁷ of geothermal and solar resource potential in the Imperial Valley area are unlikely to be realized.

Question 1.D: *What are the relevant transmission or non-transmission solutions?*

The Energy Commission believes that the most relevant near-term solution to address those issues identified in our response to questions 1.B and 1.C would be to implement the following transmission project additions identified in our *2005 Strategic Plan*.¹⁸ The specific near-term Southern California transmission projects include the following:

¹⁴ US Department of Energy, National Electric Transmission Congestion Study, August 2006, p. 45.

¹⁵ Energy Commission, *Strategic Transmission Investment Plan*, November 2005, p. 60.

¹⁶ The *Development Plan for the Phased Expansion of Transmission in the Tehachapi Wind Resources Area*, by the Tehachapi Collaborative Study Group, March 16, 2005, indicated that the potential for wind energy in the area was in excess of 4,000 MW (p.2). The *Strategic Transmission Investment Plan*, p. 78, says that "approximately 4,500 MW" could be collected and delivered to California loads. The CAISO South Regional Transmission Plan for 2006 "Summary of Final Planning Study Assumptions," presentation from July 2006 [<http://www.caiso.com/1832/1832990c72790.pdf> October 4, 2006].

¹⁷ Energy Commission, *Strategic Transmission Investment Plan*, p.72.

¹⁸ Energy Commission, *Strategic Transmission Investment Plan*, pp. 88-89

- The SDG&E Sunrise Powerlink – intended to mitigate congestion, increase imports into the San Diego area, promote reliability and access renewable resources in the Imperial Valley area. SDG&E submitted an application with the CPUC for a CPCN for this project.
- The SCE PVD2 – intended to mitigate congestion, increase imports from the southwest into Southern California, and enhance system reliability. The project is in the CPUC and Arizona Corporation Commission permitting processes.
- The SCE Antelope-Pardee Transmission Project is the first segment of the multi-phase transmission project that is intended to provide transmission access to a significant wind resource (approximately 4,500 MW) in the Tehachapi area of Southern California.
- The IID Imperial Valley Transmission Upgrades (Phase 1) is the first phase of a multi-phase project that is intended to link a potential 2,200 MW of geothermal resources in the Imperial Valley-Salton Sea area to markets in San Diego and the Los Angeles area.

See Appendix A for a more detailed discussion of these four Southern California projects and an update on their permitting status.

In addition, the Trans-Bay Cable Project in the San Francisco Bay Area, designated as a Congestion Area of Concern, is currently in the permitting process. This project is a 55-mile-long high voltage direct current (HVDC) cable in San Francisco Bay, from a terminus in the City of Pittsburg in Contra Costa County to a terminus in the City of San Francisco in the vicinity of Potrero Point. The proposed Project involves a HVDC sub-sea transmission cable proposed by a San Francisco-based company, in cooperation with the City of Pittsburg. The project is proposed to transmit electrical power and provide a dedicated connection between the East Bay, which has excess electrical capacity and transmission grid congestion, and the electrical transmission and distribution facilities in San Francisco. The project is designed to be a cost effective energy efficient solution addressing San Francisco's need for additional transmission capacity and in-city generation to meet demand projected for the period 2008 and beyond. In July 2006, FERC accepted higher rate proposals for the cable that Trans-Bay said were necessary to make the project economically viable.

It is important to note here that in recommending these projects in our *2005 Strategic Plan*, we did not identify or recommend specific corridors for those projects. The Energy Commission believes specific corridors cannot be identified without appropriate environmental studies and reviews. In addition to the four recommended transmission projects, we also recommend:

- Addressing regulatory impediments such as FERC strictures on allowing rolled-in pricing for transmission additions on Segment 3 of Phase 1 of the Tehachapi project (see response to Question 3, below.)
- Designing and implementing effective tools and processes for transmission corridor planning in California (preferably through cooperative and coordinated efforts) between state and federal procedures (as exemplified in our section 368 corridor planning work

with DOE) and extending this model to NIETC corridor planning, to the extent that such corridors are considered needed. California also recently passed transmission corridor legislation aimed at implementing a state corridor designation process (SB 1059), and we anticipate that this process will be coordinated with the federal sections 368 and 1221 corridor planning procedures (see response to Question 2, below.)

Question No. 2: *How and where should DOE establish the geographic boundaries for a National Corridor?*

As noted in our response to question 1, designation of the Southern California area as a Critical Congestion Area can be an important contribution to needed electricity system expansion in the state and can serve the needs of California if collaboration with the state transmission planning and corridor designation processes is achieved. The Energy Commission believes that transmission constraints and resulting congestion in Southern California do rise to a level of national significance. However, because DOE has not discussed how it intends to address environmental assessments in the NIETC designation process, the Commission remains concerned that in progressing from recognizing a Critical Congestion Area to designation of a NIETC, with center lines and boundaries, DOE may not be sensitive to the state's important environmental resources, recently enacted state legislation, and state energy policy objectives.

In comments submitted to the Energy Commission on the section 368 corridor process, several California environmental and wilderness interests identified sensitive lands, including state and national parks, federal and state designated wilderness and wilderness study areas, and critical inventoried roadless areas in national forests, which they believe are not appropriate locations for energy corridors.¹⁹ The list of identified sensitive lands forwarded to the Energy Commission by these organizations was included as Appendix A in the Commission's comments to DOE dated March 6, 2006, and the Commission strongly reiterates that these areas should be considered "off limits" as DOE considers establishing geographic boundaries for NIETC corridors. Furthermore, the Energy Commission strongly recommends that DOE develop a process to identify lands, including those identified in Appendix A of the Commission's March 6, 2006, comments (and reprinted herein as Appendix B), that are unsuitable for transmission corridors as part of its NIETC efforts.

According to the Native American Heritage Commission (NAHC), California has the largest number of tribes and the largest Native American population of any state in the contiguous United States. California is home to 109 federally recognized tribes and several dozen non-federally recognized tribes.²⁰ Clearly, the preservation of tribal sovereignty, cultural resources, and ancestral homeland areas are important issues that should be considered and evaluated prior to any designation of corridors under EPAct sections 368 and 1221. Although DOE is conducting nation-to-nation consultations with federally recognized Native American

¹⁹ February 15, 2006, letter to California Energy Commission Chairman Joseph Desmond from the California Wilderness Coalition, Californians for Western Wilderness, Center for Biological Diversity, Defenders of Wildlife, Environment California, Sierra Club, Sierra Nevada Forest Protection Campaign, and National Parks Conservation Association.

²⁰ Native American Heritage Commission, *2005 Supplement to General Plan Guidelines*, March 2005, p. 6.

Tribes in connection with section 368 corridors, it is unclear whether such consultation would occur for potential corridors designated under section 1221. The NAHC and the Bureau of Indian Affairs are active participants in the section 368 Interagency Working Group that the Energy Commission coordinates on behalf of the Bureau of Land Management and the DOE. Therefore, the Energy Commission believes consultation with all tribal governments is necessary, including California Native American tribes, whether or not they are officially recognized by the federal government.

It is critical that the state and DOE collaborate on long-term transmission corridor planning in California. In late 2005, the Energy Commission was designated as a cooperating agency in the section 368 PEIS process. Since that time, the Energy Commission has led a collaborative interagency team of federal and state agencies reviewing proposals to designate new and/or expand existing energy corridors on federal lands in California. This forum serves as an important model for future long-term coordinated corridor planning activities.

As noted in our response to Question 1, the California Legislature recently passed legislation establishing an electric transmission corridor designation process. While designation of NIETC corridors in the state, if consistent with transmission needs identified in the *Strategic Transmission Investment Plan*, could be helpful, it will be important for any geographical designations with center lines and lateral boundaries to be determined consistent with designation principles expressed in the state's new designation process (SB 1059, Chapter 638, California Statutes of 2006) (attached at Appendix C.) These principles include determination of corridor width, conferring with agencies and parties, information dissemination, restrictions on California tribal lands, and promoting efficient use of existing and new rights-of-way (ROW). Federal designation of land use corridors on other than federal land which would accommodate NIETC projects and be subject to a federal backstop permitting process would be best served by incorporating these principles and coordinating with the state's transmission planning process and biennial *Strategic Transmission Investment Plan*.

It should also be recognized that the Legislature in SB 2431 (Chapter 1457, Statutes of 1988) as well in SB 1059, established that the planning and siting of new transmission facilities should be pursued following principles of efficient use of the existing transmission system. These principles encourage the use of existing ROW by first upgrading existing transmission facilities where technically and economically feasible; followed by expanding existing ROW when technically and economically feasible; then creating new ROW when justified by environmental, technical, or economic reasons defined by the appropriate licensing agency. Where there is a need to construct additional transmission capacity, agreement among all interested utilities on the efficient use of that capacity should be vigorously pursued.

SB 1059 defines a transmission corridor zone as:

. . . . the geographic area necessary to accommodate the construction and operation of one or more high-voltage electric transmission lines. A transmission corridor zone shall not be more than 1,500 feet in width unless required to accommodate existing land uses and land uses identified in local general or

specific plans, or to avoid environmental constraints or mitigate potential environmental impacts.

The Energy Commission suggests that DOE use this definition of a transmission corridor zone in establishing geographic boundaries in its NIETC process related to California corridors.

The Energy Commission believes that although transmission investments are needed in key areas of the state to ensure grid reliability, relieve congestion, and meet future load growth, it is important that such investments be consistent with environmental protection and promote state energy policy objectives. Such policy objectives include diversifying the state's energy supply, achieving strategic benefits, and promoting the development of renewable generation resources to meet the renewable portfolio standard. These state policy objectives should be an important consideration for DOE in identifying the parameters of functional NIETC transmission corridors.

Question No. 3: *How would the costs of a proposed transmission facility be allocated?*

The Energy Commission applauds the DOE's recognition of the critical nature of cost allocation issues as potential impediments to the development of transmission capacity within designated corridors. As the Energy Commission commented in its March 6, 2006 comments, if DOE can help remove cost allocation barriers to transmission investment by changing cost allocation rules at the federal level, it will go a long way toward promoting adequate investment in renewables.²¹

As the Southern California Critical Congestion Area focuses almost totally on California, we do not anticipate at this time that interstate project financing and cost allocation issues will become a major concern. Two of the four projects are part of the CA ISO controlled grid and are eligible for rolled-in rate treatment by FERC, so cost allocation for those projects will not likely be an issue. However, there may well be cost-allocation issues for PVD2, which is an interstate transmission project.

Cost allocation issues are a major barrier for the portion of one critical project. FERC did not recognize segment 3 of Phase 1 of the Tehachapi Transmission Plan Project as a network upgrade. Consequently, although Segments 1 and 2 of Phase 1 of that project were treated by FERC as network facilities and transmission rates were allowed to be allocated to all CA ISO participants, the pivotal segment which would link major concentrations of renewable energy resources to the CA ISO-controlled grid was not allowed rolled-in rate treatment. Consequently, development of that segment has been stalled, leaving stranded over 1,100 megawatts of desirable renewable (wind) generation.

²¹ Energy Commission, March 6, 2006, letter to DOE Re: Considerations for Transmission Congestion Study and Designation of National Interest Electric Transmission Corridors Comments of the California Energy Commission, p. 12.

In 2005, FERC (despite a contrary position urged by then-Commissioner Brownell)²² rejected an innovative proposal by SCE to develop a renewable resource trunkline, to be operated by the CA ISO (that is, Segment 3 of the Tehachapi Transmission Plan Project). This trunkline would have interconnected a large concentration of potential renewable generation in the state's Tehachapi region to the CA ISO-operated grid. The new trunkline would have allowed the state's electric utilities to gain access to 1,100 MW or more of wind-generation resources associated with this single project. Focusing almost exclusively on the definitions under FERC Order No. 2003²³ of a generation intertie in comparison to a network upgrade, FERC denied the rolled-in rate treatment afforded to network upgrades, classifying this segment instead as a generation intertie. Consequently, this expansion has stalled in the state's regulatory process.

