

Summary of Comments from the April 5, 2004 Integrated Energy Policy Report Committee Workshop on the 2004 Transmission Update and Draft Transmission Vision

by Energy Commission Staff, May 4, 2004

Introduction and Background

This document summarizes the comments from the April 5, 2004 Integrated Energy Policy Report Committee Workshop on the 2004 Transmission Update that relate to the development of a transmission vision statement. It also describes the Commission staff's synthesis of these comments into the next steps for continuing the development of a vision statement. The remainder of the document is structured to cover the following key topics:

- Draft Transmission Vision
- Next Steps
- Summary of Comments to Develop a Long-term Vision for the State's Transmission System (see Appendix)

At the request of the Energy Commission, the Electric Power Group of the Consortium of Electric Reliability Technology Solutions (CERTS) prepared a report to begin the process of developing a long-term vision for California's electric transmission system. The report, entitled *California's Electricity Generation and Transmission Interconnection Needs Under Alternative Scenarios* (Pub. No. 700-04-003), can be found at:

http://www.energy.ca.gov/2004_policy_update/documents/index.html

Joe Eto of CERTS gave a presentation on the report at the April 5, 2004 Integrated Energy Policy Report (IEPR) Committee Workshop on the 2004 Transmission Update. The transcripts for the entire workshop [placed online on April 15, 2004] can be found on the Energy Commission's website at:

http://www.energy.ca.gov/2004_policy_update/documents/2004-04-05_workshop/2004-04-05_TRANSCRIPT.PDF

Following Mr. Eto's presentation and a question/answer session, Commission staff initiated a process for collaborating with interested parties on the development of a long-term vision for the state's transmission system for eventual use in the development of state policy. The staff described potential drivers affecting the development of a vision and then sought input from interested parties on the following questions:

1. What additional drivers need to be considered in developing a long-term transmission vision?
2. What do you see as the vision for California's transmission system?
3. What steps need to be taken in this 2004 IEPR Update?
4. What steps need to be taken in the 2005 IEPR Proceeding?

A total of eighteen people participated in the round-table discussion, plus an additional audience member who had not signed up to be on the panel. The Commission staff received additional written comments from five interested parties following the workshop.

As noted in the staff presentation, our next steps were to compile comments received as they relate to the development of a transmission vision and present a draft vision statement at the May 10, 2004 IEPR Committee Workshop. The Committee reiterated this commitment in its Notice of Committee Workshop on the 2004 Transmission Update for May 10, 2004, Attachment C, placed online on April 28, 2004.

Draft Transmission Vision

In the process of summarizing the workshop comments (see appendix), Commission staff found that the range of comments was so diverse as to require us to first look for areas of consensus and common themes in the comments before drafting a vision statement.

A common theme expressed is that the transmission system has great value to California. It is an integral part of the energy delivery system that provides reliability on both a local and regional basis, access to lower-cost markets, and access to remote renewable generation.

This theme is not new. The Legislature has also recognized the value of transmission. In Senate Bill 2431 (1988) the Legislature found and declared 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. 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...”

More recently, in SB 1389 (2002) the Legislature found and declared that

“clean and reliable energy is essential to the health of the California economy and of vital importance to the health and welfare of the citizens of the state and to the environment. The Legislature further finds and declares that government has an essential role to ensure 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 such, the development of a long-term transmission vision for the state’s future is essential. In the broadest sense, the vision should be based on principles such as the following:

1. Be long-lasting (but not inflexible.)
2. Contribute toward a sustainable energy future.
3. Create a system that can handle unpredictable conditions such as load growth patterns and market dynamics.

4. Guide both long-term and short-term needs, although not necessarily to the point of specific transmission projects being prescribed. However, it should pave the way for future transmission projects that are in the best interests of the state when compared on an equal basis with other alternatives.
5. Be developed with consideration for California's neighboring states and countries, as well as local areas and peoples. To that end, the Energy Commission should work with other state, county, and city agencies and stakeholders as it develops the vision.
6. Be developed as soon as possible, in order to maximize its value to California citizens and prevent the foreclosure of opportunities for an optimized electricity delivery system.

