December 21, 2007

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426

Re: California Independent System Operator Corporation Docket No. OA08-____

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO")¹ hereby submits this filing to comply with the transmission planning requirements of Order No. 890.² The instant filing sets forth revisions to the CAISO's existing open access transmission tariff ("CAISO Tariff") to implement an updated Transmission Planning Process that satisfies the requirements of Order No. 890 and is consistent with or superior to the planning process adopted in Order No. 890.

I. INTRODUCTION

The CAISO supports the Commission's stated goal in Order No. 890 of preventing undue discrimination and preference in the provision of transmission services. Order No. 890 promotes this objective by requiring all transmission providers to amend their existing open access transmission tariffs (OATT) to implement a coordinated, open and transparent transmission planning process that complies with nine planning principles specified in the order or, alternatively, to demonstrate that their existing process is consistent with or superior to the requirements in the order. In this regard, Order No. 890 acknowledges that independent system operators and regional transmission organizations already have approved transmission planning processes that are significantly more open and transparent than traditional, vertically-integrated utility transmission providers. The Commission therefore noted the intent of Order No. 890 is not to re-open prior approvals, but rather to ensure that each planning principle is satisfied.³

³ Order No. 890 at P 439.

¹ Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff, and in the instant compliance filing.

Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, 72 FR 12266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241 (2007), reh'g pending (Order No. 890).

The CAISO utilized the Order No. 890 compliance process to refine, clarify, and better document elements of its recently implemented, more proactive Transmission Planning Process, which is intended to ensure, over both short-and long-term planning horizons, a reliable, economically efficient transmission system that also facilitates achievement of State policy objectives. Through this effort, the CAISO submits that its Transmission Planning Process satisfies Order No. 890 and that the terms and conditions specified in the CAISO Tariff are consistent with or superior to the provisions of the *pro forma* OATT, as revised by Order No. 890.⁴

Order No. 890 further recognized that not all rules and practices relating to transmission planning activities need to be codified in the transmission providers OATT. Rules, standards, and practices that relate to, but do not significantly affect transmission service may be documented elsewhere provided those practices are readily available through the transmission provider's website.⁵ As further discussed below, consistent this Commission guidance, the CAISO has elected to document specific transmission planning process implementation details that do not constitute significant "rates, terms and conditions" of transmission service in a Business Practices Manual for the Transmission Planning Process ("BPM"). This practice conforms with other business processes under the CAISO's forthcoming conversion to its Market Redesign and Technology Upgrade ("MRTU") Tariff. The BPM, along with a "matrix" mapping the CAISO's transmission planning process to the Commission's staff August 2, 2007 white paper, are attached to this filing to assist in the Commission's compliance evaluation.

⁴ In Order No. 890, the Commission stated: "[E]ach OATT planning process attachment must incorporate the transmission planning principles and concepts in this Final Rule and must be filed with the Commission within 210 days after the publication of the Final Rule in the Federal Register. Alternatively, RTOs, ISOs, and other transmission providers that currently have planning processes they believe comply with the Final Rule may make a filing with the Commission documenting those processes in an OATT attachment and explaining how their planning processes are consistent with or superior to the planning process adopted here." Order No. 890 at P 442. Because the CAISO believes that its filing meets all of the requirements of Order No. 890, the filing could be considered either the first alternative or an amendment to provide tariff provisions that meet the "consistent with or superior to" standard for variations from the *pro forma* OATT.

⁵ Order No. 890 at PP1649-1655.

II. BACKGROUND

A. Order No. 890

On February 16, 2007, the Commission issued Order No. 890, which it stated was designed to (1) strengthen the *pro forma* OATT to ensure that it achieves its original purpose of remedying undue discrimination; (2) provide greater specificity to reduce opportunities for undue discrimination and facilitate the Commission's enforcement efforts; and (3) increase transparency in the rules applicable to planning and use of the transmission system. The Commission adopted numerous non-transmission planning reforms in Order No. 890. The CAISO submitted a compliance filing with regard to those reforms on October 11, 2007. In addition to the aforementioned non-transmission planning requirements adopted in Order No. 890, the Commission required transmission planning process that satisfies nine planning principles enunciated in the order: (1) coordination, (2) openness, (3) transparency, (4) information exchange, (5) comparability, (6) dispute resolution, (7) regional participation, (8) economic planning studies, and (9) cost allocation.⁶

The Commission declined to exempt Regional Transmission Organizations ("RTOs") and Independent System Operators ("ISOs") from the compliance obligations of Order No. 890 and required ISOs and RTOs to submit compliance filings that either (1) contain tariff provisions that conform with the requirements of Order No. 890, or (2) demonstrate that their Commission-approved tariff provisions are consistent with or superior to the provisions of the revised *pro forma* OATT. The Commission required that the transmission planning process be set forth in Attachment K to the transmission provider's OATT. It stated that Attachment K must contain --

- The process for consulting with customers and neighboring transmission providers;
- Notice procedures and anticipated frequency of meetings or planning-related communications;
- A written description of the methodology, criteria, and processes used to develop transmission plans;
- The method of disclosure of transmission plans and related studies and the criteria, assumptions, and data underlying those plans and studies;
- The obligations of and methods for customers to submit data to the transmission provider;
- A Dispute Resolution Process;

⁶ Order No. 890 at PP 435-437.

- The transmission provider's study procedures for economic upgrades to address congestion or the integration of new resources; and
- The relevant cost allocation procedures.⁷

On July 27, 2007, the Commission established December 7, 2007 as the date for transmission providers to submit filings to comply with the transmission planning requirements of Order No. 890.⁸

On August 7, 2007, Commission Staff issued a White Paper to assist transmission providers in developing transmission planning processes that comply with Order No. 890. The White Paper discussed each of the Commission's nine principles and actions that would be necessary to comply with the principles. The content of the White Paper is discussed in the description of the CAISO's compliance, below.

On October 9, 2007, the CAISO filed a motion requesting that the Commission grant the CAISO an extension of time -- until December 21, 2007 -- to make its filing to comply with the transmission planning provisions of Order No. 890. The Commission granted the motion on October 18, 2007.

B. Stakeholder Process

On May 11, 2007, consistent with the requirements of Order No. 890, the CAISO posted a strawman proposal for its revised transmission planning process and requested comments. The strawman proposal described how the CAISO intended to comply with the Commission's nine principles and outlined the CAISO's proposed planning process. Eight stakeholders submitted comments on the strawman proposal, including Participating Transmission Owners ("Participating TOs") and the California Public Utilities Commission ("CPUC"). On May 21, 2007, the CAISO conducted a stakeholder conference on the strawman proposal. The Commission conducted a technical conference on Order No. 890 transmission planning on June 26, 2007. The CAISO made a presentation on its strawman proposal and received comments from Commission Staff and participants.

The CAISO posted the strawman proposal on May 30, 2007. On July 25 and 27, the CAISO posted white papers to initiate discussions on (1) a Request Window, (2) economic planning studies, and the (3) interaction of transmission planning with Congestion Revenue Rights ("CRRs"). Three parties submitted comments. The CAISO conducted another stakeholder conference on July 27, 2007, presenting its then-current proposal and identifying various open issues.

⁷ *Id.* at P 602.

⁸ Preventing Undue Discrimination and Preference in Transmission Service, 120FERC ¶ 61,103 (2007).

The CAISO posted its draft BPM on September 14, 2007. Eight parties submitted comments. The CAISO hosted a telephonic stakeholder conference on the proposal on October 3, 2007.

Following the stakeholder conference, the CAISO posted a revised draft of the BPM on October 12, 2007, and draft tariff language on October 18, 2007. The CAISO revised these documents and posted the new versions on November 12, 2007. The CAISO conducted a stakeholder conference to discuss the draft BPM and draft tariff language on November 14, 2007. After the stakeholder conference, nine parties submitted comments. A summary of the CAISO's stakeholder process is set forth in an attachment to Attachment D hereto.

C. CAISO Governing Board Consideration

Following consideration of the last set of comments, the CAISO finalized the tariff amendments and BPM. The transmission planning process elements reflected in the tariff amendments and BPM were submitted to the CAISO Governing Board on December 13, 2007 and approved unanimously. The Governing Board memorandum regarding the Order No. 890 transmission planning process is attached as Attachment D.

III. EFFECTIVE DATE, REQUESTS FOR WAIVER AND OTHER PROCEDURAL MATTERS

A. Deviation from Format at Attachment

Order No. 890 directs all ISOs and RTOs to include an attachment to their OATTs that incorporate the final order's transmission planning principles or an attachment that demonstrates that existing procedures are consistent with or superior to the planning process outline in the rule.⁹ The CAISO and MRTU Tariffs, which have been approved by the Commission as consistent with or superior to the *pro forma* OATT, include in the body of the tariff terms that are not directly related to the provision of transmission service itself – such as Generator Interconnection and Resource Adequacy requirements. The addition of a transmission planning attachment would be inconsistent with the format of the CAISO and MRTU Tariffs.

Section 24 of the CAISO Tariff contains the CAISO's existing transmission planning process. The CAISO therefore has opted to reflect its Order No. 890 transmission planning revisions in Section 24 of the CAISO Tariff, rather than in a separately labeled attachment.¹⁰ However, the CAISO's upcoming conversion to the MRTU Tariff, currently scheduled for March 31, 2008, adds further complexity. Given the proximity of this conversion, the Order No. 890

⁹ Order No. 890 at P 442.

¹⁰ Order No. 890 at P 437.

amendments to Section 24 have been made based on the MRTU platform to facilitate its merger into the MRTU Tariff. Similar to prior MRTU-related provisions that have been incorporated into the currently effective CAISO Tariff, the CAISO has placed Section 24 in an appendix, labeled Appendix EE, that will expire upon the effectiveness of the MRTU Tariff. The Section 24 amendments have also been incorporated into the proposed replacement version of MRTU Tariff filed on December 21, 2007 in FERC Docket No. ER06-615.

B. Effective Date and Waiver of Sixty Day Requirement for Section 205 Commission Decision

The CAISO requests that all of the revisions to the CAISO Tariff proposed herein be made effective as of December 21, 2007 (*i.e.*, the date on which the instant compliance filing was submitted). To the extent that all or portions of this filing are considered amendments pursuant to Section 205 of the Federal Power Act, the CAISO respectfully requests waiver of the Commission's 60-day prior notice requirement, pursuant to Sections 35.3 and 35.11 of the Commission's regulations, 18 C.F.R. §§ 35.3, 35.11, in order to permit this effective date. Consequently, the CAISO does not believe that the Commission is required to act within 60 days. To the extent that the Commission believes that the CAISO has a right under the Section 205 to Commission action on the proposed amendments within 60 days, the CAISO waives that right.

C. Order No. 614 Waiver

Also, to the extent necessary, the CAISO respectfully requests waiver of the requirements of the Commission's Order No. 614¹¹ with regard to the CAISO Tariff revisions contained in the instant compliance filing. In particular, the CAISO notes that it has included in blackline format, and made conforming changes to, proposed CAISO Tariff amendments currently pending before the Commission related to Location Constrained Interconnection Facilities (LCRIF) in FERC Docket No. ER08-140-000. Although the Commission has not acted on the CAISO's LCRIF, the CAISO has reflected these amendments in proposed Appendix EE to create more comprehensive and coherent documentation for the Transmission Planning Process. When incorporated into the MRTU Tariff, all revisions included in this filing will conform with Order No. 614.

IV. TARIFF PROVISIONS

The CAISO has attempted to comply with the Commission's "rule of reason" in determining the level of detail of the Transmission Planning Process to include in the CAISO Tariff and which details will be included in the BPM. As described in *Town of Easton v. Delmarva Power and Light Company*, 24 FERC ¶ 61,251 (1983), under the rule of reason the Commission "balance[s] [its] desire not to

¹¹ Designation of Electric Rate Schedule Sheets, FERC Stats. & Regs., Regs. Preambles ¶ 31,096 (2000) ("Order No. 614").

deprive utilities or groups of utilities of the flexibility they need to manage their own affairs by introducing substantial delay and layer decision-making into their operations . . . with the need for the full disclosure that furthers the purpose of having filing and posting requirements which provide real benefits to existing and potential customers or users of the services in question." More recently, in *Prior Notice and Filing Requirements Under Part II of the Federal Power Act,* 64 FERC ¶ 61,139 (1993), the Commission adopted the description offered by the U.S. Court of Appeals for the District of Columbia Circuit in *City of Cleveland v. FERC*, 773 F.2d 1368 (D.C. Cir. 1985):

There is an infinitude of practices affecting rates and service. The statutory directive must reasonably be read to require the recitation of only those practices that affect rates and service significantly, that are realistically susceptible to specification, and that are not so generally understood in any contractual arrangement as to make recitation superfluous.

In Order No. 890, the Commission affirmed its previous policy regarding the filing of procedures, and affirmed the rule of reason, but required transmission providers to post on their public websites all rules, standards, and practices that relate to transmission service and provide a link to those rules, standards, and practices on OASIS. The Commission emphasized that the requirement means that all rules, standards, and business practices that relate to the terms and conditions of transmission service, and how that transmission service is provided to customers, whether currently written or otherwise, must be detailed and clearly stated on the transmission provider's public website.¹²

The CAISO believes that the proposed CAISO Tariff provisions include all provisions that significantly affect rates and services. They inform Market Participants and other stakeholders of all of their rights and obligations under the Transmission Planning Process and of the CAISO's obligations. They provide a full description of the planning cycle and the criteria that the CAISO will apply in making decisions. The BPM provides additional details, but does not add to, subtract from, or modify the rights and obligations of Market Participants, other stakeholders, or the CAISO. In accordance with Order No. 890, the BPM will be available on the CAISO Website.

The following abbreviated description of the proposed CAISO Tariff revisions is not intended to include all details or procedures, requirements, and obligations included in the section. In the case of any apparent conflict between the description and the tariff provision, the filed tariff provision will, of course, control. As previously noted, additional, but less significant, details are also provided in the BPM.

¹² Order No. 890 at PP 1652-53.

Current Section 20.2 of the CAISO Tariff identifies a non-exhaustive list of information that the CAISO treats as confidential. That section is revised to include data that the CAISO solicits from Market Participants in the performance of the Transmission Planning Process, as well as information that the CAISO receives during the Transmission Planning Process; (1) the release of which would harm competitive markets; (2) the release of which would violated contractual obligations created prior to December 31, 2007; (3) that is propriety information; and (4) that is Critical Energy Infrastructure Information ("CEII").

Current Section 20.4 of the CAISO Tariff sets forth the situations in which the CAISO can disclose confidential information. It is revised to provide that CEII submitted during the Transmission Planning Process may be released to persons employed or designated to receive CEII by Market Participants or regulatory agencies if the person submits a statement as to the need for the CEII and signs the non-disclosure agreement as set forth in the BPM. The CAISO may reject requests for CEII, in which case the requestor must employ Commission procedures to obtain the CEII. Market Participants that are not involved in market, sales, or brokering functions, as defined under Commission regulations (18 C.F.R. § 385.3), may obtain information that the CAISO has solicited or the release of which could harm competitive markets if they sign the non-disclosure agreement. The restriction on access is intended to encompass both a Marketing Affiliate and Energy Affiliate of a Transmission Provider. Data base and other transmission planning information received from the Western Electricity Coordinating Council ("WECC") (or its successor) may be released in accordance with procedures set forth in the BPM.

Current Section 24.7 of the CAISO Tariff addresses cost recovery. It is unchanged except for conforming revisions.

As noted, the remainder of the amendments that are designated as new sections in the discussion below will be assigned to an Appendix EE of the CAISO Tariff in order to facilitate their incorporation into the MRTU Tariff. The CAISO has taken this approach in other recent amendments, such as the early effectiveness of Resource Adequacy provisions, which the Commission previously approved on December 17, 2007, in Docket No. ER08-64.

New Section 24.1 carries forward the provisions contained in Section 24.2 of the current CAISO Tariff (as modified by the proposed Location Constrained Resource Interconnection ("LCRI") amendment), which provides that the CAISO will determine that a transmission addition or upgrade is needed where it will (1) promote economic efficiency, (2) maintain System reliability, (3) qualify as an LCRI facility, or (4) maintain the simultaneous feasibility of Long-Term CRRs. Section 24.1 additionally specifies that projects with estimated costs under \$50 million can be approved by CAISO Management, while projects in excess of that amount require approval of the CAISO Governing Board.

Current Section 24.1.1 establishes the criteria for determining whether a project promotes economic efficiency. In determining whether to approve an economic project, CAISO Management or the CAISO Governing Board, as appropriate, will consider whether the benefits outweigh the costs, taking into account certain factors that are identified in this section. For economic projects proposed by the CAISO, the CAISO will designate one or more Participating TOs as the Project Sponsor. If no Participating TO is willing to accept such responsibility, the CAISO may solicit bids for the financing and construction of the project.

Alternatively, an economic project can be a Merchant Transmission Facility, in which the Project Sponsor seeks revenue recovery through the receipt of Merchant Transmission Congestion Revenue Rights under Section 36.11 of the CAISO Tariff, rather than through the CAISO's Access Charge.¹³ Section 24.1.1 is further revised to provide that, for a Merchant Transmission Facility, the sponsor must (1) have the financial ability to construct and maintain the project; (2) mitigate operational concerns identified in the Transmission Planning process and ensure the continued feasibility of allocated Long-Term CRRs; and (3) if the project is to be constructed by a Participating TO and the CAISO, in consultation with the Participating TO, so requires, demonstrate credit worthiness or provide sufficient security to meet its responsibility for the full costs.

New Section 24.1.1.1 provides that Project Sponsors and relevant Participating TOs must provide the CAISO with the information and studies necessary to determine whether a transmission upgrade or addition promotes economic efficiency. Project Sponsors of economically driven transmission projects must also indicate if the project is a Merchant Transmission Facility.

Current Section 24.1.2 concerns the identification of the need for, and performance of studies relating to, transmission additions or upgrades required to ensure System Reliability. It is revised to provide that the CAISO will, consistent with the procedures set forth in the BPM, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. Further, the CAISO will direct each Participating TO with a PTO Service Area, as a NERC Transmission Planner, to perform the necessary technical studies. However, such technical studies must be conducted in accordance with the Unified Planning Assumptions and Study Plan and any deviations therefrom must be identified and addressed at a stakeholder meeting. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed is to be located will have the responsibility to construct, own, finance, and maintain such transmission upgrade or addition.

¹³ Although Merchant Transmission Facilities represent an MRTU Tariff concept, Section 36.11 relating to Merchant Transmission Facilities as set forth in Appendix BB of the current CAISO Tariff was accepted by the Commission in Docket ER07-869-000.

the CAISO, the CPUC, the California Energy Commission ("CEC"), a Participating TO, or any other Market Participant may propose a transmission addition as a Location Constrained Resource Interconnection Facility ("LCRIF"), and requires that such a proposal include certain specified information, to the extent available.

Section 24.1.3.1 provides for conditional approval of an LCRIF if the CAISO determines that the facility is needed and (1) the facility is to be constructed for the primary purpose of connecting to the CAISO Controlled Grid two or more separately owned Location Constrained Resource Interconnection Generators ("LCRIGs") in an Energy Resource Area; (2) the facility will be a High Voltage Transmission Facility; (3) at the time of its in-service date, the facility will not be a network facility otherwise ineligible for inclusion in a Participating TO's TRR; and (4) the facility meets Applicable Reliability Criteria and CAISO Planning Standards. In order for the project to gualify as an LCRIF, the proponent of a conditionally approved must provide the CAISO with information not less than ninety days prior to the planned commencement of construction demonstrating (1) that the addition of the cost of the facility to TRR of a Participating TO will not cause the aggregate net investment of all LCRIFs to exceed fifteen percent of the aggregate net investment of all Participating TOs in all High Voltage Transmission Facilities at the time of the CAISO's evaluation of the facility, and (2) existing or prospective owners of LCRIGs have demonstrated their intention to connect LCRIGs to the LCRIF. Each Participating TO must provide the information necessary to make the first determination.

Section 24.1.3.2 provides the criteria for the required demonstration of interest: a proponent of an LCRIF must to demonstrate interest in the LCRIF equal to sixty percent or more of the capacity of the facility in a manner specified in that section, with at least 25% of the capacity represented by Large Generator Interconnection Agreements ("LGIAs") or Small Generator Interconnection Agreements ("SGIAs").

Section 24.1.3.3 provides that, in the event that a proposed LCRIF would connect to LCRIGs in an Energy Resource Area that would also be served by a transmission facility of an entity that is not a Participating Transmission Owner and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO will coordinate with the other entity through any regional planning process to avoid the unnecessary construction of duplicative transmission additions.

Section 24.1.3.4 provides that, in evaluating whether a proposed LCRIF is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider (a) whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO Planning Standards; (b) whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility; and (c) whether the projected cost of the facility is reasonable in light of its projected costs and benefits, taking into account alternatives.

Current Section 24.1.3, which concerns the process for maintaining the feasibility of allocated Long Term CRRs, is renumbered as new Section 24.1.4. The section is also revised to provide that, in furtherance of the CAISO's obligation to ensure the continuing feasibility of Long Term CRRs that are allocated by the CAISO over the length of their terms, the CAISOMoreover, to the extent a transmission upgrade or addition is deemed needed to maintain the feasibility of allocated Long Term CRRs, the CAISO will designate the Participating TO(s) with a PTO Service Territory in which the transmission upgrade or addition is to be located to construct, own and/or finance, and maintain such transmission upgrade or addition.

Section 24.2 and its subsections, which concern transmission planning and coordination, have been completely revised to reflect the new Transmission Planning Process. New Section 24.2 provides that the CAISO will perform the CAISO's Transmission Planning Process on an annual cycle. At a minimum, the Transmission Planning Process will (a) coordinate and consolidate the transmission needs of the CAISO Control Area into a single plan on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards and in a manner that promotes the economic efficiency and considers federal and state environmental and other policies; (b) reflect a planning horizon covering a minimum of ten (10) years that considers transmission enhancements and expansions, Demand Forecasts, Demand-side management, and capacity forecasts relating to generation technology type, additions and retirements, and such other factors as the CAISO determines are relevant; (c) seek to avoid unnecessary duplication of facilities and ensure the simultaneous feasibility of the CAISO Transmission Plan and the transmission plans of interconnected Control Areas, and otherwise coordinate with regional and sub-regional transmission planning processes and entities; (d) identify existing and projected limitations of the CAISO Controlled Grid's capability or performance and identify transmission upgrades and additions, including alternatives thereto, deemed needed to address the existing and projected limitations; and (e) account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs.

New Section 24.2.1 provides that the CAISO will maintain a Planning Standards Committee, which will be open to all interested parties. The Commission will review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The CAISO Vice-President of Planning and Infrastructure Development will chair the Committee. New Section 24.2.2 provides that Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window, which will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. Economic transmission upgrades or additions (except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan) LCRIFs not identified by the CAISO through Interconnection Studies, Demand response programs, Generation projects, and requests for Economic Planning Studies will only be considered in the Transmission Plan if proposed during the Request Window.

New Section 24.2.2.1 provides that, except of requests for Economic Planning Studies, after submittal of a proposal during the Request Window, the CAISO will determine whether the proposal will be included in the Unified Planning Assumptions or Study Plan as appropriate. A proposal can only be included upon the determination that the proposal (a) satisfies the information requirements set forth in the BPM; (b) is not functionally duplicative of previously approved projects; transmission upgrades or additions that have previously been approved by the CAISO; and (c) if it is a sub-regional or regional project that affects other interconnected Control Areas, it has been reviewed by the appropriate sub-regional or regional planning entity and is not inconsistent that entity's preferred solution or project, and has been determined to be appropriate for inclusion in the CAISO Study Plan, rather than, or in addition to, being included in or deferred to the planning process of the sub-regional or regional planning entity. The CAISO will notify the Market Participant submitting the proposal of any deficiencies in the proposal and provide the Market Participant an opportunity to correct the deficiencies. The CAISO will notify the Market Participant submitting the proposal whether or not the proposal will be included in the Study Plan.

New Section 24.2.2.2 provides that the CAISO will determine whether the Economic Planning Study requests submitted during the Request Window will be designated as a High Priority Economic Planning Study for inclusion in the Unified Planning Assumptions and Study Plan. The CAISO will consider (a) whether the request seeks to address Congestion identified by the CAISO in the relevant CAISO Congestion Data Summary and the magnitude, duration, and frequency of that Congestion; (b) whether the request addresses delivery of Generation from LCRIGs or network transmission facilities intended to access Generation from an ERA or similar resource area assigned a high priority by the CPUC or CEC; (c) whether the request is intended to address Local Area Resource Requirements; or (d) whether Congestion described in the Economic Planning Study request is projected to increase over the planning horizon used in

the Transmission Planning Process and the magnitude of that Congestion. The CAISO will post to the CAISO Website the list of selected High Priority Economic Planning Studies to be included in the draft Unified Planning Assumptions and Study Plan. The CAISO may assess requests for Economic Planning Studies individually or in combination where such requests may have common or complementary effects on the CAISO Controlled Grid. The CAISO will perform a maximum of five High Priority Economic Planning Studies, though it retains discretion to perform a greater number of such studies should stakeholder requests or patterns of Congestion or anticipated Congestion so warrant.

New Section 24.2.3.1 requires Participating TOs to provide to the CAISO, in addition to any information that must be provided to the CAISO under the NERC Reliability Standards, any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including descriptions of (1) modeling data for power flow, including reactive power, short-circuit and stability analysis, (2) total Demand to be served from each substation, including a description of any Energy efficiency programs reflected in the total; (3) interruptible Loads included in the total (including conditions and limitations for interruptions; (4), Generating Units to be interconnected to the Distribution System of the Participating TO; (5) detailed power system models of their transmission systems that reflect transmission system changes; (6) Distribution System modifications; (7) transmission network information; and (8) Contingency lists.

New Section 24.2.3.2 provides that, in addition to any information that must be provided to the CAISO under the NERC Standards, Participating Generators must provide the CAISO on an annual or periodic basis any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including (1) modeling data for short-circuit and stability analysis and (2) the term, and status of any environmental or land use permits or agreements the expiration of which may affect the operation of the Generating Unit.

New Section 24.2.3.3 provides that the CAISO will solicit from Scheduling Coordinators for Load Serving Entities, in addition to any information that the Load Serving Entities must provide to the CAISO under NERC Standards, information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including (1) long-term resource plans; (2) existing long-term contracts for resources and transmission service outside the CAISO Control Area; (3) resource capacity and Energy bid information received through requests for offers or similar solicitations; and (4) Demand Forecasts.

New Section 24.2.3.4 requires the CAISO to obtain or solicit, from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities, information required by, or anticipated to be useful to the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system

plans; (2) long-term resource plans; (3) generation interconnection queue information; (4) Demand forecasts; and (5) any other data necessary for the development of power flow, short-circuit and stability cases over the planning horizon of the CAISO Transmission Planning Process.

New Section 24.2.3.5 provides that providers of the information required under Sections 24.3.3.1 and 24.2.3.2 must notify the CAISO of material changes to the information provided that occur during the annual Transmission Planning Process.

New Section 24.2.4.1 provides that the CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3. The CAISO will also use (1) WECC base cases for the relevant planning horizon; (2) approved transmission upgrades and additions; (3) Location Constrained Resource Interconnection Facilities that have been conditionally approved; (4) Network Upgrades relating to the CAISO's Large Generator Interconnection Procedures and Small Generator Interconnection Procedures; (5) validated operational solutions addressing Area Resource requirements; (6) regulatory initiatives, as appropriate; (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and (8) results and analyses from previously performed Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions.

New Section 24.2.4.2 provides that the Unified Planning Assumptions and Study Plan will, at a minimum, describe (a) the planning data and assumptions to be used as a base case for each technical study; (b) a list of each technical study and a summary of the objective or purpose; (c) a description of any modifications to the planning data and assumptions developed as the general base case made in each technical study; (d) a description of the software tools, methodology and other criteria to be used in each technical study; (e) the identification of any entities directed to perform the technical study; (f) a proposed schedule for all stakeholder meetings and means for notification of any changes, location on the CAISO Website of information relating to the technical, and the name of a contact person for each technical study; (g) a list and description of each High Priority Economic Planning Study; and (h) appropriate sensitivity analyses, including project or solution alternatives, to be performed as part of technical studies.

New Section 24.2.4.3 provides that the CAISO will prepare and post on the CAISO Website a draft Unified Planning Assumptions and Study Plan. The CAISO will issue a Market Notice announcing its availability, soliciting comments, and scheduling a stakeholder conference(s). Following the stakeholder meeting(s), the CAISO will determine and post on the CAISO Website the final Unified Planning Assumptions and Study Plan.

New Section 24.2.5.1 provides that the CAISO will perform, or direct the performance by third parties, of necessary technical studies and other assessments. The CAISO will post the preliminary results on the CAISO Website, conduct at least one stakeholder conference, and provide an opportunity for comments of the preliminary results. All technical studies must employ the Unified Planning Assumptions for the particular technical study to the maximum extent practical, and any deviations must be documented in the preliminary and final results of each technical study. The CAISO will measure the results of the studies against NERC planning standards, WECC planning standards, and the CAISO Planning Standards, and other relevant criteria established by the BPM. After consideration of the comments, the CAISO will complete, or direct the completion of, the technical studies and post the final study results on the CAISO Website.

New Section 24.2.5.2 provides for the posting of a draft Transmission Plan, at least stakeholder conference, and solicitation of comments. After consideration of comments, the CAISO will post a final Transmission Plan. The draft and final Transmission Plan may include (1) the results of technical studies; (2) determinations of, recommendations concerning, and justifications for need, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions proposed during the Request Window for which need has not been formally determined, but which have been identified by the CAISO as potential solutions to transmission needs studied; (3) results of Economic Planning Studies performed during the Transmission Planning Process cycle; and (4) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay. The Transmission Plan may not include the results of certain studies that were scheduled for completion after its publication.

New Section 24.2.5.3 provides for presentation of the Transmission Plan to the CAISO Governing Board at the first meeting of the year after its preparation. The Transmission Plan is final once it has been presented to the CAISO Governing Board and will be posted on the CAISO Website. Transmission upgrades and additions for which CAISO Governing Board approval is required may be presented to the CAISO Governing Board for approval separate from presentation of the Transmission Plan.