In the 2004 Integrated Energy Policy Report Update, the Energy Commission concluded that "transmission interconnection issues for renewable resources located in concentrated areas, such as the Tehachapi wind resource area and the Imperial County's geothermal resource areas, are complicated by the number of developers of renewable resources competing for limited transmission capacity and their limited ability to finance large transmission investments."²⁴ The Energy Commission further noted that

. . . the transmission interconnection process for new generation is based on single location power plant development, which does not fit the characteristics of renewable resources in remote areas. The risk of planning on a plant-by-plant basis is developing a suboptimal system. In contrast, the risk of planning for long-term renewable development provides for a more optimal transmission system, but assumes that multiple developers bring their plants into operation on a given schedule.²⁵

To address these issues the Energy Commission has recommended changes to the CA ISO tariff to recognize a third category of transmission facilities, in addition to the two existing categories of network upgrade and generation intertie facilities, in order to encourage development of renewable transmission projects.

²² Commissioner Brownell recognized that the Tehachapi region could yield as much as 4,000 megawatts of renewable power at a time when California is facing a continuing in-state supply deficit and has a high renewable portfolio standard. She recognized as well that the construction of facilities to capture this power on an efficient scale is beyond the means of any one wind resource developer. Thus, she suggested that facilities necessary to develop the power potential of the Tehachapi region represent a new category of facilities unlike any envisioned in FERC's Order No. 2003 (among its other provisions, Order No. 2003 established FERC's cost allocation methodology for network upgrades and generator interties.) Therefore, she concluded that these facilities would have satisfied the independent entity variation standard within Order No. 2003 so as to receive alternative rate treatment, and expressed her disappointment that FERC's order refused to grant Edison pre-approval for the cost allocation methodology which it requested.

²³ These definitions largely draw upon the "spider web" type grid configurations found in eastern U.S. states and fail to fully recognize the long-line characteristics of grids spanning the larger distances found in larger states in which population centers are not evenly distributed and in which resources are located far from load centers.

²⁴ Energy Commission, *2004 Integrated Energy Policy Report Update*, November, 2004, p. 31.

²⁵ *Id.*, p. 39.

The CA ISO recognizes that the production of electricity through wind, solar, biomass and other technologies is limited to certain geographical regions with very little nearby land, but vast potential for renewable energy supply.²⁶ It notes that power plants in these remote regions typically require long high-voltage transmission lines to interconnect to the high-voltage transmission grid. Recently the CA ISO proposed a general framework for new evaluation criteria for certain transmission project that are not considered “network upgrade” facilities. The CA ISO has also proposed alternative treatment for the costs associated with this type of transmission project.

The DOE’s commitment to work with the FERC and congestion area stakeholders to facilitate agreements about cost allocation and cost recovery²⁷ has been missing prior to enactment of the Energy Policy Act of 2005. Now that this new federal statute has interjected the DOE into a subject area shared by FERC (through its section 1221 backstop siting authority), it is appropriate for DOE to lend its policy voice and expertise to address cost allocation in FERC proceedings. If DOE is successful in causing FERC to recognize the need for additional rate design flexibility, this has the potential to yield tangible benefits in the form of congestion mitigation within designated corridors. Accordingly, the Energy Commission urges the DOE to intervene and actively participate in appropriate FERC proceedings in which the development of needed transmission capacity may be thwarted by cost allocation decisions. For example, cost allocation may be an issue in FERC’s section 1221 backstop siting cases or in ratemaking or other proceedings connected with new transmission facilities, whether those facilities are to be located within or without federally designated corridors.

The Energy Commission believes that the DOE’s active involvement in future FERC proceedings tied to transmission facilities that will help relieve congestion or capacity constraints and promote access to renewable resources, will promote a balanced approach in FERC’s decision-making on cost allocation issues, yielding different results than obtained in SCE’s Tehachapi case, described above. At a minimum, FERC should accord deference to DOE’s designation of a corridor in the form of greater cost allocation and rate design flexibility for transmission projects accessing renewable resources.

The Energy Commission has provided funding for research on transmission cost allocation work for interstate projects that is just now starting. This work will develop a framework for linking cost allocation and cost recovery methodologies to different types of projects under alternative scenarios. The study will consider various development models, technologies, and tariffs. Three alternative project development models will be investigated: utility, Transco, and hybrid. Five alternative tariff models will be researched: contract-based, rate-based, toll-based, tariff – custom, and rolled-in tariff. Three financing models will be explored: project finance, utility ownership, and generator financed.

While it is difficult to foresee all possible conditions and circumstances so as to urge a particular cost allocation methodology, there are certain cost allocation and rate design principles that should increase the likelihood that needed capacity will be placed into the market. At the

²⁶ Proposal to Remove Barriers to Efficient Transmission Investment, CA ISO White Paper, Revised September 21, 2006.

²⁷ US Department of Energy, *National Electric Transmission Congestion Study*, August 2006, p. x .

forefront is the need for additional flexibility, as noted above. Generally, a cost allocation methodology is desired that will not front-load all of a project's costs on the initial subscribers of the project's capacity. Similarly, cost allocation and rate design should not preclude a project proponent from adopting the most economically efficient size for its project.

If a mix of new resources can be captured over a defined time period, it is economically efficient to size a new project to accommodate all of the resources, even if the resources have staggered in-service dates spanning a number of years. To allow the construction of all of the needed capacity, but assign all of the cost to the first subscriber, causes that subscriber to pay for unneeded capacity and potentially subsidize later-in-time subscribers. Consequently, the first subscriber would be unwilling to provide the project proponent with the market commitment needed by investors to fund the project. On the other hand, if the project proponent downsizes the initial capacity offering, this would increase costs in the aggregate and potentially delay the attachment of new resources, as successive facility expansions would be required. A rolled-in approach that effectively vintages a group of potential subscribers with different in-service dates to allow upfront construction of all of the needed capacity, while deferring recovery of unsubscribed capacity costs (except for carrying charges and return) offers promise of resolving these issues.

Similarly, a rolled-in approach that allocates costs of new capacity beyond incremental subscribers, based on the new capacity yielding system benefits beyond the immediacy of the new services offered, would drive down costs to individual subscribers. Both of these approaches should increase the likelihood that a needed capacity expansion could be priced within the market bounds of potential subscribers.

The Energy Commission believes that these approaches, and variations on these approaches, to accommodate conditions and circumstances attendant on specific projects, provide avenues that should be explored by FERC and stakeholders when, at a minimum, projects are proposed in designated corridors. Similar flexibility should be given when projects would serve the same policy interests, but are located outside of designated corridors. FERC should not adhere rigidly to past definitions and ratemaking practices developed in other contexts and for other purposes, to foreclose the innovation needed to bring new resources to the market utilizing newly constructed that will help relieve congestion or capacity constraints.

Respectfully submitted,


Jackalyne Pfannenstiel
Chairman

cc: Ms. Poonum Agrawal,

Office of Electricity Delivery and Energy Reliability,
Forrestal Building, OE-20
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585
poonum.agrawal@hq.doe.gov

Mr. Lot Cooke
Office of the General Counsel
Forrestal Building, OE-20
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585
lot.cooke@hq.doe.gov

APPENDIX A

Status of the Four Projects in Southern California Recommended in the Energy Commission's 2005 Strategic Transmission Investment Plan

As the August 2006 DOE National Electric Transmission Congestion Study notes, the Energy Commission recommended four transmission projects in the SP26 area in its 2005 Strategic Transmission Investment Plan and 2005 Integrated Energy Policy Report because they will provide significant near-term benefits to California through improvements to system reliability, reduced congestion, and/or interconnection to renewable resources. In evaluating candidate projects for a favorable recommendation, the Energy Commission limited its evaluation to projects that could be on line by 2010 and that were still in need of permitting approval. A brief discussion of the permitting status of the four Southern California recommended projects is included below.

Palo Verde-Devers No. 2 (PVD2) 500 kV Project - Southern California Edison (SCE)-proposed PVD2 500 kV Project would provide significant near-term benefits by reducing congestion on lines connecting California and Arizona and providing access to lower-cost out-of-state generation. The proposed 278-mile project (consisting of 230 miles of a second 500 kV transmission line from the Harquahala Substation in Arizona to the Devers Substation in California, plus rebuild 48 miles of (4) 230-kV transmission lines west of Devers to the Los Angeles area) would also provide strategic benefits to California ratepayers, including valuable insurance against abnormal system conditions and power outages. It would increase operating flexibility for California grid operators, reduce market power for generators, and reduce the need for additional infrastructure in California.

Status: The CA ISO performed a comprehensive economic evaluation of the project and concluded that it would provide significant economic and reliability benefits to CA ISO ratepayers. The CA ISO Board of Governors unanimously approved the project on February 24, 2005.²⁸

SCE then filed an application for a certificate of public convenience and necessity (CPCN) with the California Public Utilities Commission (CPUC) on April 11, 2005 (Application no. A.05-04-015). The CPUC is the California Environmental Quality Act (CEQA) lead agency and the U.S. Bureau of Land Management (BLM) is the lead agency under NEPA. The CPUC deemed the application to be complete on September 30, 2005. The CPUC and the Bureau of Land Management (BLM) released a draft environmental impact report (EIR)/environmental impact statement (EIS) on May 3, 2006.

The draft EIR/EIS evaluated a second Devers-Valley 500 kV line as an alternative to the "West of Devers" portion of the project, due to uncertainty as to whether SCE could negotiate lease renewals in the existing West of Devers corridor with the Morongo Band of Mission

²⁸ See website: <http://www.caiso.com/docs/09003a6080/34/e4/09003a608034e440.pdf>. Editor's note: The referenced document shows an erroneous date of May 24, 2005 for the approval. The correct date is February 24, 2005. See also citation #3 below.

Indians in a timely manner. The draft EIR/EIS concluded that, although the environmental impacts of the proposed project would be less than those of the Devers-Valley No. 2 alternative, the alternative is feasible, meets the project objectives, and would allow the entire PVD2 project to be successfully constructed.²⁹

On June 16, 2006 SCE sent a letter requesting CA ISO to review and approve its updated Plan of Service for the DPV2 project. The revised plan has two major aspects: replacing the West of Devers 230 kV upgrades with a second Devers-Valley 500 kV line; and connecting the PVD2 project with Arizona Public Service's TS-5 Project.³⁰

The CA ISO unanimously approved the revised plan of service for PVD2 at its September 7, 2006 Board of Governors meeting.³¹ In its approval the CA ISO noted that the revised project results in lower total project cost, does not increase reliability concerns, preserves the Western Electricity Coordinating Council-approved path rating increase, maintains the economic benefit, and enables SCE to meet its project on-line schedule of summer 2009.

The Final EIR/EIS has not yet been released. It may be available by the end of October 2006.

For the 102-mile portion of the project in Arizona, SCE filed its Application for a Certificate of Environmental Compatibility with the Arizona Corporation Commission's (ACC's) Power Plant and Transmission Line Siting Committee on May 1, 2006. SCE hopes that the CPUC, BLM, and ACC can conclude all review and approval activities by the end of 2006.³²

Sunrise Powerlink 500 kV Project - San Diego Gas & Electric proposed 500 kV Sunrise Powerlink Project would provide significant near-term system reliability benefits to California, reduce system congestion and its resultant costs, and provide an interconnection to both renewable resources located in the Imperial Valley and lower-cost out-of-state generation. Without this proposed project, it is unlikely that SDG&E will be able to meet the state's RPS goals, ensure system reliability, or reduce RMR and congestion costs.