While the development of the vision continues throughout the 2004 Update process, there are also a number of specific actions mentioned by stakeholders that can be undertaken now. One high-priority near-term action is to look into corridor planning and land use banking. Parties saw this as a means to take lower-cost actions now that could pay off at a future date when specific new transmission projects are found to be the most effective means to meet California's needs.

Another near-term action is to investigate technologies that allow the existing system to be used more efficiently. To that end, the Energy Commission is funding a number of system improvements via its Public Interest Energy Research program.

Next Steps

At the May 10, 2004 workshop, the staff will seek feedback from interested parties on three topics: (1) the accuracy and completeness of comments received at and after the April 5, 2004 workshop (2) the accuracy and completeness of staff's synthesis of the major guiding principles for a transmission vision noted above and (3) the two specific near-term actions noted above.

The staff proposes to have a vision statement available for review and comment at the next transmission-related workshop, scheduled for June 14, 2004. The results will be included in staff's draft transmission white paper, planned for release in late July 2004.

Appendix

Summary of Comments to Develop a Long-term Vision for the State's Transmission System

The staff has attempted to capture those comments that either explicitly or implicitly relate to the development of a vision. This includes comments that provide a perspective on what the transmission system of the future may look like (such as the scenarios captured in Mr. Eto's presentation and the companion consultant report), as well as comments about what the transmission system should look like or should accomplish, as well as factors, drivers and principles that do or should affect the development of a vision.

The comments are summarized as follows. First, the comments received orally during the workshop are summarized in chronological order, based on the transcripts. In this part of staff's summary, all references to page numbers are from the April 5 workshop transcripts. Second, the comments received in writing at or after the workshop are summarized. In this part of the summary, all references to page numbers are from the document noted. All of the written comments received have been docketed.

Verbal Comments during Workshop

Transmission is a vital part of the electricity delivery infrastructure of California. (Joe Eto, CERTS, pp. 6-7)

Transmission is a somewhat unique asset, compared to generation or demand-side alternatives, in terms of its strategic value and its long-term nature. (Joe Eto, p. 7)

The long time to plan transmission is inconsistent with the more short-term way in which resource planning is currently being done. (Joe Eto, p. 7)

This inconsistency will foreclose options that may be strategically of great importance to the state because we don't have the means by which to trade off all of the resources that are available to California in meeting its future energy needs. (Joe Eto, p. 8)

The purpose of the CERTS scenario work is to begin setting the stage for having discussions in which transmission can be considered in a comprehensive fashion along with all of the other appropriate resource alternatives. (Joe Eto, p. 8)

A scenario approach allows one to posit logically consistent future states which may be required under each of those states from a resource planning perspective. (Joe Eto, pp. 8-9)

The scenario approach does not yield predictions, nor does it state a policy preference, but it does provide a framework for having a discussion about long-term energy strategy. (Joe Eto, p. 9)

The need for transmission is driven by assumptions regarding future electricity demand (which includes population-influenced load growth and conservation assumptions) and future

availability and type of generation (including existing, planned, in state, out of state, under construction, renewables, distributed generation and retirements). (Joe Eto, pp. 10-16)

We need to begin to develop a robust planning process in which the long-term horizon associated with transmission can be considered on a comparable basis with the current planning horizons that are focused on resources with much shorter lead times. (Joe Eto, p. 24)

California has already seen the value of the strategic benefits provided by transmission (see transcripts from the November 6, 2003 IEPR Committee Workshop on the 2004 Transmission Update, available on the Energy Commission website at:

http://www.energy.ca.gov/2004_policy_update/documents/2003-11-06_workshop/2003-11-06_TRANSCRIPT.PDF

There is a need to consider in an explicit fashion the strategic benefits that transmission may provide for California in the future. (Joe Eto, p. 24)

We need to have a statewide, strategic, long-term perspective to look at interconnections, and this perspective should be used as a basis for our interactions with our regional partners. (Joe Eto, p. 24)