New Section 24.3 renumbers and conforms current Section 24. It requires a Participating TO that has a PTO Service Territory to construct all transmission additions and upgrades that are determined to be needed and which (1) are additions or upgrades to transmission facilities located within its PTO Service Territory, unless (a) it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory or (b) it does not own the facility being upgraded or added and the Project Sponsor is a Participating TO that elects to construct the transmission upgrade; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities that it owns, that are part of the CAISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation is subject to (1) its good-faith ability to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism in accordance with the Tariff. The obligations of the Participating TO will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of a TO's obligations under the CAISO Tariff.

Current Section 24.3, which concerns the study obligations of Participating TOs, is renumbered and conformed as new Section 24.4. It provides that the CAISO will direct the Participating TO obligated to construct or expand to coordinate with the Project Sponsor or Participating TO(s) with PTO Service Territories in which the transmission upgrade or addition will be located, as appropriate, and other Market Participants to perform any necessary studies.

Current Section 24.4, which concerns the CAISO's operational review, is renumbered as new Section 24.5. The section provides that the CAISO will perform an operational review of all facilities studied that are proposed to be connected to, or made part of, the CAISO Controlled Grid to ensure that the proposed facilities provide for acceptable operating flexibility and meet all requirements for proper integration with the CAISO Controlled Grid. The CAISO will coordinate with the appropriate party to address any deficiencies. If the deficiencies are not addressed, the transmission upgrades or additions cannot be included in the CAISO Transmission Plan or approved by the CAISO Governing Board or CAISO management, as applicable.

Current Section 24.5, which contains provisions concerning state and local approval and property rights, is renumbered as new Section 24.6. Under new Section 24.6.1 the Participating TO obligated to construct facilities under Section 24 must make a good faith effort, including the exercise of eminent domain where permitted, to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of the facilities. New Section 24.6.2 provides that where the Participating TO is unsuccessful, the CAISO, the Participating TO, and the Project Sponsor will coordinate efforts to implement an alternative solution, which may involve construction by a third party. New Section 24.6.3 provides that if necessary, the CAISO may authorize a third party to construct the facility, which third party must execute the Transmission Control Agreement.

Current Section 24.6, which concerns WECC and regional coordination, is renumbered as new Section 24.8. It provides that the Project Sponsor will have responsibility for completing any applicable WECC requirements and rating study requirements to ensure that a proposed transmission addition or upgrade meets regional planning requirements.

Current Section 24.2.2, which concerns the regional and sub-regional planning process, is renumbered as new Section 24.8.1 The section is also revised to provide that at a minimum, the CAISO will solicit the participation of all interconnected Control Areas in the development of the Unified Planning Assumptions and Study Plan and in reviewing the results of technical studies in order to (1) coordinate planning assumptions, data, and methodologies and ensure transmission expansion plans of the CAISO, regional and sub-regional planning groups or interconnected Control Areas are simultaneously feasible and avoid duplication of facilities; (2) coordinate with regional and sub-regional planning groups regarding the entity to perform requests for Economic Planning Studies or other Congestion related studies; (3) transmit to applicable regional and sub-regional planning and sub-regional planning groups or interconnected Control Areas information on technical studies; and post on the CAISO Website links to the planning activities of applicable regional and sub-regional planning groups or interconnected Control Areas.

Section 24.8.2 precludes the CAISO, Participating TOs, and Market Participants from taking position before regional planning organizations that are inconsistent with the results of CAISO arbitration.

New Section 24.9.1 provides that the CAISO will post on the CAISO Website a Congestion Data Summary. New Section 24.9.2 provides that High Priority Economic Planning Studies will be performed in accordance with the BPM, and that Market Participants may conduct Economic Planning Studies that have not been designated as High Priority at their own expense and may submit such studies for consideration in the development of the Transmission Plan when the CAISO provides notice of the stakeholder meeting regarding preliminary technical study results.

The CAISO proposes to include, in Appendix A to the CAISO Tariff, the following new defined terms that are used in Sections 20 and 24 as revised as described above: CAISO Planning Standards; CEC; Congestion Data Summary; Critical Energy Infrastructure Information; Economic Planning Study; High Priority Economic Planning Study; NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards); Planning Standards Committee; Request Window; Study Plan; Transmission Plan; Transmission Planner; Transmission Planning Process; and Unified Planning Assumptions.

V. COMPLIANCE DEMONSTRATION

As noted above, Commission Staff issued a White Paper on the transmission planning process that set forth a "road map" of issues that transmission providers should address in their filings to demonstrate compliance with the nine principles.¹⁴ The following discussion explains how the CAISO has complied with

¹⁴ Staff recommended that these principles be addressed in Attachment K. As discussed above, the CAISO is requesting a waiver of the Attachment K requirement.

the Commission's requirements as outlined by the major issues identified in the White Paper. A "matrix with a complete list of the issues identified in the White Paper and a brief statement of the CAISO's compliance is attached as Attachment E. The following discussion refers on occasion to sections of the BPM. The CAISO notes that in all cases, many of which are not mentioned, the BPM provides detail in addition to the CAISO Tariff regarding the Transmission Planning Process.

A. Coordination

In Order No. 890, the Commission stated that the transmission planning procedures must include "[t]he process for consulting with customers and neighboring transmission providers." Tracking Commission Staff's major issues, the following sets forth the CAISO's compliance.

- Describe whether any committees or meeting structures (formal or informal) will be used to conduct planning activities.
- If groups or committees are used, describe how they will be formed, the responsibilities of each, and how decisions will be made within the group and/or committee.

The only CAISO committee involved in the Transmission Planning Process is the CAISO Planning Standards Committee, whose role, composition, and operations are described in Section 24.2.1 and BPM Section 4.1.1.1. The CAISO Planning Standards Committee reviews, provides advice on, and proposes modifications to the CAISO Planning Standards. The CAISO Planning Standards are Reliability Criteria used in various technical studies:

- address specifics not covered in the NERC and WECC planning standards
- provide interpretations of the NERC and WECC planning standards specific to the CAISO Controlled Grid, and
- identify whether specific criteria should be adopted that are more stringent than the NERC and WECC planning standards.

The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan so as to ensure any changes into the current Transmission Planning Process cycle. Meetings of the Planning Standards Committee shall be noticed by Market and all materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. Modifications of the CAISO Planning Standards are subject to approval by the CAISO Governing Board.

The CAISO initiates and coordinates a minimum of three stakeholder meetings annually as part of its Transmission Planning Process and development of its Transmission Plan. The stakeholder meetings correspond to the three stages of development of the Transmission Plan. Thus, stakeholder meetings, including opportunities to comment, will be held to 1) facilitate development of the Unified Planning Assumptions and Study Plan; 2) review preliminary results of technical analyses; and 3) review the draft Transmission Plan. In addition, the Transmission Planning Process requires third parties directed by the CAISO to perform components of technical studies to also hold stakeholder meetings that will be noticed under CAISO procedures. (Sections 24.2.4.3, 24.2.5.1, and 24.2.5.2.) Each of these meetings will be included in the calendar of events set forth in the final Study Plan. (Section 24.2.4.2.) Finally, large or complex transmission projects may also trigger additional stakeholder meetings to address project specific issues. These meetings may be noticed through media, such as newspapers, beyond CAISO notice procedures and may be held in locations near the proposed project. (BPM Section 9.1.)

The CAISO will also participate in regional and subregional planning committees and meetings. The structure of these committees and meetings are established by the relevant organization. In particular, the CAISO's coordination with WECC's Transmission Expansion Planning Policy Committee's (TEPPC) economic planning or congestion study process is specifically incorporated into the Transmission Planning Process. (BPM Section 3.4.2 and 4.2.2.)

• Describe what role the transmission provider will play in coordinating the activities of the planning committees or meetings, as relevant.

The CAISO Vice-President of Planning and Infrastructure serves as the Chair of the Grid Planning Committee, and will thus coordinate its activities. As noted above, the CAISO will coordinate and conduct stakeholder meetings pursuant to the Unified Planning Assumptions and Study Plan.

• Describe any existing processes, and the changes thereto, that will be used to satisfy the requirements of Order No. 890.

The CAISO has refined its Transmission Planning Process to satisfy the requirements of Order No. 890. As outlined in the discussion of Section 24 above, the refined process provides stakeholders with repeated opportunities to comment on each stage of the Transmission Planning Process before that stage is finalized. Certain existing CAISO procedures, such as the Dispute Resolution process and the form of Market Notices, continue to apply to the Transmission Planning Process.

The CAISO does not propose to change, or proposes to make only conforming modifications in Section 24.4 (formerly Section 24.3) (Participating TO Study Obligation), Section 24.5 (Operational Review), Section 24.6 (State and Local Approval and Property Rights), 24.7 (WECC and Regional Coordination) 24.10

(Cost Responsibility for Transmission Additions and Upgrades), 24.11 (Ownership of and Charges for Expansion Facilities) and 24.12 (Expansion by "Local Furnishing" Participating TOs). These tariff sections are discussed in section II of this filing and, where appropriate, in this section of the filing.

• Describe the frequency of meetings to be held and other planning-related communications.

As noted above, the Transmission Planning Process provides for a minimum of three stakeholder meetings. These meetings will allow for stakeholder input at an early stage through comment on the draft Unified Planning Assumptions and Study Plan, which includes such matters as planning data and assumptions, software tools, and studies to be conducted (Sections 24.2.4.2 and 24.2.4.3), as well as on the results and conclusions of the resulting analyses; on the preliminary results of studies (Section 24.2.5.1 and 24.2.5.2); and on the draft Transmission Plan.

• Describe the procedures used to notice meetings and other planningrelated communications.

The process for issuing Market Notices is set forth in the definition of the term in the MRTU Tariff. Market Notices provide all details of meetings and the availability of data, as well as contact personnel. The CAISO already has a Transmission Planning page on the CAISO Website with links to all schedules, reports, and data. Under Section 24.2.4.2, the Unified Planning Assumptions and Study Plan will include, for each planning cycle, the proposed schedule for all stakeholder meetings and means for notification of any changes thereto, location on the CAISO Website of information relating to the technical studies performed in the Transmission Planning Process cycle, and the name of a contact person for each technical study. Further, stakeholders will be allowed to subscribe to any CAISO Transmission Planning Process activities, including the publication of draft and final Unified Planning Assumptions and Study Plans, technical study results, Transmission Plans, and other transmission planning reports. (BPM Section 9.1.)

B. Openness

In Order No. 890, the Commission stated that the transmission planning procedures must include "[n]otice procedures and anticipated frequency of meetings or planning-related communications." Using Staff's major issues, the following sets forth the CAISO's compliance.

• Describe who the participants will be in the planning process, including expected participants for any groups or committees used.

Under Section 24.2.1, the Grid Planning Committee is open to all Market Participants. Materials used by the Grid Planning Committee must be posted on the CAISO Website.

Otherwise, all participant meetings under the Transmission Planning Process are stakeholder meetings, as discussed above. Various subsections of Section 24.2, in concert with the definition of Market Notice, ensure that all stakeholders are provided notice of, and the information used in, stakeholder meetings. Stakeholders also have opportunities to submit written comments. As noted above, the Unified Planning Assumptions and Study Plan will include for each planning cycle the proposed schedule for all stakeholder meetings and means for notification of any changes thereto, location on the CAISO Website of information relating to the technical studies, and the name of a contact person for each technical study.

The role that each category of stakeholder plays in the Transmission Planning Process is described in Table 3 of the BPM. The role and obligations of specific stakeholder categories in submitting information to facilitate the Transmission Planning Process is explicitly outlined in Section 24.2.3.

• Describe what data is confidential/CEII, the criteria to be used to identify such data, and the eligibility criteria and process for obtaining access.

Confidential information and CEII used in the planning process, and the criteria by which the CAISO will determine such status, are described in Section 20.2. The requirements for access to such information are set forth in Section 20.4. Section 9.2 of the BPM provides additional detail regarding the determination of and procedures for obtaining confidential information and CEII.

C. Transparency

In Order No. 890, the Commission stated that the transmission planning procedures must include "[a] written description of the methodology, criteria, and processes used to develop transmission plans" and "[t]he method of disclosure of transmission plans and related studies and the criteria, assumptions and data underlying those plans and studies." Tracking Staff's major principles, the following sets forth the CAISO's compliance.

- Describe the transmission planning cycle and important milestones in the cycle *e.g.*, timelines/dates for data exchange, studies, presentation of studies to transmission customers, *etc.*
- Describe the transmission planning methodology and protocols used to develop transmission plans.
- Describe how, and when, transmission plans and other planning information will be presented to customers and other stakeholders.

Section 24.2 directs that a Transmission Plan be prepared on an annual basis with a planning horizon of at least 10 years. It then goes on in the various subsections to set forth the sequence of events. The BPM (which is available on the CAISO Website) provides a more detailed explanation of the process. BPM Table 1 describes specific timelines dates, and BPM Tables 1-6 provide flow charts for a visual representation of the Transmission Planning Process.

Under the process established by Section 24.2, the development of the data, assumptions, software, and technical studies to be used in the Transmission Planning Process are identified in the Unified Planning Assumptions and Plan. Stakeholders are involved in this process from the beginning. The underlying reliability criteria (including NERC TPL 001-004, WECC Planning Standards and CAISO Planning Standards), and a non-exclusive list of the types of studies are included in Section 4.2 of the BPM. All input into, and products of, the Transmission Planning Process are posted on the CAISO Website.

- Describe the procedure for communicating with customers and other stakeholders regarding the basic criteria, assumptions, and data that underlie the transmission provider's system plan.
- Describe how, and when, transmission plans and other planning information will be presented to customers and other stakeholders.

As previously discussed, stakeholders are involved in the Transmission process from the start. The CAISO uses information provided by stakeholders to develop the Unified Planning Assumptions and Study Plan. Under Section 24.3, Participating TOs must provide the CAISO with information on (1) Demand at each substation, including energy efficient programs; (2) interruptible Loads; (3) power factor; (4) interconnection of Generating Units to distribution systems; (5) transmission system changes; (6) distribution system changes; and (7) transmission network information. The CAISO must solicit from other Market Participants information on such matters as (1) long-term resource plans; (2) existing long-term contracts for resources and transmission outside the CAISO Control Area; (3) resource capacity and Energy bid information received through solicitations; and (4) Demand Forecasts. The CAISO must solicit from interconnected Control Areas, regional and subregional planning groups within the WECC, the California Public Utilities Commission, the California Energy Commission, and Local Regulatory Authorities information on such matters as (1) long-term transmission and resource plans; (2) generation interconnection queues; and (3) Demand forecasts.

Under Sections 24.2.4.2 and 24.2.4.3, the CAISO will consider this information and include and publish such information in the draft Unified Planning Assumptions and Study Plan, except to the extent it is confidential, along with the additional details regarding data, assumptions, software, and methodology to be used in the development of the Transmission Plan. The draft Transmission Plan will be noticed and posted under Section 24.3.4.3. Generally, stakeholders may review confidential information by executing a non-disclosure statement, as described in Section 20.4 and Section 9.2 of the BPM.

As discussed above, the preliminary study results and draft Transmission Plan will also be made available to stakeholders for comment and a stakeholder conference. During this process, stakeholders may discuss or propose alternatives to the projects that the CAISO proposes to approve.

• Describe the procedure for sharing information regarding the status of upgrades identified in the transmission plan.

Under Section 2.2 of the BPM, each annual Transmission Plan will include updates on the status of previously approved projects and the development of the Unified Planning Assumptions and Study Plan provides an opportunity to update other transmission-related information and data.

D. Information Exchange

The Commission stated that the transmission planning procedures must include "[t]he obligations of and methods for customers to submit data to the transmission provider." Using Staff's major principles, the following sets forth the CAISO's compliance.

• Describe the obligations and methods for customers to submit data to the transmission provider.

The basic opportunities for Transmission Customers to submit data to the CAISO during the course of the Transmission Planning Process are discussed above. In addition, Project Sponsors must submit certain information when proposing a project for CAISO approval during the Request Window. The information needed to satisfy the submission requirements is set forth in Sections 24.1.1.1 (Economically Driven Projects) and 24.1.3 (LCRI Facilities). Participating TOs must also perform studies and provide the CAISO with information pursuant to Sections 24.1.2 (Reliability Driven Projects) and 24.1.4 (projects to Maintain the Feasibility of Allocated CRRs).

• Describe the schedule and procedures for submission of information by transmission customers.

As discussed above, Section 24.2 sets forth the sequence of the annual Transmission Planning Process with the opportunities for the submittal of comments, including any data, studies, or analysis that a customer might have. More specificity of the timelines is set forth in the BPM. In the Request Window, Demand Resources may be proposed for consideration in the base case or as an alternative to transmission additions or upgrades.

E. Comparability

As described by Staff,

The comparability principle requires transmission providers, after considering the data and comments supplied by customers and other stakeholders, to develop a transmission system plan that meets the specific service requests of their transmission customers and otherwise treats similarly-situated customers (*e.g.*, network and retail native load) comparably in transmission system planning. Through the comparability principle, the Commission required that the interests of transmission providers and their similarly-situated customers be treated on a comparable basis during the planning process. The Commission also explained that demand resources should be considered on a comparable basis to the service provided by comparable generation resources where appropriate.

Under the CAISO model, transmission customers do not make specific service requests. The CAISO also has no native retail load. The CAISO Tariff does not distinguish between types of customers.

The revision to the Transmission Planning Process requires consideration of demand resources and generation as alternatives to transmission solutions, where appropriate. The CAISO must consider various demand resources in determining the need for a Reliability Driven Project (Section 24.1.2) and the need for upgrades or additions to Maintain the Feasibility of Allocated Long-Term CRRs (Section 24.1.4).

F. Dispute Resolution

The Commission stated that the transmission planning procedures must include a dispute resolution procedure. Using Staff's major issues, the following sets forth the CAISO's compliance.

- Describe the process(es) that will be used to resolve planning-related disputes.
- Describe the issues, procedural and substantive, that will be addressed through a particular dispute resolution process.

Section 13 of the current and MRTU Tariffs provides a dispute resolution process applicable to all disputes under the CAISO documents except where the decision of the CAISO is stated in the tariff to be final. It would therefore be applicable to disputes arising from the Transmission Planning Process.

Section 13 provides for a sequential process of good faith negotiation, mediation, and arbitration. Following a failure of good faith negotiation, a party makes a statement of claim. The CAISO posts a summary of each statement of claim on the CAISO Website. If the matter goes to arbitration, the CAISO also posts a summary of the decision on the CAISO Website.

G. Regional Participation

The Commission stated that the transmission planning procedures must include "[t]he process for consulting . . . neighboring transmission providers." Using Staff's major issues, the following sets forth the CAISO's compliance.

- Identify the entities with which the transmission provider engages in regional planning and the responsibilities of each entity in the planning process.
- Describe the interaction between local planning and regional planning activities.
- Describe any inter-regional planning activities in which the transmission provider or regional entity participates.
- Describe the process for reviewing and coordinating the results of subregional, regional and inter-regional planning activities.

- Staff recognizes that the various regions are at different stages of development of subregional and regional planning process and that these processes can and should evolve over time. Staff therefore recommends that each transmission provider describe, as part of the transmittal letter to its compliance filing:
 - The forms of subregional or regional planning that occur today in the transmission provider's region;
 - The modifications or improvements to such processes that are being proposed as part of compliance with Order No. 890;
 - The reasons why a particular subregion or region was chosen to address compliance with Principle No. 7;
 - The process by which the proposed subregional or regional planning processes can evolve over time as stakeholders gain experience with them (e.g., in undertaking additional studies as experience is gained with the initial studies; in formalizing stakeholder and state agency participation; in exchanging data, etc.).

As the Commission recognized in Order No. 890, planning by an ISO or RTO is itself a form of regional or sub-regional planning. Thus, the CAISO's Transmission Planning Process can be said to be a regional or sub-regional process involving the transmission systems of all the Participating TOs, which comprise virtually all transmission in the CAISO Control Area. The responsibilities of these parties are included in Section 24.

In this regard, pursuant to Section 24 and the BPM, the CAISO's Transmission Planning Process guides the enhancement and expansion of transmission facilities to ensure that the CAISO Controlled Grid can satisfy the needs of a competitive bulk power market in a reliable, economically efficient, and environmentally acceptable manner. Although the CAISO plans only the CAISO Controlled Grid, such transmission planning, by its very nature, must, and will, take into account facilities that are not part of the CAISO Controlled Grid, but are interconnected to it, including those facilities that are located inside the CAISO's geographic footprint (e.g., generation ties, distribution facilities, the COTP). This "local planning" is incorporated into the CAISO Transmission Planning Process in several ways that ensure transparency and comparability of treatment. For example, the CAISO utilizes the unique expertise of its Participating TOs by assigning to them the performance of certain reliability assessments of their systems. However, these assessments must be developed and performed in adherence to the Unified Planning Assumptions and Study Plan and vetted through the CAISO's Transmission Planning Process. (Section 24.2.5.1.) Further, all changes to Participating TOs' owned facilities, whether at the transmission or distribution level, must be provided to the CAISO for incorporation into foundational base cases. (Section 24.2.3.1.) Finally, to ensure consistency and equity in the assignment of capacity values for Generators

interconnecting at the distribution level, the CAISO shall perform the deliverability analysis. (Section 24.2(e).)

Section 24.8 provides that the CAISO will participate in the broader WECC's planning committees and in other regional and sub-regional (*i.e.*, narrower than WECC) coordinated planning processes. The CAISO is currently pursuing a bifurcated approach. First, the CAISO's Transmission Planning Process itself offers an open, transparent, and structured opportunity for interconnected neighbors to exchange planning information and objectives. Second, the CAISO is participating in the development of larger sub-regional planning effort, which it hopes will encompass most of the transmission systems in California. Through either of these means, the CAISO will satisfy its requirement that transmission providers coordinate with neighboring systems to ensure simultaneous feasibility of their respective plans and assess the possibility of efficiencies through mutual cooperation.

Until a California sub-regional planning group is created and participant responsibilities defined, the CAISO will perform the transmission planning functions for its Balancing Authority Area in accordance with Section 24.8 of the CAISO Tariff and BPM Section 5. However, the CAISO will continue to collaborate with representatives from adjacent transmission providers and existing sub-regional planning organizations through existing processes. This collaboration involves a reciprocal exchange of information and participation, to the maximum extent possible, in order to ensure the simultaneous feasibility of respective Transmission Plans, the identification of potential areas for increased efficiency, and the consistent use of common assumptions. In this regard, the CAISO shall expressly request the participation of the proposed interconnected transmission providers and other entities, as set forth in BPM section 5.1, in providing information during the Request Window, participating in the creation of the Unified Planning Assumptions and Study Plan, and reviewing study results and draft Transmission Plans. (See also Section 24.8.)

Equally important, the CAISO shall coordinate with WECC regarding the performance of Economic Planning Studies. The CAISO will advise WECC through that entity's request window of all requests for Economic Planning Studies, including the CASIO's selection of High Priority Economic Planning Studies. While the CAISO will maintain the authority to conduct High Priority Economic Planning Studies, consistent with WECC policies, the CAISO will work within the WECC structure to ensure regional or sub-regional congestion studies are conducted and reviewed by the appropriate parties and that opportunities for study efficiencies are realized. This process is described in Section BPM Section 4.2.2.1.

H. Economic Planning Studies

The Commission stated that the transmission planning procedures must include "[t]he transmission provider's study procedures for economic upgrades to address congestion or the integration of new resources." Using Staff's major issues, the following sets forth the CAISO's compliance.

- Describe the scope of economic planning undertaken by the transmission provider on behalf of its native load and OATT customers.
- Describe the process by which economic planning studies can be requested and the procedures for publishing study-related information.

Under proposed Section 24.2.2, any party can request an Economic Planning Study during the Request Window. The CAISO has no native load, so there is no distinction between native load and transmission customers. There is also no distinction between classes of Market Participants and stakeholders. As discussed below, all requests for Economic Planning Studies are evaluated according to the same criteria. The CAISO may select up to five High Priority Economic Planning Studies to be included in the Unified Planning Assumptions and Study Plan. Stakeholders will be able to comment on the preliminary results of High Priority Economic Studies through comments and stakeholder meetings on the draft Unified Planning Assumptions and Study Plan.

In order to facilitate the submission of Economic Planning Study Requests, the CAISO will publish, prior to the close of the Request Window, a Congestion Data Summary. The Congestion Data Summary provides information on Congestion on the CAISO Controlled Grid and specifically identifies "Significant and Recurring Congestion" that looks at the magnitude and duration of Congestion over a prior 12-month period. The CAISO will evaluate all requests in order to select High Priority Economic Planning Studies based on (1) whether the requested Economic Planning Study seeks to address Congestion identified by the CAISO in the Congestion Data Summary and the magnitude and frequency of that Congestion; (2) whether the requested Economic Planning Study addresses delivery of Location Constrained Resources or network transmission facilities intended to access Generation from an ERA or similar resource area assigned a high priority by the CPUC or CEC; (3) whether the requested Economic Planning Study is intended to address Local Capacity Area Resource requirements; or (4) whether resource and Demand information indicates that Congestion described in the Economic Planning Study request is projected to increase over the planning horizon and the magnitude of that Congestion. (Section 24.2.2.2.)

Thus, Economic Planning Studies do not address particular proposed projects – whether reliability-driven or economically driven. Rather, they provide information that can be used to propose an economic project or an LCRI, or can be taken into account in proposing a cost-efficient reliability project. As

described in Section 4.2.2.2 of the BPM, the CAISO Economic Planning Studies focus on identifying future congestion and exploring potential mitigation plans for bottlenecks on the grid. The mitigation plans recommended from the Economic Planning Study will consider: 1) expansion or acceleration of previously approved transmission projects and 2) new proposed upgrades or conceptual projects that can relieve the constraint. The results of Economic Planning Studies will be included in the Transmission Plan.

This does not mean that the economies of reliability and economic projects and LCRIs proposed during the Request Window are not evaluated. Under Section 4.2.2.3 of the BPM, all projects for which the costs will be included in the transmission Access Charge undergo a technical assessment of potential impact on system operating conditions and cost-benefit of the project.

In addition, under Section 24.9.2, Market Participants may conduct Economic Planning Studies that have not been designated as a High Priority Economic Planning Study at their own expense and may submit such studies for consideration in the development of the Transmission Plan when the CAISO provides notice of the stakeholder meeting regarding technical study. Additional details regarding High Priority Economic Planning Studies and their coordination with WECC processes are set forth in Sections 3.4.2 and 4.2.2.1 of the BPM.

• Describe the mechanism for recovering costs incurred to perform economic planning studies.

The definition of High Priority Economic Planning Study provides that the CAISO assumes the cost. The CAISO will recover the cost through the Grid Management Charge.

I. Cost Allocation

The Commission stated that the transmission planning procedures must include the relevant cost allocation procedures. Using Staff's major issues, the following sets forth the CAISO's compliance.

• Describe the methodology for allocating costs associated with reliability and economic upgrades.

Cost allocation of reliability and economic upgrades is set forth in current Section 24.7, which is revised only to make certain conforming changes. These provisions have previously been approved by the Commission as just and reasonable and are consistent with Commission allocation principles.

Where a Project Sponsor commits to pay the full cost of a transmission addition or upgrade, it bears the full costs. Such Project Sponsor is eligible to receive Merchant Transmission CRRs under Section 36.11 of Appendix BB to the current

CAISO Tariff. Otherwise, the cost is borne by the Participating TO that will be the owner of the Transmission facility.

Generally, Participating TOs recover the costs of High Voltage Transmission Facilities (and LCRIFs under Section 26.6 pending before the Commission) by including those costs in their High Voltage Transmission Revenue Requirements, and receiving disbursement from the CAISO's transmission Access Charge. In order to meet the definition of High Voltage Transmission Facility in the CAISO Tariff, a facility must be under the CAISO's Operational Control, and either an LCRI or operate at a voltage at or above 200 kilovolts. Supporting facilities for such lines, the costs of which are not directly assigned to one or more specific customers, are also included.

Under Section 26.6, as included in the LCRI Amendment pending before the Commission, each Location Constrained Resource Interconnection Generator (LCRIG) that connects to an LCRIF will pay on a going forward basis its pro rata share of the Transmission Revenue Requirement associated with the LCRIF, which is calculated based on the maximum capacity of the LCRIG relative to the capacity of the LCRIF. (See *California Independent System Operator Corp.,* FERC Docket No. ER08-140-000.)

Under current Section 27.4, as approved by the Commission, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive (1) its share of the Wheeling revenues that are attributable to the transmission addition or upgrade; (2) its share of the proceeds of the FTR auction for FTRs defined on the Inter-Zonal Interface of which the transmission addition or upgrade forms a part; and (3) its share of the Congestion revenues provided as calculated on the Inter-Zonal Interface of which the transmission addition or upgrade forms a part. The Project Sponsor's share of Wheeling, Congestion and FTR auction revenues for the upgraded transmission facility shall be the number that is determined by dividing the incremental change in the rating of the transmission facility by the new rating for the upgraded or additional transmission facility. The Participating TO's share of Wheeling, Congestion and FTR auction revenues for the upgraded or additional transmission facility shall be determined by subtracting the Project Sponsor's share from one hundred percent (100%).¹⁵

¹⁵ It should be noted that BPM Section 7.2 refers to provisions under the MRTU Tariff. Under MRTU Section 24.7.3, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO, provided the upgrade or addition is under CAISO Operational Control, shall be entitled to receive a compensation package based on a negotiation between the Project Sponsor, the CAISO and the relevant Participating TO. The compensation for the Project Sponsor shall be commensurate with the amount of additional transmission capacity that results from the upgrade determined by subtracting the rating of the transmission facility before the

• Describe the roles and responsibilities of the transmission provider and stakeholders during the cost allocation process.

The process is determined by the CAISO Tariff. The Commission will determine whether the proposed increase in a Participating TO's Transmission Revenue Requirement due to an addition or upgrade is just and reasonable. For project sponsors that do not recover their Transmission Revenue Requirement through the transmission Access Charge, the CAISO will provide the share of FTRs, wheeling, and congestion revenues when it files a revision to the Transmission Control Agreement accommodating the new facilities.