Status: SDG&E filed a partial application (A.05-12-014) for a CPCN with the CPUC on December 14, 2005. The CPUC is the CEQA lead agency and the BLM is the lead agency under NEPA. The filing contained information on the need for the project but did not contain information on a proposed route for the project, and hence it did not include the Proponent's Environmental Assessment (PEA). The filing indicated only that the project would consist of a 500 kV line connecting the existing Imperial Valley Substation to a new "Central" substation

²⁹ See pp. ES-63 through ES-64 of the Executive Summary of the May 2006 Draft EIR/EIS for the Devers-Palo Verde No. 2 Transmission Line Project, available at: <http://www.cpuc.ca.gov/Environment/info/aspen/dpv2/toc-deir.htm>.

³⁰ See website: <http://www.caiso.com/1864/1864c3a04c770.pdf>.

³¹ See website: <http://www.caiso.com/186a/186ac21917450.pdf>.

³² See website: <http://www.sce.com/PowerandEnvironment/GoalsandImprovements/dpv2/status.htm>.

located somewhere in central San Diego County, along with additional new 230-kV lines west of the new Central substation.

SDG&E entered into a Memorandum of Agreement (MOA) with the Imperial Irrigation District (IID) and Citizens Energy Corporation on March 16, 2006 to form a partnership for building a portion of the Sunrise project. The MOA calls for IID/Citizens Energy to build a new 500 kV line from the existing SDG&E/IID Imperial Valley Substation to a new IID San Felipe Substation, then to the existing SDG&E Narrows Substation (this project is known as the Green Path Project- Southwest.) SDG&E would then be responsible for building the 500-kV portion from the Narrows Substation to the new Central Substation, plus the planned 230-kV lines west of Central. The Imperial Irrigation District (IID) Board approved the MOA on June 21, 2006.

The CA ISO Board of Governors voted unanimously to approve the Sunpath Project (the combined Sunrise Powerlink/Green Path Project – Southwest project) at its August 3 board meeting.³³

SDG&E then filed an amended application, including the PEA, to the CPUC on August 4, 2006 (A.06-08-010). The application was deemed complete on September 8, 2006.³⁴

On August 31 the BLM published its Notice of Intent to prepare an EIS in the Federal Register. On September 15 the CPUC issued a Notice of Preparation/Notice of Public Scoping Meetings for the EIR/EIS. In early October the CPUC and BLM held a series of public scoping meetings to take public comment on the scope and content of the environmental document.³⁵

Tehachapi Transmission Plan, Phase I: Antelope Transmission Project -

The Energy Commission believes that the Antelope Transmission Project, proposed by SCE, is crucial to the development of wind resources in the Tehachapi region and will offer significant benefits to California. It will permit the reliable export of about 700 MW of new wind generation from the Tehachapi area.

Status: The CA ISO unanimously approved the project on July 29, 2004³⁶. Phase 1 consists of three segments: Segment 1 is a new 500-kV, 25.6-mile transmission line from the existing Antelope Substation to the existing Pardee Substation, initially energized at 220 kV. The project, which would replace an existing 66-kV line, traverses about 13 miles of the Angeles National Forest. Segment 2 is a new 500 kV, 21-mile transmission line from the existing Antelope Substation to the existing Vincent Substation, initially energized at 220 kV. Segment 3 is a new 500-kV, 26-mile transmission line from the existing Antelope Substation to a new Tehachapi #1 substation, plus a new 220-kV, 10-mile transmission line from the new Tehachapi #1 substation to a new Tehachapi #2 substation.

³³ See website: http://www.caiso.com/pubinfo/BOG/minutes/docs/060803_final_boggen_minutes.pdf.

³⁴ See website: <http://www.sdge.com/sunrisepowerlink/info/SunriseCompleteLtr.pdf>.

³⁵ See website: <http://www.cpuc.ca.gov/Environment/info/aspn/sunrise/sunrise.htm>.

³⁶ See website: <http://www.caiso.com/docs/09003a6080/32/43/09003a6080324395.pdf>.

With respect to Phase 1, Segment 1, SCE filed an application for a CPCN with the CPUC on December 9, 2004 for the Antelope-Pardee 500-kV Transmission Project (A.04-12-007). SCE also filed an application for a 50-year Special Use Easement to the USDA Forest Service. A Notice of Intent to prepare a joint EIR/EIS was issued on June 28, 2005. The joint CPUC/Forest Service draft EIR/EIS was released on July 21, 2006. The CPUC and Forest Service held public participation meetings in Southern California on August 28-30. Written comments on the draft EIR/EIS were due on October 3, 2006. According to a quarterly status report from the Forest Service covering the period from April 1 to June 30, 2006, it estimates that it will issue a decision on the Special Use Easement in April 2007.³⁷

With respect to Phase 1, Segments 2 and 3, SCE filed an application for a CPCN with the CPUC on December 9, 2004 for Segments 2 and 3 (A.04-12-008.) The application was deemed incomplete, so SCE then filed an amended application, along with a complete Proponent's Environmental Assessment, on September 30, 2005, replacing the original application. The

CPUC's Energy Division deemed the supplemental application complete on November 22, 2005. The Draft EIR was released on August 23, 2006.³⁸ The CPUC will hold informational workshops and public participation hearings on October 11, and 12. According to an October 6, 2006 CPUC Administrative Law Judge ruling, a final decision on the CPCN and certification of the Final EIR is anticipated in February 2007.³⁹

Imperial Valley Transmission Upgrades - An Imperial Valley upgrade project would provide access to valuable renewable resources needed to meet future load growth, support California's RPS goals and provide significant near-term reliability benefits to California.

Status: IID Energy has teamed with the Los Angeles Department of Water and Power (LADWP) and Citizens Energy to create the Green Path Project, which will boost transmission capacity in both IID Energy's and LADWP's regions while facilitating transportation of Imperial Valley-produced renewable energy to the western grid. The Green Path Project consists of three projects. The first arm of the project, sponsored by IID Energy, will accommodate the growing demand for energy within IID Energy's service area by upgrading the utility's existing transmission capacity from 161 kV to 230 kV. In November 2005, IID Board approved Phase 1 (environmental, permitting, preliminary engineering, etc.) of the Green Path Coordinated Project, which is scheduled for completion by December 2006. (Note: The third arm of the project, dubbed the Green Path Southwest Project, was described above in the Sunrise Powerlink Project status.)

³⁷ See website: <http://www.fs.fed.us/sopa/components/reports/sopa-110501-2006-04.pdf>.

³⁸ See website: <http://www.cpuc.ca.gov/Environment/info/aspen/atp2-3/toc-deir.htm>.

³⁹ See website: <http://www.cpuc.ca.gov/EFILE/RULINGS/60562.pdf>

APPENDIX B WILD PLACES AT RISK

Bureau of Land Management Wilderness

- Black Mountain Wilderness, BLM California Desert Conservation Area
- Carrizo Gorge wilderness, BLM California Desert Conservation Area
- Chuckwalla Mountains Wilderness, BLM California Desert Conservation Area
- Coyote Mountains Wilderness, BLM California Desert Conservation Area
- Fish Creek Mountains Wilderness, BLM California Desert Conservation Area
- Kelso Dunes Wilderness, BLM California Desert Conservation Area
- Little Chuckwalla Mountains Wilderness, BLM California Desert Conservation Area
- Mecca Hills Wilderness, BLM California Desert Conservation Area
- Newberry Mountains Wilderness, BLM California Desert Conservation Area
- Nopa Range Wilderness, BLM California Desert Conservation Area
- Old Woman Mountains Wilderness, BLM California Desert Conservation Area
- Orocopia Mountains Wilderness, BLM California Desert Conservation Area
- Palo Verde Wilderness, BLM California Desert Conservation Area
- Piute Mountains Wilderness, BLM California Desert Conservation Area
- Rodman Mountains Wilderness, BLM California Desert Conservation Area
- Rice Valley Wilderness, BLM California Desert Conservation Area
- Sawtooth Mountains Wilderness, BLM California Desert Conservation Area
- Stepladder Mountains Wilderness, BLM California Desert Conservation Area
- Turtle Mountains Wilderness, BLM California Desert Conservation Area

Bureau of Land Management Wilderness Study Areas

- Cady Mountains Wilderness Study Area, BLM California Desert Conservation Area
- Death Valley #17 Wilderness Study Area, BLM California Desert Conservation Area
- Dry Valley Rim Wilderness Study Area, BLM Eagle Lake Field Office
- Skedaddle Wilderness Study Area, BLM Eagle Lake Field Office
- Soda Mountains Wilderness Study Area, BLM California Desert Conservation Area

National Forest Wilderness

- Cucamonga Wilderness, San Bernardino National Forest
- Desolation Wilderness, Eldorado National Forest
- Ishi Wilderness, Lassen National Forest
- Mokelumne Wilderness, Eldorado National Forest

National Forest Inventoried Roadless Areas

- Caples Creek Roadless Area, Eldorado National Forest
- Cajon Roadless Area, San Bernardino National Forest

- Circle Mountain Roadless Area, San Bernardino National Forest
- Cucamonga Roadless Area, San Bernardino National Forest
- Dardanelles Roadless Area, Lake Tahoe Basin Management Unit
- Fish Canyon Roadless Area, Angeles National Forest
- Freel Roadless Area, Lake Tahoe Basin Management Unit
- Grizzly Mountain Roadless Area, Plumas National Forest
- Heart Lake Roadless Area, Lassen National Forest
- Ishi Roadless Area, Lassen National Forest
- Magic Mountain Roadless Area, Angeles National Forest
- Middle Fort Feather River Roadless Area, Plumas National Forest
- Mill Creek Roadless Area, Lassen National Forest
- Red Mountain Roadless Area, Angeles National Forest
- Salt Creek Roadless Area, Angeles National Forest
- Salt Springs Roadless Area, Eldorado National Forest
- San Sevaine Roadless Area, San Bernardino National Forest
- Steele Swamp Roadless Area, Modoc National Forest
- Strawberry Peak Roadless Area, Angeles National Forest
- Tragedy-Elephant's Back Roadless Area, Eldorado National Forest
- Tule Roadless Area, Angeles National Forest
- West fork Roadless Area, Angeles National Forest
- Wild Cattle Mountain Roadless Area, Lassen National Forest

National Parks

- Death Valley National Park
- Joshua Tree National Park
- Lassen Volcanic National Park
- Mojave National Preserve

State Parks

- Anza-Borrego Desert State Park

APPENDIX C SB 1059

Senate Bill No. 1059

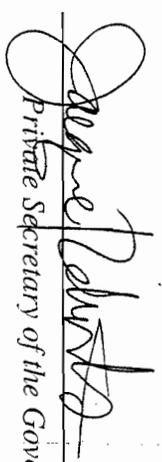
Passed the Senate August 31, 2006


Secretary of the Senate

Passed the Assembly August 28, 2006


Acting Chief Clerk of the Assembly

This bill was received by the Governor this 12th day
of September, 2006, at 10 o'clock a. M.


Private Secretary of the Governor

CHAPTER 638

An act to add Chapter 4.3 (commencing with Section 25330) to Division 15 of the Public Resources Code, relating to electricity transmission.

LEGISLATIVE COUNSEL'S DIGEST

SB 1059, Escutia. Electric transmission corridors.

(1) Existing law requires the State Energy Resources Conservation and Development Commission to adopt a strategic plan for the state's electric transmission grid using existing resources. Existing law requires that the plan identify and recommend actions required to implement investments needed to ensure reliability, relieve congestion, and to meet future growth in load and generation, including, but not limited to, renewable resources, energy efficiency, and other demand reduction measures.