There are two parts to the process: a longer-term strategic process and a permitting process. We have some of the second part (the permitting process), but none of the first part (the longer-term strategic process). When restructuring occurred, we lost that ability to trade off, as a state, generation, transmission, and demand-side alternatives in a consistent fashion. (Joe Eto, p. 25)

If we don't take action now, we will effectively foreclose strategic options that we may want to take advantage of at a later time. (Joe Eto, p. 25)

Two low-cost entry options that give you the opportunity to develop transmission at a later time include site banking and corridor planning. We need to do this now or we will find out the hard way that we won't be able to build in a hurry. (Joe Eto, pp. 25-26)

We need to look beyond the five- and ten-year plans of the investor-owned utilities (IOUs) and the California Independent System Operator (CA ISO). A 25-year planning horizon is consistent with the kinds of things CERTS looked at in its scenario planning work. (Joe Eto, p. 26)

It is important to have a consensus built around that long-run vision of the resource portfolio for the state because that will help guide us into the processes that we are going to need to develop a consensus around some of the specific interconnections that we need to start planning for and developing right now. (Joe Eto, p. 26)

To do that we need to assess long-run potential, look at market hubs, and integrate that into our shorter range planning for the specific interconnection projects we may consider. (Joe Eto, p. 26)

We need to provide a forum to build consensus with our neighbors, which will be critical in advancing these plans. (Joe Eto, p. 27)

Specific transmission projects should flow out of the vision. (Joe Eto, p. 27)

Our traditional tools guide us for a five-year planning horizon for a facility [transmission] that has an estimated life of 50 years, conservatively. If you look at the transmission corridor as the asset, the life is likely quite a bit longer than 50 years. (Commissioner John Geesman, p. 29)

The state must deal with this problem now while we have the possibility of establishing some consensus. (Commissioner Geesman, pp. 29-30)

It is important to understand the cost of additional transmission infrastructure versus the siting and location of new [generation] projects. (Robert Sims, SeaWest Wind Power, p. 32)

The problem is that right now we look at individual projects, but don't have a real basis for where each fits in the larger portfolio. (Joe Eto, p. 33)

The various transmission interconnection additions that may be needed, according to the CERTS report, will require not only the construction of facilities across state boundaries to adjacent states and/or Mexico, but will also require significant infrastructure additions within the state in order to make that energy available to California consumers. (David Korinek, San Diego Gas & Electric, p. 35)

We need to deal with the power compensation problem caused by long transmission lines. (Mark Galperin, Controllable Electric Reactors Consortium, pp. 36-37)

We need to deal with the issue of right-of-way for long transmission lines. Such a process should include public hearings, legislative hearings, etc. (Mark Galperin, p. 38)

We need to look at some other technologies already in place, for example in Brazil, which would allow us to decrease demand for additional right-of-way. (Mark Galperin, pp. 38-39)

We also need to deal with the problem that it is almost impossible to build new lines here without any investment incentives for transmission line developers. (Mark Galperin, p. 39)

As David Korinek noted, when talking about transmission needs for California we need to talk about more than just imports. In some of the scenarios that CERTS developed there would be dramatic differences in the amount of in-state transmission required to support new interstate transmission. (Barry Flynn, Flynn RCI, p. 40)

There is a major problem with regard to the long gestation period of transmission projects, compared to other parts of the energy delivery system, and this is where land use banking or right-of-way banking can help. (Barry Flynn, p. 42)

We need to reevaluate the way we think about planning transmission needs. Instead of looking at it as a \$300 million commitment that we need to make today, we should think of it as a \$2 million commitment to do some of the earlier parts of the permitting process to make a

transmission project a viable option in the future and thus bring the lead time closer to what the lead times are for the alternatives. (Barry Flynn, p. 42)