• Describe the methodology used to recover costs associated with planning for reliability needs.

All planning costs, except as described above, are recovered nondiscriminatorily from all users of the CAISO Controlled Grid through the Grid Management Charge.

VI. COMMUNICATIONS

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service list established by the Secretary with respect to this submittal:

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upgrade or addition from the new rating for the upgraded or additional transmission facility. The CAISO anticipates evaluating the need to restrict this authority solely to projects previously electing recovery under the current pre-MRTU version of Section 24.7.3 such that new transmission projects approved after the commencement of MRTU would not be eligible for negotiated rate recovery.

VII. SERVICE

The CAISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, the California Electricity Oversight Board, and all parties with effective Scheduling Coordinator Service Agreements under the CAISO Tariff and all parties in FERC Docket OA08-12-000. In addition, the CAISO is posting this transmittal letter and all attachments on the CAISO website.

VIII. ATTACHMENTS

The following documents, in addition to this transmittal letter, support the instant filing:

Attachment A	Revised CAISO Tariff sheets to comply with the transmission planning elements of Order No. 890
Attachment B	Tariff revisions shown in black-line format
Attachment C	BPM for the Transmission Planning Process
Attachment D	Governing Board Memorandum Concerning the Transmission Planning Process with attachments
Attachment E	Matrix Re CAISO Transmission Planning Process Consistency with Order No. 890 Transmission Planning Process Staff White Paper

IX. CONCLUSION

For the foregoing reasons, the Commission should accept the instant filing as satisfying the CAISO compliance obligations with respect to the nontransmission planning elements of Order No. 890. The CAISO also requests that the Commission grant any necessary waivers consistent with the discussion herein.

Respectfully submitted,

Nancy Saracino General Counsel, Corporate Secretary and Vice-President of Legal Affairs Anthony J. Ivancovich Assistant General Counsel – Regulatory Sidney Davies, Assistant General Counsel - Tariff and Tariff Compliance Grant Rosenblum, Senior Counsel California Independent System Operator Corporation 151 Blue Ravine Road Folsom, CA 95630 Tel: (916) 351-4400 Fax: (916) 608-7296 Sean A. Atkins Michael E. Ward Bradley R. Miliauskas Alston & Bird LLP The Atlantic Building 950 F Street, NW Washington, DC 20004 Tel: (202) 756-3300 Fax: (202) 654-4875

Counsel for the California Independent System Operator Corporation Attachment A – Clean Sheets

FERC Order 890 – Transmission Planning Compliance Filing

Docket No. OA08-____

December 21, 2007

(d) transactions between Scheduling Coordinators;

(e) individual Generator Outage programs unless a Generator makes a change to its Generator
Outage program which causes Congestion in the short term (i.e. one month or less), in which case, the
ISO may publish the identity of that Generator.

(f) Demand Forecast and other hourly data provided by Scheduling Coordinators to the ISO pursuant to Sections 4.5.3.7 and 31.1.4.

(g) The following information provided to the ISO by Scheduling Coordinators or Market Participants for purposes of the Interim Reliability Requirements Program shall be treated by the ISO as confidential:

- (1) Annual and monthly Resource Adequacy Plans pursuant to Sections 40.2.1 and 40.2.2, respectively, and Supply Plans pursuant to Section 40.6; however, any Planning Reserve Margin information required by Section 40.4 and any Qualifying Capacity eligibility criteria information required by Section 40.5.1 contained in the Resource Adequacy Plans and/or Supply Plans shall not be treated as confidential.
- (2) Demand Forecast and other hourly data provided pursuant to Section 40.3.
- (3) Information on existing import contracts, and any trades or sales of allocated import capacity, provided pursuant to Section 40.5.2.2.
- (4) Information reported by non-Participating Generators pursuant to Sections 40.6A.3 and 40.7.3.
- (5) Information submitted through the dispute or discrepancy resolution process pursuant to Section 40.2.3.

- (h) The following information related to the Transmission Planning Process in accordance with Section 24 of Appendix EE:
 - Information received under Sections 24.2.3.2 and 24.2.3.3 of Appendix EE to the extent such information has been designated as confidential in accordance with the Business Practice Manual;
 - Information, the release of which may harm competitive markets, as determined by the CAISO's Department of Market Monitoring;
 - Information received by the CAISO pursuant to agreements and contracts, executed prior to December 21, 2007, that preclude the release of the information;
 - (4) Information that involves proprietary analytical tools, computer codes, or any other material that is protected by intellectual property rights held by the CAISO, Project Sponsor, Market Participant or other third-party; and
 - (5) Critical Energy Infrastructure Information.

However, composite documents, data, and other information that may be developed based on confidential information under this Section shall not be deemed confidential if the composite documents, data, and other information do not disclose any confidential information of any individual Scheduling Coordinator, Market Participant, or other third-party or Critical Energy Infrastructure Information.

20.3 Other Parties.

No Market Participant shall have the right hereunder to receive from the ISO or to review any documents, data or other information of another Market Participant to the extent such documents, data or information is to be treated as in accordance with Section 20.2; provided, however, a Market Participant may receive and review any composite documents, data, and other information that may be developed based upon such confidential documents, data, or information, if the composite document does not disclose such
Confidentiality Agreement for Electric System Data, or are subject to similar confidentiality requirements; or

- (iii) In order to maintain reliable operation of the ISO Control Area, the ISO may share individual Generating Unit Outage information with the operations engineering and/or the outage coordination division(s) of other Control Area operators, Participating TOs, MSS Operators and other transmission system operators engaged in the operation and maintenance of the electric supply system whose system is significantly affected by the Generating Unit and who have executed the Western Electricity Coordinating Council Confidentiality Agreement for Electric System Data.
- Information submitted through Resource Adequacy Plans pursuant to Sections 40.2.1 and 40.2.2,
 Supply Plans pursuant to Section 40.6, and the dispute or discrepancy resolution process
 pursuant to Section 40.2.3 may be provided to:
 - the Scheduling Coordinator(s) and/or Market Participant(s) involved in the dispute or discrepancy pursuant to Section 40.2.3, only to the limited extent necessary to identify the disputed transaction and relevant counterparty or counterparties.
 - (ii) the regulatory entity, whether the CPUC or a Local Regulatory Authority, with jurisdiction over a Load Serving Entity involved, pursuant to Section 40.2.3, in a dispute or discrepancy, or otherwise is identified by the ISO as exhibiting a potential deficiency in demonstrating compliance with Resource Adequacy rules adopted by the CPUC or Local Regulatory Authority, as applicable. The information provided shall be limited to the particular dispute, discrepancy or deficiency.
- Notwithstanding the provisions of Section 20.2(f), information submitted through the Transmission
 Planning Process may be disclosed as follows:

- (i) Critical Energy Infrastructure Information may be provided to a requestor where such person is employed or designated by a Market Participant or electric utility regulatory agency within California to receive CEII, the requestor submits a statement as to the need for the CEII, and the requestor executes and returns to the CAISO the form of the non-disclosure agreement and non-disclosure statement included as part of the Business Practice Manual. The CAISO may, at its sole discretion, reject a request for CEII and upon such rejection, the requestor will be directed to utilize the FERC procedures for access to the requested CEII.
- (ii) Information that is confidential under Section 20.2(f)(i) or 20.2.(f)(ii) may be disclosed to any individual designated by a Market Participant, electric utility regulatory agency within California, or other stakeholder that signs and returns to the CAISO the form of the nondisclosure agreement, nondisclosure statement and certification that the individual is or represents a non-Market Participant, which is any person or entity not involved in a marketing, sales, or brokering function as market, sales, or brokering are defined in FERC's Standards of Conduct for Transmission Providers (18 C.F.R. § 358 et seq.), included as part of the Business Practice Manual; and
- (iii) Data base and other transmission planning information obtained from the WECC, or its successor, may be disclosed to individuals designated by a Market Participant, electric utility regulatory agency within California, or other stakeholder in accordance with the procedures set forth in the Business Practice Manual.

20.5 Confidentiality.

The ISO shall implement and maintain a system of communications with Scheduling Coordinators that includes the strict use of passwords for access to data to ensure compliance with Section 20. Access within the ISO to such data on ISO's communications systems, including databases and backup files, shall be strictly limited to authorized ISO personnel through the use of passwords and other appropriate means.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 316 THIRD REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 316 This allocation will represent the ISO's best estimates at the time, and is not intended to affect any rights provided under Existing Contracts, except as provided in Section 16.2.4.3. The ISO's forecast of total transfer capability for each Inter-Zonal Interface will depend on prevailing conditions for the relevant Trading Day, including, but not limited to, the effects of parallel path (unscheduled) flows and/or other limiting operational conditions. This information will be posted on WEnet by the ISO in accordance with Appendix Y. In accordance with Section 16.2.4D of the ISO Tariff, the four categories are as follows:

(a) transmission capacity that must be reserved for firm Existing Rights;

(b) transmission capacity that may be allocated for use as ISO transmission service (i.e., "new firm uses");

(c) transmission capacity that may be allocated by the ISO for conditional firm Existing Rights; and

(d) transmission capacity that may remain for any other uses, such as non-firm Existing Rights for which the Responsible PTO has no discretion over whether or not to provide such non-firm service.

24 TRANSMISSION EXPANSION.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 317 THIRD REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 317

24.1 [NOT USED]

[NOT USED]

[NOT USED]

24.1.3 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.1 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.1 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.1 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.2 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.2 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.3 [NOT USED] LCRI Language Moved to Appendix EE

24.1.3.4 [NOT USED] LCRI Language Moved to Appendix EE

24.2 [NOT USED]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATIONFERC ELECTRIC TARIFFFirst Revised Sheet No. 320THIRD REPLACEMENT VOLUME NO. ISuperseding Original Sheet No. 320

24.3 [NOT USED]

- 24.3 [NOT USED]
- 24.4 [NOT USED]
- 24.5 [NOT USED]

24.6 [NOT USED]

24.7 Cost Responsibility for Transmission Additions or Upgrades.

Cost responsibility for transmission additions or upgrades constructed pursuant to Section 24 of Appendix EE (including the responsibility for any costs incurred under Section 24.7 of Appendix EE) shall be determined as follows:

24.7.1 Where a Project Sponsor commits to pay the full cost of a transmission addition or upgrade as set forth in Section 24.1.1(a) of Appendix EE the full costs shall be borne by the Project Sponsor.

24.7.2 Where the need for a transmission addition or upgrade is determined by the ISO as set forth in Sections 24.1.1 (b)-(c), 24.1.2, and 24.1.4 of Appendix EE, the cost of the transmission addition or upgrade shall be borne by the Participating TO that will be the owner of the transmission addition or upgrade and shall be reflected in its Transmission Revenue Requirement.

24.7.3 Provided that the ISO has Operational Control of the transmission upgrade or addition, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive:

(a) its share, as determined in subsection (d) below, of the Wheeling revenues calculated in accordance with Section 26.1.4.3 that are attributable to the transmission addition or upgrade,

ISO TARIFF APPENDIX EE

Transmission Expansion and Planning Process

PART A. Transmission Expansion and Planning Process

24.1 Determination of Need for Proposed Transmission Projects.

A Participating TO, Market Participant, the CAISO, the CPUC, or CEC may propose a transmission system addition or upgrade, and the CAISO will determine, in accordance with this Section 24.1 of this Appendix EE, whether the transmission addition or upgrade is needed, where it will (1) promote economic efficiency, (2) maintain System Reliability, (3) satisfy the requirements of a Location Constrained Resource Interconnection Facility, or (4) maintain the simultaneous feasibility of allocated Long-Term CRRs. CAISO management can determine the need for transmission additions or upgrades with an estimated capital investment of less than \$50 million without CAISO Governing Board approval. The determination of need by CAISO management for transmission additions or upgrades with an estimated capital cost of \$50 million or more must be approved by the CAISO Governing Board.

24.1.1 Economically Driven Projects.

The determination that a transmission addition or upgrade is needed to promote economic efficiency shall be made in accordance with this Section 24 of this Appendix EE and the Business Practice Manual in any of the following ways:

> (a) Where a Project Sponsor proposes a Merchant Transmission Facility and demonstrates to the CAISO the financial capability to pay the full cost of construction and operation of the Merchant Transmission Facility. The Merchant Transmission Facility must mitigate all operational concerns identified under Section 24.5 of this Appendix EE to the satisfaction of the CAISO, in consultation with the Participating TO(s) in whose PTO Service Territory the Merchant Transmission Facility will be located, and ensure the continuing feasibility of

allocated Long Term CRRs over the length of their terms. To ensure that the Project Sponsor is financially able to pay the construction and operating costs of the Merchant Transmission Facility, and where the Participating TO is not the Project Sponsor and is to construct the Merchant Transmission Facility under Section 24.1 of this Appendix EE, the CAISO in cooperation with the Participating TO may require (1) a demonstration of creditworthiness (e.g., an appropriate credit rating), or (2) sufficient security in the form of an unconditional and irrevocable letter of credit or other similar security sufficient to meet its responsibilities and obligations for the full costs of the transmission addition or upgrade.

(b) Where a Project Sponsor, the CPUC, or CEC proposes a transmission addition or upgrade during the Request Window and the project is approved by the CAISO Governing Board, or a Participating TO proposes a transmission upgrade or addition to an existing transmission facility with an estimated capital cost of less than \$50 million in accordance with the Study Plan and the project is included in the CAISO annual Transmission Plan. In determining whether to approve the project, the CAISO Governing Board or CAISO management, as applicable, shall consider the degree to which, if any, the benefits of the project outweigh the costs, in accordance with the procedures and using the technical studies set forth in the Business Practice Manual. The benefits of the project may include, but need not be limited to, a calculation of any reduction in production costs, Congestion costs, Transmission Losses, capacity or other electric supply costs resulting from improved access to cost-efficient resources, and environmental costs. The cost of the project must consider any estimated costs identified under Section 24.1.4 of this Appendix EE to maintain the simultaneous feasibility of allocated Long Term CRRs for the length of their term. The CAISO management or CAISO Governing Board, as appropriate, in determining whether to approve or recommend the project, shall also consider the comparative costs and benefits of viable alternatives to the proposed transmission upgrade or addition, including (1) other transmission additions or upgrades, or the effects of other transmission additions or upgrades proposed under Section 24.2 of this Appendix EE during the Transmission Planning Process cycle, (2) Demand-side management, (3) acceleration or expansion of any transmission upgrade or addition already approved by the CAISO Governing Board or included in any CAISO annual Transmission Plan, or (4) Generation.

(c) Where the CAISO proposes a transmission addition or upgrade during the CAISO's Transmission Planning Process and the project is approved by the CAISO Governing Board or included in the CAISO annual Transmission Plan, as appropriate. In determining whether to approve the CAISO proposed transmission addition or upgrade, the CAISO Governing Board and CAISO management shall apply the same factors set forth in Section 24.1.1(b) of this Appendix EE. If approved by the CAISO Governing Board or CAISO management, as appropriate, the CAISO Governing Board or CAISO management, as appropriate, the CAISO will designate one or more of the Participating TOs with PTO Service Territories in which the terminus of the transmission addition or upgrade will be located to act as Project Sponsor. Where two or more Participating TOs are designated as Project Sponsors, such CAISO designation will include the proportionate responsibility between or among Participating TOs to own, construct, and finance the transmission addition or upgrade. If a Participating TO refuses to act as a Project Sponsor under this Section 24.1.1(c) of this Appendix EE, the CAISO will first request other designated Participating TO(s) to assume the remainder or greater proportionate responsibility, and if no other Participating TO had been designated or is willing to increase its proportionate responsibility, the CAISO may solicit bids to finance, own, and construct the transmission addition or upgrade.

24.1.1.1 Information Requirements for Economic Transmission Projects.

The Project Sponsor and relevant Participating TOs shall provide any necessary assistance and information to the CAISO to enable the CAISO to determine that a transmission upgrade or addition is needed to promote economic efficiency, and will perform all studies required by the adopted Study Plan in a manner consistent with the Business Practice Manual. A Project Sponsor of an economically driven transmission upgrade or addition to promote economic efficiency under Section 24.1.1 of this Appendix EE shall also provide in its proposal a statement whether the proposed upgrade or addition will be a Merchant Transmission Facility.

24.1.2 Reliability Driven Projects.

The CAISO in coordination with each Participating TO with a PTO Service Territory will, consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost

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alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3 of this Appendix EE and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 of the CAISO Tariff. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participanting Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 of this Appendix EE is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

24.1.3. Location Constrained Resource Interconnection Facility Projects.

The CAISO, CPUC, CEC, a Participating TO or any other Market Participant may propose a transmission addition as a Location Constrained Resource Interconnection Facility. A proposal shall include the following information, to the extent available:

- Information showing that the proposal meets the requirements of Section 24.1.3.1 of this
 Appendix EE; and
- (b) A description of the proposed facility, including the following information:
 - Transmission studies demonstrating that the proposed facility satisfies Applicable Reliability Criteria and CAISO Planning Standards;

- (2) Identification of the most feasible and cost-effective alternative transmission additions, which may include network upgrades, that would accomplish the objective of the proposal;
- A planning level cost estimate for the proposed facility and all proposed alternatives;
- An assessment of the potential for the future connection of further transmission additions that would convert the proposed facility into a network transmission facility, including conceptual plans;
- (5) The estimated in-service date of the proposed facility; and
- (6) A conceptual plan for connecting potential LCRIGs, if known, to the proposed facility.

24.1.3.1 Criteria for Qualification as a Location Constrained Resource Interconnection Facility.

- (a) The CAISO shall conditionally approve a facility as a Location Constrained Resource Interconnection Facility if it determines that the facility is needed and all of the following requirements are met:
 - (1) The facility is to be constructed for the primary purpose of connecting to the CAISO Controlled Grid two or more Location Constrained Resource Interconnection Generators in an Energy Resource Area, and at least one of the Location Constrained Resource Interconnection Generators is to be owned by an entity(ies) that is not an Affiliate of the owner(s) of another Location Constrained Resource Interconnection Generator in that Energy Resource Area;
 - (2) The facility will be a High Voltage Transmission Facility;

- (3) At the time of its in-service date, the facility will not be a network facility and would not be eligible for inclusion in a Participating TO's TRR other than as an LCRIF; and
- (4) The facility meets Applicable Reliability Criteria and CAISO Planning Standards.
- (b) The proponent of a facility that has been determined by the CAISO to meet the requirements of Section 24.1.3.1(a) of this Appendix EE shall provide the CAISO with information concerning the requirements of this subsection not less than ninety (90) days prior to the planned commencement of construction, and the facility shall qualify as a Location Constrained Resource Interconnection Facility if the CAISO determines that both of the following requirements are met:
 - (1) The addition of the capital cost of the facility to the High Voltage TRR of a Participating TO will not cause the aggregate of the net investment of all LCRIFs (net of the portion of the capital costs of LCRIFs credited to Participating TOs' TRRs pursuant to Section 26.6 included in the High Voltage TRRs of all Participating TOs to exceed fifteen percent (15%) of the aggregate of the net investment of all Participating TOs in all High Voltage Transmission Facilities reflected in their High Voltage TRRs in effect at the time of the CAISO's evaluation of the facility); and
 - (2) Existing or prospective owners of LCRIGs have demonstrated their intention to connect LCRIGs to the facility consistent with the requirements of Section 24.1.3.2 of this Appendix EE.

(c) Each Participating TO shall report annually to the CAISO the amount of its net investment in LCRIFs, the portion of the capital costs of LCRIFs credited to its TRR, and its net investment in High Voltage Transmission Facilities reflected in its High Voltage TRR, to enable the CAISO to make the determination required under Section 24.1.3.1(b)(1) of this Appendix EE.

24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) of Appendix EE does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs have demonstrated interest in the LCRIF by one of the following methods:
 - executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer;

- being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures or Small Generator Interconnection Procedures, as applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or
- (iii) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward study costs performed in connection with the Large Generator Interconnection Procedures or Small Generator Interconnection Procedures, whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

24.1.3.3 Coordination With Transmission Additions Proposed by Non-Participating TOs.

In the event that a facility proposed as an LCRIF would connect to LCRIGs in an Energy Resource Area that would also be connected by a transmission facility that is in existence or is proposed to be constructed by an entity that is not a Participating TO and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO shall coordinate with the entity owning or proposing that transmission facility through any regional planning process to avoid the unnecessary construction of duplicative transmission additions to connect the same LCRIGs to the CAISO Controlled Grid.

24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 of this Appendix EE is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO
 Planning Standards, including standards that are Applicable Reliability Criteria.
- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission Planning Process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
 - The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
 - The capacity of LCRIGs in the CAISO's interconnection queue for each Energy Resource Area;
 - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
 - Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
 - (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

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24.1.4 Maintaining the Feasibility of Allocated Long Term CRRs.

The CAISO is obligated to ensure the continuing feasibility of Long Term CRRs that are allocated by the CAISO over the length of their terms. In furtherance of this requirement the CAISO shall, as part of its annual Transmission Planning Process cycle, test and evaluate the simultaneous feasibility of allocated Long Term CRRs, including, but not limited to, when acting on the following types of projects: (a) planned or proposed transmission projects; (b) Generating Unit or transmission retirements; (c) Generating Unit interconnections; and (d) the interconnection of new Load. Pursuant to such evaluations the CAISO shall identify the need for any transmission additions or upgrades required to ensure the continuing feasibility of allocated Long Term CRRs over the length of their terms. In assessing the need for transmission additions or upgrades to maintain the feasibility of allocated Long Term CRRs, the CAISO, in coordination with the Participating TOs and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects; Demand-side management; Remedial Action Schemes; constrained-on Generation; interruptible Loads; reactive support; or in cases where the infeasible Long Term CRRs involve a small magnitude of megawatts, ensuring against the risk of any potential revenue shortfall using the CRR Balancing Account and uplift mechanism in Section 11.2.4 of the CAISO Tariff. As part of the CAISO's Transmission Planning Process, the Participating TOs and Market Participants shall provide the necessary assistance and information to the CAISO to allow it to assess and identify transmission additions or upgrades that may be necessary under Section 24.1.4 of this Appendix EE. To the extent a transmission upgrade or addition is deemed needed to maintain the feasibility of allocated Long Term CRRs in accordance with this Section and included in the CAISO's annual Transmission Plan, the CAISO will designate the Participating TO(s) with a PTO Service Territory in which the transmission upgrade or addition is to be located as the Project Sponsor(s), responsible to construct, own and/or finance, and maintain such transmission upgrade or addition.

24.2 Transmission Planning and Coordination.

The CAISO shall perform the CAISO's Transmission Planning Process on an annual cycle in accordance with the terms of this CAISO Tariff, the Transmission Control Agreement, and the Business Practice Manual. The Transmission Planning Process shall, at a minimum:

- (a) Coordinate and consolidate the transmission needs of the CAISO Control Area into a single plan, which will be assessed on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards, in a manner that promotes the economic efficiency of the CAISO Controlled Grid and considers federal and state environmental and other policies affecting the provision of Energy.
- (b) Reflect a planning horizon covering a minimum of ten (10) years that considers transmission enhancements and expansions, Demand Forecasts, Demand-side management, and capacity forecasts relating to generation technology type, additions and retirements, and such other factors as the CAISO determines are relevant.
- (c) Seek to avoid unnecessary duplication of facilities and ensure the simultaneous feasibility of the CAISO Transmission Plan and the transmission plans of interconnected Control Areas, and otherwise coordinate with regional and subregional transmission planning processes and entities in accordance with Section 24.8 of this Appendix EE.
- (d) Identify existing and projected limitations of the CAISO Controlled Grid's physical, economic or operational capability or performance and identify transmission upgrades and additions, including alternatives thereto, deemed needed in accordance with Section 24.1 of this Appendix EE to address the existing and projected limitations.

(e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U.

24.2.1 CAISO Planning Standards Committee.

The CAISO shall maintain a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan under Section 24.2.3 of this Appendix EE; however, additional meetings, web conferences, teleconferences may be scheduled as needed. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee. The CAISO Vice President of Planning and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of the effective date of Section 24.2 of this Appendix EE, and must include in the report to the CAISO Governing Board a summary of the positions of parties with respect to the proposed modifications to the CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market Participants or other interested parties.

24.2.2 Request Window.

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- Economic transmission upgrades or additions proposed under Section 24.1.1 of this Appendix EE, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 of this Appendix EE not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies.

24.2.2.1 CAISO Assessment of Request Window Proposals.

Following the submittal of a proposal for a transmission addition or upgrade, Demand response program, or generation project during the Request Window in accordance with Section 24.2.2 of this Appendix EE, the CAISO will determine whether the proposal will be included in the Unified Planning Assumptions or Study Plan as appropriate. A proposal can only be included in the Unified Planning Assumptions or Study Plan upon the determination by the CAISO that:

- (a) the proposal satisfies the information requirements for the particular type of project submitted as set forth in templates included in the Business Practice Manual;
- (b) the proposal is not functionally duplicative of transmission upgrades or additions
 that have previously been approved by the CAISO; and
- (c) the proposal, if a sub-regional or regional project that affects other interconnected Control Areas, has been reviewed by the appropriate subregional or regional planning entity, is not inconsistent with such sub-regional or regional planning entity's preferred solution or project, and has been determined to be appropriate for inclusion in the CAISO Study Plan, rather than, or in addition to, being included in or deferred to the planning process of the subregional or regional planning entity.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will notify the Market Participant submitting the proposal of any deficiencies in the proposal and provide the Market Participant an opportunity to correct the deficiencies. The failure to correct the deficiency precludes the proposal from inclusion in the Study Plan. The CAISO will notify the Market Participant submitting the proposal will be included in the Study Plan.

24.2.2.2 CAISO Assessment of Requests for Economic Planning Studies Received During the Request Window.

Following the submittal of a request for an Economic Planning Study during the Request Window in accordance with Section 24.2.2 of this Appendix EE, the CAISO will determine whether the request shall be designated as a High Priority Economic Planning Study for inclusion in the Unified Planning Assumptions and Study Plan. In making the determination, the CAISO will consider:

- Whether the requested Economic Planning Study seeks to address Congestion identified by the CAISO in the Congestion Data Summary published for the applicable Transmission Planning Process cycle and the magnitude, duration, and frequency of that Congestion;
- (b) Whether the requested Economic Planning Study addresses delivery of Generation from Location Constrained Resource Interconnection Generators or network transmission facilities intended to access Generation from an Energy Resource Area (ERA) or similar resource area assigned a high priority by the CPUC or CEC;
- Whether the requested Economic Planning Study is intended to address Local
 Capacity Area Resource requirements; or
- (d) Whether resource and Demand information indicates that Congestion described in the Economic Planning Study request is projected to increase over the planning horizon used in the Transmission Planning Process and the magnitude of that Congestion.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will post to the CAISO Website the list of selected High Priority Economic Planning Studies to be included in the draft Unified Planning Assumptions and Study Plan. The CAISO may assess requests for Economic Planning Studies individually or in combination where such requests may have common or complementary effects on the CAISO Controlled Grid. The CAISO will perform a maximum of five High Priority Economic Planning Studies; however, the CAISO retains discretion to perform greater than five High Priority Economic Planning Studies should stakeholder requests or patterns of Congestion or anticipated Congestion so warrant.

24.2.3 Additional Planning Information.

24.2.3.1 Information Provided by Participating TOs.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), Participating TOs shall provide the CAISO on an annual or periodic basis in accordance with the schedule and procedures and in the form required by the Business Practice Manual any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to: (1) modeling data for power flow, including reactive power, short-circuit and stability analysis; (2) a description of the total Demand to be served from each substation, including a description of any Energy efficiency programs reflected in the total Demand; (3) the amount of any interruptible Loads included in the total Demand (including conditions under which an interruption can be implemented and any limitations on the duration and frequency of interruptions); (4), a description of Generating Units to be interconnected to the Distribution System of the Participating TO, including generation type and anticipated Commercial Operation Date; (5) detailed power system models of their transmission systems that reflect transmission system changes, including equipment replacement not requiring approval by the CAISO; (6) Distribution System modifications; (7) transmission network information, including line ratings, line length, conductor sizes and lengths, substation equipment ratings, circuits on common towers and with common rights-of-ways and cross-overs, special protection schemes, and protection setting information; and (8) Contingency lists.

24.2.3.2 Information Provided by Participating Generators.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), Participating Generators shall provide the CAISO on an annual or periodic basis in accordance with the schedule, procedures and in the form required by the Business Practice Manual any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to (1) modeling data for short-circuit and stability analysis and (2) data, such as term, and status of any environmental or land use permits or agreements the expiration of which may affect that the operation of the Generating Unit.

24.2.3.3 Information Requested from Load Serving Entities.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), the CAISO shall solicit from Load Serving Entities through their Scheduling Coordinators information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term resource plans; (2) existing long-term contracts for resources and transmission service outside the CAISO Control Area; (3) resource capacity and Energy bid information received through requests for offers or similar solicitations; and (4) Demand Forecasts, including forecasted effect of Energy efficiency and Demand response programs.

24.2.3.4 Information Requested from Interconnected Control Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.

In accordance with Section 24.8 of this Appendix EE, the CAISO shall obtain or solicit from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection queue information; (4) Demand forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

24.2.3.5 Obligation to Provide Updated Information.

If material changes to the information provided under Sections 24.2.3.1 and 24.2.3.2 of this Appendix EE occur during the annual Transmission Planning Process, the providers of the information must provide notice to the CAISO of the changes.