This bill would authorize the commission to designate a transmission corridor zone on its own motion or by application of a person who plans to construct a high-voltage electric transmission line within the state. The bill would provide that the designation of a transmission corridor shall serve to identify a feasible corridor where a future transmission line can be built that is consistent with the state's needs and objectives as set forth in the strategic plan adopted by the commission. The bill would prescribe procedures for the designation of a transmission corridor zone, including publication of the request for designation and request for comments, coordination with federal agencies and California Native American tribes, informational hearings, and requirements for a proposed decision.

The bill would require the commission, after designating a transmission corridor zone, to identify that transmission corridor zone in its subsequent strategic plans and to regularly review and revise its designated transmission corridor zones as necessary, but not less than once every 10 years.

The bill would require a city or county, after receiving a notice from the commission of a transmission corridor zone, to consider the designated transmission corridor zone, as specified, when

making a determination regarding a land use change within or adjacent to the transmission corridor zone that could affect the continuing viability to accommodate a transmission line planned within the transmission corridor zone.

The bill would require a city or county, within 10 days of accepting as complete an application for a development project within a designated transmission corridor zone that the city or county determines would threaten the potential to construct a high-voltage electric transmission line, to notify the commission of the proposed development project. The bill would require the commission, upon making a specified finding regarding the proposed development project, to provide written comments to the city or county and would require the city or county to consider the commission's comments.

The bill would impose a state-mandated local program by imposing new duties upon local agencies.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) California currently lacks an integrated, statewide approach to electric transmission planning and permitting that addresses the state's critical energy and environmental policy goals and allows electric transmission projects to move seamlessly from the planning phase into the permitting phase for timely approval and construction of needed electric transmission lines.

(b) Planning for and establishing a high-voltage electric transmission system to accommodate the development of renewable resources within the state, facilitate bulk power transactions, ensure access to out-of-state regions that have surplus power available, and reliably and efficiently supply

existing and projected load growth is vital to the future economic and social well-being of California.

(c) To promote the efficient use of the existing transmission system, the state should do both of the following:

(1) Encourage the use of existing rights-of-way, the expansion of existing rights-of-way, and the creation of new rights-of-way in that order.

(2) Promote the efficient use of new rights-of-way, where needed, to improve system efficiency and the environmental performance of the transmission system.

(d) The construction of new high-voltage electric transmission lines within new or existing corridors has become increasingly difficult and may impose financial hardships and adverse environmental impacts on the state and its residents. It is in the interest of the state, therefore, through the electricity transmission planning process, to accomplish all of the following:

(1) Identify the long-term needs for electric transmission corridor zones within the state.

(2) Work with stakeholders, appropriate federal, state, and local agencies, and the public to study transmission corridor zone alternatives and designate appropriate transmission corridor zones for future use to ensure reliable and efficient delivery of electricity for California's residents.

(3) Integrate transmission corridor zone planning at the state level with local planning, so that designated transmission corridor zones are considered by cities and counties when they are making land use decisions.

(e) Orderly planning and development of needed high-voltage electric transmission lines through the designation of transmission corridor zones is an issue of statewide concern.

SEC. 2. Chapter 4.3 (commencing with Section 25330) is added to Division 15 of the Public Resources Code, to read:

CHAPTER 4.3. DESIGNATION OF TRANSMISSION CORRIDORS

25330. For purposes of this chapter, the following terms have the following meanings:

(a) "Feasible" has the same meaning as in Section 21061.1.

(b) "High-voltage electric transmission line" means an electric transmission line with an operating capacity of at least 200 kilovolts, or that is under the operational control of the California Independent System Operator.

(c) "Transmission corridor zone" means the geographic area necessary to accommodate the construction and operation of one or more high-voltage electric transmission lines. A transmission corridor zone shall not be more than 1,500 feet in width unless required to accommodate existing land uses and land uses identified in local general or specific plans, or to avoid environmental constraints or mitigate potential environmental impacts.

25331. (a) The commission may designate a transmission corridor zone on its own motion or by application of a person who plans to construct a high-voltage electric transmission line within the state. The designation of a transmission corridor zone shall serve to identify a feasible corridor where one or more future high-voltage electric transmission lines can be built that are consistent with the state's needs and objectives as set forth in the strategic plan adopted pursuant to Section 25324.

(b) A person planning to construct a high-voltage electric transmission line may submit to the commission an application to designate a proposed transmission corridor zone as being consistent with the strategic plan adopted pursuant to Section 25324. The application shall be in the form prescribed by the commission and shall be supported by any information that the commission may require.

25332. The designation of a transmission corridor zone is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000)). The commission shall be the lead agency, as provided in Section 21165, for all transmission corridor zones proposed for designation pursuant to this chapter.

25333. (a) In developing a strategic plan pursuant to Section 25324 or considering an application for designation pursuant to this chapter, the commission shall confer with cities and counties, federal agencies, and California Native American tribes to identify appropriate areas within their jurisdictions that may be suitable for a transmission corridor zone. The commission shall, to the extent feasible, coordinate efforts to identify long-term transmission needs of the state with the land use plans of cities,

counties, federal agencies, and California Native American tribes.

(b) The commission shall not designate a transmission corridor zone within the jurisdiction of a California Native American tribe without the approval of the California Native American tribe.

25334. (a) Upon receipt of an application or upon its own motion for designation of a transmission corridor zone, the commission shall arrange for the publication of a summary of the application in a newspaper of general circulation in each county where the proposed transmission corridor zone would be located, and shall notify all property owners within, or adjacent to, the transmission corridor zone. The commission shall transmit a copy of the application for designation to all cities, counties, and state and federal agencies having an interest in the proposed transmission corridor zone. The commission shall publish the application for designation on its Internet Web site, and notify members of the public that the application is available on the commission's Internet Web site.

(b) As soon as practicable after the receipt of an application or upon its own motion for designation of a transmission corridor zone, the commission shall notify cities, counties, state and federal agencies, and California Native American tribes in whose jurisdictions the proposed transmission corridor zone would be located regarding the proposed transmission corridor zone and the objectives of the most recent strategic plan for the state's electric transmission grid. The commission's notice shall solicit information from, and the commission shall confer with, all interested cities, counties, state and federal agencies, and California Native American tribes regarding their land use plans, existing land uses, and other factors in which they have expertise or interest with respect to the proposed transmission corridor zone. The commission shall provide any interested city, county, state or federal agency, California Native American tribe, or member of the public, including any property owner within the proposed transmission corridor zone, ample opportunity to participate in the commission's review of a proposed transmission corridor zone.

(c) The commission shall request affected cities, counties, state and federal agencies, the Electricity Oversight Board, the Independent System Operator, interested California Native

American tribes, and members of the public, including any property owner within the proposed transmission corridor zone, to provide comments on the suitability of the proposed transmission corridor zone with respect to environmental, public health and safety, land use, economic, and transmission-system impacts or other factors on which they may have expertise.

(d) The commission shall require a person who files an application for the designation of a transmission corridor zone to pay a fee sufficient to reimburse the commission for all costs associated with reviewing the application. If the commission initiates the designation of a transmission corridor zone on its own motion, the commission shall fix the surcharge imposed pursuant to subdivision (b) of Section 40016 of the Revenue and Taxation Code, at a level sufficient to cover the commission's added costs.

(e) Upon receiving the commission's request for review of a proposed transmission corridor zone, a city or county may request a fee pursuant to Section 25538 to cover for the actual and added costs of this review and the commission shall pay this amount to the city or county.

25335. (a) Within 45 days of receipt of the application or motion for designation, the commission shall commence public informational hearings in the county or counties where the proposed transmission corridor zone would be located.

(b) The purpose of the hearings shall be to do all of the following:

(1) Provide information about the proposed transmission corridor zone so that the public and interested agencies have a clear understanding of what is being proposed.

(2) Explain the relationship of the proposed transmission corridor zone to the commission's strategic plan for the state's electric transmission grid, as set forth in the most recent integrated energy policy report adopted pursuant to Chapter 4 (commencing with Section 25300).

(3) Receive initial comments about the proposed transmission corridor zone from the public and interested agencies.

(4) Solicit information on reasonable alternatives to the proposed transmission corridor zone.

25336. (a) Within 155 days of the final informational hearing, the commission shall conduct a prehearing conference to

determine the issues to be considered in hearings pursuant to this section, to identify the dates for the hearings, and to set forth filing dates for public comments and testimony from the parties and interested agencies. Within 15 days of the prehearing conference, the commission shall issue a hearing order setting forth the issues to be heard, the dates of the hearings, and the filing dates for comments and testimony.

(b) The commission shall conduct hearings pursuant to the hearing order. The purpose of the hearings shall be to receive information upon which the commission can make findings and conclusions pursuant to Section 25337.

25337. After the conclusion of hearings conducted pursuant to Section 25336, and no later than 180 days after the date of certification of the environmental impact report prepared pursuant to Section 25332, the commission shall issue a proposed decision that contains its findings and conclusions regarding all of the following matters:

(a) Conformity of the proposed transmission corridor zone with the strategic plan adopted pursuant to Section 25324.

(b) Suitability of the proposed transmission corridor zone with respect to environmental, public health and safety, land use, economic, and transmission-system impacts.

(c) Mitigation measures and alternatives as may be needed to protect environmental quality, public health and safety, the state's electric transmission grid, or any other relevant matter.

(d) Other factors that the commission considers relevant.

25338. As soon as practicable after the commission designates a transmission corridor zone, it shall post a copy of its decision on its Internet Web site, send a copy of its decision, including a description of the transmission corridor zone, to each affected city, county, state agency, and federal agency, and notify property owners within or adjacent to the corridor of the availability of the decision on the commission's Internet Web site.

25339. After the commission designates a transmission corridor zone, it shall identify that transmission corridor zone in its subsequent strategic plans adopted pursuant to Section 25324. The commission shall regularly review and revise its designated transmission corridor zones as necessary, but not less than once every 10 years. In revising designations of transmission corridor

zones, the commission shall follow the procedures of this chapter. If, upon regular review or at any other time, the commission finds that a transmission corridor zone is no longer needed, the commission shall revise or repeal the designation and, as soon as practicable, notify the affected cities, counties, state and federal agencies, and property owners within, or adjacent to, the transmission corridor zone.

25340. After receiving notice from the commission regarding the designation or revision of a transmission corridor zone within its jurisdiction, each city or county shall consider the designated transmission corridor zone when making a determination regarding a land use change within or adjacent to the transmission corridor zone that could affect its continuing viability to accommodate a transmission line planned within the transmission corridor zone. Nothing in this section shall preclude compatible uses within or adjacent to a designated transmission corridor zone.

25341. (a) Within a designated transmission corridor zone, within 10 days of accepting as complete an application pursuant to Section 65943 of the Government Code for a development project that a city or county determines would threaten the potential to construct a high-voltage electric transmission line, the city or county shall notify the commission of the proposed development project. The notice shall include a copy of the application, and set a deadline that is not less than 60 days from the date of the notice for the commission to provide written comments to the city or county regarding the proposed development project.

(b) If the commission finds that the proposed development project would threaten the potential to construct a high-voltage electric transmission line within the designated transmission corridor zone, the commission shall provide written comments to the city or county. The commission may recommend revisions to, redesign of, or mitigation measures for the proposed development project that would eliminate or reduce the threat.

(c) The city or county shall consider the commission's comments, if any, prior to acting on the proposed development project. If the commission objects to the proposed development project, the city or county shall provide a written response that

shall address in detail why it did not accept the commission's comments and recommendations.

SEC. 3. The Legislature finds and declares that Sections 65104 and 66014 of the Government Code provide local agencies with authority to levy fees sufficient to pay for the program or level of service mandated by this act.

SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

FILED

in the office of the Secretary of State
of the State of California

SEP 29 2006

At 11:00 O'clock A M.