The question of site banking/corridor planning is an appropriate activity at this time. It is an excellent example of the type of option the state should be trying to explore now in order to be in a position at some point to think about transmission. It allows more of an opportunity to build consensus around corridors. It is a worthwhile low-cost investment, because if we do need a corridor someday and can't get it, then we have lost an incredible opportunity. (Joe Eto, pp. 43-44)

Staff grouped the type of drivers affecting the development of a transmission vision into five categories. First is the need to consider legislatively-mandated programs and their impact on the transmission system. For example, the Renewable Portfolio Standard (RPS) program is expected to have a significant impact on the location and size of future interconnections. (Judy Grau, Energy Commission staff, p. 49)

A second driver is the need to consider state preferences. Senate Bill 2431 of 1988 declared that a reliable, efficient, and flexible bulk transmission system is vital to the future economic and social well-being of California. It also established a preference hierarchy when upgrades are necessary. The first preference is to encourage the use of existing rights-of-way by upgrading existing facilities, followed by the construction of new lines within existing rights-of-way, followed by the creation of new rights-of-way. (Judy Grau, pp. 49-50)

A third driver is to improve the environmental performance of the system. (Judy Grau, p. 50)

A fourth driver is the need to achieve strategic goals and opportunities such as planning for low-probability, high-impact events; taking advantage of technological improvements in transmission; enhancing system security; and making strategic interconnections to other states for both reliability and economic purposes. (Judy Grau, p. 51)

A fifth driver is the desire to achieve a least-cost electricity system. This could be facilitated by accessing lower-cost resources, both intra- and interstate, and by using transmission to reduce the need for, and cost of, reliability must-run (RMR) units in local areas. (Judy Grau, p. 51)

There are drivers related to resource procurement and renewables. (Gary DeShazo, CA ISO, p. 55)

We need to deal with inconsistencies in how load forecasting is applied in various venues, such as the California Public Utilities Commission (CPUC) Certificate of Public Convenience and Necessity (CPCN) process. (Gary DeShazo, pp. 55-56)

The discrepancy in the planning horizons for generation and transmission needs to be addressed. (Gary DeShazo, p. 56)

The vision for California's transmission system is about subregional planning. California must consider its neighbors, who have strong ideas about what they want to do. (Gary DeShazo, pp. 56-57)

We need to follow through. The CA ISO is willing to participate to make sure we can follow through. (Gary DeShazo, p. 57)

In terms of priorities, we need to deal with the resource part before we can deal with the transmission infrastructure that goes behind it. Second, we need to work on the load forecasting part. (Gary DeShazo, pp. 57-58)

In terms of drivers, the first priority is to have clear energy resource planning and policy goals. The second is predictable market rules and cost recovery regime. The third priority is the need to consider regional coordination and planning. (Kevin Dasso, Pacific Gas & Electric Company, pp. 58-59)

Transmission needs to be part of the solution: it is not the solution. We should not lose sight of all of the elements and focus only on transmission. (Kevin Dasso, p. 59)

The Energy Commission should continue to identify the issues and raise people's awareness. It should include the role of transmission in its scenarios. (Kevin Dasso, p. 60)

The Energy Commission should develop a vision that is driven by principle, not by prescription, otherwise it runs the risk of being short-lived. (Patricia Arons, Southern California Edison, p. 61)

A vision driven by principle would consider how we are going to do transmission development and why it is the right thing to do. (Patricia Arons, p. 61)

The vision should focus on meeting long-term needs, with major drivers being load growth, generation, interconnections, and reliability. (Patricia Arons, pp.61-62)

We need to acknowledge that the choice to build, and where and how and when to build, is often a societal choice. (Patricia Arons, p. 62)

We need to think in terms of a sustainable energy future for California. (Patricia Arons, p. 62)

We need to do proactive siting in order to deal with the "not in my backyard" philosophy toward transmission. (Patricia Arons, p. 62)

We need to look at transmission technology options that allow us to expand the existing capability without the need for new transmission. (Patricia Arons, pp. 62-63)

We need to clarify what our roles, responsibilities, and expectations are for state agencies, local agencies, and county agencies for energy in the future. (Patricia Arons, p. 63)