24.2.4 Unified Planning Assumptions and Study Plan.

24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3 of this Appendix EE. The CAISO will also use the following in the development of the Unified Planning Assumptions and Study Plan:

- (1) WECC base cases for the relevant planning horizon;
- transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;

- Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of this Appendix EE;
- (4) Network Upgrades identified pursuant to Section 25, Appendix U or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix AA relating to the CAISO's Small Generator Interconnection Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- regulatory initiatives, as appropriate, including state regulatory agency initiated programs;
- Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

24.2.4.2 General Scope of Unified Planning Assumptions and Study Plan.

The Unified Planning Assumptions and Study Plan shall, at a minimum, describe:

 (a) the planning data and assumptions to be used, to the maximum extent possible, as a base case for each technical study to be performed in the Transmission Planning Process cycle, including, but not limited to, those related to Demand Forecasts and distribution, generation capacity additions and retirements, and transmission system modifications;
- (b) a list of each technical study to be performed in the Transmission Planning
 Process cycle and a summary of the technical study's objective or purpose;
- (c) a description of any modifications to the planning data and assumptions developed as the general base case in Section 24.2.4.2(a) of this Appendix EE made in each technical study performed in the Transmission Planning Process cycle;
- (d) a description of the software tools, methodology and other criteria used in each technical study performed in the Transmission Planning Process cycle;
- the identification of any entities directed to perform a particular technical study or portions of a technical study;
- (f) a proposed schedule for all stakeholder meetings to be held as part of the Transmission Planning Process cycle, and means for notification of any changes thereto, the location on the CAISO Website of information relating to the technical studies performed in the Transmission Planning Process cycle, and the name of a contact person at the CAISO for each technical study performed in the Transmission Planning Process cycle;
- (g) a list and description of each Economic Planning Study studied by the CAISO as a High Priority Economic Planning Study under Section 24.9 of this Appendix EE; and
- (h) to the maximum extent practicable, and where applicable, identify appropriate sensitivity analyses, including project or solution alternatives, to be performed as part of technical studies.

24.2.4.3 Preparation of Draft and Final Unified Planning Assumptions and Study Plan.

- (a) Following review of relevant information, the CAISO will prepare and post on the CAISO Website a draft Unified Planning Assumptions and Study Plan. The CAISO will issue a Market Notice announcing the availability such draft, soliciting comments, and scheduling a stakeholder conference(s) as required by Section 24.2.4.3(c) of this Appendix EE.
- (b) All comments from stakeholders on the draft Unified Planning Assumptions and Study Plan will be posted by the CAISO to the CAISO Website.
- (c) Subsequent to the posting of the draft Unified Planning Assumptions and Study Plan, the CAISO will conduct a minimum of one stakeholder meeting open to Market Participants, electric utility regulatory agencies, and other interested parties to review, discuss, and recommend modifications to the draft Unified Planning Assumptions and Study Plan. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website.
- (d) Following the stakeholder conference(s) required by Section 24.2.4.2(c) of this Appendix EE, and under the schedule set forth in the Business Practice Manual, the CAISO will determine and publish to the CAISO Website the final Unified Planning Assumptions and Study Plan in accordance with the procedures set forth in the Business Practice Manual.

24.2.5 Development and Approval of Transmission Plan.

24.2.5.1 Technical Studies.

- (a) In accordance with the Unified Planning Assumptions and Study Plan and the procedures and deadlines in the Business Practice Manual, the CAISO will perform, or direct the performance by third parties of, technical studies and other assessments necessary for the Transmission Plan and Transmission Planning Process, post the preliminary results on the CAISO Website, conduct a minimum of one stakeholder conference, and provide an opportunity for comments of the preliminary results. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website.
- (b) All technical studies, whether performed by the CAISO or third party under the direction of the CAISO, must utilize the Unified Planning Assumptions for the particular technical study to the maximum extent practical, and deviations from the Unified Planning Assumptions for the particular technical study must be documented in the preliminary and final results of each technical study. The CAISO will measure the results of the studies against NERC planning standards, WECC planning standards, and the CAISO Planning Standards, and other criteria established by the Business Practice Manual. After consideration of the completion of, the technical studies and post the final study results on the CAISO Website.

24.2.5.2 Development of Transmission Plan.

- (a) In accordance with the schedule and procedures in the Business Practice Manual, the CAISO will post a draft Transmission Plan. The CAISO will subsequently conduct a stakeholder conference regarding the draft Transmission Plan and solicit comments, consistent with the timelines and procedures set forth in the Business Practice Manual. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. After consideration of comments, the CAISO will post a final Transmission Plan to the CAISO Website.
- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 of this Appendix EE, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 of this Appendix EE and for which need has not been formally determined by the CAISO Governing Board or management, as applicable, under Section 24.1 of this Appendix EE, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle; (3) results of Economic Planning Studies performed during the Transmission Planning Process cycle; and (4) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition.

(c) The Transmission Plan may not include the results of certain technical studies performed as part of the Transmission Planning Process cycle identified in the Unified Planning Assumptions and Study Plan that were scheduled for completion after publication of the Transmission Plan for the Transmission Planning Process cycle.

24.2.5.3 Approval by the CAISO Governing Board.

The CAISO will present the Transmission Plan to the CAISO Governing Board at the first meeting of the year following the year in which the Transmission Plan is prepared. The Transmission Plan will be considered final once it has been presented to the CAISO Governing Board and will be posted on the CAISO Website. Transmission upgrades and additions for which CAISO Governing Board approval is required may be presented to the CAISO Governing Board for approval separate from presentation of the Transmission Plan.

24.3 Obligation to Construct Transmission Projects Included in Transmission Plan.

A Participating TO that has a PTO Service Territory shall be obligated to construct all transmission additions and upgrades that are determined by the CAISO Governing Board or management, as applicable, to be needed in accordance with the requirements of Section 24 of this Appendix EE and which: (1) are additions or upgrades to transmission facilities that are located within its PTO Service Territory, unless (a) it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory or (b) it does not own the facility being upgraded or added and the Project Sponsor is a Participating TO that elects to construct the transmission upgrade; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities that it owns, that are part of the CAISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 24.7 of the CAISO Tariff. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of a TO's obligations under this CAISO Tariff or as those rights may be conferred by the CAISO or may arise or exist pursuant to this CAISO Tariff.

24.4 Participating TO Study Obligation.

The Participating TO constructing or expanding facilities in accordance with Section 24.3 of this Appendix, will be directed by the CAISO to coordinate with the Project Sponsor or Participating TO(s) with PTO Service Territories in which the transmission upgrade or addition will be located, as appropriate, and other Market Participants to perform any study or studies necessary, including a Facility Study, to determine the appropriate facilities to be constructed in accordance with the CAISO Transmission Planning Process and the terms set forth in the TO Tariff.

24.5 Operational Review.

The CAISO will perform an operational review of all facilities studied as part of the CAISO Transmission Planning Process that are proposed to be connected to, or made part of, the CAISO Controlled Grid to ensure that the proposed facilities provide for acceptable operating flexibility and meet all its requirements for proper integration with the CAISO Controlled Grid. If the CAISO finds that such facilities do not provide for acceptable operating flexibility or do not adequately integrate with the CAISO Controlled Grid, the CAISO shall coordinate with the Project Sponsor and, if different, the Participating TO with the PTO Service Territory in which the facilities will be located to reassess and redesign the facilities required to be constructed. Transmission upgrades or additions that do not provide acceptable operating flexibility or do not adequately integrate with the CAISO Controlled Grid cannot be included in the CAISO Transmission Plan or approved by CAISO management or the CAISO Governing Board, as applicable.

24.6 State and Local Approval and Property Rights.

24.6.1 The Participating TO obligated to construct facilities under this Section 24 must make a good faith effort to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of the required transmission additions or upgrades. This obligation includes the Participating TO's use of eminent domain authority, where provided by state law.

24.6.2 If the Participating TO cannot secure any such necessary approvals or property rights and consequently is unable to construct a transmission addition or upgrade found to be needed in accordance with Section 24.1 of this Appendix, it shall promptly notify the CAISO and the Project Sponsor, if any, and shall comply with its obligations under the TO Tariff to convene a technical meeting to evaluate alternative proposals. The CAISO shall take such action as it reasonably considers appropriate, in coordination with the Participating TO, the Project Sponsor, if any, and other affected Market Participants, to facilitate the development and evaluation of alternative proposals including, where possible, conferring on a third party the right to build the transmission addition or upgrade as set forth in Section 24.6.3 of this Appendix.

24.6.3 Where the conditions of Section 24.6.2 of this Appendix have been satisfied and it is possible for a third party to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of transmission additions or upgrades required to be constructed in accordance with this CAISO Tariff (including the use of eminent domain authority, where provided by state law), the CAISO may confer on a third party the right to build the transmission addition or upgrade, which third party shall enter into the Transmission Control Agreement in relation to such transmission addition or upgrade.

24.7 WECC and Regional Coordination.

The Project Sponsor will have responsibility for completing any applicable WECC requirements and rating study requirements to ensure that a proposed transmission addition or upgrade meets regional planning requirements. The Project Sponsor may request the Participating TO to perform this coordination on behalf of the Project Sponsor at the Project Sponsor's expense.

24.8 Regional and Sub-Regional Planning Process.

The CAISO will be a member of the WECC and other applicable regional or sub-regional organizations and participate in WECC's operation and planning committees, and in other applicable regional and subregional coordinated planning processes.

24.8.1 Scope of Regional or Sub-Regional Planning Participation.

The details of the CAISO's participation in regional and sub-regional planning processes are set forth in the Business Practice Manual. At a minimum, the CAISO shall be required to:

- solicit the participation, whether through sub-regional planning groups or individually, of all interconnected Control Areas in the development of the Unified Planning Assumptions and Study Plan and in reviewing the results of technical studies performed as part of the CAISO's Transmission Planning Process in order to:
 - coordinate, to the maximum extent practicable, planning assumptions,
 data and methodologies utilized by the CAISO, regional and sub-regional
 planning groups or interconnected Control Areas;
 - ensure transmission expansion plans of the CAISO, regional and subregional planning groups or interconnected Control Areas are simultaneously feasible and seek to avoid duplication of facilities.
- (b) coordinate with regional and sub-regional planning groups regarding the entity to perform requests for Economic Planning Studies or other Congestion related studies;
- (c) transmit to applicable regional and sub-regional planning groups or interconnected Control Areas information on technical studies performed as part of the CAISO Transmission Planning Process;

 (d) post on the CAISO Website links to the planning activities of applicable regional and sub-regional planning groups or interconnected Control Areas.

24.8.2 Limitation on Regional Activities.

Neither the CAISO nor any Participating TO nor any Market Participant shall take any position before the WECC or a regional organization that is inconsistent with a binding decision reached through an arbitration proceeding pursuant to Section 13 of the CAISO Tariff.

24.9 Economic Planning Studies.

24.9.1 Congestion Data Summary.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO shall post on the CAISO Website a Congestion Data Summary.

24.9.2 High Priority Economic Planning Studies.

High Priority Economic Planning Studies shall be performed in accordance with the standards and procedures established in the Business Planning Manual. Market Participants may conduct Economic Planning Studies that have not been designated as High Priority Economic Planning Studies at their own expense and may submit such studies for consideration in the development of the Transmission Plan when the CAISO provides notice of the stakeholder meeting regarding technical study results pursuant to Section 24.2.5.2 of this Appendix EE.

PART B. - DEFINITIONS

CAISO Planning Standards	Reliability Criteria that: (1) address specifics not covered in the NERC and WECC planning standards; (2) provide interpretations of the NERC and WECC planning standards specific to the CAISO Controlled Grid; and (3) identify whether specific criteria should be adopted that are more stringent than the NERC and WECC planning standards.
CEC	The California Energy Commission or its successor.
Congestion Data Summary	A report issued by the CAISO on the schedule set forth in the Business Practice Manual that sets forth historic Congestion on the CAISO Controlled Grid.
Critical Energy Infrastructure Information (CEII)	Critical Energy Infrastructure Information shall have the meaning given the term in the regulations of FERC at 18 C.F.R. § 388.12, et seq.
Economic Planning Study	A study performed to provide a preliminary assessment of the potential cost effectiveness of mitigating specifically identified Congestion.
High Priority Economic Planning Study	An Economic Planning Study performed by the CAISO for inclusion in the Transmission Plan and for which the CAISO assumes cost responsibility.
Long Term Congestion Revenue Right (Long Term CRR)	A Congestion Revenue Right differentiated by season and time-of-use period (on-peak and off-peak) with a term of ten years.
Merchant Transmission Facility	A transmission facility or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.

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NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards)	A set of NERC Reliability Standards applicable to the transmission planning process.
Planning Standards Committee	The committee appointed under Section 24.2.1.
Request Window	The period of time as set forth in the Business Practice Manual during which transmission additions or upgrades, requests for Economic Planning Studies, and other transmission related information is submitted to the CAISO in accordance with Section 24.2.2 of Appendix EE.
Study Plan	The plan to be developed pursuant to Section 24.4.3 of Appendix EE, which sets forth the technical studies to be performed during the annual Transmission Planning Process.
Transmission Plan	The report prepared by the CAISO on annual basis pursuant to Section 24 of Appendix EE, which documents the outcome of the Transmission Planning Process as defined in the Study Plan.
Transmission Planner	A designation by NERC regarding responsibility to perform specified transmission planning functions in accordance with the NERC Reliability Standards.
Transmission Planning Process	The process by which the CAISO assesses the CAISO Controlled Grid as set forth in Section 24 of Appendix EE.
Unified Planning Assumptions	The assumptions to be developed pursuant to Section 24.4.3 of Appendix EE and used, to the maximum extent possible, in performing technical studies identified in the Study Plan as part of the annual Transmission Planning Process.

Attachment B – Blacklines

Currently Effective Tariff

FERC Order 890 – Transmission Planning Compliance Filing

Docket No. OA08-____

December 21, 2007

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20.2 Confidential Information.

The following information provided to the ISO by Scheduling Coordinators shall be treated by the ISO as confidential:

(a) individual bids for Supplemental Energy;

(b) individual Adjustment Bids for Congestion Management which are not designated by the Scheduling Coordinator as available;

(c) individual bids for Ancillary Services;

(d) transactions between Scheduling Coordinators;

(e) individual Generator Outage programs unless a Generator makes a change to its Generator
 Outage program which causes Congestion in the short term (i.e. one month or less), in which case, the
 ISO may publish the identity of that Generator.

(f) Demand Forecast and other hourly data provided by Scheduling Coordinators to the ISO pursuant to Sections 4.5.3.7 and 31.1.4.

(g) The following information provided to the ISO by Scheduling Coordinators or Market Participants for purposes of the Interim Reliability Requirements Program shall be treated by the ISO as confidential:

- (1a) Annual and monthly Resource Adequacy Plans pursuant to Sections 40.2.1 and 40.2.2, respectively, and Supply Plans pursuant to Section 40.6; however, any Planning Reserve Margin information required by Section 40.4 and any Qualifying Capacity eligibility criteria information required by Section 40.5.1 contained in the Resource Adequacy Plans and/or Supply Plans shall not be treated as confidential.
- (2b) Demand Forecast and other hourly data provided pursuant to Section 40.3.
- (<u>3</u>e) Information on existing import contracts, and any trades or sales of allocated import capacity, provided pursuant to Section 40.5.2.2.
- (<u>4</u>d) Information reported by non-Participating Generators pursuant to Sections 40.6A.3 and 40.7.3.

- (5e) Information submitted through the dispute or discrepancy resolution process pursuant to Section 40.2.3.
- (h) The following information related to the Transmission Planning Process in accordance with Section 24 of Appendix EE:
 - (1) Information received under Sections 24.2.3.2 and 24.2.3.3 of Appendix EE to the extent such information has been designated as confidential in accordance with the Business <u>Practice Manual</u>;
 - (2) Information, the release of which may harm competitive markets, as determined by the CAISO's Department of Market Monitoring;
 - (3) Information received by the CAISO pursuant to agreements and contracts, executed prior
 to December 21, 2007, that preclude the release of the information;
 - (4) Information that involves proprietary analytical tools, computer codes, or any other material that is protected by intellectual property rights held by the CAISO, Project Sponsor, Market Participant or other third-party; and
 - (5) Critical Energy Infrastructure Information.

However, composite documents, data, and other information that may be developed based on confidential information under this Section shall not be deemed confidential if the composite documents, data, and other information do not disclose any confidential information of any individual Scheduling Coordinator, Market Participant, or other third-party or Critical Energy Infrastructure Information.

20.4 Disclosure.

Notwithstanding anything in this Section 20 to the contrary,

(a) The ISO: (i) shall publish individual bids for Supplemental Energy, individual bids for Ancillary Services, and individual Adjustment Bids, provided that such data are published no sooner than six (6) months after the Trading Day with respect to which the bid or Adjustment Bid was submitted and in a manner that does not reveal the specific resource or the name of the Scheduling Coordinator submitting the bid or Adjustment Bid, but that allows the bidding behavior of individual, unidentified resources and

Scheduling Coordinators to be tracked over time; and (ii) may publish data sets analyzed in any public report issued by the ISO or by the Market Surveillance Committee, provided that such data sets shall be published no sooner than six (6) months after the latest Trading Day to which data in the data set apply, and in a manner that does not reveal any specific resource or the name of any Scheduling Coordinator submitting bids or Adjustment Bids included in such data sets.

(b) If the ISO is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence pursuant to this Section 20, the ISO may disclose such information; provided, however, that as soon as the ISO learns of the disclosure requirement and prior to making such disclosure, the ISO shall notify any affected Market Participant of the requirement and the terms thereof. The Market Participant may, at its sole discretion and own cost, direct any challenge to or defense against the disclosure requirement and the ISO shall cooperate with such affected Market Participant to the maximum extent practicable to minimize the disclosure of the information consistent with applicable law. The ISO shall cooperate with the affected Market Participant to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

(c) The ISO may disclose confidential or commercially sensitive information, without notice to an affected Market Participant, in the following circumstances:

(i) If the FERC, or its staff, during the course of an investigation or otherwise, requests information that is confidential or commercially sensitive. In providing the information to FERC or its staff, the ISO shall take action consistent with 18 C.F.R. §§ 1b.20 and 388.112, and request that the information be treated as confidential and non-public by the FERC and its staff and that the information be withheld from public disclosure. The ISO shall provide the requested information to the FERC or its staff within the time provided for in the request for information. The ISO shall notify an affected Market Participant within a reasonable time after the ISO is notified by FERC or its staff that a request for disclosure of, or decision to disclose, the confidential or commercially sensitive information has been received, at which time the ISO and the affected Market Participant may respond before such information would be made public; or (ii) In order to maintain reliable operation of the ISO Control Area, the ISO may share critical operating information, system models, and planning data with other WECC Reliability Coordinators, who have executed the Western Electricity Coordinating Council Confidentiality Agreement for Electric System Data, or are subject to similar confidentiality requirements; or

(iii) In order to maintain reliable operation of the ISO Control Area, the ISO may share individual Generating Unit Outage information with the operations engineering and/or the outage coordination division(s) of other Control Area operators, Participating TOs, MSS Operators and other transmission system operators engaged in the operation and maintenance of the electric supply system whose system is significantly affected by the Generating Unit and who have executed the Western Electricity Coordinating Council Confidentiality Agreement for Electric System Data.

- Information submitted through Resource Adequacy Plans pursuant to Sections 40.2.1 and 40.2.2,
 Supply Plans pursuant to Section 40.6, and the dispute or discrepancy resolution process
 pursuant to Section 40.2.3 may be provided to:
 - the Scheduling Coordinator(s) and/or Market Participant(s) involved in the dispute or discrepancy pursuant to Section 40.2.3, only to the limited extent necessary to identify the disputed transaction and relevant counterparty or counterparties.
 - (ii) the regulatory entity, whether the CPUC or a Local Regulatory Authority, with jurisdiction over a Load Serving Entity involved, pursuant to Section 40.2.3, in a dispute or discrepancy, or otherwise is identified by the ISO as exhibiting a potential deficiency in demonstrating compliance with Resource Adequacy rules adopted by the CPUC or Local Regulatory Authority, as applicable. The information provided shall be limited to the particular dispute, discrepancy or deficiency.
- (e) Notwithstanding the provisions of Section 20.2(f), information submitted through the Transmission Planning Process may be disclosed as follows:

- (i) Critical Energy Infrastructure Information may be provided to a requestor where such person is employed or designated by a Market Participant or electric utility regulatory agency within California to receive CEII, the requestor submits a statement as to the need for the CEII, and the requestor executes and returns to the CAISO the form of the non-disclosure agreement and non-disclosure statement included as part of the Business Practice Manual. The CAISO may, at its sole discretion, reject a request for CEII and upon such rejection, the requestor will be directed to utilize the FERC procedures for access to the requested CEII.
- (ii) Information that is confidential under Section 20.2(f)(i) or 20.2.(f)(ii) may be disclosed to any individual designated by a Market Participant, electric utility regulatory agency within <u>California, or other stakeholder that signs and returns to the CAISO the form of the nondisclosure agreement, nondisclosure statement and certification that the individual is or represents a non-Market Participant, which is any person or entity not involved in a marketing, sales, or brokering function as market, sales, or brokering are defined in <u>FERC's Standards of Conduct for Transmission Providers (18 C.F.R. § 358 et seq.),</u> included as part of the Business Practice Manual; and</u>
- (iii) Data base and other transmission planning information obtained from the WECC, or its successor, may be disclosed to individuals designated by a Market Participant, electric utility regulatory agency within California, or other stakeholder in accordance with the procedures set forth in the Business Practice Manual.

24 TRANSMISSION EXPANSION.

A Participating TO shall be obligated to construct all transmission additions and upgrades that are determined to be needed in accordance with the requirements of this Section 24, not including conditional approvals and determinations of need under Section 24.1.3.1(a), and which: (1) are additions or upgrades to transmission facilities that are located within its PTO Service Territory, unless it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities or upgrades to existing transmission facilities or upgrades to exist to exist the transmission facilities or upgrades to exist the transmission facilities to exist the transmission facilities or upgrades to exist to exist the transmission facilities or upgrades to exist the transmission facilities to exist the transmission facilities or upgrades to exist the transmission facilities to transmission facilities to exist the terminus of such facility is located within its PTO Service Territory; or (2) are additions to exist the transmission facilities or upgrades to exist the transmission

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facilities that it owns, that are part of the CAISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 24.7. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of the TO's obligations under this CAISO Tariff or as those rights may be conferred by the CAISO or may arise or exist pursuant to this CAISO Tariff.

24.1 [NOT USED]Determination of Need.

A Participating TO or any other Market Participant may propose a transmission system addition or upgrade. The CAISO will determine that a transmission addition or upgrade is needed where it will promote economic efficiency or maintain System Reliability, or connect Location Constrained Resource Interconnection Generators to the CAISO Controlled Grid, as set forth below.

24.1.1 Economically Driven Projects.

The Participating TO and Market Participants shall provide the necessary assistance and information to the ISO, as part of the coordinated planning process, to enable the ISO to determine that a project is needed to promote economic efficiency, including, at the ISO's discretion, studies comporting with ISO guidelines that demonstrate whether the project will promote economic efficiency or the information the ISO requires to carry out its own studies for economically driven projects. The ISO shall treat market sensitive information provided to the ISO in accordance with this Section by Participating TOs, Project Sponsors and applicable Market Participants confidentially in accordance with Section 20 provided that such information is clearly marked "Confidential" at the time it is provided to the ISO. The determination that a transmission addition or upgrade is needed to promote economic efficiency shall be made in any of the following ways:

24.1.1.1 If the Participating TO or any party questions the economic need for the project (except where the Project Sponsor commits to pay the full cost of construction) the proposal will be submitted to the ISO ADR Procedures for resolution.

24.1.1.2 Where a Project Sponsor other than the Participating TO commits to pay the full cost of construction of a transmission addition or upgrade and its operation, and demonstrates to the ISO financial capability to pay those costs, such commitment and demonstration shall be sufficient to demonstrate need to the ISO. To ensure that the Project Sponsor is financially able to pay the costs of the project to be constructed by the Participating TO, the Participating TO may require (1) a demonstration of creditworthiness (e.g. an appropriate credit rating), or (2) sufficient security in the form of an unconditional and irrevocable letter of credit or other similar security sufficient to meet its responsibilities and obligations for the full costs of the transmission addition or upgrade.

24.1.1.3 Where a Project Sponsor asserts that a transmission addition or upgrade is economically beneficial, but that Project Sponsor is unwilling to commit to pay the full cost of the addition or upgrade; where (1) the proposed transmission addition or upgrade was submitted to the Participating TO but was not included in the transmission expansion plan of that Participating TO in accordance with Section 24.2 or (2) the operation date of the planned expansion is not acceptable to the ISO or the Project Sponsor or (3) the Participating TO unreasonably delays implementing or subsequently decides not to proceed with the project, the Project Sponsor may submit its proposal to the ISO ADR Procedure for determination of need. A determination of need shall be made as follows:

24.1.1.3.1 The Project Sponsor shall include in its proposal: (1) a showing that the economic benefits of the proposed transmission addition or upgrade are expected to exceed its costs (giving consideration to any reasonable alternatives to the construction of transmission additions or upgrades) using an economic analysis that comports with ISO guidelines, and (2) a statement of the proposed pricing methodology for the transmission upgrades or additions that the Project Sponsor elects in accordance with Section 24.7 of the ISO Tariff.

24.1.1.3.2 If neither any Market Participant nor the ISO disputes the Project Sponsor's showing, then the proposal is determined to be needed.

24.1.1.3.3 If any Market Participant or the ISO disputes the Project Sponsor's showing, the disputing Market Participant, the ISO, or the Project Sponsor may submit to resolution through the ISO ADR Procedure the issue of whether the transmission addition or upgrade is needed on the ground that its economic benefits exceed its costs. If a Market Participant fails to raise through the ISO ADR Procedure

a dispute as to whether a proposed transmission addition or upgrade is needed, then the Market Participant shall be deemed to have waived its right to raise such dispute at a later date. The determination under the ISO ADR Procedure as to whether the transmission addition or upgrade is needed, including any determination by FERC or on appeal of a FERC determination in accordance with that process, shall be final.

24.1.2 Reliability Driven Projects.

The ISO in coordination with the Participating TO, will identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria. In making this determination, the ISO, in coordination with the Participating TO and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, demand-side management, remedial action schemes, constrained on Generation, interruptible Loads or reactive support. The Participating TO, in cooperation with the ISO, shall perform the necessary studies to determine the facilities needed to meet all Applicable Reliability Criteria. The Participating TO shall provide the ISO and other Market Participants with all information relating to a proposed transmission addition or upgrade that they may reasonably request (other than information available to them through the WECC or any other applicable regional organization) and shall, through the WECC or any other applicable regional organization coordinated planning processes, develop the scope of and assumptions for such studies that are acceptable to the ISO and those other Market Participants. The ISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria, and, subject to appropriate appeals, the Participating TO shall be obligated to construct such lines. After the ISO Operations Date, the ISO, in consultation with Participating TOs and any affected UDCs and MSSs, will work to develop a consistent set of Reliability Criteria for the ISO Controlled Grid which the Participating TOs will use in their transmission planning and expansion studies or decisions.

Sections 24.1.3 through 24.1.3.4 Location Constrained Resource Interconnection Facility Amendment language [Docket No. ER08-140] moved to Appendix EE as part of this filing Order 890 Transmission Planning [Docket No. OA08-__]. These Sections are being included and further

revised for consistency with this Order 890 Transmission Planning Compliance Filing.

24.1.3. Location Constrained Resource Interconnection Facility Projects.

The CAISO, a Participating TO or any other Market Participant may propose a transmission addition as a Location Constrained Resource Interconnection Facility. A proposal shall include the following information, to the extent available:

- (a) Information showing that the proposal meets the requirements of Section 24.1.3.1; and
- (b) A description of the proposed facility, including the following information:
 - (1) Transmission studies demonstrating that the proposed facility satisfies the applicable CAISO grid planning standards, including planning standards that are Applicable Reliability Criteria;
 - (2) Identification of the most feasible and cost-effective alternative transmission additions, which may include network upgrades, that would accomplish the objective of the proposal;
 - A planning level cost estimate for the proposed facility and all proposed alternatives;
 - (4) An assessment of the potential for the future connection of further transmission additions that would convert the proposed facility into a network transmission facility, including conceptual plans;
 - (5) The estimated in-service date of the proposed facility; and
 - (6) A conceptual plan for connecting potential LCRIGs, if known, to the proposed facility.

24.1.3.1 Criteria for Qualification as a Location Constrained Resource Interconnection Facility.

(a) The CAISO shall conditionally approve a facility as a Location Constrained Resource Interconnection Facility if it determines that the facility is needed and all of the following requirements are met:

- (1) The facility is to be constructed for the primary purpose of connecting to the CAISO Controlled Grid two or more Location Constrained Resource Interconnection Generators in an Energy Resource Area, and at least one of the Location Constrained Resource Interconnection Generators is to be owned by an entity(ies) that is not an Affiliate of the owner(s) of another Location Constrained Resource Interconnection Generator in that Energy Resource Area;
- (2) The facility will be a High Voltage Transmission Facility;
- (3) At the time of its in-service date, the facility will not be a network facility and would not be eligible for inclusion in a Participating TO's TRR other than as an LCRIF; and
- (4) The facility meets applicable CAISO grid planning standards, including standards that are Applicable Reliability Criteria.
- (b) The proponent of a facility that has been determined by the CAISO to meet the requirements of Section 24.1.3.1(a) shall provide the CAISO with information concerning the requirements of this subsection not less than ninety (90) days prior to the planned commencement of construction, and the facility shall qualify as a Location Constrained Resource Interconnection Facility if the CAISO determines that both of the following requirements are met:
 - (1) The addition of the capital cost of the facility to High Voltage TRR of a Participating TO will not cause the aggregate of the net investment of all LCRIFs (net of the portion of the capital costs of LCRIFs credited to Participating TO's TRRs pursuant to Section 26.6 included in the High Voltage TRRs of all Participating TOs to exceed fifteen percent (15%) of the aggregate of the net investment of all Participating TOs in all High Voltage Transmission Facilities reflected in their High Voltage TRRs in effect at the time of the CAISO's evaluation of the facility; and

- (2) Existing or prospective owners of LCRIGs have demonstrated their intention to connect LCRIGs to the facility consistent with the requirements of Section 24.1.3.2.
- (c) Each Participating Transmission Owner shall report annually to the CAISO the amount of its net investment in LCRIFs, the portion of the capital costs of LCRIFs credited to its TRR, and its net investment in High Voltage Transmission Facilities reflected in its High Voltage TRR, to enable the CAISO to make the determination required under Section 24.1.3.1(b)(1).