BRUCE MCPHERSON, Secretary of State

By Sharon [Signature]
Deputy Secretary of State

Approved _____ SEP 29 _____, 2006

[Signature]
GOVERNOR

ATTACHMENT 1
Considerations for Transmission Congestion Study and
Designation of National Interest Electric Transmission Corridors
Comments of the California Energy Commission (March 6, 2006)

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



VIA ELECTRONIC MAIL

March 6, 2006

United States Department of Energy
Office of Electricity Delivery and Energy Reliability, OE-20
Attention: EPACT 1221 Comments, U.S. Department of Energy
Forrestal Building, Room 6H-050
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Re: Considerations for Transmission Congestion Study and
Designation of National Interest Electric Transmission Corridors
Comments of the California Energy Commission

In response to the Notice of Inquiry ("NOI") published by the Department of Energy's Office of Electricity Delivery and Energy Reliability ("OE") on February 2, 2006, (71 Fed. Reg. 5660) relating to DOE's plans for an electricity transmission congestion study and possible designation of National Interest Electric Transmission Corridors ("NIETCs"), pursuant to section 1221(a) of the Energy Policy Act of 2005 ("EPAct-05"),¹ the California Energy Commission ("Energy Commission") submits its comments, below.

Communications concerning the Energy Commission's comments should be addressed to the following:

Judy Grau, Sr. Mechanical Engineer
Engineering Office, Siting Division
California Energy Commission
1516 9th Street, MS 46
Sacramento, CA 95814-5512
jgrau@energy.state.ca.us
(916) 653-1610

Kenneth L. Glick, Staff Counsel
Office of the Chief Counsel
California Energy Commission
1516 9th Street, MS 14
Sacramento, CA 95814-5512
kglick@energy.state.ca.us
(916) 654-3855

I. INTRODUCTION

The Energy Commission² has been the State of California's primary energy policy and planning agency for the last 30 years. In California, the construction and operation of

¹ Section 1221 of the EPAct-05 provides, in part, that designated NIETCs be subject to "backstop" siting authority by the Federal Energy Regulatory Commission ("FERC") for facilities located within these designated corridors.

² The California Energy Commission is also known by its formal name, State Energy Resources Conservation and Development Commission, and is an organizational unit within the State of California Resources Agency.

any thermal power plant with a generating capacity of 50 MW or greater requires that a license (certificate) first be issued by the Energy Commission. This certificate takes the place of any other state, regional, or local permit that would otherwise be required. This certificate process examines all aspects of the proposed facilities, including engineering, environmental, health, and public safety issues. In this capacity, the Energy Commission serves as the lead review agency under the California Environmental Quality Act ("CEQA"). When licensing new thermal power plants, the Energy Commission also licenses related transmission facilities up to the point of interconnection with the existing electricity transmission grid.

In addition, the Energy Commission takes a keen interest in ensuring adequate transmission infrastructure for the state. Since the late 1970s, the Energy Commission has actively participated in both state and federal efforts to address transmission corridor planning and permitting issues. The Energy Commission also has siting jurisdiction for thermal power plants of 50 megawatts (MW) or greater and related transmission facilities. As the result of the Energy Commission's long-standing participation and developed expertise in the area of transmission corridor planning and electricity infrastructure siting, we are pleased to provide comments on DOE's proposed implementation of EPCAct-05 Section 1221(a) relating to NIETCs.

Beginning in the late 1970s and early 1980s, the Energy Commission became an active participant in the Bureau of Land Management's (BLM) corridor planning efforts. In the late 1980s and early 1990s, in response to state legislation, the Energy Commission conducted an extensive investigation of transmission issues in the state, culminating in a 1992 report to the Legislature recommending how best to address transmission problems in the state. More recently, the Energy Commission has made a number of recommendations to both the Governor and the Legislature under the state-mandated *Integrated Energy Policy Report (Energy Report)* and *Strategic Transmission Investment Plan (Strategic Plan)* to improve transmission corridor planning and permitting in California.

Finally, in late 2005, the BLM and DOE designated the Energy Commission as a cooperating agency in the federal Programmatic Environmental Impact Statement (PEIS) effort for energy corridors in the Western States, under Section 368 of the EPCAct-05. The Energy Commission's role in this federal proceeding is to ensure that the state's energy and infrastructure needs, renewable generation policy goals, and environmental concerns are considered in the PEIS.

In California, the construction and operation of any thermal power plant with a generating capacity of 50 MW or greater requires that a license (certificate) first be issued by the Energy Commission. This certificate takes the place of any other state, regional, or local permit that would otherwise be required. This certificate process examines all aspects of the proposed facilities, including engineering, environmental, health, and public safety issues. In this capacity, the Energy Commission serves as the lead review agency under the California Environmental Quality Act ("CEQA").

II. GENERAL COMMENTS

Before responding to specific areas for comment outlined in the NOI, we have several issues and concerns, outlined below:

The Importance of State Laws and Policies in the Designation of National Interest Transmission Corridors

The Energy Commission believes it is important to explicitly address state energy laws and policies relating to transmission corridor planning to ensure that DOE's designation of transmission corridors of national interest both complements these efforts and leverages state expertise. Although the NOI states that DOE's initial study pursuant to EPA Act-05 section 216 may include "enabling larger transfers of economically beneficial electricity to load centers, or enabling delivery of electricity from new generation capacity to distant load centers"³ in its recitation of questions for public comment, DOE appears to be too narrowly focused on addressing congestion alone and needs to adequately consider the other important transmission planning objectives faced by California and other states. The need for transmission corridor planning in California is a long-running issue for the Energy Commission.

In 1988, recognizing both the growing importance of transmission with the interconnection of independent power producers and the escalating conflicts between transmission-owning and transmission-dependent utilities, the California Legislature passed Senate Bill (SB) 2431 (Section 1457, Statutes of 1988), which contained the following findings concerning the role of transmission in California's future development:

- (a) The Legislature finds and declares that establishing a high-voltage electricity transmission system capable of facilitating bulk power transactions for both firm and nonfirm energy demand, accommodating the development of alternative power supplies within the state, ensuring access to regions outside the state having surplus power available, and reliably and efficiently supplying existing and projected load growth, are vital to the future economic and social well being of California.
- (b) The Legislature further finds and declares that the construction of new high-voltage transmission lines within new rights-of-way may impose financial hardships and adverse environmental impacts on the state and its residents, so that it is in the interests of the state, through existing licensing processes, to accomplish all of the following:
 - (1) Encourage the use of existing rights-of-way by upgrading existing transmission facilities where technically and economically justifiable.
 - (2) When construction of new transmission lines is required, encourage expansion of existing rights-of-way, when technically and economically feasible.
 - (3) Provide for the creation of new rights-of-way when justified by environmental, technical, or economic reasons, as determined by the appropriate licensing agency.
 - (4) Where there is a need to construct additional transmission, seek agreement among all interested utilities on the efficient use of that capacity.

³ 71 Fed. Reg. 22 at 5661.

In directing the Energy Commission to conduct an investigation and prepare a report outlining recommended policies and actions, SB 2431 plainly stated that the purpose of the report was to facilitate effective, long-term transmission line corridor planning.⁴ One of the major findings of the report was that utilities should take appropriate mitigation measures to reduce the environmental impacts of approved projects.⁵ The report also identified the absence of coordinated transmission and land-use planning as a major impediment to transmission development in California, and called for a process to identify environmentally sensitive areas, acceptable areas, and areas where urban encroachment into transmission rights-of-way could pose problems.⁶ The basic principles and policies expressed in this effort formed a sound foundation for assessing and designating transmission corridors then, and are still persuasive today, nearly 20 years after they were first articulated.

In 2002, in highlighting the importance of reliable energy supplies, the California Legislature again concluded that state government has an essential role in ensuring that a reliable supply of energy is provided, consistent with protection of public health and safety, promotion of the general welfare, maintenance of a sound economy, conservation of resources, and preservation of environmental quality. As a result, SB 1389 (Bowen and Sher), Chapter 568, Statutes of 2002, requires that the Energy Commission adopt an *Energy Report* every two years. In preparing the *Energy Report*, the Energy Commission was directed to evaluate energy trends and issues facing California and develop and recommend policies to ensure reliable and economical energy supplies. Other state agencies with energy responsibilities are required to use the Energy Commission's assessments and forecasts to ensure consistency in the information that forms the foundation of California's energy policies and decisions.

In 2004, noting both the lack of an official state role in transmission planning and the failure of existing processes to consider broader state interests, SB 1565 (Bowen), Chapter 692, Statutes of 2004, added Public Resources Code (PRC) Section 25324:

The [Energy] commission, in consultation with the [California] Public Utilities Commission, the California Independent System Operator [CAISO], transmission owners, users, and consumers, shall adopt a strategic plan for the state's electric transmission grid using existing resources. The strategic plan shall identify and recommend actions required to implement investments needed to ensure reliability, relieve congestion, and meet future growth in load and generation, including, but not limited to, renewable resources, energy efficiency, and other demand reduction measures. The plan shall be included in the integrated energy policy report adopted on November 1, 2005, pursuant to subdivision (a) of Section 25302.

With passage of SB 1565, the California Legislature acknowledged the importance of the state's role in the transmission planning process and recognized the Energy Commission as the

⁴ Energy Commission, *Transmission System and Right of Way Planning for the 1990's and Beyond*, March 1992, Publication P700-91-005, p. 1.

⁵ *Ibid*, p. 7.

⁶ *Ibid*, p. 15.

state agency best suited to undertake and accomplish this effort. The *Strategic Transmission Investment Plan (Strategic Plan)*⁷ creates a blueprint for the development of an efficient and reliable bulk transmission system for California. The *Strategic Plan*, adopted by the Energy Commission in November 2005, identifies five prospective transmission projects needed in the near-term to provide strategic benefits to California's electricity grid through improvements to system reliability, reduced congestion, and/or interconnection to renewable resources. These are:

- Palo Verde-Devers No. 2 500kV Project (reduces congestion on lines connecting California and Arizona).
- Sunrise Powerlink 500kV Project (allows interconnections with renewable resources located in California's Imperial Valley, reduces congestion and improves system reliability).
- Tehachapi Transmission Plan Phase I - Antelope Transmission Project (allows interconnections with wind energy generated in the Tehachapi area of Southern California).
- Imperial Valley Transmission Upgrade (provides interconnection with renewable energy resources, to meet future load growth, and provide reliability benefits).
- Trans-Bay Cable Project (provides reliability benefits to the San Francisco Peninsula and CAISO control area).

The Energy Commission believes that the DOE process for designating transmission corridors of national interest should explicitly recognize the critical need for these projects. The *2005 Energy Report* also recommended that the Energy Commission actively participate in federal corridor planning processes, enacted as part of the EPLAct-05.⁸ In following through on this recommendation, the Energy Commission is pleased to provide comments and be an active participant in this DOE proceeding.

Applying Broad Principles in Assessing the Need for Transmission Corridors of National Significance

Establishing the need for transmission corridors is necessarily a flexible process that needs to consider regional differences in operational characteristics, planning considerations, and energy policies within California and across the Western U.S.. In order for designated "national interest" transmission corridors to blend seamlessly into state and regional energy strategies, it is critical that DOE processes adequately recognize critical transmission investments – identified by California and other states – that we believe are expressly allowed under federal law. In identifying the principles that underlie the need for transmission corridors of national

⁷ The Strategic Plan may be accessed through the Energy Commission's website at [<http://www.energy.ca.gov/2005publications/CEC-100-2005-006/CEC-100-2005-006-CMF.PDF>]

⁸ The 2005 Energy Report may be accessed through the Energy Commission's website at [<http://www.energy.ca.gov/2005publications/CEC-100-2005-007/CEC-100-2005-007-CMF.PDF>]

interest, DOE should employ a broad set of definitional criteria, instead of engaging in a narrow modeling effort focused merely on relieving congestion.