We need to consider our view of environmental stewardship in California, and how we will deal with the land use implications of transmission. (Patricia Arons, p. 63)

The more robust and flexible a transmission infrastructure you have, the more market variations you can deal with without creating congestion problems. (Patricia Arons, p. 64)

A robust transmission vision will require us to employ cooperative planning methods. This will require a good definition of the roles and responsibilities for the utilities, CA ISO, Energy Commission, CPUC, various jurisdictions, and the owners and users of transmission. (Patricia Arons, p. 64)

We need to leverage our existing transmission assets via upgrading, rebuilding, reconductoring, and employing new technologies. (Patricia Arons, p. 64)

We need to ensure that we do not build into the system new vulnerabilities. (Patricia Arons, p. 65)

The integrated energy policy must resolve transmission expansion issues to ensure access to the optimum mix of long-range energy resources for California, including economic imports from outside the state. This policy must include a process to designate appropriately-sited utility planning corridors across state-owned lands. (David Korinek, quoting from the April 2, 2004 letter from James Avery, San Diego Gas & Electric Company, to Commissioner Geesman [see below], pp. 66-67.)

The concept of utility corridor planning is especially important. (David Korinek, p. 67)

We used to plan and acquire right-of-way in advance of need, but now there is not incentive for utilities to do that. There needs to be a mechanism to provide an incentive for them. (Morteza Sabet, Western Area Power Administration, pp. 68-69)

There needs to be a continuous effort to establish and maintain the relationship between the utilities and the land owners and stakeholders at large. (Morteza Sabet, p. 69)

We need to look at what type of reliability standards we are going to ultimately end up with. (Mark Ward, Los Angeles Department of Water and Power, p. 69)

A priority is to establish predictable costs on an ongoing basis, and to preserve the ability to serve the loads they say they will serve. (Mark Ward, p. 70)

Transmission policy starts with resource adequacy, and the need to settle where we are, and where we are going. (James Feider, Transmission Agency of Northern California, pp. 71 and 73)

Transmission policy must consider the future role of natural gas, including accelerating gas infrastructure via liquefied natural gas (LNG) facilities. (James Feider, p. 71)

Transmission planning in the western United States should have a common approach throughout the Western Electricity Coordinating Council. To that end, the Energy Commission should talk with its counterparts in the west to determine the best priority and strategic approach. (James Feider, pp. 71 and 73)

The CA ISO's locational marginal pricing design provides a disincentive to transmission. (James Feider, p. 72)

The permitting process for investor-owned utilities should be streamlined so that projects can get built sooner. (James Feider, p. 72)

As a next step, the Energy Commission should consider inventorying possible vacant right-of-way. (James Feider, p. 72)

Integrated energy policy thinking is the way to go; however, transmission is part of the integration of the whole. (Jane Turnbull, League of Women Voters, p. 74)

The League is concerned about the balkanization of energy in the state and would like the state to take a better look at this. (Jane Turnbull, pp. 74 and 75)

The League supports regional planning, sub-regional planning, and integrated planning. (Jane Turnbull, p. 75)

Transmission is a vital element of the planning process, but it is not the only element. (Jane Bergen, League of Women Voters, p. 75)

Long-range comprehensive planning for energy cannot take place without a philosophical support for long-range comprehensive planning in other aspects of public policy, especially land use planning and economic development. (Jane Bergen, p. 76)

The Energy Commission and other involved agencies need to do an extensive public education program and create a constituency among the public for long-range planning. Political leaders will need to come forth with support for that concept. (Jane Bergen, p. 77)

People are an important part of the equation. They are both a constraint and a driver. (Andrew Bozeman, Southeast Sector Community Development Corporation, pp. 77-78)

Site banking is important because it prevents the population from moving into a space that makes future transmission or generation unworkable. It saves us a lot of trouble and money politically by avoiding fighting those battles. (Andrew Bozeman, pp. 78-79)

There needs to be public education of how the energy business affects them from an environmental impact standpoint, in a down-to-earth understandable way. (Andrew Bozeman, p. 79)