24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs have demonstrated interest in the LCRIF by one of the following methods:
 - executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer;
 - (ii) being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures or Small Generator Interconnection Procedures, as

applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or

(iii) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward study costs performed in connection with the Large Generator Interconnection Procedures or Small Generator Interconnection Procedures, whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

24.1.3.3 Coordination With Transmission Additions Proposed by Non-Participating Transmission Owners.

In the event that a facility proposed as an LCRIF would connect to LCRIGs in an Energy Resource Area that would also be connected by a transmission facility that is in existence or is proposed to be constructed by an entity that is not a Participating Transmission Owner and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO shall coordinate with the entity owning or proposing that transmission facility through any regional planning process to avoid the unnecessary construction of duplicative transmission additions to connect the same LCRIGs to the CAISO Controlled Grid.

24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

(a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO grid planning standards, including standards that are Applicable Reliability Criteria.

- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO planning process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
 - (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
 - (2) The capacity of LCRIGs in the CAISO's interconnection queue for each Energy Resource Area;
 - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
 - (4) Whether, and if so, the extent to which the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
 - (5) Whether, and if so, the extent to which the facility would create a risk of stranded costs.

24.2 [NOT USED] Transmission Planning and Coordination.

The ISO shall actively participate with each Participating TO and the other Market Participants in the ISO Controlled Grid planning process in accordance with the terms of this ISO Tariff and the Transmission Control Agreement.

24.2.1 Each Participating TO with a PTO Service Territory shall develop annually a transmission expansion plan covering the next five years plus a ten-year case for the Loads that are geographically embedded within its PTO Service Territory and are within the ISO Control Area, even if such Loads are served by another Participating TO. Such Participating TO shall coordinate with the ISO and other Market Participants in the development of such plan. The Participating TO shall be responsible for

ensuring that its transmission expansion plan meets all Applicable Reliability Criteria.

24.2.2 The ISO shall review the Participating TOs' transmission expansion plans for the PTO Service Territory, whether or not such plans are subject to Section 24.2.1, to ensure that each Participating TO's expansion plans meet the Applicable Reliability Criteria. The Participating TO will provide the necessary assistance and information as part of the coordinated planning process to the ISO to enable it to carry out its own studies for these purposes. If the ISO finds that the Participating TO's plan or projects do not meet the Applicable Reliability Criteria, the ISO will provide comments and the Participating TO will reassess its plans, as appropriate. The ISO may also propose new projects or suggest project changes (e.g., timing, project size) for consideration by the Participating TO's expansion plan. Changes or additions not accepted by the TO will be included in the Participating TO's expansion plan. Changes or additions not accepted in the coordinated planning process will be resolved through the ISO ADR Procedure.

24.2.3 The Participating TO will act as a Project Sponsor for Participating TO proposed economic or reliability projects that are included in its expansion plan. The Participating TO shall provide to the ISO any information that the ISO requires to enable the ISO to comply with WECC and any other applicable regional coordination requirements pursuant to Section 24.6.

24.2.4 The ISO will be a member of the WECC and other applicable regional organizations and participate in WECC's operation and planning committees, and in other applicable regional coordinated planning processes. Neither the ISO nor any Participating TO nor any Market Participant shall take any position before the WECC or a regional organization that is inconsistent with a binding decision reached through the ISO ADR Procedure.

24.3 [NOT USED]Studies to Determine Facilities to be Constructed.

Where a Participating TO is obligated to construct or expand facilities in accordance with this ISO Tariff or where the ISO or any Market Participant requests that a Facility Study be carried out, the Participating TO (in coordination with the ISO or the relevant Market Participants as the case may require), shall perform the necessary study or studies to determine the appropriate facilities to be constructed in accordance with the terms set forth in the TO Tariff. The scope of and assumptions for any studies requested by a Project Sponsor of a transmission addition or upgrade on economic grounds must be acceptable to the Project

Sponsors and the ISO. Any dispute relating to a Facility Study Agreement (including any dispute over the scope of the study or its assumptions) shall be resolved through the ISO ADR Procedures.

24.4 [NOT USED]Operational Review.

The ISO will perform an operational review of all facilities that are to be connected to, or made part of, the ISO Controlled Grid to ensure that the facilities being proposed provide for acceptable operating flexibility and meet all its requirements for proper integration with the ISO Controlled Grid. If the ISO finds that such facilities do not provide for acceptable operating flexibility or do not adequately integrate with the ISO Controlled Grid, the Participating TO will reassess its determination of the facilities required to be constructed.

24.5 [NOT USED]State and Local Approval and Property Rights.

24.5.1 The Participating TO shall be obligated to make a good faith effort to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of transmission additions or upgrades required to be constructed in accordance with this ISO Tariff. This obligation includes the Participating TO's use of eminent domain authority, where provided by state law.

24.5.2 If the Participating TO cannot secure any such necessary approvals or property rights and consequently is unable to construct a transmission addition or upgrade, it shall promptly notify the ISO and the Project Sponsor and shall comply with its obligations under the TO Tariff to convene a technical meeting to evaluate alternative proposals. The ISO shall take such action as it reasonably considers appropriate, in coordination with the Participating TO, the Project Sponsor (if any) and other affected Market Participants, to facilitate the development and evaluation of alternative proposals including, where possible, conferring on a third party the right to build the transmission addition or upgrade.

24.5.3 Where it is possible for a third party to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of transmission additions or upgrades required to be constructed in accordance with this ISO Tariff (including the use of eminent domain authority, where provided by state law) the ISO may confer on a third party the right to

build the transmission addition or upgrade which shall enter into the Transmission Control Agreement in relation to such transmission addition or upgrade.

24.6 [NOT USED] WECC and Regional Coordination.

The Project Sponsor will have responsibility for completing any applicable WECC requirements and other applicable regional coordination and rating study requirements to ensure that a proposed transmission addition or upgrade meets regional planning requirements. The Project Sponsor may request the Participating TO to perform this coordination on behalf of the Project Sponsor at the Project Sponsor's expense.

24.7 Cost Responsibility for Transmission Additions or Upgrades.

Cost responsibility for transmission additions or upgrades constructed pursuant to this Section 24 of <u>Appendix EE</u> (including the responsibility for any costs incurred under Section 24.76 of Appendix EE) shall be determined as follows:

24.7.1 Where a Project Sponsor commits to pay the full cost of a transmission addition or upgrade as set forth in Section 24.1.1(a).2, of Appendix EE the full costs shall be borne by the Project Sponsor.

24.7.2 Where the need for a transmission addition or upgrade is determined by the ISO or as a result of the ISO ADR Procedure as set forth in Sections 24.1.1(b)-(c), 24.1.2, and 24.1.4 of Appendix <u>EE</u>-3, the cost of the transmission addition or upgrade shall be borne by the Participating TO that will be the owner of the transmission addition or upgrade and shall be reflected in its Transmission Revenue Requirement.

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ISO TARIFF APPENDIX EE

Transmission Expansion and Planning Process

PART A. Transmission Expansion and Planning Process

24.1 Determination of Need for Proposed Transmission Projects.

A Participating TO, Market Participant, the CAISO, the CPUC, or CEC may propose a transmission

system addition or upgrade, and the CAISO will determine, in accordance with this Section 24.1 of this Appendix EE, whether the transmission addition or upgrade is needed, where it will (1) promote economic efficiency, (2) maintain System Reliability, (3) satisfy the requirements of a Location Constrained Resource Interconnection Facility, or (4) maintain the simultaneous feasibility of allocated Long-Term CRRs. CAISO management can determine the need for transmission additions or upgrades with an estimated capital investment of less than \$50 million without CAISO Governing Board approval. The determination of need by CAISO management for transmission additions or upgrades with an estimated capital cost of \$50 million or more must be approved by the CAISO Governing Board.

24.1.1 Economically Driven Projects.

The determination that a transmission addition or upgrade is needed to promote economic efficiency shall be made in accordance with this Section 24 of this Appendix EE and the Business Practice Manual in any of the following ways:

(a) Where a Project Sponsor proposes a Merchant Transmission Facility and demonstrates to the CAISO the financial capability to pay the full cost of construction and operation of the Merchant Transmission Facility. The Merchant Transmission Facility must mitigate all operational concerns identified under Section 24.5 of this Appendix EE to the satisfaction of the CAISO, in consultation with the Participating TO(s) in whose PTO Service Territory the Merchant Transmission Facility will be located, and ensure the continuing feasibility of allocated Long Term CRRs over the length of their terms. To ensure that the Project Sponsor is financially able to pay the construction and operating costs of the Merchant Transmission Facility, and where the Participating TO is not the Project Sponsor and is to construct the Merchant Transmission Facility under Section 24.1 of this Appendix EE, the CAISO in cooperation with the Participating TO may require (1) a demonstration of creditworthiness (e.g., an appropriate credit rating), or (2) sufficient security in the form of an unconditional and irrevocable letter of credit or other similar security sufficient to meet its responsibilities and obligations for the full costs of the transmission addition or

upgrade.

- Where a Project Sponsor, the CPUC, or CEC proposes a transmission addition (b) or upgrade during the Request Window and the project is approved by the CAISO Governing Board, or a Participating TO proposes a transmission upgrade or addition to an existing transmission facility with an estimated capital cost of less than \$50 million in accordance with the Study Plan and the project is included in the CAISO annual Transmission Plan. In determining whether to approve the project, the CAISO Governing Board or CAISO management, as applicable, shall consider the degree to which, if any, the benefits of the project outweigh the costs, in accordance with the procedures and using the technical studies set forth in the Business Practice Manual. The benefits of the project may include, but need not be limited to, a calculation of any reduction in production costs, Congestion costs, Transmission Losses, capacity or other electric supply costs resulting from improved access to cost-efficient resources, and environmental costs. The cost of the project must consider any estimated costs identified under Section 24.1.4 of this Appendix EE to maintain the simultaneous feasibility of allocated Long Term CRRs for the length of their term. The CAISO management or CAISO Governing Board, as appropriate, in determining whether to approve or recommend the project, shall also consider the comparative costs and benefits of viable alternatives to the proposed transmission upgrade or addition, including (1) other transmission additions or upgrades, or the effects of other transmission additions or upgrades proposed under Section 24.2 of this Appendix EE during the Transmission Planning Process cycle, (2) Demand-side management, (3) acceleration or expansion of any transmission upgrade or addition already approved by the CAISO Governing Board or included in any CAISO annual Transmission Plan, or (4) Generation.
- (c) Where the CAISO proposes a transmission addition or upgrade during the CAISO's Transmission Planning Process and the project is approved by the

CAISO Governing Board or included in the CAISO annual Transmission Plan, as appropriate. In determining whether to approve the CAISO proposed transmission addition or upgrade, the CAISO Governing Board and CAISO management shall apply the same factors set forth in Section 24.1.1(b) of this Appendix EE. If approved by the CAISO Governing Board or CAISO management, as appropriate, the CAISO will designate one or more of the Participating TOs with PTO Service Territories in which the terminus of the transmission addition or upgrade will be located to act as Project Sponsor. Where two or more Participating TOs are designated as Project Sponsors, such CAISO designation will include the proportionate responsibility between or among Participating TOs to own, construct, and finance the transmission addition or upgrade. If a Participating TO refuses to act as a Project Sponsor under this Section 24.1.1(c) of this Appendix EE, the CAISO will first request other designated Participating TO(s) to assume the remainder or greater proportionate responsibility, and if no other Participating TO had been designated or is willing to increase its proportionate responsibility, the CAISO may solicit bids to finance. own, and construct the transmission addition or upgrade.

24.1.1.1 Information Requirements for Economic Transmission Projects.

The Project Sponsor and relevant Participating TOs shall provide any necessary assistance and information to the CAISO to enable the CAISO to determine that a transmission upgrade or addition is needed to promote economic efficiency, and will perform all studies required by the adopted Study Plan in a manner consistent with the Business Practice Manual. A Project Sponsor of an economically driven transmission upgrade or addition to promote economic efficiency under Section 24.1.1 of this Appendix EE shall also provide in its proposal a statement whether the proposed upgrade or addition will be a Merchant Transmission Facility.

24.1.2 Reliability Driven Projects.

The CAISO in coordination with each Participating TO with a PTO Service Territory will, consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3 of this Appendix EE and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 of the CAISO Tariff. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 of this Appendix EE is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

Sections 24.1.3 – 24.1.3.4 Location Constrained Resource Interconnection Amendment language as filed in Docket No. ER08-140, October 31, 2007, pending FERC Order. The LCRI language is included and further revised for consistency with this Order 890 Transmission Planning Compliance Filing Docket No. OA08-__.]

24.1.3. Location Constrained Resource Interconnection Facility Projects.

<u>The CAISO, CPUC, CEC, a Participating TO or any other Market Participant may propose a transmission</u> addition as a Location Constrained Resource Interconnection Facility. A proposal shall include the <u>following information, to the extent available:</u>

- (a) Information showing that the proposal meets the requirements of Section 24.1.3.1 of this Appendix EE; and
- (b) A description of the proposed facility, including the following information:
 - (1)
 Transmission studies demonstrating that the proposed facility satisfies the

 applicable CAISO grid planning standards, including planning standards that are

 Applicable Reliability Criteria and CAISO Planning Standards;
 - (2) Identification of the most feasible and cost-effective alternative transmission additions, which may include network upgrades, that would accomplish the objective of the proposal;
 - (3) A planning level cost estimate for the proposed facility and all proposed alternatives;
 - (4) An assessment of the potential for the future connection of further transmission additions that would convert the proposed facility into a network transmission facility, including conceptual plans;
 - (5) The estimated in-service date of the proposed facility; and
 - (6) A conceptual plan for connecting potential LCRIGs, if known, to the proposed <u>facility.</u>

24.1.3.1 Criteria for Qualification as a Location Constrained Resource Interconnection Facility.

- (a) The CAISO shall conditionally approve a facility as a Location Constrained Resource Interconnection Facility if it determines that the facility is needed and all of the following requirements are met:
 - (1)
 The facility is to be constructed for the primary purpose of connecting to the

 CAISO Controlled Grid two or more Location Constrained Resource

 Interconnection Generators in an Energy Resource Area, and at least one of the

 Location Constrained Resource Interconnection Generators is to be owned by an

entity(ies) that is not an Affiliate of the owner(s) of another Location Constrained Resource Interconnection Generator in that Energy Resource Area;

- (2) The facility will be a High Voltage Transmission Facility;
- (3) At the time of its in-service date, the facility will not be a network facility and would not be eligible for inclusion in a Participating TO's TRR other than as an LCRIF; and
- (4) The facility meets a Applicable Reliability Criteria and CAISO grid pPlanning sStandards, including standards that are Applicable Reliability Criteria.
- (b) The proponent of a facility that has been determined by the CAISO to meet the requirements of Section 24.1.3.1(a) of this Appendix EE shall provide the CAISO with information concerning the requirements of this subsection not less than ninety (90) days prior to the planned commencement of construction, and the facility shall qualify as a Location Constrained Resource Interconnection Facility if the CAISO determines that both of the following requirements are met:
 - (1) The addition of the capital cost of the facility to the High Voltage TRR of a Participating TO will not cause the aggregate of the net investment of all LCRIFs (net of the portion of the capital costs of LCRIFs credited to Participating TO's' TRRs pursuant to Section 26.6 included in the High Voltage TRRs of all Participating TOs to exceed fifteen percent (15%) of the aggregate of the net investment of all Participating TOs in all High Voltage Transmission Facilities reflected in their High Voltage TRRs in effect at the time of the CAISO's evaluation of the facility); and
 - (2) Existing or prospective owners of LCRIGs have demonstrated their intention to connect LCRIGs to the facility consistent with the requirements of Section 24.1.3.2 of this Appendix EE.
- (c) Each Participating Transmission Owner shall report annually to the CAISO the amount of its net investment in LCRIFs, the portion of the capital costs of LCRIFs credited to its

TRR, and its net investment in High Voltage Transmission Facilities reflected in its High Voltage TRR, to enable the CAISO to make the determination required under Section 24.1.3.1(b)(1) of this Appendix EE.

24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.

<u>A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of</u> the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b)
 to the extent the showing pursuant to Section 24.1.3.2(a) of Appendix EE does not

 constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's

 demonstration of the remainder of the required minimum level of interest must include a

 showing that additional LCRIGs have demonstrated interest in the LCRIF by one of the

 following methods:
 - (i) executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer;
 - (ii) being in the CAISO's interconnection queue and paying a deposit to the CAISO
 equal to the sum of the minimum deposits required of an Interconnection
 Customer for all studies performed in accordance with the Large Generator
 Interconnection Procedures or Small Generator Interconnection Procedures, as
 applicable to the LCRIG, less the amount of any deposits actually paid by the
 LCRIG for such studies. The deposit shall be credited toward such study costs.
 If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid
 under this provision shall be refundable to the extent it exceeds costs incurred by
 the CAISO for such studies; or

(iii) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward study costs performed in connection with the Large Generator Interconnection Procedures or Small Generator Interconnection Procedures, whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

24.1.3.3 Coordination With Transmission Additions Proposed by Non-Participating Transmission Owners.

In the event that a facility proposed as an LCRIF would connect to LCRIGs in an Energy Resource Area that would also be connected by a transmission facility that is in existence or is proposed to be constructed by an entity that is not a Participating Transmission-Owner and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO shall coordinate with the entity owning or proposing that transmission facility through any regional planning process to avoid the unnecessary construction of duplicative transmission additions to connect the same LCRIGs to the CAISO Controlled Grid.

24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 of this Appendix EE is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO grid pPlanning sStandards, including standards that are Applicable Reliability Criteria.
- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission pPlanning
pProcess, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:

- (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area:
- (2) The capacity of LCRIGs in the CAISO's interconnection queue for each Energy Resource Area;
- (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
- (4) Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
- (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

24.1.4 Maintaining the Feasibility of Allocated Long Term CRRs.

The CAISO is obligated to ensure the continuing feasibility of Long Term CRRs that are allocated by the CAISO over the length of their terms. In furtherance of this requirement the CAISO shall, as part of its annual Transmission Planning Process cycle, test and evaluate the simultaneous feasibility of allocated Long Term CRRs, including, but not limited to, when acting on the following types of projects: (a) planned or proposed transmission projects; (b) Generating Unit or transmission retirements; (c) Generating Unit interconnections; and (d) the interconnection of new Load. Pursuant to such evaluations the CAISO shall identify the need for any transmission additions or upgrades required to ensure the continuing feasibility of allocated Long Term CRRs, over the length of their terms. In assessing the need for transmission additions or upgrades to maintain the feasibility of allocated Long Term CRRs, the CAISO, in coordination with the Participating TOs and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects; Demand-side management; Remedial Action Schemes; constrained-on Generation; interruptible Loads; reactive support; or in cases where the infeasible Long Term CRRs involve a small magnitude of megawatts, ensuring against the risk of any potential revenue shortfall using the CRR Balancing Account

and uplift mechanism in Section 11.2.4 of the CAISO Tariff. As part of the CAISO's Transmission Planning Process, the Participating TOs and Market Participants shall provide the necessary assistance and information to the CAISO to allow it to assess and identify transmission additions or upgrades that may be necessary under Section 24.1.4 of this Appendix EE. To the extent a transmission upgrade or addition is deemed needed to maintain the feasibility of allocated Long Term CRRs in accordance with this Section and included in the CAISO's annual Transmission Plan, the CAISO will designate the Participating TO(s) with a PTO Service Territory in which the transmission upgrade or addition is to be located as the Project Sponsor(s), responsible to construct, own and/or finance, and maintain such transmission upgrade or addition.

24.2 Transmission Planning and Coordination.

The CAISO shall perform the CAISO's Transmission Planning Process on an annual cycle in accordance with the terms of this CAISO Tariff, the Transmission Control Agreement, and the Business Practice Manual. The Transmission Planning Process shall, at a minimum:

- (a) Coordinate and consolidate the transmission needs of the CAISO Control Area into a single plan, which will be assessed on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards, in a manner that promotes the economic efficiency of the CAISO Controlled Grid and considers federal and state environmental and other policies affecting the provision of Energy.
- (b) Reflect a planning horizon covering a minimum of ten (10) years that considers transmission enhancements and expansions, Demand Forecasts, Demand-side management, and capacity forecasts relating to generation technology type, additions and retirements, and such other factors as the CAISO determines are relevant.
- (c)
 Seek to avoid unnecessary duplication of facilities and ensure the simultaneous

 feasibility of the CAISO Transmission Plan and the transmission plans of

 interconnected Control Areas, and otherwise coordinate with regional and sub

regional transmission planning processes and entities in accordance with Section 24.8 of this Appendix EE.

- (d)
 Identify existing and projected limitations of the CAISO Controlled Grid's

 physical, economic or operational capability or performance and identify

 transmission upgrades and additions, including alternatives thereto, deemed

 needed in accordance with Section 24.1 of this Appendix EE to address the

 existing and projected limitations.
- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U.

24.2.1 CAISO Planning Standards Committee.

The CAISO shall maintain a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan under Section 24.2.3 of this Appendix EE; however, additional meetings, web conferences, teleconferences may be scheduled as needed. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee. The CAISO Vice President of Planning and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of the effective date of Section 24.2 of this Appendix EE, and must include in the report to the CAISO <u>Governing Board a summary of the positions of parties with respect to the proposed modifications to the</u> <u>CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market</u> <u>Participants or other interested parties.</u>

24.2.2 Request Window.

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1 of this Appendix EE, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 of this Appendix EE not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U;
- (c)
 Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term

planning studies, or as alternatives to transmission additions or upgrades; and

(e) Requests for Economic Planning Studies.

24.2.2.1 CAISO Assessment of Request Window Proposals.

Following the submittal of a proposal for a transmission addition or upgrade, Demand response program, or generation project during the Request Window in accordance with Section 24.2.2 of this Appendix EE, the CAISO will determine whether the proposal will be included in the Unified Planning Assumptions or Study Plan as appropriate. A proposal can only be included in the Unified Planning Assumptions or Study Plan upon the determination by the CAISO that:

- (a) the proposal satisfies the information requirements for the particular type of project submitted as set forth in templates included in the Business Practice Manual;
- (b)the proposal is not functionally duplicative of transmission upgrades or additionsthat have previously been approved by the CAISO; and
- (c) the proposal, if a sub-regional or regional project that affects other
 interconnected Control Areas, has been reviewed by the appropriate subregional or regional planning entity, is not inconsistent with such sub-regional or
 regional planning entity's preferred solution or project, and has been determined
 to be appropriate for inclusion in the CAISO Study Plan, rather than, or in
 addition to, being included in or deferred to the planning process of the subregional or regional planning entity.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will notify the Market Participant submitting the proposal of any deficiencies in the proposal and provide the Market Participant an opportunity to correct the deficiencies. The failure to correct the deficiency precludes the proposal from inclusion in the Study Plan. The CAISO will notify the Market Participant submitting the proposal will be included in the Study Plan.

24.2.2.2 CAISO Assessment of Requests for Economic Planning Studies Received During the Request Window.

Following the submittal of a request for an Economic Planning Study during the Request Window in accordance with Section 24.2.2 of this Appendix EE, the CAISO will determine whether the request shall be designated as a High Priority Economic Planning Study for inclusion in the Unified Planning Assumptions and Study Plan. In making the determination, the CAISO will consider:

- (a) Whether the requested Economic Planning Study seeks to address Congestion identified by the CAISO in the Congestion Data Summary published for the applicable Transmission Planning Process cycle and the magnitude, duration, and frequency of that Congestion;
- (b)
 Whether the requested Economic Planning Study addresses delivery of

 Generation from Location Constrained Resource Interconnection Generators or

 network transmission facilities intended to access Generation from an Energy

 Resource Area (ERA) or similar resource area assigned a high priority by the

 CPUC or CEC:
- (c) Whether the requested Economic Planning Study is intended to address Local Capacity Area Resource requirements; or
- (d) Whether resource and Demand information indicates that Congestion described in the Economic Planning Study request is projected to increase over the planning horizon used in the Transmission Planning Process and the magnitude of that Congestion.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will post to the CAISO Website the list of selected High Priority Economic Planning Studies to be included in the draft Unified Planning Assumptions and Study Plan. The CAISO may assess requests for Economic Planning Studies individually or in combination where such requests may have common or complementary effects on the CAISO Controlled Grid. The CAISO will perform a maximum of five High Priority Economic Planning Studies; however, the CAISO retains discretion to perform greater than five High Priority Economic Planning Studies should stakeholder requests or patterns of Congestion or anticipated Congestion so warrant.

24.2.3 Additional Planning Information.

24.2.3.1 Information Provided by Participating TOs.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), Participating TOs shall provide the CAISO on an annual or periodic basis in accordance with the schedule and procedures and in the form required by the Business Practice Manual any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to: (1) modeling data for power flow, including reactive power, short-circuit and stability analysis; (2) a description of the total Demand to be served from each substation, including a description of any Energy efficiency programs reflected in the total Demand; (3) the amount of any interruptible Loads included in the total Demand (including conditions under which an interruption can be implemented and any limitations on the duration and frequency of interruptions); (4), a description of Generating Units to be interconnected to the Distribution System of the Participating TO, including generation type and anticipated Commercial Operation Date; (5) detailed power system models of their transmission systems that reflect transmission system changes, including equipment replacement not requiring approval by the CAISO; (6) Distribution System modifications; (7) transmission network information, including line ratings, line length, conductor sizes and lengths, substation equipment ratings, circuits on common towers and with common rights-of-ways and cross-overs, special protection schemes, and protection setting information; and (8) Contingency lists.

24.2.3.2 Information Provided by Participating Generators.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), Participating Generators shall provide the CAISO on an annual or periodic basis in accordance with the schedule, procedures and in the form required by the Business Practice Manual any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to (1) modeling data for short-circuit and stability analysis and (2) data, such as term, and status of any environmental or land use permits or agreements the expiration of which may affect that the operation of the Generating Unit.

24.2.3.3 Information Requested from Load Serving Entities.

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards), the CAISO shall solicit from Load Serving Entities through their Scheduling Coordinators information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term resource plans; (2) existing long-term contracts for resources and transmission service outside the CAISO Control Area; (3) resource capacity and Energy bid information received through requests for offers or similar solicitations; and (4) Demand Forecasts, including forecasted effect of Energy efficiency and Demand response programs.

24.2.3.4 Information Requested from Interconnected Control Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.

In accordance with Section 24.8 of this Appendix EE, the CAISO shall obtain or solicit from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection queue information; (4) Demand forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

24.2.3.5 Obligation to Provide Updated Information.

If material changes to the information provided under Sections 24.2.3.1 and 24.2.3.2 of this Appendix EE

occur during the annual Transmission Planning Process, the providers of the information must provide

notice to the CAISO of the changes.

24.2.4 Unified Planning Assumptions and Study Plan.

24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data

received during the Request Window and under Section 24.2.3 of this Appendix EE. The CAISO will also

use the following in the development of the Unified Planning Assumptions and Study Plan:

(1) WECC base cases for the relevant planning horizon;

- (2) transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;
- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of this Appendix EE;
- (4)
 Network Upgrades identified pursuant to Section 25, Appendix U or Appendix W

 relating to the CAISO's Large Generator Interconnection Procedures and

 Appendix AA relating to the CAISO's Small Generator Interconnection

 Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) regulatory initiatives, as appropriate, including state regulatory agency initiated programs;
- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

24.2.4.2 General Scope of Unified Planning Assumptions and Study Plan.

The Unified Planning Assumptions and Study Plan shall, at a minimum, describe:

- (a) the planning data and assumptions to be used, to the maximum extent possible,
 as a base case for each technical study to be performed in the Transmission
 Planning Process cycle, including, but not limited to, those related to Demand
 Forecasts and distribution, generation capacity additions and retirements, and
 transmission system modifications;
- (b)a list of each technical study to be performed in the Transmission PlanningProcess cycle and a summary of the technical study's objective or purpose;

- (c)
 a description of any modifications to the planning data and assumptions

 developed as the general base case in Section 24.2.4.2(a) of this Appendix EE

 made in each technical study performed in the Transmission Planning Process

 cycle;
- (d)a description of the software tools, methodology and other criteria used in eachtechnical study performed in the Transmission Planning Process cycle;
- (e) the identification of any entities directed to perform a particular technical study or portions of a technical study;
- (f)a proposed schedule for all stakeholder meetings to be held as part of theTransmission Planning Process cycle, and means for notification of any changesthereto, the location on the CAISO Website of information relating to thetechnical studies performed in the Transmission Planning Process cycle, and thename of a contact person at the CAISO for each technical study performed in theTransmission Planning Process cycle;
- (g)a list and description of each Economic Planning Study studied by the CAISO asa High Priority Economic Planning Study under Section 24.9 of this Appendix EE;and
- (h) to the maximum extent practicable, and where applicable, identify appropriate
 sensitivity analyses, including project or solution alternatives, to be performed as
 part of technical studies.

24.2.4.3 Preparation of Draft and Final Unified Planning Assumptions and Study Plan.

(a) Following review of relevant information, the CAISO will prepare and post on the CAISO Website a draft Unified Planning Assumptions and Study Plan. The CAISO will issue a Market Notice announcing the availability such draft, soliciting comments, and scheduling a stakeholder conference(s) as required by Section 24.2.4.3(c) of this Appendix EE.

- (b) All comments from stakeholders on the draft Unified Planning Assumptions and Study Plan will be posted by the CAISO to the CAISO Website.
- (c) Subsequent to the posting of the draft Unified Planning Assumptions and Study Plan, the CAISO will conduct a minimum of one stakeholder meeting open to Market Participants, electric utility regulatory agencies, and other interested parties to review, discuss, and recommend modifications to the draft Unified Planning Assumptions and Study Plan. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website.
- (d)
 Following the stakeholder conference(s) required by Section 24.2.4.2(c) of this

 Appendix EE, and under the schedule set forth in the Business Practice Manual,

 the CAISO will determine and publish to the CAISO Website the final Unified

 Planning Assumptions and Study Plan in accordance with the procedures set

 forth in the Business Practice Manual.

