

Memorandum

To: ISO Board of Governors
From: Gary DeShazo, Director of Regional Transmission North
Armando Perez, Vice President of Planning & Infrastructure Development
Date: January 18, 2007
Re: *2006 CAISO Transmission Plan*

This memorandum does not require Board action.

The purpose of this memorandum is to present the 2006 CAISO Transmission Plan (Transmission Plan) to the Board for your information. Over the past year, ISO Management has briefed the Board on the development of the new ISO Planning Process. The completion of this first transmission plan represents a significant achievement for the ISO and our proactive working relationship with the IOUs, the CEC, and CPUC and ushers in a new era in coordinated planning by the ISO. This 2006 Transmission Plan, which was prepared jointly by the ISO and PTOs, includes all ISO and PTO projects and presents information spanning an operational, short-term, mid-term, and long-term focus. An initial draft of the Transmission Plan was presented to Stakeholders on December 15, 2006 where, overall, positive comments were received. Where possible, stakeholder comments have been incorporated into this final version that is being presented to you by this memorandum. Remaining comments will be addressed in the 2007 CAISO Transmission Plan.

Unfortunately, as with any major transition, this initial Plan will certainly not have all of the T's crossed and I's dotted. However, the CAISO believes that its commitment to a robust and transparent planning process and its desire to strengthen its planning partnership with the PTOs and regulatory agencies, this Plan and the process by which it is developed will continue to be refined, thus assuring success in meeting its Goals and Objectives.

Goals of the Plan

The transformation of the CAISO Transmission Planning Process began in Summer 2005 with the introduction of the "New ISO Transmission Planning Process". As a statement of vision, this new Process articulated the CAISO's intent to rethink its role in transmission planning to achieve a more proactive planning process that would result in a robust transmission system, ultimately benefiting all customers of the State of California.

This 2006 CAISO Transmission Plan is the first of future annual plans that will be prepared by the CAISO to communicate to stakeholders, CAISO and PTO plans to address the long-term reliability of the CAISO Controlled Grid. Just as important as the Transmission Plan is the process of planning itself. Electric system planning is an ongoing process of evaluating, monitoring, and updating as conditions warrant and the CAISO is encouraging all stakeholders to actively participate in the preparation of this plan. As with any significant change in a major process, transformation can be, at best, difficult. The CAISO 2006 Transmission Plan is an initial step towards preparing a document that not only addresses reliability, but should provide information that is both informative and of value to California's electricity customers. Specifically, the goals of the Transmission Plan are:

- To articulate the new CAISO Transmission Planning Process and produce a single transmission plan for the CAISO Controlled Grid
- To provide stakeholders a snapshot of the most up-to-date and comprehensive information
- To emphasize the need of existing and future transmission reinforcements

Integrated Planning Process

Early on in this process, the California Energy Commission (CEC), the California Public Utilities Commission (CPUC), and the California Independent System Operator (CAISO) began a dialog on how the three agencies could best align their core strengths and update their processes for transmission and resource planning and resource procurement so that the processes are better coordinated, more streamlined and better aligned with state and federal policies for timely development of electric transmission and resources (These updated processes, taken together, are called the Integrated Planning Process).

The objective of the Integrated Planning Process is to ensure that information on transmission cost and feasibility that is needed to make informed decisions on resource siting and procurement is timely produced and provided to CEC, CPUC, resource developers and LSEs, and information on resource plans and procurement that is needed for transmission development is timely provided to CAISO and the PTOs. The proposed process would provide certainty in the development, approval, and implementation of key projects to assure reliable electric service and support California's resource preference policies. The process is intended to fully coordinate the individual proceedings and processes of the CEC, CPUC, and CAISO, allow all LSEs, including Publicly Owned Utilities (POU) to participate, includes stakeholder involvement, and not require any increases in procedural timelines.