We need to look at the technologies that will move us forward. We need to consider our dependence on natural gas, both from a cost and sustainability viewpoint. (Andrew Bozeman, pp. 79-80, 82)

We need empirical data to zero in on any situation; scenarios alone will not get us there. (Francisco DaCosta, Environmental Justice Advocacy, p. 80)

We need to consider how transmission lines and power plants affect the health of the ratepayers and constituents. We need to respect native Americans and those from poor neighborhoods by paying attention to where power facilities are placed. (Francisco DaCosta, pp. 81-82)

We need to use the latest technologies while paying attention to the health of the constituents, especially poor neighborhoods. (Francisco DaCosta, pp. 82-83)

There are three additional drivers that should be considered. First, if the peak load grows as projected, the internal power transfers within California will become extremely constrained, shrinking the trade radius of the average generator from 234 miles to 146 miles. (Bill Meyers, The Valley Group, pp. 83-84) [See also Reference #2 under “Written Comments” below.]

Second, unless the internal transmission network is strengthened substantially, the benefits of potentially less-expensive imported energy will become localized near the border regions of the imported sources. (Bill Meyers, p. 84)

Third, it is quite likely that the increase in renewables will require substantial adjustments to the instate transmission system. (Bill Meyers, p. 84)

All of these drivers need to be considered before the final recommendations are made regarding resource policies. (Bill Meyers, p. 84)

Resource planning is essentially a societal choice. Our choices are increased dependence on coal, increased dependence on LNG, or increased dependence on renewables. As such, the next step for the Energy Commission is to paint the picture of the energy futures that underlie these scenarios and try to reach consensus on where California is going to go. (Rich Ferguson, Center for Energy Efficiency and Renewable Technologies, pp. 85-87)

We need to distinguish between manageable drivers and unmanageable drivers. Some drivers are manageable through technology development or policy development. (Tom Tanton, Vulcan Power; Silvan Power; and Pacific Southwest Combined Heat and Power Initiative, p. 87)

One driver is the emergence of technologies such as the smart grid. (Tom Tanton, p. 87)

We need to move away from an exclusively AC-driven transmission network and consider the role of generation technologies (some appropriate for load centers, some not) and local storage. (Tom Tanton, p. 88)

We may want to consider a scenario of high load growth from some future use such as the production of hydrogen for transportation applications. (Tom Tanton, p. 88)

It may not be appropriate to lump all renewables into one homogeneous category since they are diverse in their performance and impact to the grid. (Tom Tanton, p. 88)

Perhaps the most important driver is the interconnected dependencies of our various infrastructures (e.g., water, telecommunications, banking, transportation, etc.) Until we see the future vision of those infrastructures, we are working somewhat in isolation. (Tom Tanton, pp. 88-89)

California needs to be very aware of what others are thinking about in terms of regional transmission planning within the WECC. (Perry Cole, Trans-Elect, p. 91)

It is very difficult to implement something that may not be needed for 25 or 30 years. There are so many variables that can change that perhaps five to ten years is more appropriate. (Perry Cole, p. 92)

However, with that said, the idea of site banking makes a tremendous amount of sense. (Perry Cole, p. 93)

Given the interconnected nature of the transmission system, it is important to have technical data on all parts of the grid to see how various renewables technologies affect the entire grid. (Bulant Bilir, Solargenix, p. 94)

There is a need to study the impact of additional transmission lines into load pockets in California, in particular San Diego and the Greater Bay Area, and how RMR costs can be an important driver for transmission. (Barry Flynn, p. 95)

More work needs to be done to analyze the difficult-to-identify benefits of transmission delineated in the CERTS report. However, we should concentrate on the strategic benefits of transmission to offset RMR units as “low-hanging fruit” while continuing to develop more sophisticated strategic assessment tools. (Barry Flynn, pp. 96-97)