24.2.5 Development and Approval of Transmission Plan.

24.2.5.1 Technical Studies.

(a) In accordance with the Unified Planning Assumptions and Study Plan and the procedures and deadlines in the Business Practice Manual, the CAISO will perform, or direct the performance by third parties of, technical studies and other assessments necessary for the Transmission Plan and Transmission Planning Process, post the preliminary results on the CAISO Website, conduct a minimum of one stakeholder conference, and provide an opportunity for comments of the preliminary results. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. (b) All technical studies, whether performed by the CAISO or third party under the direction of the CAISO, must utilize the Unified Planning Assumptions for the particular technical study to the maximum extent practical, and deviations from the Unified Planning Assumptions for the particular technical study must be documented in the preliminary and final results of each technical study. The CAISO will measure the results of the studies against NERC planning standards, WECC planning standards, and the CAISO Planning Standards, and other criteria established by the Business Practice Manual. After consideration of the completion of, the technical studies and post the final study results on the CAISO Website.

24.2.5.2 Development of Transmission Plan.

- (a) In accordance with the schedule and procedures in the Business Practice
 Manual, the CAISO will post a draft Transmission Plan. The CAISO will
 subsequently conduct a stakeholder conference regarding the draft Transmission
 Plan and solicit comments, consistent with the timelines and procedures set forth
 in the Business Practice Manual. Additional stakeholder meetings, web
 conferences, or teleconferences may be scheduled as needed. All stakeholder
 meetings, web conferences, or teleconferences shall be noticed by Market Notice
 and such notice shall be posted to the CAISO Website. After consideration of
 comments, the CAISO will post a final Transmission Plan to the CAISO Website.
- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 of this Appendix EE, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 of this Appendix EE and for which need has not been formally determined by the CAISO Governing Board or management, as applicable,

under Section 24.1 of this Appendix EE, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle; (3) results of Economic Planning Studies performed during the Transmission Planning Process cycle; and (4) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition.

(c)The Transmission Plan may not include the results of certain technical studiesperformed as part of the Transmission Planning Process cycle identified in theUnified Planning Assumptions and Study Plan that were scheduled forcompletion after publication of the Transmission Plan for the TransmissionPlanning Process cycle.

24.2.5.3 Approval by the CAISO Governing Board.

The CAISO will present the Transmission Plan to the CAISO Governing Board at the first meeting of the year following the year in which the Transmission Plan is prepared. The Transmission Plan will be considered final once it has been presented to the CAISO Governing Board and will be posted on the CAISO Website. Transmission upgrades and additions for which CAISO Governing Board approval is required may be presented to the CAISO Governing Board for approval separate from presentation of the Transmission Plan.

24.3 Obligation to Construct Transmission Projects Included in Transmission Plan.

A Participating TO that has a PTO Service Territory shall be obligated to construct all transmission additions and upgrades that are determined by the CAISO Governing Board or management, as applicable, to be needed in accordance with the requirements of Section 24 of this Appendix EE and which: (1) are additions or upgrades to transmission facilities that are located within its PTO Service Territory, unless (a) it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory or (b) it does not own the facility being upgraded or added and the Project Sponsor is a Participating TO that elects to construct the transmission upgrade; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities that it owns, that are part of the CAISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 24.7 of the CAISO Tariff. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of a TO's obligations under this CAISO Tariff or as those rights may be conferred by the CAISO or may arise or exist pursuant to this CAISO Tariff.

24.4 Participating TO Study Obligation.

The Participating TO constructing or expanding facilities in accordance with Section 24.3 of this Appendix, will be directed by the CAISO to coordinate with the Project Sponsor or Participating TO(s) with PTO Service Territories in which the transmission upgrade or addition will be located, as appropriate, and other Market Participants to perform any study or studies necessary, including a Facility Study, to determine the appropriate facilities to be constructed in accordance with the CAISO Transmission Planning Process and the terms set forth in the TO Tariff.

24.5 Operational Review.

The CAISO will perform an operational review of all facilities studied as part of the CAISO Transmission Planning Process that are proposed to be connected to, or made part of, the CAISO Controlled Grid to ensure that the proposed facilities provide for acceptable operating flexibility and meet all its requirements for proper integration with the CAISO Controlled Grid. If the CAISO finds that such facilities do not provide for acceptable operating flexibility or do not adequately integrate with the CAISO Controlled Grid, the CAISO shall coordinate with the Project Sponsor and, if different, the Participating TO with the PTO Service Territory in which the facilities will be located to reassess and redesign the facilities required to be constructed. Transmission upgrades or additions that do not provide acceptable operating flexibility or do Plan or approved by CAISO management or the CAISO Governing Board, as applicable.

24.6 State and Local Approval and Property Rights.

24.6.1 The Participating TO obligated to construct facilities under this Section 24 must make a good faith effort to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of the required transmission additions or upgrades. This obligation includes the Participating TO's use of eminent domain authority, where provided by state law.

24.6.2 If the Participating TO cannot secure any such necessary approvals or property rights and consequently is unable to construct a transmission addition or upgrade found to be needed in accordance with Section 24.1 of this Appendix, it shall promptly notify the CAISO and the Project Sponsor, if any, and shall comply with its obligations under the TO Tariff to convene a technical meeting to evaluate alternative proposals. The CAISO shall take such action as it reasonably considers appropriate, in coordination with the Participating TO, the Project Sponsor, if any, and other affected Market Participants, to facilitate the development and evaluation of alternative proposals including, where possible, conferring on a third party the right to build the transmission addition or upgrade as set forth in Section 24.6.3 of this Appendix.

24.6.3 Where the conditions of Section 24.6.2 of this Appendix have been satisfied and it is possible for a third party to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of transmission additions or upgrades required to be constructed in accordance with this CAISO Tariff (including the use of eminent domain authority, where provided by state law), the CAISO may confer on a third party the right to build the transmission addition or upgrade, which third party shall enter into the Transmission Control Agreement in relation to such transmission addition or upgrade.

24.7 WECC and Regional Coordination.

The Project Sponsor will have responsibility for completing any applicable WECC requirements and rating study requirements to ensure that a proposed transmission addition or upgrade meets regional planning requirements. The Project Sponsor may request the Participating TO to perform this coordination on behalf of the Project Sponsor at the Project Sponsor's expense.

24.8 Regional and Sub-Regional Planning Process.

The CAISO will be a member of the WECC and other applicable regional or sub-regional organizations and participate in WECC's operation and planning committees, and in other applicable regional and subregional coordinated planning processes.

24.8.1 Scope of Regional or Sub-Regional Planning Participation.

The details of the CAISO's participation in regional and sub-regional planning processes are set forth in the Business Practice Manual. At a minimum, the CAISO shall be required to:

- (a) solicit the participation, whether through sub-regional planning groups or individually, of all interconnected Control Areas in the development of the Unified Planning Assumptions and Study Plan and in reviewing the results of technical studies performed as part of the CAISO's Transmission Planning Process in order to:
 - (1) coordinate, to the maximum extent practicable, planning assumptions,
 data and methodologies utilized by the CAISO, regional and sub-regional
 planning groups or interconnected Control Areas;
 - (2) ensure transmission expansion plans of the CAISO, regional and subregional planning groups or interconnected Control Areas are simultaneously feasible and seek to avoid duplication of facilities.
- (b) coordinate with regional and sub-regional planning groups regarding the entity to perform requests for Economic Planning Studies or other Congestion related studies;
- (c)
 transmit to applicable regional and sub-regional planning groups or

 interconnected Control Areas information on technical studies performed as part

 of the CAISO Transmission Planning Process;
- (d) post on the CAISO Website links to the planning activities of applicable regional and sub-regional planning groups or interconnected Control Areas.

24.8.2 Limitation on Regional Activities.

Neither the CAISO nor any Participating TO nor any Market Participant shall take any position before the WECC or a regional organization that is inconsistent with a binding decision reached through an arbitration proceeding pursuant to Section 13 of the CAISO Tariff.

24.9 Economic Planning Studies.

24.9.1 Congestion Data Summary.

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO shall post on the CAISO Website a Congestion Data Summary.

24.9.2 High Priority Economic Planning Studies.

High Priority Economic Planning Studies shall be performed in accordance with the standards and procedures established in the Business Planning Manual. Market Participants may conduct Economic Planning Studies that have not been designated as High Priority Economic Planning Studies at their own expense and may submit such studies for consideration in the development of the Transmission Plan when the CAISO provides notice of the stakeholder meeting regarding technical study results pursuant to Section 24.2.5.2 of this Appendix EE.

PART B. - DEFINITIONS

CAISO Planning	Reliability Criteria that: (1) address specifics not covered in the NERC
<u>Standards</u>	and WECC planning standards; (2) provide interpretations of the NERC
	and WECC planning standards specific to the CAISO Controlled Grid;
	and (3) identify whether specific criteria should be adopted that are more
	stringent than the NERC and WECC planning standards.
	* * *
CEC	The California Energy Commission or its successor.
	* * *
Congestion Data	A report issued by the CAISO on the schedule set forth in the Business
<u>Summary</u>	Practice Manual that sets forth historic Congestion on the CAISO
	Controlled Grid.
	* * *

<u>Critical Energy</u> Infrastructure Information (CEII)	Critical Energy Infrastructure Information shall have the meaning given the term in the regulations of FERC at 18 C.F.R. § 388.12, et seq. * * *
Economic Planning Study	A study performed to provide a preliminary assessment of the potential cost effectiveness of mitigating specifically identified Congestion.
<u>High Priority Economic</u> <u>Planning Study</u>	An Economic Planning Study performed by the CAISO for inclusion in the Transmission Plan and for which the CAISO assumes cost responsibility.
<u>Long Term Congestion</u> <u>Revenue Right (Long</u> <u>Term CRR)</u>	A Congestion Revenue Right differentiated by season and time-of-use period (on-peak and off-peak) with a term of ten years.
<u>Merchant Transmission</u> <u>Facility</u>	A transmission facility or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.
<u>NERC Reliability</u> <u>Standards for Modeling,</u> <u>Data and Analysis (NERC</u> <u>MOD Standards)</u>	A set of NERC Reliability Standards applicable to the transmission planning process.
<u>Planning Standards</u> <u>Committee</u>	The committee appointed under Section 24.2.1.
<u>Request Window</u>	The period of time as set forth in the Business Practice Manual during which transmission additions or upgrades, requests for Economic Planning Studies, and other transmission related information is submitted to the CAISO in accordance with Section 24.2.2 of Appendix <u>EE.</u>

Ctude Dian	The star to be developed surgest to Costies 24.4.2 of Assessing EF		
<u>Study Plan</u>	The plan to be developed pursuant to Section 24.4.3 of Appendix EE,		
	which sets forth the technical studies to be performed during the annual		
	Transmission Planning Process.		
	* * *		
Transmission Plan	The report prepared by the CAISO on annual basis pursuant to Section		
	24 of Appendix EE, which documents the outcome of the Transmission		
	Planning Process as defined in the Study Plan.		
	* * *		
Transmission Planner	A designation by NERC regarding responsibility to perform specified		
	transmission planning functions in accordance with the NERC Reliability		
	Standards.		
	* * *		
Transmission Planning	The process by which the CAISO assesses the CAISO Controlled Grid		
Process	as set forth in Section 24 of Appendix EE.		
	* * *		
Unified Planning	The assumptions to be developed pursuant to Section 24.4.3 of		
Assumptions			
	Appendix EE and used, to the maximum extent possible, in performing		
	technical studies identified in the Study Plan as part of the annual		
	Transmission Planning Process.		
	* * *		

ATTACHMENT C



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Business Practice Manual for the Transmission Planning Process

Order 890 Compliance

Version 1.0

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1. Introduction

Welcome to the CAISO's **BPM for the Transmission Planning Process.** In this Introduction, you will find the following information:

- The purpose of CAISO BPMs, in general
- > What you can expect from this specific CAISO BPM

1.1 **Purpose of California ISO Business Practice Manuals**

The Business Practice Manuals (BPMs) developed by the CAISO are intended to contain implementation details consistent with, and supported by, the CAISO Tariff —including instructions, rules, procedures, examples and guidelines for the administration, operation, planning, and accounting requirements of the CAISO and the markets. Exhibit 1-1 lists the currently available CAISO BPMs.

Title	
BPM for BPM Change Management	
BPM for Candidate CRR Holder Registration	
BPM for Compliance Monitoring	
BPM for Congestion Revenue Rights	
BPM for Credit Management	
BPM for Definitions and Acronyms	
BPM for Managing Full Network Model	
BPM for Market Instruments	
BPM for Market Operations	
BPM for Metering	
BPM for Outage Management	
BPM for Reliability Requirements	
BPM for Rules of Conduct Administration	
BPM for Scheduling Coordinator Certification and Termination	
BPM for Settlements and Billing	

Table 2: CAISO BPMs

1.2 Purpose of this Business Practice Manual

This BPM explains the CAISO Transmission Planning Process, as well as the annual Transmission Plan produced by this process. Additionally, the BPM discusses how other associated processes performed by the CAISO's Planning and Infrastructure Development Department serve to guide the enhancement and expansion of transmission facilities to ensure that the CAISO Controlled Grid can satisfy the needs of a competitive bulk power market in a reliable, economically efficient, and environmentally acceptable manner. In so doing, this BPM, together with corresponding CAISO Tariff provisions on the Transmission Planning Process,

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serve to fulfill the requirements of the Federal Energy Regulatory Commission's (FERC) Final Rule on *Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890* ("Order No. 890").¹ Among other things, this Order requires all transmission providers, including independent system operators, to implement and document, through open access Tariffs and other public postings, a coordinated, open, and transparent transmission planning process that complies with the planning principles and other requirements articulated in Order No. 890.

The provisions of this BPM are intended to be consistent with the CAISO Tariff. If, however, the provisions of this BPM conflict with the CAISO Tariff in any way, the CAISO is bound to operate in accordance with the CAISO Tariff. Any provision of the CAISO Tariff that may have been summarized or repeated in this BPM is only to aid understanding. Even though every effort will be made by the CAISO to update the information contained in this BPM and to notify Market Participants of changes, *it is the responsibility of each Market Participant* to ensure that he or she is using the most recent version of this BPM and to comply with all applicable provisions of the CAISO Tariff.

Any reference in this BPM to the CAISO Tariff, a given agreement, or any other BPM or instrument, is intended to refer to that Tariff, agreement, BPM or instrument as modified, amended, supplemented or restated in the most current version.

The captions and headings in this BPM are intended solely to facilitate reference and not to have any bearing on the meaning of any of the terms and conditions of this BPM.

1.3 Specific Topics Covered by this BPM

In this BPM, the following general topics will be covered:

- Overview of the CAISO Transmission Planning Process that covers the schedules and scope of each stage of the process.
- A description of the types or categories of transmission upgrades identified through the Transmission Planning Process, including:
 - o Reliability Transmission Projects
 - Economic Transmission Projects
 - o Location Constrained Resource Interconnections
 - o Long-term Congestion Revenue Right (Long Term CRRs) Projects
- > The "stages" that form the Transmission Planning Process, such as:
 - o Development of Unified Planning Assumptions and Study Plans
 - o Performing technical studies
 - Documentation of technical study results and development of CAISO Transmission Plan
- > Other key components related to the Transmission Planning Process include:
 - Request Window, including instructions and requirements for submitting study requests or project proposals to be considered in the CAISO Transmission Plan

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¹ Preventing Undue Discrimination and Preference in Transmission Service, Order No. 890, III FERC Stats. & Regs., Regs. Preambles ¶31,241 (2007).

- Project final approval principles
- Information requirements from various participants to facilitate the Transmission Planning Process
- The availability of planning information provided by CAISO and accessibility of the information
- The CAISO's involvement in regional and sub-regional transmission planning with neighboring entities, and sub-regional and regional planning groups

2. Overview of the Transmission Planning Process and Annual Transmission Plan

The continuing development and growth of the CAISO's competitive markets necessarily rest, in significant part, on a foundation of adequate transmission infrastructure. Therefore, a primary function of the CAISO is to plan for, and promote, the enhancement and expansion of transmission capability within its footprint. The CAISO, with cooperation from Participating Transmission Owners (Participating TOs), Market Participants, neighboring transmission providers, and state regulatory authorities, performs this function through the Transmission Planning Process in accordance with the terms of Section 24 of the CAISO Tariff,² as well as the business rules set forth in this BPM. The Transmission Planning Process ensures independent analyses and recommendations, supported by timely and meaningful opportunities for broad stakeholder input and independent CAISO Board of Governor approval, all of which are ultimately incorporated into an annual CAISO Transmission Plan, project-specific reports, and other specific transmission-dependent resource adequacy studies.

2.1 The CAISO Transmission Planning Process

The CAISO's Transmission Planning Process is an integrated, open, participatory and transparent process that focuses on ensuring reliable, economically efficient, and nondiscriminatory use of the transmission system. It accounts for three levels of transmission planning to meet these objectives:

- Local planning Planning for the transmission systems of the CAISO's Participating TOs to meet the needs of Load Serving Entities serving Load within the CAISO Control Area
- Sub-regional planning Planning at this level encompasses two components. First, the CAISO itself conducts sub-regional planning by aggregating the assessment of transmission needs of the Participating TOs and LSEs within the CAISO Balancing Authority Area. Second, as part of the foregoing process, the CAISO plans for the needs of the CAISO Balancing Authority Area, through the reciprocal exchange of transmission plans and other information, among the CAISO, Participating TOs and transmission systems neighboring the CAISO Balancing Authority Area (Interconnected Balancing Authority Areas) and/or established sub-regional planning entities. The CAISO believes this type of planning broadly facilitates the consistency of data, identification of

² Reference to Section 24 of the CAISO Tariff also constitutes reference to Appendix EE of the CAISO Tariff. Appendix EE includes the majority of the CAISO Tariff provisions governing the Transmission Planning Process prior to the effective date of MRTU. Appendix EE will expire upon the commencement of MRTU and the relevant tariff sections will again be found in Section 24 of the CAISO Tariff. When there is a potential conflict between the pre-MRTU Tariff provisions and the MRTU Tariff provisions, this BPM references the MRTU Tariff provisions.

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efficiencies, and the avoidance of duplication to ensure simultaneous feasibility of local planning outcomes

Regional planning – Planning across sub-regions through the WECC, including by means of the CAISO's membership and active participation in WECC committees such as Transmission Expansion Planning Policy Committee (TEPPC)

Further, the implementation of the Transmission Planning Process is generally achieved through three stages:

- Development of Unified Planning Assumptions and Study Plan
- Performance of technical analysis
- > Documentation of technical study results and development of CAISO Transmission Plan

Finally, there are standards and interrelated planning information that drive the Transmission Planning Process, including, but not limited to:

- > NERC/WECC Regional Reliability Council Transmission Planning Standards and Criteria
- CAISO Grid Planning Standards
- > CAISO Annual Report on Market Issues and Performance
- Participating TO reliability assessments
- Economic Planning Studies and Economic Transmission Project proposals, including Merchant Transmission Facilities
- Sub-regional transmission expansion plans
- Local Capacity Area Resource requirements
- Generator Interconnection Requests
- Generation and import deliverability assessments
- Reliability and congestion concerns from CAISO Short-term plan
- Long-term CRR feasibility assessments
- State initiatives, mandates, and policies.

2.1.1 Roles of Participants in the Transmission Planning Process

In order to achieve this multi-tiered planning perspective, the CAISO engages with its Participating TOs; stakeholders; state regulatory agencies, such as the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC); Publicly Owned Utilities (POUs); regional and sub-regional planning committees or other neighboring transmission providers; Load Serving Entities (LSEs); and affected customers. The anticipated roles of respective participants are summarized as follows:

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No	Participant	Roles and Responsibilities
1	CAISO	Leads the CAISO Transmission Planning Process; responsible for planning of CAISO Controlled Grid; performs NERC's Planning Authority functions; conducts transmission planning studies for the CAISO Controlled Grid; proposes transmission projects and conducts independent review of all proposed projects and project alternatives; facilitates a Request Window for proposing new transmission projects and/or study requests under the scope of Economic Planning Studies; approves beneficial projects consistent with CAISO Tariff authority; administers LGIP/SGIP processes; participates in regional/sub-regional planning groups; and conducts simultaneous feasibility analyses for Long Term CRRs.
2	PTOs	Participate in the CAISO Transmission Planning Process; perform NERC's Transmission Planner functions, including conducting local and bulk transmission planning studies of its service area under the direction of the CAISO for inclusion in the CAISO Transmission Planning Process; propose new facilities; prepare meaningful cost estimates for proposed and alternative facilities; conduct interconnection studies, facility studies, participate in regional/sub-regional planning groups, and construct projects when designated under the CAISO Tariff.
3	Load Serving Entities (LSE)	Participate in the CAISO Transmission Planning Process; assist in capacity planning and conduct procurement to meet resource adequacy requirements; obtain CRRs, voluntarily provide resource planning information, and propose desired non-wire alternatives.
4	Publicly Owned Utilities (POU)	Participate in the CAISO Transmission Planning Process; voluntarily exchange information and coordinate plans with CAISO and Participating TOs and other regional and sub- regional planning groups.
5	California Energy Commission (CEC)	Participates in the CAISO Transmission Planning Process; conducts Integrated Energy Policy Report (IEPR) and other strategic plans; provides data, permitting and approval of new thermal generation.
6	California Public Utilities Commission (CPUC)	Participates in the CAISO Transmission Planning Process; issues CPCN/environmental permits for new transmission projects, and administers the resource portfolio requirements of its jurisdictional LSEs, including the Renewable Portfolio Standard (RPS).
7	Other Stakeholders/Affected	Participate in the CAISO Transmission Planning process; propose new transmission projects; request studies, and

Table 3: Roles and Responsibilities of Transmission Planning Participants

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No	Participant	Roles and Responsibilities
	Customers	provide relevant information and data.
8	Regional and Sub- regional Planning Groups, including TEPPC and neighboring transmission providers	Participate in the CAISO Transmission Planning Process; perform transmission planning studies (including congestion studies) when appropriate; propose new conceptual facilities, along with analyses of alternatives; exchange information toward shaping transmission plans from sub-regional and regional perspectives; and consider CAISO's plans with respect to the larger regional or sub-regional transmission plan.

The integrated and coordinated nature of the Transmission Planning Process is set forth in Figure 1.

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BPM for the Transmission Planning Process



Figure 1: Coordination among Entities Regarding California ISO Transmission Plan

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2.1.2 General Description of Stages of Transmission Planning Process

The CAISO conducts the Transmission Planning Process on overlapping cycles of approximately 18 months, beginning in August of Y1and ending in January of Y3. This cycle is comprised of a Request Window and the three general planning stages described in Section 2.1, as well as several supporting processes that culminate in the CAISO's Transmission Plan and other identified planning reports. The CAISO's planning horizon is a minimum of ten years and its Transmission Plan is presented to the CAISO Governing Board for review in January of each year.

2.1.2.1 Request Window

CAISO Tariff Section 24.2.2

The CAISO's Transmission Planning Process utilizes a Request Window to provide stakeholders with the opportunity to propose transmission projects, requests for Economic Planning Studies, resource alternatives, *i.e.*, Demand management programs or Generation, or otherwise submit additional relevant data to the CAISO for inclusion in the following year's annual Transmission Planning Process. <u>The Request Window opens August 15th and closes</u> <u>November 15th of each planning cycle.</u>

Certain inputs into the Transmission Planning Process must come through the Request Window. These include:

- Economic Transmission Project proposals, including upgrades or additions proposed to reduce Local Capacity Area Resource requirements, reduce or eliminate Congestion, or Merchant Transmission Facilities to obtain Merchant Transmission Congestion Revenue Rights. Definitions and distinctions between Economic and Reliability Transmission Projects are defined in section 4.2.1 and 4.2.2 of this BPM.
- Location Constrained Resource Interconnection Facilities (LCRIFs) not otherwise identified through CAISO Interconnection Studies
- Economic Planning Study requests
- Specific Demand management, Generation, and other resources for potential inclusion in the Transmission Planning Process analyses

The Request Window may, but need not apply to:

- Reliability Transmission Projects proposed by PTOs
- Network Upgrades identified through CAISO Interconnection Studies
- Location Constrained Resource Interconnection Facilities identified through CAISO Interconnection Studies
- Transmission upgrades or additions determined to be the appropriate mechanism to maintain the feasibility of allocated Long-term CRRs
- Operating solutions to reduce Local Capacity Requirements
- > Alternative solutions to Transmission Projects proposed during the Request Window.

The CAISO will apply "screening criteria" to select the transmission projects and Economic Planning Study requests received during the Request Window that will be included in the

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preparation of the Unified Planning Assumptions and Study Plan, which underlie the analyses performed as part of the following Transmission Planning Process cycle.

As further discussed in Section 3.4, the screening process generally assesses proposed transmission projects against three categories of criteria:

(1) whether the submissions are "complete" in that they provide all necessary data or information requested by the CAISO with respect to the particular category of submission;

(2) whether the proposal is or is not functionally duplicative of transmission upgrades or additions that have been previously approved by the CAISO; and

(3) whether the proposal, if a sub-regional or regional project that affects other interconnected Control Areas has been reviewed by the appropriate sub-regional planning entity and is not inconsistent with any sub-regional planning entity's preferred solution or project.

The CAISO applies separate screening criteria to study requests under Economic Planning Study to select which request will be designated High Priority Economic Planning Studies. High Priority Economic Planning Studies are included in the Study Plan for the upcoming planning cycle and will be performed by the CAISO at its cost. These study requests, if meeting the screening criteria and are regional (and potentially sub-regional) in scope such as impacting not only CAISO controlled area, shall be submit to WECC's Transmission Expansion Planning Policy Committee (TEPPC) or applicable sub-regional planning group. However, CAISO still have the responsibility to conduct Economic Planning studies for these requests if TEPPC does not select them in its study scope.

Similarly, other Economic Planning Studies not designated as High Priority Economic Planning Studies, but which meet the screening criteria and are regional (and potentially sub-regional) in scope, will be submitted to WECC's Transmission Expansion Planning Policy Committee (TEPPC) as part of its joint coordinated evaluation and prioritization process. The TEPPC process will determine whether the request is performed and by whom. Economic Planning Studies that are neither High Priority Economic Planning Studies nor regional or sub-regional in scope may still be performed at the proponent's expense and submitted to the CAISO for review and potential inclusion in the final Transmission Plan. The CAISO will coordinate with any third party performing its own study to ensure that the study is consistent with the data, assumptions, and methodology employed by the CAISO.

Any proposed transmission upgrades or additions that do not pass the screening process will be subject to the CAISO's alternative dispute resolution (ADR) procedures under Section 13 of the CAISO Tariff.

2.1.2.2 Stage 1: Unified Planning Assumptions and Study Plan

CAISO Tariff Sections 24.2.3 and 24.2.4

Stage 1 of the Transmission Planning Process involves development of Unified Planning Assumptions and Study Plan. The objective of this stage is to determine the goals of, and agree upon assumptions for, the various studies to be performed as part of a Transmission Planning Process cycle. Information from the Request Window is integrated into the development of the Unified Planning Assumptions and Study Plan. Input is also expected from other entities, such as the CEC, Participating TOs, POUs, CPUC, WECC, and potentially other sub-regional planning groups or neighboring transmission providers. The information obtained forms the basis of a draft Unified Planning Assumptions and Study Plan produced by the CAISO

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(see Attachment 1). The Unified Planning Assumptions and Study Plan provide stakeholders with a coordinated plan for completing all of the required and proposed studies during that Transmission Planning Process cycle. As such, the draft Unified Planning Assumptions and Study Plan will list all the studies to be conducted, describe basic planning assumptions and inputs, sources for those assumptions and inputs, how assumptions and inputs, sources for those assumptions and inputs, how assumptions and inputs will be applied, methodology, tools used, study criteria, (*i.e.* WECC Planning Standards), expected study outputs and assignments for performing specific analyses to Participating TOs and third parties as determined by the CAISO. Major milestones such as tentative schedules and locations of the meetings, postings of information, how the comments should be submitted to CAISO and how they will be responded, along with information of subject matter experts (SMEs) are also part of the scope of the study plan.

Generally, the components of the Unified Planning Assumptions are Demand, transmission system topology, generation assumptions, and imports. Stakeholders will be provided the opportunity to review and comment on the draft Unified Planning Assumptions prior to incorporation into the final Study Plan by the CAISO. The information contained in the Study Plan is intended to allow replication of the studies performed during the CAISO's Transmission Planning Process by competent transmission engineers.

The timeframe for Stage 1 development is January through April of each year.

During this stage, individual study plans and schedules for large proposed transmission projects (and their alternatives) with significant capital outlays (i.e., > \$50 million), especially those identified through the Request Window, also will be developed. The development of study assumptions and other inputs, the identification of possible project alternatives to be considered, and the schedule for completion of the necessary studies for such large projects may be determined through separate stakeholder process involving additional noticed stakeholder meetings and comment periods, and then published independently from the Unified Planning Assumptions if necessary. To maximize stakeholder and public participation, this additional meeting on study assumptions may be noticed both through CAISO Market Notices, as well as through the media in the area in which the project will be located. Such meetings may also be held near the project's proposed or anticipated location. The CAISO attempts to apply the Unified Planning Assumptions to such projects to the maximum extent possible, and provides access to updates and information on these larger project alternatives similar to that which is published for studies conducted for incorporation into the Transmission Plan. Further, to the extent practical, the CAISO will nevertheless seek to document within the Unified Planning Assumptions and Study Plan any special data, assumptions and other inputs tailored specifically for these large transmission project proposals. Updates on the latest statuses of these projects will also be documented in the annual CAISO Transmission Plan report.