California and federal policies addressing the need for additional transmission infrastructure investments can be fairly easily reconciled. The EPAct-05 (Subtitle B – Transmission Infrastructure Modernization) Section 1221 lays out a broad framework that designates interstate electric transmission corridors of “national interest.” It directs the Secretary of Energy to do the following:

1. Conduct a study, in consultation with affected states, of electric transmission congestion.
2. Issue a report designating areas experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers.
3. Conduct the study and issue the report in consultation with appropriate regional entities.
4. Designate a national interest electric transmission corridor that considers whether:
 - (A) The economic vitality and development of the corridor, or end markets served by the corridor, may be constrained by lack of adequate or reasonably priced electricity.
 - (B) i. economic growth in the corridor, or the end markets served by the corridor, may be jeopardized by reliance on limited sources of energy; and,
ii. diversification of supply is warranted.
 - (C) The energy independence of the United States would be served by the designation.
 - (D) The designation would be in the interests of national energy policy.
 - (E) The designation would enhance national defense and homeland security.

The NOI correctly recognizes that investment in new transmission facilities has not kept pace with the increasing economic and operational demand for transmission services. The Energy Commission shares this concern and identified three urgent transmission issues in its *2005 Energy Report*:

- The state lacks a well-integrated, proactive transmission planning and permitting process. Overlapping and often conflicting roles and responsibilities between state and federal agencies cripple California’s ability to effectively secure the investments needed to address dramatic increases in congestion costs and serious threats to electric system reliability.
- California urgently needs a formal, collaborative transmission corridor planning process to identify critical transmission corridors well in advance of need so that utilities can identify and retain needed lands and easements, and local governments can flag incompatible land uses.
- California needs major investments in new transmission infrastructure to interconnect with remote renewable resources in the Tehachapi and Imperial Valley areas, without which it will not be able to meet its Renewable Portfolio Standard (RPS) targets.⁹

DOE should explicitly include furthering key state energy policies and laws as a fundamental criterion when designating transmission corridors of national interest. The Energy

⁹ *2005 Integrated Energy Policy Report*, Energy Commission, November 2005, pp. 88-89.

Commission believes that state and federal transmission interests, as articulated in both federal and state laws and policies, can reinforce one another as long as they are carefully coordinated so as to avoid unnecessary overlap, duplication of efforts, or delay and to allow transmission infrastructure investments to be made in the near term..

While provisions of federal law have as their goal “designating areas experiencing electric energy transmission *capacity constraints or congestion* that adversely affects consumers,” (Subsection 1221(a), emphasis added) the Energy Commission does have concerns that DOE has outlined an overly narrow focus on congestion alone in the NOI. The process outlined in the NOI envisions a “congestion study” that, as currently drafted, appears to be a precursor to designating transmission corridors of national interest. The Energy Commission believes that identifying transmission congestion is an important element of establishing the “need” for transmission infrastructure investments; however, it should not serve as the sole basis for such assessments. Relieving “capacity constraints,” as expressed in the EPAct-05 (Subsection 1221(a)), conveys a much broader meaning than merely addressing existing or forecasted transmission congestion. This broader interpretation is necessary to meet other provisions in the law relating to “adequate and reasonably priced electricity,” “diversification of supply,” and “energy independence” (Subsection 1221 (a)(4)).

California’s energy policy heavily emphasizes the need for the state to diversify its electricity supply. California’s growing dependence on natural gas as a fuel source for power generation, from 30 percent of power generation in 1999 to 41 percent in 2004, is a primary driver of the state’s energy policy.¹⁰ In recent years, with extremely high and volatile natural gas prices, reducing natural gas dependence is foremost in the minds of California’s energy policy-makers. A centerpiece of the state’s strategy to diversify electricity supplies is the development of renewable resources.¹¹ RPS, which requires 20 percent of energy deliveries in the state to be sourced from renewable power generation by 2010, is the state’s primary vehicle to ensure development of renewable resources in California. Long-term contracts with renewable resources, which have no ongoing gas price exposure, are not only environmentally preferable in California, but also economically attractive because they serve as a true hedge against long-term natural gas prices. In addition, the RPS will be a prominent feature of California’s Climate Action Team strategies to reduce greenhouse gas emissions to meet Governor Schwarzenegger’s aggressive climate change goals.¹²

The lack of transmission access to the state’s most promising renewable resources, which are frequently in remote locations including the Tehachapi and the Imperial Valley areas, is one of the most significant near-term barriers to achieving California’s RPS goals.¹³ In order to build sufficient transmission capacity to access these renewable resources, it is vital that “reasonably priced,” “diversity of supply,” and “energy independence” needs identified in federal law (Subsection 1221(a)(4)) are elevated and prominently featured in DOE’s assessment of

¹⁰ 2005 Integrated Energy Policy Report, Energy Commission, November 2005, at pp. 60-62.

¹¹ In this context, “renewable resources” represents power generation fueled by alternative energy sources, such as wind energy or geothermal steam, among others.

¹² 2005 Integrated Energy Policy Report, Energy Commission, November 2005, at pp. 162-163.

¹³ Ibid, at p. 90.

transmission capacity constraints, congestion, and the subsequent designation of corridors of national interest.

DOE efforts to study and “model” congestion are highly sensitive to the data and assumptions upon which they are based. Natural gas price assumptions are an extremely important driver of congestion modeling results. Thus, to a large extent the results of these models are simply products of natural gas price forecasts and assumptions of future generation resource types and locations, as well as assumptions of incremental transmission additions. In its *2005 Energy Report*, the Energy Commission concluded that it needs to investigate alternative natural gas price forecasting methods in addition to traditional models based upon “equilibrium models” that rely on market fundamentals.¹⁴ The Energy Commission determined that current “equilibrium models” fail to capture the discrepancy witnessed over the last several years between the production costs of natural gas and actual prices paid in the marketplace, the latter of which reflect substantial scarcity rents. The large uncertainty about where natural gas prices are headed in the future brings into question the whole notion of DOE’s heavy reliance upon such modeling for the primary determinant of transmission corridor needs.

The Energy Commission’s *2004 Energy Report Update*¹⁵ also concluded that current transmission modeling fails to capture important “strategic benefits” that are not easily quantified and fails to adequately account for the long-lived nature (30 to 50 years) of transmission facilities. Among the important strategic benefits are “diversity of supply” and “energy independence” reflected in federal law (Section 1221 (a)(4)). In our view, this and other shortcomings call into question the validity of recent congestion forecasts for most years beyond the fairly near term, and DOE’s apparent over-reliance upon congestion modeling to identify transmission needs.

As highlighted by the CAISO in our *2005 Energy Report* proceeding, the existing transmission planning process for investor-owned utility (IOU) transmission systems operated by the CAISO in California (which is authorized under FERC tariffs) is overly reactive and insufficiently forward looking. While the CAISO announced development of a new “proactive” planning process in mid-2005, it has yet to design and implement such a system. For now, the DOE’s corridor designation process will be similarly hampered by the current state of tools and planning techniques. In recognizing these limitations we urge DOE to view modeling as only illustrative. Designations of national interest transmission corridors should be based primarily on current factual information, consistency with state and federal policy, and common sense judgment of where transmission is most needed, with appropriate emphasis on accessing renewable resources currently constrained by transmission limitations. Such an approach will be consistent with the phrase “capacity constraints” as used in the EPAct-05, Section 1221(a)).

Federal Delegation and Coordination with Other Federal Transmission Efforts

The lack of timely permitting for transmission in California continues to be of concern to the Energy Commission. While the state will not easily cede its sovereignty over land-use

¹⁴ *Ibid*, p. 133-134.

¹⁵ See website: [<http://www.energy.ca.gov/reports/CEC-100-2004-006/CEC-100-2004-006CMF.PDF>]

decisions relating to transmission development in California, there may be specific cases where federal back-stop siting authority might be justified and welcomed on a case-by-case basis. DOE should focus its efforts on how such a process would be coordinated with state and regional entities.

In addition, the assessment, planning and environmental review involved in designating a NIETC will be enhanced by drawing upon the expertise of state agencies well-versed in the established planning processes and unique environmental characteristics of their respective states. DOE should consider federal delegation or at a minimum, coordination, of planning and environmental review to the states. This delegation can be modeled on the long-standing and successful federal-state relationship practiced by the U.S. Environmental Protection Agency (EPA). For decades, the EPA has relied upon state agencies to conduct environmental reviews under federal program standards. DOE should also address other issues of federal-state cooperation, such as cost allocation (which is an issue under the regulatory oversight of the Federal Energy Regulatory Commission), which continues to delay or restrain renewable and interstate transmission development in California.

The Energy Commission is already a cooperating agency in federal energy corridor designation efforts. EPLA-05, Section 368, requires DOE, BLM, and the U.S. Forest Service (USFS), in cooperation with the Departments of Agriculture, Commerce, Defense and Interior, to designate new right-of-way corridors on federal lands for electricity transmission and distribution facilities, and oil, gas, and hydrogen pipelines. The DOE, BLM, and USFS will prepare a West-Wide Energy Corridor Programmatic Environmental Impact Statement (PEIS) to evaluate issues associated with the designation of energy corridors on federal lands in 11 Western states. Public scoping meetings for the West-Wide Energy Corridor PEIS were held in California on November 1, 2005, and the public scoping comment period ended November 28, 2005. Based upon the information and analyses developed in the PEIS, each federal agency would amend its respective land use plans by designating appropriate energy corridors.

On November 10, 2005, because of the substantial energy-related information developed through the Energy Commission's *2005 Energy Report* and *Strategic Transmission Investment Plan*, the State of California Resources Agency requested that the Energy Commission represent California in the federal PEIS effort. In this role, the Energy Commission is ensuring that the state's energy and infrastructure needs, renewable generation policy goals, and environmental concerns are considered in the PEIS.

The Energy Commission then notified cities, counties, investor-owned and municipal utilities, and multiple state agencies of the need to submit comments on the PEIS. To date, the Energy Commission has received over 1,500 comments from individuals and organizations on the scope of the PEIS. On December 12, 2005, BLM and DOE designated the Energy Commission as a cooperating agency. Since that time, the Energy Commission has been working with an interagency team of federal and state agencies to review proposals to designate new and/or expand existing energy corridors and examine alternatives to these corridors on federal lands in California.

The Energy Commission also believes that important lessons learned in California, pursuant to SB 2431, should be incorporated into DOE's implementation of the EPAct-05.¹⁶ The Energy Commission called for a process to identify environmentally sensitive areas, acceptable areas, and areas where urban encroachment into transmission rights-of-way could pose problems. In comments on the Section 368 federal energy corridor process, several California environmental and wilderness interests identified sensitive lands – including state and national parks, federal and state designated wilderness and wilderness study areas, and critical inventoried roadless areas in national forests – which they believe are not appropriate locations for energy corridors.¹⁷ The list of identified sensitive lands forwarded to the Energy Commission by these organizations is included as Appendix A, below. The Energy Commission strongly recommends that DOE develop a process to identify lands, including those identified in the Section 368 process, that are unsuitable for transmission corridors as part of its NIETC efforts.

The Energy Commission, through its Public Interest Energy Program (PIER program), is funding the development of a web-based siting decision analysis tool called Planning Alternative Corridors for Transmission (PACT). PACT will assess proposed transmission corridors through comparing environmental, health and safety, community, engineering and economic values. Research goals for the project include: 1) assembling and involving appropriate technical and stakeholder committees to determine metrics and weighted factors for each discipline to populate the model, 2) expanding current capabilities of the framework to include a broader range of disciplines, and 3) improving the usability of the framework to all appropriate stakeholders. This effort may prove helpful as we move forward with ongoing transmission corridor assessment and transmission infrastructure permitting.