While some portion of the current RMR capacity is the most economical way to provide local reliability services, we owe it to transmission ratepayers to replace the critical reliability services now provided by RMR contracts when it is economical to do so. For that we need more study work. (Barry Flynn, pp. 97-98)

The Energy Commission needs to create a process that is action-oriented and accommodates obviously urgent needs as it integrates its activities with longer-range priorities and planning of newer and fully integrated facilities. (Hal Romanowitz, Oak Creek Energy, p. 98)

It is important that the transmission planning process integrate all of the existing islands within California (e.g., the three original IOUs, the munis, and private transmission facilities). There are

significant transmission resources that could, when integrated, create much greater value for the state. (Hal Romanowitz, pp. 99-100)

We can avoid the environmental impacts and costs of building new facilities to some extent by developing better techniques for more fully utilizing existing facilities. That will require transparency of data regarding existing asset utilization, reversing the trend since 9/11. (Hal Romanowitz, pp. 100 and 101)

We need to facilitate the use of Flexible AC Transmission System (FACTS) and energy storage devices so that they can be integrated into the system as they become increasingly economic. (Hal Romanowitz, pp. 100-101)

The site banking concept embraced by many of today's participants may be our last great chance to get ahead of the curve. (Commissioner James Boyd, pp. 103-104)

We need to make the transmission and distribution grids more efficient. We should elevate efficiency of the transmission grid to the level of driver status. (Richard Hammond, Optimal Technologies, p. 106)

The Energy Commission is doing some important R&D work on the way in which distributed generation is creating complexities in the distribution system, and the relationship between distribution system performance and improved performance of the transmission grid. (Richard Hammond, p. 107)

To the extent that we are heading toward a market-based system, we cannot have an efficient market if we don't have an efficient infrastructure upon which it is built. (Richard Hammond, p. 107)

Written Comments

- 1) Letter from James Avery (Senior Vice President of Electric Transmission, San Diego Gas & Electric) to John L. Geesman (Commissioner, California Energy Commission), April 2, 2004.

A robust, well-planned electric transmission system is vital to the continued economic growth and security of the state. (p. 2)

Due to the long lead time for transmission licensing and construction, transmission licensing uncertainty will inevitably force the state to rely on shorter-term resource additions that are bound to be less efficient than an integrated long-term resource plan unless this problem is resolved through changes in the State's energy policies. (p. 2)

It is important that the State agencies work together to promote efficiencies and avoid unnecessary redundancies in the transmission review process. (p. 2)

In order to protect our state's future, an integrated energy policy must resolve these transmission expansion issues to ensure access to the optimum mix of long-term energy resources for California, including economic energy imports from outside of the state. (p. 2)

To support such expansion it is essential that the State's energy policy include a process to designate appropriately sited utility planning corridors across State-owned lands such as the Anza Borrego Desert State Park. (p. 2)

- 2) Letter from Tapani Seppa, President of The Valley Group, Inc.) to IEPR Committee (California Energy Commission) re: *Comments on California's Electricity Generation and Transmission Interconnection Needs Under Alternative Scenarios Workshop on April 5, 2004*, dated March 30, 2004. [See also the transcripts at pp. 83-84.]

There is a need to start active pursuit at an early date of transmission interface plans for import into California because of the significant complexities of such interstate agreements. (p. 1)

With the projected peak load growth from the present 52 gigawatts (GW) to 80 GW in 2030, the internal power transfers within California will become extremely constrained. (p. 1)

Unless the internal transmission network is strengthened substantially, benefits of potentially less expensive imported energy will become localized near the border regions of the import sources. (p. 2)

Renewable resources present special challenges for transmission networks. The existing networks are generally designed with a voltage drop from the extra high voltage (EHV) system towards the sub-transmission and distribution systems. When a substantial amount of generation is connected to sub-transmission, this voltage profile reverses, and can limit power transfers at the EHV level.