2.1.2.3 Stage 2: Technical Studies and Presentation of Results

CAISO Tariff Section 24.2.5

Stage 2 of the Transmission Planning Process involves performance of technical studies, and presentation of initial results and the proposed mitigation plans to stakeholders. The technical studies follow the Study Plan using the Unified Planning Assumptions to the maximum extent possible. *The time frame for Stage 2 is May – October of each year.* The CAISO, Participating

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TOs, and other parties—at the direction of the CAISO as appropriate³—perform technical studies according to the Study Plan. At the end of this stage, the CAISO coordinates the preparation and presentation of all study results to the stakeholders. A minimum of one stakeholder meeting will be held in late October of each year to deliver preliminary study results to stakeholders for their review and comment. The information presented to the stakeholders will include:

- Summary of findings
- Proposed mitigation plans for identified problems
- Findings on High Priority Economic Planning Studies (i.e. feasible upgrades to relieve congestions or bottlenecks) and, if necessary, the scope for needed further analysis

As mentioned earlier, before the second stage is complete, to the extent Participating TOs or other parties are directed to perform elements of the Study Plan, the CAISO will hold, in coordination with the Participating TOs or other parties, additional stakeholder meetings to discuss results of system performance assessment studies and potential solutions to the problems identified in those studies that could be transmission and non-wire. These meetings provide an additional opportunity for stakeholders to provide input on the transmission alternatives to be considered in the CAISO's Transmission Plan. All meetings will be noticed by the CAISO by Market Notice and will be coordinated with the CAISO's stakeholder calendar.

2.1.2.4 Stage 3: Development and Presentation of the Expansion Transmission Plan

CAISO Tariff Section 24.2.5

Stage 3 of the Transmission Planning Process involves documenting the technical results, related information to the planning activities, and addressing stakeholder comments and/or concerns. The primary product resulting from this stage is the CAISO Transmission Plan, which will be presented to the CAISO Board of Governors. Also, if consistent with the agreed upon schedule in the Study Plan, the Transmission Plan may include the results of other specific technical studies involving larger transmission projects or other identified planning evaluations. Otherwise, such larger transmission projects or other identified planning evaluations will be presented independently of the Transmission Plan. *The timeframe for this activity is November – January*.

Within this stage, the CAISO develops its draft CAISO Transmission Plan report primarily based on the final study results. The Transmission Plan lists , but is not limited to, the status of the transmission projects subject to CAISO management approval (*i.e.*, those with capital investment < \$50 million), along with the basis of the CAISO's decision on such projects, including analyses of other alternatives not recommended by CAISO management. The Transmission Plan also provides the latest status of the project CAISO previously approved but still under construction and the status on the transmission projects that require more than \$50 million of capital investment, which are separately submitted to the CAISO Governing Board for approval. As noted above, the technical studies, reports and recommendations for those

³ CAISO will direct Participating TOs, Project Sponsors or other entities who perform the studies on their behalf to perform specific tasks. However, other studies such as those performed by neighboring Balancing Authority Areas shall be provided voluntary.

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separately reviewed transmission projects may be prepared concomitantly with the Transmission Plan or on an alternative schedule.

The CAISO presents a draft Transmission Plan report to stakeholders. As part of this process, the CAISO will explicitly request the participation of representatives from neighboring transmission providers and sub-regional planning organizations, in order to seek input and identify potential improvements for the following year's Transmission Plan. The CAISO also will present its Transmission Plan at relevant regional and sub-regional planning groups. All stakeholder comments and CAISO responses throughout the development of the Transmission Plan will be posted on the website (<u>http://caiso.com/thegrid/planning/index.html</u>) and in the CAISO transmission plan report The CAISO Transmission Plan will be finalized and scheduled for presentation during the CAISO Governing Board in January or, if necessary, in February.

Participating TOs and other successful Project Sponsors may move toward the development and permitting of those projects approved by the CAISO Governing Board or management, as applicable. Projects with estimated capital investment of \$50 million or less that are included as approved in the final Transmission Plan are deemed formally approved by CAISO management.
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2.1.3 General Calendar for Performing the Transmission Planning Process

The following table describes the approximate proposed timelines and milestones for the CAISO Transmission Planning Process:

Dates ⁴	Milestones	
By November 15 th	Request Window closes.	
By December 7 th	CAISO concludes all inputs from Request Window	
By End of January	Previous year's Transmission Plan recommendations are made to the CAISO Board of Governors.	
By February 15 th	CAISO identifies the High Priority Economic Planning Studies and transmission projects submitted during the Request Window that will be included in the Study Plan for the current year's Transmission Planning Process.	
By March 31 st	CAISO publishes draft Unified Planning Assumptions and Study Plan	
By April 30 th	Stakeholder meeting held to discuss the draft Unified Planning Assumptions and Study Plan	
By May 31 st	Complete and publish final Unified Planning Assumptions and Study Plan, and respond to stakeholder comments on the Unified Planning Assumptions and Study Plan. Hold additional stakeholder meetings or teleconferences regarding the Unified Planning Assumptions and Study Plan as determined by the CAISO.	
	Complete any separate stakeholder processes regarding specific transmission projects.	
August 15 th	Request Window for next planning cycle opens	
	The technical analyses identified in the Study Plan are performed.	
By October 31 st	Participating TOs and other parties may hold stakeholder meetings to discuss results of system performance assessment studies and discuss potential transmission alternatives to mitigate the problems identified in studies assigned to those entities.	
By October 31 st	Stakeholder meeting is held to discuss draft results of technical studies.	

⁴ If the due dates fall on the weekends or CAISO holidays, these due dates will moved to close of business of the next working day.

Dates	Mileston	
November 15 th	Request Window for next year planning cycle closes	
By December 7 th	CAISO concludes all inputs from Request Window	
By End of January Y-2	The Transmission Plan report is finalized, including response to stakeholder comments on draft Transmission Plan study results.	
	Transmission Plan recommendations presented to the CAISO Governing Board.	

This reflects the minimum level of activity. As noted, additional stakeholder meetings may be scheduled as necessary, both for projects to be included in the Transmission Plan and for projects being studied through independently developed schedules.

2.1.4 Transmission Projects Identified Through the Transmission Planning Process

The Transmission Planning Process, which encompasses the CAISO's Large and Small Generator Interconnection Procedures (LGIP/SGIP), the production of the Transmission Plan, and other independent studies, identify the following categories of transmission additions or upgrades:

LGIP/SGIP

- Reliability Network Upgrades The transmission facilities at or beyond the Point of Interconnection necessary to interconnect a Large Generating Facility safely and reliably to the CAISO Controlled Grid, which would not have been necessary without the interconnection of the Large Generating Facility. This includes Network Upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the CAISO Controlled Grid. Consistent with WECC practice, Reliability Network Upgrades also include the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.
- Delivery Network Upgrades Transmission facilities at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies to relieve constraints on the CAISO Controlled Grid and which the Interconnection Customer or the PTO elects to fund.
- Interconnection Facilities The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modifications, additions, or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.
- Location Constrained Resource Interconnection Facility A High Voltage Transmission Facility, proposed to connect Location Constrained Interconnection Generator in

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designated Energy Resource Areas (ERAs), that has been determined by the CAISO to satisfy, or conditionally satisfy, all of the requirements of Section 24.1.3 of the CAISO Tariff. (See Section 4.2.3 for further discussion.)

Transmission facilities originating outside the LGIP/SGIP in the Transmission Planning Process and deemed "needed" under Section 24.1 of the CAISO Tariff:

- Reliability Transmission Projects The CAISO obligates Participating TOs, as NERC Transmission Planners, to identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. This obligation requires that the CAISO Controlled Grid be planned to a level that meets or exceeds transmission system performance criteria established by the WECC, NERC, Local Reliability Criteria, and other CAISO Planning Standards (collectively Reliability Criteria). Reliability Transmission Projects may also originate from CAISO recommendations from the CAISO's short-term plan based on the past operational experiences. A transmission upgrade or addition will be justified on the basis of reliability where the project is specifically designed to mitigate or prevent identified Reliability Criteria violations.
- Economic Transmission Projects These types of upgrades promote economic efficiency. The CAISO Tariff does not define economic efficiency. However, economic efficiency may be demonstrated where (1) the Project Sponsor, other than a PTO, commits to pay the full cost of the construction, maintenance, and operation of the addition or upgrade and rely on the receipt of Merchant Transmission Congestion Revenue Rights to recover such costs; or (2) the economic benefits of the upgrade or addition are expected to exceed its costs. Economically efficient transmission upgrades or additions may serve many objectives, including, but not limited to, lowering a region's Energy production costs, reducing or eliminating Congestion, reducing capacity costs (*i.e.*, lowering Local Capacity Requirements for a Local Capacity Area), and efficiently accessing renewable Energy resources.
- Location Constrained Resource Interconnection Facility A High Voltage Transmission Facility, proposed to connect location constrained resources in designated Energy Resource Areas (ERAs), that has been determined by the CAISO to satisfy, or conditionally satisfy, all of the requirements of Section 24.1.3 of the CAISO Tariff. (See Section 4.2.3 for further discussion.)
- Long-term CRR Transmission Projects Transmission organizations must incorporate procedures into their Transmission Planning Processes that maintain or ensure the feasibility (but not the value) of allocated or awarded long-term firm transmission rights over their entire term. The terms under which the CAISO satisfies this requirement are set forth in Section 24.1.4 of the CAISO Tariff and are further addressed in Section 4.2.6 of this BPM.

2.2 CAISO Transmission Plan

The CAISO's Transmission Plan is the primary product of its Transmission Planning Process. Produced annually, it details information on newly proposed Transmission Projects and alternatives considered within the CAISO Balancing Authority Area, as well as external transmission facilities that will interconnect to the CAISO Controlled Grid. The Transmission Plan also articulates the plans or key activities of other participating entities and contains information on other issues involving Transmission Planning, such as Congestion analyses, a

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long-term projection of Local Capacity Requirements, resource deliverability and operational issues based on experiences learned from real-time operation. The Transmission Plan shall contain information, including, but not limited to, the following:

- Transmission Project Summary Provides a list and details about transmission projects including:
 - Updates on the status of transmission projects approved by the CAISO during prior Transmission Planning Process cycles
 - o Transmission projects that have been proposed to the CAISO for approval and recommendation
 - Transmission projects CAISO management approves in the current transmission plan and the basis of approval i.e. description of the analysis for assessing "need" for the preferred project
 - Alternatives considered and the resulting comparison of these alternatives to the preferred project
 - Transmission project proposals CAISO management does not approve along with the basis of its decisions
 - Transmission projects proposals require approval from CAISO Board of Governors
 - Transmission project proposals that are at a conceptual stage or require additional study that are advanced to mitigate reliability issues or provide economic benefits to the CAISO ratepayers, or for other purposes, including the potential development of Energy Resource Areas (that may also be competitive renewable energy zones (CREZ)) identified through State regulatory processes.
- System Outlook Provides information on future system conditions to facilitate transmission planning decisions, including, but not limited to:
 - o New generation from CAISO Interconnection Queue and CEC licensing process
 - o Generation retirement analyses from CEC
 - Load forecast data from CEC ;
 - Other factors, such as state and federal policies impacting transmission planning, economic trends, fuel prices outlook, activities from other entities in the region that should be considered, future technology, impact from climate changes, etc.
- System Assessment Results Results from various technical studies performed by the CAISO or other entities at the direction of the CAISO in accordance with the Study Plan that focus on different perspectives of the system, including, but not limited to:
 - Reliability Studies performed to ensure that system performance can satisfy all NERC/WECC (TPL 001 – TPL 004) reliability and CAISO Planning Standards over both the short-term (up to 5 years) and long-term (10 years or longer)
 - Resource Adequacy and Related Issues Studies support resource adequacy programs, including the Local Capacity Technical Study, and import and Generation deliverability assessments

- Economic Transmission Project studies Studies to determine how a proposed transmission upgrade or addition promotes economic efficiency relative to other alternatives
- Economic Planning Studies Studies that provide information for Market Participants to independently assess the effects of Congestion in order to facilitate market decisions regarding transmission or other resource additions or upgrades to mitigate the identified Congestion.
- Location Constrained Resource Interconnection Facilities (LCRIFs) evaluation of proposed LCRIFs from Project Sponsor(s) to connect location constrained resources in designated Energy Resource Areas (ERAs)
- Long-Term Congestion Revenue Rights (CRRs) Identify simultaneous feasibility of allocated Long Term CRRs
- Other System Planning Studies Studies that evaluate specific relevant planning topics, including, but not limited to, aging power plants, conceptual Transmission Plans to facilitate Renewable Portfolio Standards, and operational studies to integrate renewable resources
- Short-Term Plan Summary of recent concerns and recommendations based on system operators' experiences on the grid, including congestions, load, resources, and system performances. This also includes the assessments of near-term system conditions (1-3 years) with consideration of the benefits from future transmission upgrades. This study may recommend system reinforcements or additional actions that are not addressed by other future upgrades.
- Operating Guide Informational guidelines for CAISO grid operations regarding possible impacts of new transmission projects and the need to revise existing or develop new—operating procedures
- Scenarios Analysis Results from specific, periodic studies focusing on opportunities to improve reliability and system performance
- Conclusions, Visions and Future Plans Conclusion from the current plan, CAISO's vision on various topics, such as potential concerns, potential grid enhancements, and plans for enhancing future iterations of the Transmission Plan.

3. Request Window

The CAISO's Transmission Planning Process utilizes a "Request Window" as a centralized, transparent, and organized method to solicit and manage alternative project proposals, Economic Planning Study requests, and to manage submission of project-related data. The Request Window is a 3-month window, *ending November 15th* of each year, during which stakeholders may submit certain types of transmission project proposals, Economic Planning Study requests, and other necessary data related to those projects and studies. Submissions during the Request Window will be evaluated against defined criteria in a screening process.

The screening process functions to:

- Ensure sufficient information is provided to the CAISO to allow consideration of the submission in the Transmission Planning Process
- Establish if other threshold criteria have been met, as described in Section 3.4 of this BPM.

As a general matter, submissions that satisfy the screening process will be included within the scope of the following year's Study Plan. However, valid Economic Planning Study requests with a regional or sub-regional study scope may be referred to, and the study performed by, a sub-regional planning group or the Transmission Expansion Planning Policy Committee (TEPPC) of WECC in accordance with the TEPPC synchronized economic planning study process. Project proposals or Economic Planning Study requests that do not satisfy the Request Window requirements or are not otherwise selected may be submitted to the CAISO's alternative dispute resolution process under Section 13 of the CAISO Tariff.

The major components of the Request Window to be discussed are:

- Scope of the proposals and projects that may be submitted
- Submission process
- Data included in submission process
- Screening process

3.1 Scope of Proposals and Projects in Request Window

CAISO Tariff Section 24.2.2

Section 2.1.2 describes certain categories of proposed transmission additions, upgrades, or requests. Some of these must go through the Request Window process, while others do not. This section identifies the two categories, as well as other information, subject to the Request Window.

Projects or requests that must go through the Request Window process:

- Merchant Transmission Facilities Transmission upgrades or additions in which the Project Sponsor will seek revenue recovery through the receipt of Merchant Congestion Revenue Rights under Section 36.11 of the CAISO Tariff, rather than through the CAISO's Transmission Access Charge
- Participating TO economic transmission upgrades or additions Transmission upgrades or additions proposed by Participating TOs or entities applying to become Participating TOs for approval primarily based on the economic efficiency of the projects and for which the Participating TOs intends to obtain revenue recovery through the CAISO's Transmission Access Charge. (Note that projects that are less than \$50 million dollars may also be identified through mitigation proposals submitted by Participating TOs with PTO Service Territories)
- Location Constrained Resource Interconnection Facilities proposed transmission projects to connect Location Constrained Interconnection Resource Generators in designated ERAs

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- Demand Response programs For possible inclusion in base case/assumptions or as a resource alternative to resolve planning targets
- Generation projects Information on proposed Generating Units may be submitted as proposed solutions along with the study requests under Economic Planning Study.
- Economic Planning Study requests These are stakeholder requests for the CAISO to develop conceptual transmission solutions to mitigate identified system congestion and perform preliminary assessment of the economic benefits of such mitigation

Projects or requests that need *not* go through the Request Window:

- Reliability transmission upgrades or additions Participating TOs with PTO Service Territories, as NERC Transmission Planners, are under an obligation to propose transmission solutions to resolve any identified reliability criteria violations. Participating TOs may propose these projects through submission of individual mitigation proposals in accordance to the developed Study Plan
- Network Upgrades identified through the SGIP/LGIP Transmission associated with requests to interconnect Generating Units will be identified through the SGIP or LGIP, as applicable
- Location Constrained Resource Interconnection Facilities The CAISO's SGIP/LGIP may identify these types of projects as a result of performing Interconnection System Impact Studies.
- Projects to preserve Long-term Congestion Revenue Rights These projects will be an output of CAISO studies conducted in conformity with the developed Study Plan
- > Operational solutions to address Local Capacity Requirements

3.2 Request Window Submission Process

This section describes the steps for submitting the required proposals or requests through the Request Window process. Proposals and requests submitted through the Request Window will be considered, provided that the following process steps are satisfactorily completed:

- Initiation Submitters shall start the process by submitting the appropriate forms to the CAISO at <u>requestwindow@caiso.com</u>. The appropriate forms, including instructions for submission and the data requirements necessary, will be posted on the CAISO website at <u>http://www.caiso.com/thegrid/planning/index.html</u>. These data forms include the details of the Economic Planning Study request or project proposals necessary to allow initial evaluation. The CAISO will assign responsibility for the project or Economic Planning Study request to its staff and acknowledge receipt of the project information or Economic Planning Study request to the submitter within three Business Days.
- 2. <u>Validation/Selection</u> Within fourteen calendar days after receiving the form, the CAISO will apply the screening test to validate the transmission proposals or Economic Planning Study requests. At that time, the CAISO will inform submitters by e-mail whether the proposed project satisfies the screening criteria. For those submitters whose data or information are deemed incomplete by the CAISO, such submitters will have seven calendar days to supplement their submissions (if the seventh day falls on a weekend or holiday, the deadline will be the close of business of the following Business Day).

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3. <u>Secondary Validation</u> – For those submitters whose data or information are deemed incomplete by the CAISO as part of the initial validation in step 2 above, such submitters will have seven calendar days to supplement their submissions (if the seventh day falls on a weekend or holiday, the deadline with be the following Business Day). Within seven calendar days after receiving the supplemental submission, the CAISO will inform the project proponent whether the screening criteria have been satisfied.

3.3 Data Requirements for Request Window Submissions

The data requirements necessary to initiate the Request Window process, as discussed in Section 3.2, will be described further in this section with respect to different categories of projects and/or requests. Data templates and accompanying instructions for submission to the Request Window may be found at http://www.caiso.com/thegrid/planning/index.html under the Request Window link.

3.3.1 Economic Transmission Project Proposals

CAISO Tariff Section 24.2.2.1

As noted, any economic project, including those seeking cost recovery through Long-term Congestion Revenue Rights or to reduce Local Capacity Requirements, whether submitted by a PTO or sponsor of a Merchant Transmission Facility, must submit the following project information, which includes, but is not limited to:

General Data

- Basic description of the proposal, such as the scope, the nature of alternative (AC/DC), objectives, and the qualifications for the proposal to meet certain policies such as LCRIF, LT-CRRs, etc.
- > Geographical location and proposed preferred project route
- > Evidence of securing the route or ability to secure the route

Technical Data

- > Network model for power flow study
- > Dynamic models for stability study
- Short-circuit data
- Protection data

Planning Level Cost Data

- > Detailed project construction, operation, and other costs necessary for the study
- Explanation of the accuracy of the cost estimate, and the level of risk of actual cost exceeding the estimate.

Miscellaneous Data

> Proposed entity to construct, own, and finance the project

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- Planned operator of the project
- > Construction schedule and expected online date

3.3.2 Generation Project Proposals

CAISO Tariff Section 24.2.2.1

Proposed Generating Facilities may also be submitted to the CAISO for purposes of evaluating the effect of such generation on resolving previously identified grid concerns, including Congestion, voltage support, etc. Proponents of generation projects for consideration in the Transmission Planning Process need to provide a similar set of project data that is required by the LGIP process:

General Data

- Basic description of the project, such as fuel type, size, location, etc.
- Proof of site control and CEC licensing status
- Description of the issue sought to be resolved by the Generating Facility, including any reference to results of prior technical studies included in published Transmission Plans.

Technical Data

- Network model of the project for power flow study
- Geographical location, evidence of land procurement
- Dynamic models for stability study
- Short-circuit data
- Protection data
- Other technical data that may be required for specific types of resources, such as wind generation

Planning Level Cost Data

- > Detailed project construction, heat rate, and operation costs
- Proponent should specify expected contractual information necessary to assign generator profit, for estimate of CAISO transmission ratepayer benefits.

Miscellaneous Data

- Entity responsible for constructing, owning, and financing the project, and the entity responsible for the costs of the project.
- Planned operator of the project
- Construction schedule and expected online date
- > Any additional miscellaneous data that may be applicable

3.3.3 Demand Responses and Other Proposals

CAISO Tariff Section 24.2.2.1

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Information regarding demand management resources (*e.g.*, amount of load impact, location, cost of the program) may be submitted to CAISO for consideration in its Transmission Planning Process. The purpose of requesting such information is to properly account for demand response resources in assessing transmission infrastructure needs. Accordingly, validated demand management programs are to be included in the CAISO's Unified Planning Assumptions. The mechanisms and standards to be applied are currently in development based on ongoing coordination between the CAISO, CPUC, CEC and other Market Participants.

3.3.4 Location Constrained Resource Interconnection Facilities (LCRIFs)

CAISO Tariff Section 24.1.3

Any party proposing a Location Constrained Resource Interconnection Facility shall include the following information in accordance with Section 24.1.3 of the CAISO Tariff:

- > A description of the proposed facility, setting forth:
 - Transmission study results demonstrating that the transmission facility meets Applicable Reliability Requirements and CAISO Planning Standards
 - Identification of the most .feasible and cost-effective alternative transmission additions, which may include network upgrades, that would accomplish the objectives of the proposal
 - A planning level cost estimate for the proposed facility and all proposed alternatives
 - An assessment of the potential for the future connection of further transmission additions that would convert the proposed facility into a network transmission facility, including conceptual plans
 - o The estimated in-service date of the proposed facility, and
 - A conceptual plan for connecting potential LCRIGs, if known, to the proposed facility.⁵
- Information showing that the proposal meets the criteria outlined in Section 24.1.3.1(a) of the CAISO Tariff. This information permits the CAISO to conditionally approve the LCRIF:
 - The transmission facility is to be constructed for the primary purpose of connecting two or more Location Constrained Resource Interconnection Generators (LCRIG) in an Energy Resource Area, and at least one of the LCRIG is to be owned by an entity or entities not an Affiliate of the owner(s) of another LCRIG in that Energy Resource Area.
 - The transmission facility will be a High Voltage Transmission Facility.

⁵ The foregoing conditions are subject to change pending the outcome of FERC Docket No. ER08-140 regarding the CAISO's proposed tariff language for Location Constrained Resource Interconnections.

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• At the time of its in-service date, the transmission facility will not be a network facility and would not be eligible for inclusion in a Participating TO's TRR other than as an LCRIF.

3.3.5 Economic Planning Studies

CAISO Section 24.2.2.2

Requests to perform an Economic Planning Study must identify the congested transmission element (binding constraint) or limiting facilities to be studied. The request should also include reference to the Congestion Data Summary for Congestion associated with the binding constraint, if applicable, or other information supporting the potential for increased future Congestion on the binding constraint. Furthermore, requester may submit up to 2 conceptual mitigation plans along with study requests. However, for the conceptual mitigation plans to be considered, sufficient data i.e. network model, planning level cost data in accordance with section 3.3 of this BPM, and anticipated online date of the alternatives must be provided to CAISO by the closing date of Request Window.

3.3.6 Other Planning Data

The Request Window is designed to be a centralized process to accommodate not only alternative transmission proposals, but also the exchange of information for purposes of developing the Unified Planning Assumptions. Thus, the CAISO will actively solicit updated data from Participating TOs, other Market Participants and neighboring control areas or transmission providers, and sub-regional planning groups in order to supplement existing WECC/TEPPC data.

3.3.6.1 Information from Participating TOs

CAISO Tariff Section 24.2.3.1

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In addition to any information that must be provided to the CAISO under the NERC Reliability Standards for Modeling, Data, and Analysis (NERC MOD Standards), Participating TOs shall provide the CAISO on an annual or periodic basis in accordance with the schedule, procedures and in the form required by the Business Practice Manual for the Transmission Planning Process any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to: (1) modeling data for power flow, including reactive power and stability analyses; (2) a description of the total Demand to be served from each substation, including a description of any Energy efficiency programs reflected in the total Demand; (3) the amount of any interruptible Loads included in the total Demand (including conditions under which an interruption can be implemented and any limitations on the duration and frequency of interruptions); (4), a description of Generating Units to be interconnected to the Distribution System of the Participating TO, including generation type and anticipated Commercial Operation Date; (5) transmission system changes, including equipment replacement not requiring approval by the CAISO; (6) transmission network information, operating diagrams, including line ratings, line length, conductor sizes and lengths, substation

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equipment ratings, circuits on common towers and with common rights-of-ways and crossovers, special protection schemes, and protection setting information; and (7) Contingency lists.

3.3.6.2 Information Provided by Participating Generators

CAISO Tariff Section 24.2.3.2

In addition to any information that must be provided to the CAISO under the NERC MOD Standards, Participating Generators shall provide the CAISO on an annual or periodic basis in accordance with the schedule, procedures and in the form required by the Business Practice Manual any information and data reasonably required by the CAISO to perform the Transmission Planning Process, including, but not limited to (1) modeling data for short-circuit and stability analysis and (2) data, such as term and status of any environmental or land use permits or agreements the expiration of which may affect that the operation of the Generating Unit.

3.3.6.3 Information Requested from Load Serving Entities

CAISO Tariff Section 24.2.3.3

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In addition to any information that must be provided to the CAISO under the NERC MOD Standards, the CAISO shall solicit from Load Serving Entities through their Scheduling Coordinators information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term resource plans; (2) existing long-term contracts for resources and transmission service outside the CAISO Control Area; (3) resource capacity and Energy bid information received through requests for offers or similar solicitations; and (4) Demand Forecasts, including forecasted effect of Energy efficiency and Demand response programs.

3.3.6.4 Information Requested from Interconnected Control Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies

CAISO Tariff Section 24.2.3.4

The CAISO shall solicit from interconnected Balancing Authority Area operators and transmission providers, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; long-term resource plans; (3) generation interconnection queue information; and (4) Demand forecasts.

3.4 Screening Process

3.4.1 Transmission Projects

CAISO Tariff Section 24.2.2.1

In order to ensure that the Transmission Planning Process proceeds in an efficient and timely manner, transmission project proposals are subject to screening criteria as set forth below:

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- All data and other requested information must be complete. The CAISO will determine whether the proponent has provided sufficient information to evaluate the transmission proposal, other resource, or Economic Planning Study request. Failure to fully complete the appropriate data templates after the period allowed for supplemental submissions will constitute a failure to satisfy this requirement
 - o A proposed transmission project must connect to the CAISO Control Grid.
- Duplication The proposals received during the Request Window must not duplicate benefits from transmission projects that have previously been approved by the CAISO. However, competing proposals received during a Request Window may be included in the Study Plan. As appropriate, the CAISO may encourage joint ownership of an optimal project that utilizes the superior features of each proposal.
- If a sub-regional or regional project that affects other Balancing Authority Areas, whether the proposal has previously been identified by the appropriate sub-regional or regional planning entity as a "preferred" solution;
- If the transmission proposal constitutes facilities to access renewable resources, whether one or more of the projects increase transfer capability with respect to a Competitive Renewable Energy Zone, Energy Resource Area, or similar designation identified through a state sanctioned entity.

3.4.2 Economic Planning Studies

CAISO Tariff Section 24.2.2.2

The screening process will generally place requests for Economic Planning Studies into one of three categories.

In each planning cycle, the CAISO will perform a maximum of five High Priority Economic Planning Studies on behalf of stakeholders. However, the CAISO retains discretion to perform greater than five High Priority Economic Planning Studies should patterns of Congestion so warrant. High Priority Economic Planning Studies will be selected based on consideration of at least one of the following:

- Whether the requested study seeks to address Congestion identified by the CAISO in the Congestion Data Summary.
- Whether the requested study seeks to address delivery of Location Constrained Resource Interconnection Generators in an Energy Resource Area or similar designation from a state sanctioned entity
- Whether the requested study seeks to reduce or address the need for Local Capacity Area Resources in a Local Capacity Area.
- Whether resource and Demand information indicate that Congestion described in the request is projected to increase over the planning horizon used in the Transmission Planning Process and the projected magnitude of the Congestion.

High Priority Economic Planning Studies will be included in the Study Plan and performed by the CAISO at its cost as part of the Transmission Planning Process cycle. The CAISO will notify TEPPC and other sub-regional planning groups of the selected High Priority Economic Planning Studies prior to the close of TEPPC's request window on January 31st of each year. To the

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extent that CAISO determines particular study requests under High Priority category should impact multi controlled areas, these study requests will be submitted to TEPPC or the sub-regional planning group by January 31st as well.

Where the request is not designated as a High Priority Economic Planning Study and the request is regional or sub-regional in scope, the CAISO will submit the requested Economic Planning Study to TEPPC as part of its request window that closes on January 31st of each year.

Requests that are neither High Priority Economic Planning Studies nor regional or sub-regional in scope will be rejected for inclusion in the CAISO's Study Plan, but still will be submitted to TEPPC for inclusion in the consolidated list of potential studies. The submitting entity may still perform the proposed Economic Planning Study at its own cost and submit the results to the CAISO for review and potential inclusion in the final Transmission Plan. The CAISO will coordinate with any third party performing its own study to ensure that the study is consistent with the data, assumptions, and methodology employed by the CAISO.

In conclusion, Figure 2 shows the overview of the Request Window and its interaction with the CAISO Transmission Planning Process.





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4. Transmission Plan Development Process

Sections 4.1–4.3 below articulate the three stages of the CAISO's Transmission Planning Process in more detail.

4.1 Development of Unified Planning Assumptions and Study Plan

Following the close of the Request Window, the CAISO compiles information from the Request Window and engages in the first stage of the Transmission Planning Process. *The timeframe for Stage 1 development is January through April of each year.* The objective of this stage is to determine the goals, agree on data assumptions and inputs for creation of a base case, identify necessary modifications to the base case for individual technical studies, identify the technical studies to be performed as part of the Transmission Planning Process cycle, and allow stakeholders to review and comment on the scope of the upcoming technical studies. This stage creates the Unified Planning Assumptions and Study Plan.