In addition, Section 925 of the EPAct-05 requires DOE to develop a five-year plan that establishes a comprehensive research, development and demonstration program to ensure the reliability, efficiency and environmental integrity of electrical transmission systems. The establishment of this plan should be coordinated with the Energy Commission's transmission R&D program plan that has identified specific activities to develop advanced grid reliability planning and monitoring tools, advanced energy delivery technologies and technologies to enhance existing grid components.¹⁸ Technological development in the transmission areas need to be adequately considered in efforts to improve California's and the nation's transmission systems.

Resolving Renewable and Interstate Cost Allocation Issues

Securing sufficient investments in new transmission in California has been problematic, especially in light of the dilemma that faces renewable generation projects that need access to transmission, including interstate transmission, primarily because of financial/cost allocation

¹⁶ *Transmission System and Right of Way Planning for the 1990's and Beyond*, March 1992, Energy Commission, Publication P700-91-005, p. 15.

¹⁷ February 15, 2006 letter to California Energy Commission Chairman Joseph Desmond from the California Wilderness Coalition, Californians for Western Wilderness, Center for Biological Diversity, Defenders of Wildlife, Environment California, Sierra Club, Sierra Nevada Forest Protection Campaign, and Nations Parks Conservation Association.

¹⁸ *Five-year Transmission Research and Development Plan*, California Energy Commission, November 2003, Publication No. 500-03-104F, [http://www.energy.ca.gov/reports/2003-11-25_500-03-104F.PDF].

issues. The new provisions of EPAct-05 should be interpreted to help address these questions in an integrated manner. We welcome the interest of the federal government in designating transmission corridors of national interest as a way to overcome obstacles to needed transmission infrastructure development.

Most new transmission projects involve multiple jurisdictions, markets, regions, and beneficiaries for which traditional rate base approaches may no longer be adequate. There is a need to research new approaches for assessing benefit streams, beneficiaries, and the quantification of benefits for cost allocation and cost recovery for new transmission investments. While reliability-related transmission investments are moving forward, projects that are viewed as serving an economic, market or policy objective – for example the Tehachapi transmission project – have no clear process for moving forward, in part due to issues relating to cost recovery and cost allocation. Consequently, it is important to review and document existing transmission approval processes, frame policy issues, and outline policy options for cost allocation and cost recovery. Without certainty in these areas, investors are reluctant to commit funds necessary for the construction of these needed facilities.

Last year FERC rejected an innovative proposal from Southern California Edison (SCE) to develop a renewable resource trunk line, operated by the CAISO, which would have interconnected a large concentration of potential renewable generation. The trunk line concept included several linked segments in the Tehachapi area and would have allowed SCE, Pacific Gas and Electric (PG&E), San Diego Gas and Electric (SDG&E), and other CAISO grid users access to as much as 1,100 Megawatts (MW) of wind resources. The renewable resource trunk line concept could also have provided access other remote renewable resources such as geothermal and central station solar. Despite support from California's primary energy agencies, FERC did not approve this application. The FERC ruled that the third segment SCE identified as a renewable resource trunk facility was ineligible for rolled-in rates since the segment resembles more of a generation tie than a network upgrade. This illustrates the need for improved coordination between state and federal energy regulators and policy makers to achieve workable solutions to real world problems.

The advanced planning and construction of transmission facilities is essential to transmission development to access renewable resources. Renewable projects cannot secure contracts under RPS procurement procedures without knowing whether existing or future transmission will be able to accommodate them; at the same time, utilities are wary of investing in transmission to capture renewable power without assurance of cost recovery, which is premised on the renewable generation being built. This poses a major impediment to the achievement of state policy goals.

Even when a renewable developer requests new transmission capacity, the present system assigns the bulk of the costs to the developer who first requests an interconnection requiring system upgrades, regardless of when those upgrades are to go into service and whether system upgrades required by later-in-time requesters will go into service first. Transmission upgrades would be much more efficiently built through a plan that anticipates phased-in development of future renewable generation instead of additions of relatively small, individual projects.

However, phased-in development requires pre-building portions of transmission lines, currently not allowed under FERC regulation.

The September edition of the *Natural Gas & Electricity Journal* makes very important observations about the implications of FERC's decision on the Tehachapi renewable trunk line with which we agree. In its denial of SCE's renewable resource trunk line FERC failed to recognize the benefits access to Tehachapi wind resources would bring to users of the CAISO-operated transmission system. In the case of Tehachapi "numerous potential wind developers are poised to provide renewable energy to any and all users of the grid system, many of whom need access to the wind energy to meet their renewable portfolio standards (RPSs), the systemwide benefits of all the facilities needed for interconnection should have been apparent." Therefore, it appears surprising that although California clearly recognized these benefits, FERC did not. In addition, if the Segment 3 of Tehachapi were built without rolled-in rate treatment authorized by FERC, the retail ratepayers of SCE would bear all of the costs of those facilities, which may be used primarily to meet the RPS requirements of other California utilities.¹⁹

The *2005 Energy Report* recommended changes in the CAISO's FERC-approved tariff not only to allow recognition of transmission needs for reliability and economic projects, but also for access to renewable projects to meet RPS goals. FERC has already allowed tariff changes relating to transmission planning and expansion which suggest further refinements are needed in the CAISO tariff. For example, the Southwest Power Pool (Oklahoma, Kansas, parts of Arkansas, Louisiana, New Mexico, and Texas) is permitted by FERC to engage in a transmission study process which provides four-month "open seasons" for generator interconnection requests and the aggregation of the requests received for group processing. Moreover, FERC takes into account whether a new transmission line will increase fuel diversity when deciding whether these transmission costs will be allocated broadly or narrowly. See, *Southwest Power Pool, Inc.*, 110 FERC ¶ 61,028 (January 21, 2005); *Southwest Power Pool, Inc.*, 111 FERC ¶ 61,118 (April 22, 2005) *Order on Rehearing and Compliance Filing*, *Southwest Power Pool, Inc.*, 112 FERC ¶ 61,319 (September 20, 2005). See also, *Midwest Independent Transmission System Operator, Inc.* 114 FERC ¶ 61,106 (February 3, 2006).

This provides a good example of where state and federal cooperation would further the public interest in development of environmentally-benign renewable resources that reduce our dependence on natural gas. If DOE can help remove cost-allocation barriers to transmission investments by changing cost allocation rules at the federal level, it will go a long way toward promoting adequate investment in new transmission and relieving capacity constraints and congestion.

The Energy Commission, through its Public Interest Energy Research (PIER) program is conducting research designed to address these questions, learn from case studies and best-in-class examples of transmission approval processes, and develop a framework to guide cost allocation and cost recovery, based upon a range of benefits of different transmission projects. The Energy Commission will continue to work with DOE and other federal agencies on these cost-allocation efforts.

¹⁹ "Tehachapi Wind Power Setback Has Nationwide Implications," *Natural Gas & Electricity Journal* (Darrell Blakeway), September 2005, pp 3, 11. Mr. Blakeway is an attorney formerly employed by FERC for 25 years.

III. SPECIFIC RESPONSES TO THE NOTICE OF INQUIRY

For clarity, the Energy Commission's comments on select NOI areas of interest are organized in a question and answer format, ranked in significance by their appearance below.

Question No. 1: *In the NOI, DOE has invited commenters to address how broadly or narrowly the Department should consider and define corridors.*

For purposes of the Section 1221 work, we strongly believe that national interest electrical transmission corridors should be defined in relation to anticipated electrical path needs, while recognizing that "capacity constraints or congestion that adversely affects customers" (Subsection 1221(a)) must include important state goals, such as the deliverability of remote renewables to load centers, as well as economic congestion. A corridor is broader than a path for a particular transmission line, and at a minimum must include not only a particular transmission path but the paths associated with competing projects that would serve the same market.

In addition, it is important to note that the term "corridor," as used in Section 1221 of the EPA Act-05 is significantly different from its use in Section 368 (Energy Right-of-Way Corridors on Federal Lands). Section 368(e) states that "A corridor designated under this section shall, at a minimum, specify the centerline, width, and compatible uses of the corridor." As noted in Section 368(a)(2), the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior are required to perform "any environmental reviews that may be required to complete the designation of such corridors..." Section 368(a)(3) requires local governments to "incorporate the designated corridors into the relevant agency land use and resource management plans or equivalent plans."

While the term "corridor" in Section 1221 is not defined explicitly, Federal Power Act Section 216(a)(2)²⁰ states that a national interest electric transmission corridor may be designated in "...any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects customers."

The NOI then notes that "The Department expects to identify corridors for potential projects as generalized electricity paths between two (or more) locations, as opposed to specific routes for transmission facilities. The Department believes that defining corridors too narrowly would unduly restrict state authorities, FERC, and other relevant parties in determining whether and how to authorize the construction and operation of transmission facilities to relieve the identified congestion."

Clearly there is a need for coordination between the Section 368 land use-centered approach toward transmission expansion and the Section 1221 electrical path-centered approach. As noted earlier, the Energy Commission is serving as a cooperating agency in the Section 368 West-Wide Energy Corridor PEIS effort by ensuring that the state's energy and infrastructure needs, renewable generation policy goals, and environmental concerns are considered in the

²⁰ Section 1221 amends Part II of the Federal Power Act (16 United States Code section 824 *et seq.*) to add Section 216 entitled "Siting of Interstate Electric Transmission Facilities."

PEIS. To date the Energy Commission has held two workshops in California to seek public comments on designating corridors in California on federal land and the corridors proposed for consideration by utilities and other entities during the federal scoping period.

With respect to transmission corridors in the Section 368 effort, two types of corridors have been identified: those with existing transmission facilities already in place, and those which may be needed in the future. We assume from the proposed future corridors that these are potential land use solutions²¹ to anticipated electrical path needs. However, at this time there does not appear to be an explicit link between the electrical path analyses which form the basis for the proposed land use corridors identified in the Section 368 process and the electrical path analyses being conducted for the Section 1221 work. We believe it is essential that physical corridors designated under the Section 368 work be predicated upon the results of the Section 1221 work.

Question No. 2: *What criteria should be used in evaluating the suitability of geographic areas for NIETC status?*

Before commenting on the specific draft criteria in the NOI, we offer three general comments:

(1) We believe the criteria must be developed and applied in an open, transparent, and collaborative manner so that parties understand the drivers for, as well as the implications of, NIETC designation. In addition to the criteria themselves and their associated metrics, it would be useful to solicit input on the relative weight that should be assigned to each criterion. For example, the NOI asks: “Are certain considerations or criteria more important than others? If so, which ones, and why are they more important?” A logical extension of these questions is: “How much more important?”

(2) The permitting of proposed transmission projects in national interest electric transmission corridors can be preempted by the federal government if state or local permitting is ineffective or not done in a timely manner. Because the federal preemption includes the ability to exercise the right of eminent domain on property not owned by the United States or a state, it should be viewed as a “last resort” option.

(3) An additional criterion not included in the NOI list is the extent to which targeted actions are needed to help affected states achieve their energy policies. See the response to Question No. 3, below, for more information.

Below, we offer specific comments on *select* criteria from the eight draft criteria contained in the NOI.

Draft Criterion 1: Action is needed to maintain high reliability.

We agree that remedying existing or emerging reliability problems is an important criterion. We recognize that utilities are bound to Western Electricity Coordinating Council and North American Electric Reliability Council rules; however, we can envision the situation where there could be local supply constraints because of the unforeseen or premature retirement of

²¹ Approximately 46 percent of California is federal land.

aging power plants that would be consistent with the definition of capacity constraints (Subsection 1221(a)).

Draft Criterion 2: Action is needed to achieve economic benefits for consumers.