The second problem of renewables is their generally low capacity factor, the variation of which has a large random component. To fully utilize renewable generation requires a larger transmission investment than what is needed for a generator which can be scheduled based on demand. (p. 2)

- 3) *Comments of the City of Temecula, City of Hemet, City of Murrieta, and Save Southwest Riverside County Opposing the Proposed Amendment to [California Public Utilities] Commission General Order 131-D*, originally filed in CPUC Rulemaking 04-01-026 on April 6, 2004, emailed to Energy Commission Docket 03-IEP-01 2004 Transmission Update on April 6, 2004.

The Riverside Parties have concluded that the CPUC General Order 131-D amendments proposed by the Order Instituting Rulemaking are illegal under the Public Utilities Code and the California Environmental Quality Act. The delegation would also violate constitutional procedural due process guarantees and threaten effective public participation in the CPCN process. In addition, the proposed delegation rests on a number of incorrect assumptions and

could result in unintended adverse consequences. The Riverside Parties therefore submit these comments opposing the amendments to GO 131-D proposed in the OIR.

4) Bay Area Municipal Transmission Group (BAMx) Comments for the Committee on the 2004 Transmission Update, April 20, 2004.

BAMx endorses the remarks and comments made by Mr. Barry Flynn at the April 5 workshop. (p. 1 of letter) [See transcripts pp. 95-98]

BAMx supports the following overall policy positions:

- (1) Relying on the market to build transmission makes no sense; it has not happened.
- (2) Price signals via locational marginal pricing will not provide necessary incentives to build transmission.
- (3) The State needs to ensure that needed transmission is constructed.
- (4) Participating transmission owners should be allowed to build transmission, but the State needs a backstop strategy to ensure construction of needed facilities.
- (5) Maximizing the use of existing rights-of-way (ROW) for overhead lines is important for both economical and environmentally responsible expansion.
- (6) Since existing ROW are in the hands of few entities, if existing ROW holders do not provide needed expansion of capability, a mechanism is needed to provide the ability for others to expand the ROW utilization.

The CPUC has not represented the state well on transmission needs. BAMx advocates Energy Commission jurisdiction over siting investor-owned utility transmission in order to maximize the chances of needed transmission being constructed. (p. 1)

On-going efforts to redefine transmission siting authority should not detract from the important role the Energy Commission can play in identifying new economically justified transmission. (p. 2)

While the state should evaluate its long-term regional needs and assist in identifying projects within the state, the largest short-term payoff to California ratepayers would be to identify the load pocket transmission additions that would provide the greatest benefit. These will tend to be transmission projects that improve reliability in load pockets while providing substantial savings. (p. 2)

Although BAMx believes that many, if not most, new transmission will be justified based on economic need rather than reliability criteria, the Energy Commission can and should also perform very important additional studies to assist the CA ISO and its Planning Standards Committee in recommending further standards improvements to the CA ISO Board. (p. 2)

5) City and County of San Francisco (CCSF) Comments for the Committee on the 2004 Transmission Update, April 20, 2004.

CCSF endorses the remarks and comments made by Mr. Barry Flynn at the April 5 workshop. (p. 1 of letter) [See transcripts pp. 95-98]

CCSF supports the first five overall policy positions noted above in the summary of BAMx's comments. (p. 1)

Local control is important to CCSF and it wants to retain its present capability to satisfy CEQA requirements for its transmission needs. If the Energy Commission obtains siting authority for transmission, CCSF should be able to apply for a license if they choose to do so. This will maximize the chances of needed transmission being constructed. (p. 1)

Controversy over which State agency should have transmission siting authority should not detract from the important role the Energy Commission can play in identifying new economically justified transmission. (p. 1)

While the state should evaluate its long-term regional needs and assist in identifying projects within the state, the largest short-term payoff to California ratepayers would be to identify the load pocket transmission additions that would provide the greatest benefit. These will tend to be transmission projects that improve reliability in load pockets while providing substantial savings. (p. 2)

Although CCSF believes that many, if not most, new transmission will be justified based on economic need rather than reliability criteria, the Energy Commission can and should also perform very important additional studies to assist the CA ISO and its Planning Standards Committee in recommending further standards improvements to the CA ISO Board. (p. 2)