Overall, the guiding principles of the Integrated Planning Process are:

- ***Timely Project Development:*** The process should promote the timely development of needed transmission and resource projects.
- ***Be Consistent and Repeatable:*** The process must be designed and implemented such that it will be consistently followed by all PTOs and CPUC jurisdictional utilities.
- ***Be Transparent and Open:*** The process must be transparent in that the methodology and assumptions are clearly established and accessible to all stakeholders.
- ***Meaningful Stakeholder Participation:*** This process must solicit and encourage the participation of all interested stakeholders.
- ***Clearly Defined Inputs and Outputs:*** Each major step should be clearly defined, including which entity is responsible for the inputs, clearly defined outputs, and the linkages to other steps in the process.
- ***Avoid Duplication:*** Any request for information should only be required to be submitted once in any forum throughout the process. Stakeholders should not be faced with participating in multiple forums for the same purpose.
- ***Support State and Federal Policy Objectives:*** It is imperative that each decision maker considers the overarching state and federal objectives. This includes, but is not limited to the state's goal of achieving the renewables portfolio standard (RPS) and the federal requirements for open access and competition in the ISO Controlled Grid.
- ***Leverage Expertise:*** The process should promote collaboration and make optimal use of the focused expertise of the CEC, CPUC, CAISO, PTOs and LSEs.
- ***Recognize Regionalization:*** Any resource determination in California must be mindful of the impact on the grid and electric power markets, as it is one interconnected system in the Western United States. As such, California must coordinate transmission planning with the West-wide regional planning processes.

- ***Provide for Feedback and Adjustment:*** Any long term plan and policies must allow for some flexibility to accommodate emerging developments and short-term contingencies.

The CAISO is committed to these guiding principles and will work with the PTOs, regulatory agencies, and stakeholders to continue to refine its planning process to assure their successful implementation.

Consolidation of Past CAISO Planning Processes

Over this past year, the CAISO has been proactively working with the larger PTOs on realigning the CAISO's planning process to facilitate a more integrated transmission planning approach between the CAISO and the PTOs. As a result of this effort, the CAISO, supported by the PTOs, will annually prepare the CAISO Transmission Plan to, among other things, accomplish the following:

- Fulfill the function of a single transmission plan for the CAISO Controlled Grid;
- Identify transmission issues and establish objectives over a ten-year or more planning horizon for the CAISO Transmission Plan to address overall CAISO Controlled Grid needs;
- Covering a ten-year or more planning horizon, identify transmission needs in the ISO's grid and propose and/or support a PTOs proposal of transmission projects that are required to enhance the reliability of the grid, reduce or mitigate expected congestion and locational capacity requirements, and identify and/or support a PTOs identification of regional projects that better integrate the interconnected transmission system across the CAISO Control Area as well as with adjacent control areas to satisfy all National, Regional, and CAISO planning standards;
- Identify Locational Capacity Requirements (LCR) over a five-year time frame that should be considered in the resource procurement process; and identify generation and transmission alternatives to satisfy those requirements;
- Periodically perform the necessary baseline deliverability analysis required as the basis for Deliverability Assessments in the Large Generator Interconnection Procedures (LGIP) and to implement resource adequacy deliverability requirements within the State;
- Provide the foundational basis for developing an annual California Transmission Plan that includes near and long-term projects over a ten-year or more planning horizon that focuses on the overall strategic transmission needs for the State of California and reflects CEC IEPR input on strategic transmission objectives.

This plan will reflect input from the CPUC, CEC, PTOs, and stakeholders and once finalized by CAISO Management, will be submitted to the CAISO Board of Governors for their information. Once CAISO Management finalizes the Plan, all proposed specific (versus conceptual) projects within this plan will be considered approved by the CAISO and the PTOs are expected to construct those projects within their service area by the need dates identified in the plan. Conceptual projects submitted within the plan will be considered endorsed by the CAISO and the PTOs for further consideration in the integrated planning process.

The Consolidated CAISO Transmission Plan will be developed through the CAISO's annual Transmission Planning Process and will include studies performed by the CAISO and PTOs, in coordination with stakeholders, and will identify the need for any transmission additions or upgrades required to ensure that the system performance of the CAISO Control Area is consistent with applicable reliability planning standards. This process requires the CAISO to receive transmission planning information from PTOs (IOUs and municipal utilities in the CAISO control area), to evaluate these plans before they can be incorporated into the CAISO Consolidated Transmission Plan. Transmission plans initiated by other California entities will be assessed in conjunction with the IEPR proceeding to develop a California Grid Plan.

Finally, the CAISO and its neighboring control areas are involved in creating a California Sub-Regional Planning Group (CSPG). The purpose of this effort is to form a group where members can share information regarding transmission planning that will benefit all of the planning community. Once this group has been established, this practice could improve the efficiency of the whole planning process, regardless of control areas, by alerting participants of the ongoing activities in a control area that might impact others. Also, it could point out some projects that appear to be redundant or unnecessary due to lack of communication.