The calculation of savings to consumers should reflect state energy policies, as enacted in state energy law and policies or reviews of load serving entity resource plans. Specifically, if a state policy places a high priority on acquiring renewable energy generation, or makes a judgment about natural gas price risk, or establishes a carbon adder to reflect its determination of carbon risk, DOE should assume compliance with such policies in the calculations of economic benefits to consumers. However, it is unclear to us how FERC would treat competing interests between affected states for interstate projects.

Another aspect of reliability is the consideration of forced outages of transmission because of natural disasters such as forest fires. California relies upon a significant amount of imports from the Southwestern states, and in California the season of highest fire potential typically coincides with periods of high electricity demand. While in general we advocate the efficient use of rights-of-way and existing corridors in planning for transmission expansion, there may be situations where establishing new corridors is the best option to maintain high reliability.

Draft Criterion 3: Actions are needed to ease electricity supply limitations in end markets served by a corridor, and to diversify sources.

We agree that actions are needed to promote the diversification of energy sources, particularly with respect to renewable resources. California is a national leader in the development of renewable resources. Over the past 30 years, California has built one of the largest and most diverse renewable generation portfolios in the world. In 2002, California established its RPS program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. The Energy Commission's *2003 Integrated Energy Policy Report* recommended accelerating that goal to 2010, and the *2004 Integrated Energy Policy Report Update* further recommended increasing the target to 33 percent by 2020.

However, many of California's best renewable resource areas are located far from load centers, requiring transmission expansion in order to meet state goals. NJETC designation, coupled with the Section 368 federal corridor designation process, could help ensure the interconnection of these resources.

As noted in our response to Draft Criterion 1, the retirement of aging power plants could create the need to increase transfer capability into affected local areas in order to ease supply limitations.

Draft Criterion 4: Targeted actions in the area would enhance the energy independence of the United States.

As noted in the response to Draft Criterion 3, we have a state policy objective to promote renewable resources, which could play a significant role in increasing the energy independence of the United States.

Draft Criterion 7: The area's projected need (or needs) is not unduly contingent upon uncertainties associated with analytic assumptions, e.g., assumptions about future prices for generation fuels, demand growth in load centers, the location of new generation facilities, or the cost of new generation technologies.

As noted in our Part II: General Comments response, we agree that this is an important criterion. To the extent that varying assumptions about natural gas prices, hydro conditions, and other critical assumptions affect the need for transmission, it is essential to consider the robustness of the results as factors in NIETC determination. In general, modeling results which demonstrate the need for transmission constraint relief over a wide range of plausible input assumptions should take precedence over results that are more sensitive to analytic assumptions. Given that the congestion study will be conducted every three years, there should be time to reevaluate the need for corridors that may not receive NIETC designation the first time.

Draft Criterion 8: The alternative means of mitigating the need in question have been addressed sufficiently.

We agree, and believe that this is an important criterion for all NIETC designations since a comprehensive review of alternatives may not be made for specific projects proposed within NIETCs.

For projects affecting California, CEQA requires an examination of alternatives, including no-project and non-transmission alternatives. If a proposed project is not able to demonstrate that it is the preferred alternative, it will be rejected by the state.

Federal Power Act Section 216(h)(3) states: "To the maximum extent practicable under applicable Federal law, the Secretary shall coordinate the Federal authorization and review process under this subsection with any Indian tribes, multistate agencies, and State agencies that are responsible for conducting any separate permitting and environmental reviews of the facility, to ensure timely and efficient review and permit decisions."

The Federal "backstop" permitting authority should be carried out so as to not undermine CEQA compliance determination. A comprehensive evaluation of alternatives prior to NIETC designation can help avoid conflicts at a later stage when a specific project is proposed in a NIETC.

Question No. 3: *Other than what are listed in the NOI, are there other criteria or considerations that DOE should consider when deciding whether to designate a NIETC? If so,*

please explain. In this explanation, indicate how the proposed criterion would be applied, if possible, within the context of a specific area or areas that you consider suitable for designation as a NIETC. For each new criterion proposed, you should offer metrics that measure or quantify the criterion.

As noted in the response to Question No. 4, an additional criterion not included in the NOI list is the extent to which targeted actions are needed to help affected states achieve their energy policies. In California's case, these state energy policies are laid out in the Energy Commission's biennial integrated energy report (the most recent one, the *2005 Integrated Energy Policy Report*, was adopted in November 2005), as well as the companion *Strategic Plan* (also adopted in November 2005).

Question No. 4: *Are certain considerations or criteria more important than others? If so, which ones, and why are they especially important?*

We believe the highest priority should be given to designation of transmission corridors that promote achievement of state energy policy objectives. Next in priority would be the designation of corridors in location-constrained generation resource areas. Lower priority should be given to the designation of corridors with contractual congestion but little physical congestion, unless there has been an evaluation which finds that solutions to contractual congestion are either not feasible or more costly than building new transmission.

Question No. 5: *Should the Department of Energy (DOE) distinguish between persistent congestion and dynamic congestion, and, if so, how?*

As noted in our comments in Part II: General Comments, we do not believe that congestion should be the sole basis for NIETC designation. However, to the extent that distinctions between definitions of congestion provide focus to the effort, we offer the following comments.

The term "dynamic congestion" is not defined in the NOI and does not appear to be a standard industry term. We infer from the wording of the question that "persistent congestion" is that which has shown, and is expected to continue to show, a consistent pattern of congestion on an ongoing or seasonal basis under "baseline" conditions (including generation and transmission additions and retirements), while "dynamic congestion" refers to current or possible future congestion caused by deviations from baseline conditions, such as extended multiple transmission outages or other unanticipated events that may temporarily cause congestion.

While dynamic congestion can be extremely costly to affected parties, we believe the NIETC designation process is not the appropriate mechanism for effectively addressing dynamic congestion.

Question No. 6: *Should DOE distinguish between physical congestion and contractual congestion, and, if so, how?*

As noted in our comments in Part II, we do not believe that congestion should be the sole basis for NIETC designation. However, to the extent that distinctions between definitions of congestion provide focus to the effort, we offer the following comments.

We believe that DOE should distinguish between physical and contractual congestion, and that findings of physical congestion that adversely affect consumers should guide the DOE's conclusions on congested paths. While contractual congestion can also adversely affect consumers, it is more appropriately addressed through institutional mechanisms. However, in the event that evaluations of contractual congestion find that institutional solutions at the state, regional, or federal levels are infeasible or more costly than building new transmission, it would be appropriate to address contractual congestion in the NIETC designation process.

IV. CONCLUSION

In conclusion, the Energy Commission recommends that DOE address the following critical issues in assessing and designating transmission corridors of national interest:

- Explicitly address state energy laws and policies relating to transmission corridor planning, consistent with federal law (Subsection 1221(a)), to ensure that DOE's designation of transmission corridors of national interest both complements these efforts and leverages state expertise.
- Elevate and prominently feature "reasonably priced," "diversity of supply," and "energy independence" policies in federal law (Subsection 1221(a) to identify transmission capacity constraints and the subsequent designation of corridors of national interest. DOE should recognize the short-comings in existing transmission congestion forecasts and avoid over-reliance on these modeling studies to identify transmission needs.
- Focus efforts on how the DOE NIETC process would be coordinated with state and regional entities, as well as federal energy corridor efforts already underway to implement EAct-05 Section 368. DOE should consider federal delegation of planning and environmental review to states and model it on the U.S. Environmental Protection Agency's reliance upon state agencies to implement environmental review under federal program standards.

- Assist in removing cost-allocation barriers to renewable and interstate transmission investments by working with FERC to push cost allocation rules at the federal level to promote adequate investment in new transmission and relieve capacity constraints consistent with federal transmission corridor law (Subsection 1221(a)).

Respectfully submitted,



Joseph Desmond
Chairman

cc: Ms. Poonum Agrawal,
Office of Electricity Delivery and Energy Reliability
Forrestal Building, OE-20
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585
poonum.agrawal@hq.doe.gov

Mr. Lot Cooke
Office of the General Counsel
Forrestal Building, OE-20
U.S. Department of Energy
1000 Independence Ave., S.W.
Washington, D.C. 20585
lot.cooke@hq.doe.gov

APPENDIX A WILD PLACES AT RISK

Bureau of Land Management Wilderness

- Black Mountain Wilderness, BLM California Desert Conservation Area
- Carrizo Gorge wilderness, BLM California Desert Conservation Area
- Chuckwalla Mountains Wilderness, BLM California Desert Conservation Area
- Coyote Mountains Wilderness, BLM California Desert Conservation Area
- Fish Creek Mountains Wilderness, BLM California Desert Conservation Area
- Kelso Dunes Wilderness, BLM California Desert Conservation Area
- Little Chuckwalla Mountains Wilderness, BLM California Desert Conservation Area
- Mecca Hills Wilderness, BLM California Desert Conservation Area
- Newberry Mountains Wilderness, BLM California Desert Conservation Area
- Nopa Range Wilderness, BLM California Desert Conservation Area
- Old Woman Mountains Wilderness, BLM California Desert Conservation Area
- Orocopia Mountains Wilderness, BLM California Desert Conservation Area
- Palo Verde Wilderness, BLM California Desert Conservation Area
- Piute Mountains Wilderness, BLM California Desert Conservation Area
- Rodman Mountains Wilderness, BLM California Desert Conservation Area
- Rice Valley Wilderness, BLM California Desert Conservation Area
- Sawtooth Mountains Wilderness, BLM California Desert Conservation Area
- Stepladder Mountains Wilderness, BLM California Desert Conservation Area
- Turtle Mountains Wilderness, BLM California Desert Conservation Area

Bureau of Land Management Wilderness Study Areas

- Cady Mountains Wilderness Study Area, BLM California Desert Conservation Area
- Death Valley #17 Wilderness Study Area, BLM California Desert Conservation Area
- Dry Valley Rim Wilderness Study Area, BLM Eagle Lake Field Office
- Skedaddle Wilderness Study Area, BLM Eagle Lake Field Office
- Soda Mountains Wilderness Study Area, BLM California Desert Conservation Area

National Forest Wilderness

- Cucamonga Wilderness, San Bernardino National Forest
- Desolation Wilderness, Eldorado National Forest
- Ishi Wilderness, Lassen National Forest
- Mokelumne Wilderness, Eldorado National Forest

National Forest Inventoried Roadless Areas

- Caples Creek Roadless Area, Eldorado National Forest
- Cajon Roadless Area, San Bernardino National Forest

- Circle Mountain Roadless Area, San Bernardino National Forest
- Cucamonga Roadless Area, San Bernardino National Forest
- Dardanelles Roadless Area, Lake Tahoe Basin Management Unit
- Fish Canyon Roadless Area, Angeles National Forest
- Freel Roadless Area, Lake Tahoe Basin Management Unit
- Grizzly Mountain Roadless Area, Plumas National Forest
- Heart Lake Roadless Area, Lassen National Forest
- Ishi Roadless Area, Lassen National Forest
- Magic Mountain Roadless Area, Angeles National Forest
- Middle Fort Feather River Roadless Area, Plumas National Forest
- Mill Creek Roadless Area, Lassen National Forest
- Red Mountain Roadless Area, Angeles National Forest
- Salt Creek Roadless Area, Angeles National Forest
- Salt Springs Roadless Area, Eldorado National Forest
- San Sevaine Roadless Area, San Bernardino National Forest
- Steele Swamp Roadless Area, Modoc National Forest
- Strawberry Peak Roadless Area, Angeles National Forest
- Tragedy-Elephant's Back Roadless Area, Eldorado National Forest
- Tule Roadless Area, Angeles National Forest
- West fork Roadless Area, Angeles National Forest
- Wild Cattle Mountain Roadless Area, Lassen National Forest

National Parks

- Death Valley National Park
- Joshua Tree National Park
- Lassen Volcanic National Park
- Mojave National Preserve

State Parks

- Anza-Borrego Desert State Park