4.1.1 Input into the Unified Planning Assumptions

CAISO Tariff Section 24.2.4.1

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The CAISO develops the Unified Planning Assumptions using information including, but not limited to:

- > Information received during the Request Window
- > Applicable Reliability Criteria and CAISO Planning Standards
- > WECC/TEPPC base cases for the relevant planning horizon
- > Transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon
- Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of the CAISO Tariff
- Network Upgrades identified pursuant to Section 25, Appendix U or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix AA relating to the CAISO's Small Generator Interconnection Procedures
- Operational solutions validated by the CAISO to address Local Capacity Area Resource requirements as part of the Local Capacity Technical Study
- Real-time operational data for CAISO short-term study
- > Regulatory initiatives, as appropriate, including state regulatory agency initiated programs
- Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- Results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

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4.1.1.1 CAISO Planning Standards Committee

CAISO Tariff Section 24.2.1

The CAISO maintains a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The CAISO Planning Standards are Reliability Criteria that:

- > address specifics not covered in the NERC and WECC planning standards
- provide interpretations of the NERC and WECC planning standards specific to the CAISO Controlled Grid, and
- identify whether specific criteria should be adopted that are more stringent than the NERC and WECC planning standards.

The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan. To the extent necessary, the CAISO may notice additional meetings, web conferences, and teleconferences. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee.

The CAISO Vice President of Planning and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of December 21, 2007, and must include in the report to the CAISO Governing Board a summary of the positions of parties with respect to the proposed modifications to the CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market Participants or other interested parties.

4.1.2 Process for Developing Unified Planning Assumptions and Study Plan

CAISO Tariff Section 24.2.4.3

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During the period from January through February of each year, the CAISO, in coordination with stakeholders, will review information received and validated during the Request Window or otherwise obtained by the CAISO, to develop a draft Unified Planning Assumptions and Study Plan for the annual Transmission Planning Process cycle. This draft Unified Planning Assumptions and Study Plan is posted to the CAISO Website and subsequently, after an opportunity for review by Stakeholders, presented at a stakeholder meeting for comment by the end of April. A Market Notice will announce the availability of the draft, solicit comments and establish a deadline for such comments, and schedule the stakeholder meeting. Comments on the draft Unified Planning Assumptions and Study Plan must be submitted to the CAISO electronically to regionaltransmission@caiso.com. All stakeholder meetings, web conferences, or teleconferences may be scheduled as determined by the CAISO. Following all stakeholder

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meetings and by the end of May of each year, the CAISO will publish to the CAISO Website, the final Unified Planning Assumptions and Study Plan.

It should be noted that the annual Local Capacity Requirements Technical Study that sets targets for the forthcoming Resource Adequacy Compliance Year pursuant to Section 40.3 of the CAISO Tariff, will proceed separately from the development of the Unified Planning Assumptions and Study Plan. The final results of the Local Capacity Technical Study must be presented in May of each year. The timing of the Local Capacity Technical Study was developed in order to complete the study in sufficient time to allow Load Serving Entities sufficient time to procure necessary capacity prior to regulatory deadlines. This annual Local Capacity Technical Study will incorporate the outcome of the most recently completed Transmission Plan. Similarly, the Unified Planning Assumptions will incorporate operating procedures that affect the transmission system as identified in the Local Capacity Technical Study.

The Study Plan, however, will account for the Longer-Term Local Capacity Requirements Study that the CAISO performs to estimate Local Capacity Area Resource requirements three and five years out. The Local Capacity Technical Study Manual for the annual Local Capacity Technical Study is posted on the CAISO Website each year in October under Transmission Planning and Local Capacity Technical Study. CAISO also manages and performs technical studies on generation interconnection requests through the Large and Small Generator Interconnection Procedures (LGIP/SGIP). CAISO incorporates results from generation interconnection studies, including "Clustered" interconnection studies, in the annual Transmission Planning Process as input assumptions. As outlined in section 2.1.4, in addition to the information regarding new Generation projects, details of network upgrades and Net Qualifying Capacity resulting from generation Deliverability Assessments are key information to be included in the Transmission Planning Process.

4.1.3 Output

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CAISO Tariff Section 24.2.4.2

The Unified Planning Assumptions and Study Plan describe the details of the subsequent Transmission Planning Process cycle. At minimum, the Unified Planning Assumptions and Study Plan (see Section 4.1) will include:

- Objectives Define the goal of each technical study performed and how those studies will be used in decision-making processes.
- Summary of CAISO Transmission Planning Process:
 - Preliminary schedule for stakeholder activities for the remaining Transmission Planning Process
 - Instructions for stakeholders to receive notifications or communication, and to provide comments to the CAISO
 - Website locations where Transmission Planning Process information will be available and instructions regarding any steps necessary to gain access to such information.
 - o CAISO contact information for each study and the Transmission Planning Process.
- > Planning data:

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- Demand forecasts values, source of the Demand forecasts, and methodology to derive Demand forecasts and any adjustments to original forecast as necessary to perform a particular technical study
- Generation assumptions values, source of generation data, modeling of generation, description of generation dispatch methodology, and any adjustments to the foregoing as necessary to perform a particular technical study
- Generation retirement values, source of generation retirement data, and list of generation retirement modeled in the studies
- Transmission Projects Source of transmission project information and list of transmission projects modeled in the studies
- Import values, source of import data, and methodology, and any adjustments to the foregoing as necessary to perform a particular technical study.
- Planning studies:
 - List of all technical studies, including High Priority Economic Planning Studies, to be done for incorporation into the Transmission Plan or Transmission Planning Process generally, *i.e.*, technical studies that may not be complete by the publication date of the Transmission Plan
 - o For each study, explain:
 - Study assumptions (*e.g.*, study year, planning data applied to each technical study, any modifications to be made).
 - To the maximum extent possible, based on stakeholder input, identified sensitivity analyses and project or solution alternatives to be included in each technical study, as appropriate
 - Methodology describe how the study will be performed
 - Criteria reliability or criteria applied to each study
 - Software list software and tools for the study
 - Entity to perform the study or elements of the study.
- Comments received from Stakeholders, and CAISO responses thereto regarding the draft Unified Planning Assumptions and Study Plan.

An overview of the Unified Planning Assumption and Study Plan development is shown in Figure 3.

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4.2 Performance of Technical Studies and Other Necessary Review Procedures

As indicated by the outline of the Study Plan, each Transmission Planning Process cycle will conduct a number of technical studies to meet stakeholder objectives. The technical studies provide the bases for identifying potential physical and economic limitations of the CAISO Controlled Grid and potential upgrades to maintain or enhance system reliability, promote economic efficiency, maintain the feasibility of Long Term CRRs for the length of their terms, while also seeking to promote other policy objectives. These assessments involve, but are not limited to, the following technical studies:

- Power Flow Simulation The study focusing on equipment thermal loadings and voltage magnitudes in the system at a specific study scenario
- Stability Analysis Assessments of system responses during the transient period after disturbances or small signal stability of the system under various scenarios
- Voltage Stability Analysis of reactive power sufficiency to ensure reliable system conditions under different system conditions and disturbances. Power flow and stability are primary technical studies in reliability assessment
- Short-Circuit The study to be performed as part of interconnection process which focuses on the system's capability to withstand major short-circuits
- Economic Planning Studies (production cost simulation) Assessments of future market conditions based on the historical input and future plan. The study concentrates on identifying potential congestions and mitigation plans that could relieve or eliminate the congestions
- Long Term Congestion Revenue Rights Feasibility Study (LTCRRs) A Simultaneous Feasibility Test (SFT) will be performed to ensure that allocated Long Term CRRs will still be feasible according to their allocation.
- Long-Term Projected Local Capacity Requirement (LCR) Study The study, which relies primarily on power flow analysis, determines capacity requirements in Local Capacity Areas over a projected 3-5 year planning horizon. The Local Capacity Technical Study, not the Long-Term LCR Study, establishes effective Local Capacity Area Resource requirements for the next Resource Adequacy Compliance Year.
- Short-Term Plan Study analyzes recent system conditions and proposes upgrades or other recommendations based on the experience of CAISO system operators. This is similar to the Operating Guide which is the informational guideline for CAISO grid operations regarding possible impacts of new Transmission Projects and the need to revise existing—or develop new—operating procedures.
- Other studies from time to time, specific technical studies may be included in the Transmission Plan. These studies address special issues in addition to the scope of the other annual studies, such as long-term plans for particular areas or renewable resource integration studies

For the studies related to economic studies, it is imperative to describe two distinctive terms commonly used terms in this BPM. Economic Study Requests (study requests) represent submission of bottlenecks i.e. congestions that stakeholders submit to CAISO to perform

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economic study to identify feasible mitigation plans as part of the annual Economic Planning Study. The results from this study do not constitute submission of a transmission project for CAISO approval. However, Economic Projects represent the proposals of transmission projects or upgrades seeking approval from CAISO based on their economic benefits. In this case, the detailed scopes and other information of the project have been fully developed. Although both the Economic Study Requests and Economic Projects are required to be submitted to CAISO during the Request Window, they are uniquely different and will go to different processes in CAISO Transmission Plan.

The technical studies are required, to the maximum extent practicable, to utilize the Unified Planning Assumptions and any deviations must be documented in the preliminary results of the technical study. Results from the technical studies will be measured against the following planning standards to quantify system performance. The following reliability criteria violations will be used as fundamental to justify transmission upgrades:

- NERC Planning Standards
- WECC Planning Standards
- CAISO Planning Standards

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For the evaluation of projects proposed to promote economic efficiency, the CAISO relies on criteria defined in Transmission Economic Assessment Methodology (TEAM) and other practices adopted by the industry to justify economic benefits of the proposals. Principles underlying TEAM may be found on the CAISO Website at

http://www.caiso.com.docs/2004/06103/2004060313241622985.pdf and http://www.caiso.com/184b/184bd6cc2d70.html.

This second stage of the planning process is summarized in Figure 4.





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Based on resource considerations, technical expertise, and the roles of Participating TOs with PTO Service Territories as NERC Transmission Planners, the CAISO may assign technical studies or portions of technical studies to Project Sponsors or the Participating TOs to perform. Similarly, the CAISO may seek the voluntary commitment of other market participants to perform technical studies or portions thereof.

Once the responsible entities have completed the technical studies, the preliminary results will be presented to stakeholders during one or more additional stakeholder meetings to be held in the fall of each year.

4.2.1 Determining Reliability Projects

CAISO Tariff Section 24.1.2

Reliability projects will be identified and justified using the following study tools identified in Section 4.2:

- > Power Flow
- > Transient Stability
- Voltage Stability

As required by applicable planning standards, technical studies must be performed on both the short-term (up to five years) and long-term (≈ ten years or more) under various stress conditions (*e.g.*, summer peak), while considering the impact from losing critical system elements. Thresholds for demonstrating compliance with these standards are included in the NERC reliability standards e.g. the summary in Table 1 of the **Standard TPL-001-0** — **System Performance Under Normal Conditions** document, located at ftp://www.nerc.com/pub/sys/all_updl/standards/rs/TPL-001-0.pdf.

As indicated in the Study Plan, reliability assessments may be performed by Participating TOs with a PTO Service Territory as a component of their role as a NERC designated Transmission Planner. While these assessments may be performed by the Participating TOs, the assessments must utilize the Unified Planning Assumptions; except as otherwise justified and documented. Accordingly, as part of the plan to maintain reliability and serve Load within the CAISO Balancing Area Authority, the CAISO anticipates receiving each year power flow and stability study results from Participating TOs with PTO Service Territories, along with the comparison between these results and the reliability standards. If criteria violations have been identified, mitigation plans to address the violations will be proposed by the Participating TOs for the CAISO's review and approval. Participating TOs must propose alternatives to address each criteria violation to assess the efficiency and effectiveness of the competing alternatives. Each alternative should set forth a sufficient description of the upgrades, costs, schedules, impacts on the grid, and other information related to the alternative.

The CAISO relies on the following guidelines for approving proposals as the appropriate solution:

- Need The analysis shows violations of reliability criteria that require mitigation to be in place to ensure compliance of reliability standards.
- Sufficient Data Sufficient information on each of the mitigation proposals to be evaluated compared with other alternatives. For example, project scope, descriptions, cost estimate

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of the proposals and alternatives, benefits (e.g. reliability criteria violations will be mitigated by the proposals), and scheduled in-service date are necessary information that must be provided to CAISO.

- Technically Sound The suggested alternatives demonstrate an ability to eliminate the violation(s) based on a technically sound approach. This requires the Participating TO to demonstrate that the proposed alternative utilizes technology that has been accepted by the industry. In cases where a new technology has been proposed as a preferred alternative, sufficient proof demonstrating that the alternative will work reliably, efficiently, and comply with all applicable standards will be required as part of the approval process.
- Cost-Effective The preferred alternative must be an economically efficient approach to resolve criteria violations. Generally, this requires a least-cost solution. However, in some circumstances, least-cost solutions may not be selected or recommended if the CAISO finds that another approach appears to be more prudent. For example, if the analysis identifies that several criteria violations in the same vicinity can be anticipated in the future, the CAISO may recommend a construction of capital projects to eliminate all violations at the same time rather than incrementally addressing each violation in a potentially piece-meal fashion. This approach tries to avoid expenditures on redundant upgrades which may result in higher costs to the ratepayers.

CAISO management may approve proposals with an estimated capital cost of \$50 million or less, while the CAISO Governing Board must approve proposals with an estimated capital cost of greater than \$50 million. Moreover, for those proposals that must receive CAISO Governing Board approval, factors in addition to the reliability benefits may be considered as part of the recommendation and approval process, including, but not limited to:

- > economic advantages from mitigating congestion
- > reducing Local Capacity Area Resource requirements
- > operational flexibility

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> environmental benefits

4.2.2 Determining Economically Efficient Projects

4.2.2.1 Economic Planning Studies

CAISO Tariff Section 24.9

In each annual Transmission Planning Process cycle, the CAISO will conduct a maximum of five High Priority Economic Planning Studies as requested by stakeholders during the Request Window. However, the CAISO may elect to perform additional High Priority Economic Planning Studies should Congestion or other system conditions warrant. Stakeholders will have the opportunity to comment on selected High Priority Economic Planning Studies during the Unified Planning Assumptions and Study Plan stakeholder meeting. The CAISO's performance of Economic Planning Studies also coordinates with sub-regional and regional planning processes as described below.

In general, the Economic Planning Study process involves three major steps:

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- Step 1: Publication of the Congestion Data Summary that provides information on Congestion on the CAISO Controlled Grid and specifically identifies Significant and Recurring Congestion: This step occurs during October of each year and is intended to provide information to stakeholders to assist Economic Planning Study requests during the Request Window. Due to the possibilities that results from grid operations during the past 12 months period may incur a large number of congestion, CAISO intends to use the criteria in this step to filter out and provides a shorter list of major congestions that may beneficial to stakeholders. Significant and Recurring congestion is identified for the following scenarios:
 - o Congestion during the past 12 months ending September 15.
 - Congestion during a 10-year planning horizon simulation. CAISO-approved reliability transmission projects and future system conditions will be modeled in these studies to ensure the impact from reliability projects will be reflected in any resulting Economic Planning Study.

Significant and Recurring Congestion is determined by the cost and duration of the Congestion as follows:

- o Congestion that costs more than 5 million dollars,
- Congestion that occurs more than 8 percent of the time⁶
- Step 2: Select High Priority Economic Planning Studies. The criteria used to make this determination are similar to the criteria set forth in Section 4.2.2.1 of this BPM. In this context, cost of the congestion is the primary selective criterion while the duration of the congestion shall be used as a tiebreaker. The CAISO's selection of the five High Priority Economic Planning Studies will be discussed during the first CAISO stakeholder meeting to address the Unified Planning Assumptions and Study Plan.
 - Step 2a All Economic Planning Study requests are communicated to TEPPC by January 31st as part of that organization's request window. The CAISO will earmark those that it has identified as High Priority Economic Planning Studies that will be conducted by the CAISO. Other Economic Planning Study requests with a regional or sub-regional scope will be considered by TEPPC as part of its congestion study process.
 - Step 2b The CAISO will fully participate in the TEPPC congestion study process and may alter the scope of any selected High Priority Economic Planning Study to effectuate any identified efficiencies resulting from "clustering" or combining study requests received by TEPPC. However, consistent with TEPPC principles, the CAISO anticipates taking responsibility for performing, completing and communicating the results of all High Priority Economic Planning Studies whether or not modified.
 - Step 2c To the extent non-High Priority Economic Planning Studies are not determined by TEPPC to be high priority for regional or sub-regional study, the CAISO will so notify the submitting entity and such submitting entity may still

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⁶ However, due to the transition to a new market environment based on Locational Marginal Prices under the Market Redesign and Technology Upgrade (MRTU), if future congestion under MRTU appears to be significantly different from the past and other means to quantify Significant and Recurring congestion appear to be more appropriate, the CAISO may propose different criteria to address this issue.

perform the proposed Economic Planning Study at its own cost. The CAISO will coordinate with any third party performing its own study to ensure that the study is consistent with the data, assumptions, and methodology employed by the CAISO.

Step 3: Evaluate Congestion Mitigation Alternatives: In this step, the CAISO identifies or evaluates potential plans to mitigate the Congestion studied in each High Priority Economic Planning Study. Each study analyzes up to 2 mitigation plans on the future year scenarios. Study results will be presented to stakeholders during the second stakeholder meetings to address technical study preliminary results and the third meeting to address the draft Transmission Plan. The results from studies conducted by third parties may be submitted to the CAISO for review and potential inclusion in the final Transmission Plan.

The overview of the Economic Planning Study process is shown in Figure 5.

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Figure 5: Economic Planning Study

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4.2.2.2 Methodology

The CAISO Economic Planning Studies focus on identifying expected Congestion and other transmission element constraints and exploring potential mitigation plans for such bottlenecks on the grid. This will be accomplished by considering Congestion observed in the past operating years, Local Capacity Area resource requirements, and other expected grid conditions consistent with the Unified Planning Assumptions, including use of the WECC base case for economic studies. The CAISO may also consider other data submitted through Request Window, such as the long-term power supply plans for Long-Term CRR purposes. The studies utilize production simulation cost software using Security-Constrained Unit Commitment (SCUC) and Security-Constrained Economic Dispatch (SCED) to determine market conditions. The framework to quantify potential benefits will be consistent with CAISO's TEAM approach.

The mitigation plans recommended from the High Priority Economic Planning Study will consider: 1) expansion or acceleration of previously approved transmission projects and 2) new proposed upgrades or conceptual projects that can relieve the constraint. In order to efficiently manage the requests, CAISO will try to maximize the use of a batch or cluster approach to perform the High Priority Economic Planning Studies. In this case, one High Priority study may represent one batch or cluster of study.

The CAISO intends to coordinate High Priority Economic Planning Study efforts with sub-regional planning groups and TEPPC at the regional planning level. This collaboration emphasizes assigning Congestion-related studies to the proper forum. For example, Congestion observed in the CAISO Balancing Authority Area may impact multiple entities and should be addressed on a sub-regional or regional basis.

It is imperative to note that the purpose of High Priority Economic Planning Studies is not to provide formal CAISO approval of Economic Transmission Project proposals. Selected High Priority Economic Planning Studies do not constitute submission of a transmission project for CAISO approval. Rather, these studies provide information on future system conditions and the feasibility of eliminating Congestion by specific alternatives. This information guides CAISO and other Market Participants development of specific economic projects for submission in a future Transmission Planning Process cycle.

4.2.2.3 Technical Assessment for Specifically Proposed Economic Projects

CAISO Tariff Section 24.1.1

At the end of Request Window, when all valid project proposals have been collected, the following technical assessments will be conducted for each proposed economic project in the Study Plan as part of project evaluation:

- Power Flow Determine thermal loadings on facilities and bus voltages due to the implementation of the project. Study results will be compared with applicable reliability standards to ensure system performance will meet reliability criteria
- Stability Analysis– Capability of the system to meet applicable reliability standards during various conditions, such as after disturbances
- > Short-Circuit Study Capability of the system to withstand faults
- Economic Study Determine potential impact on system operating conditions and costbenefit of the project (for TAC projects)

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Simultaneous Feasibility Test (SFT) – Determine amounts and source-sink combinations of incremental CRRs due to the project (for Non-TAC projects)

4.2.3 Determining Location Constrained Resource Interconnection

CAISO Tariff Section 24.1.3

The requirements for approval or conditional approval of a LCRIF are set forth in detail in 24.1.3 of the CAISO Tariff and in Section 3.3.4 above.

4.2.4 Determining Projects to Maintain Long-Term Congestion Revenue Rights

CAISO Tariff Section 24.1.4

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The CAISO expects that released Long Term CRRs (LT-CRRs) will remain feasible during their full term. This expectation is based on the fact that the transfer capacity of existing grid facilities will be reduced to 60 percent of the normal ratings for the release of LT-CRRs, as well as the expectation that most proposed transmission upgrades will reduce Congestion; that is, the flows on binding constraints will be reduced or the flow capability through constrained facilities will be increased. However, for those infrequent changes to the transmission system that could result in substantial adverse impacts on binding constraints and cause infeasibility in certain LT-CRRs, the CAISO plans to perform an annual Simultaneous Feasibility Test (SFT) analysis to identify this outcome. In such instances, the Transmission Planning Process identifies potential ways to mitigate the adverse impacts, to be considered in conjunction with the overall Transmission Plan.

This new technical study, consisting of Simultaneous Feasibility Tests, will be integrated in the CAISO Transmission Planning Process and will be performed in the context of (a) planned or proposed transmission projects; (b) Generating Unit or transmission retirements; (c) Generating Unit interconnections; and (d) the interconnection of new Load. In assessing the need for transmission additions or upgrades to maintain the feasibility of allocated Long Term CRRs, the CAISO, in coordination with the Participating TOs and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, constrained-on Generation, interruptible Loads, reactive support, or in cases where the infeasible Long Term CRRs involve a small magnitude of megawatts, ensuring against the risk of any potential revenue shortfall using the CRR Balancing Account and uplift mechanism in Section 11.2.4 of the CAISO Tariff.

4.2.5 Merchant Transmission Process

CAISO Tariff Sections 24.1.1 and 36.11

Currently, any Market Participant, group of Market Participants or Participating TO may act as a Project Sponsor to identify a possible transmission upgrade and seek its incorporation into the CAISO Transmission Planning Process for ultimate approval and construction. A Project Sponsor may elect to pursue the transmission upgrade or addition as a Merchant Transmission Facility. A Merchant Transmission Facility is a transmission upgrade or addition that is part of the CAISO Controlled Grid where the Project Sponsor does not seek a regulated rate of recovery, but rather funds the project itself and recovers its costs through an allocation of incremental Merchant

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Transmission CRRs. A Merchant Transmission Facility will be deemed "needed" by the CAISO upon satisfaction of three elements:

- Mitigation of operational concerns identified under Section 24.5
- Mitigation of any impact from the proposed project that impairs the continuing feasibility of allocated Long Term CRRs over the length of their terms
- Proof that the Project Sponsor is financially able to pay the construction and operating costs of the Merchant Transmission Facility by requiring (1) a demonstration of creditworthiness (*e.g.* an appropriate credit rating), or (2) sufficient security in the form of an unconditional and irrevocable letter of credit or other similar security sufficient to meet its responsibilities and obligations for the full costs of the transmission addition or upgrade.

Accordingly, the CAISO and affected Participating TOs will perform technical studies to determine whether and how the project can be safely and reliably integrated with the CAISO Controlled Grid. Further, detailed Facilities Studies are performed by the Participating TOs with PTO Service Territories who own the existing transmission facilities to which the new project would interconnect, and these studies are performed at the expense of the Project Sponsor pursuant to provisions of the Transmission Owner Tariff of the applicable Participating TO.

4.2.6 Long-Term Local Capacity Requirements Study

CAISO Tariff Sections 24.2, 24.2.4, and 24.1.1

In each planning cycle, the CAISO conducts technical studies to evaluate Local Capacity Area Resource needs under the following scenarios:

- Local Capacity Technical Study Determines the Local Capacity Area Resource needs for the next Resource Adequacy Compliance Year.
- Long-Term Local Capacity Requirements (LCR) Study Evaluates Local Capacity Area Resource needs on a 3 and 5 year planning horizon.

The Local Capacity Technical Study is used to implement that assignment of Local Capacity Area Resource responsibility under Section 40.3 of the CAISO Tariff. The Long-Term LCR Study provides Market Participants with information to utilize in the Transmission Planning Process or in their individual procurement activities. Both studies assess the minimum level of capacity needed to ensure reliable CAISO Controlled Grid operation under peak Demand conditions consistent with NERC and WECC standards and CAISO Planning Standards. The studies also evaluate the existing local areas and potentially identify the changes in local areas or sub-areas definitions due to the impacts from system topology changes. Both studies utilize a similar methodology, but evaluate different time horizons. Detailed study assumptions, methodology, tools, and other information necessary for the studies are found in the Local Capacity Technical Study Manual posted to the CAISO Website at Transmission Planning.

4.2.7 **Preservation of Generation Deliverability**

CAISO Tariff, Appendix U, Section 3.3

The CAISO uses the deliverability analysis embodied in its Interconnection procedures to ensure that new Generation does not degrade the deliverability of existing resources. This mechanism generally maintains the stability of Net Qualifying Capacity (NQC) ratings for a given existing resource. Generally, economically and reliability driven transmission upgrades will enhance

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generation deliverability. However, a transmission project could potentially degrade the deliverability of one or more generation projects. During the development and review of transmission project proposals, the potential for adverse impacts on generation deliverability will be assessed by the CAISO and the estimated cost impacts associated with the reduction in NQC will be considered in the analysis of project alternatives.

4.3 **Development of CAISO Transmission Plan**

CAISO Sections 24.2.5.2 and 24.2.5.3

Stage 3 of the Transmission Planning Process involves the development of the CAISO Transmission Plan and its presentation to the CAISO Governing Board. The timeframe for this activity is November through January.

Within this stage, the CAISO develops a draft CAISO Transmission Plan report based on the final study results from Stage 2. The draft Transmission Plan report will be presented to Stakeholders for review and comment during the 3rd CAISO Transmission Plan stakeholder meeting. The CAISO independently provides the draft Transmission Plan to representatives from neighboring transmission providers or interconnected Balancing Authority Areas and sub-regional and regional planning groups for input and to facilitate transmission expansion coordination. After collecting stakeholder comments on the draft Transmission Plan, which will be posted to the CAISO Website, the Transmission Plan will be finalized and scheduled for presentation to the CAISO Governing Board. Upon presentation of the Transmission Plan to the CAISO Governing Board, the CAISO will post the Transmission Plan on the CAISO Website under Transmission Planning and deliver the Transmission Plan to sub-regional and regional planning groups.

The draft and final Transmission Plan may include, but is not limited to:

- The results of technical studies performed under the Study Plan;
- Determinations, recommendations, and justifications for the need for identified transmission upgrades and additions;
- Assessments of conceptual transmission upgrades and additions for which need has not been formally determined by the CAISO Governing Board or management, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle;
- Results of Economic Planning Studies and other studies conducted by CAISO during the Transmission Planning Process cycle; and
- Updates on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition.
- Updates on other key issues related to transmission planning activities i.e., new and ongoing initiatives.

Figure 6 shows an overview of Stage 3 for the CAISO Transmission Plan.





5. Regional Coordination

To enhance the ongoing coordination efforts with neighboring transmission providers and regional and sub-regional organizations, as a component of the CAISO's Transmission Planning Process, the CAISO acts as an initiator, organizer, and participant in relevant forums for sub-regional and regional transmission planning. This section explains the CAISO's coordination with interconnected systems at both the sub-regional and regional levels.

5.1 Sub-Regional Coordination

CAISO Tariff Section 24.8

Ensuring regional coordination through a robust sub-regional planning process is an important objective of the CAISO's Transmission Planning Process. The CAISO will enhance its existing provisions regarding coordination within the WECC by including specific requirements to exchange information with sub-regional planning groups and, in their absence, directly with interconnected transmission providers. The CAISO is currently pursuing a bifurcated approach. First, the CAISO's Transmission Planning Process itself offers an open, transparent, and structured opportunity for interconnected neighbors to exchange planning information and objectives. Second, the CAISO is participating in the development of a Pacific Southwest Planning Association (PSPA), which hopes to encompass most of the transmission systems in California. Through either of these means, the CAISO will satisfy its requirement that transmission providers coordinate with neighboring systems to ensure simultaneous feasibility of their respective plans and assess the possibility of efficiencies through mutual cooperation.

Until a California sub-regional planning group is created and participant responsibilities defined, the CAISO will perform the transmission planning functions for its Balancing Authority Area in accordance with Section 24 of the CAISO Tariff and this BPM. However, the CAISO will continue to collaborate with representatives from adjacent transmission providers and existing sub-regional

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planning organizations through existing processes. This collaboration involves a reciprocal exchange of information and participation, to the maximum extent possible, in order to ensure the simultaneous feasibility of respective Transmission Plans, the identification of potential areas for increased efficiency, and the consistent use of common assumptions. In this regard, the CAISO shall expressly request the participation of the proposed interconnected transmission providers and other entities in providing information during the Request Window, participating in the creation of the Unified Planning Assumptions and Study Plan, and reviewing study results and draft Transmission Plans. Requests for participation will be sent directly through electronic means to identified transmission planning representatives of entities, including, but not limited to:

- WestConnect Sub-Regional Groups
- > Los Angeles Department of Water and Power
- > ColumbiaGrid
- > The Northern Tier Transmission Group
- > The Northwest Transmission Assessment Committee of the Northwest Power Pool

The CAISO will also participate, as appropriate, in the planning activities of the foregoing entities and provide any information requested to facilitate those activities (subject to confidentiality limitations).

Through this interim collaboration, the CAISO intends to:

- > Exchange information such as Transmission Plan and other information
- Ensure transmission expansion plans from neighboring transmission providers and the CAISO are simultaneously feasible and maximize the efficiency of infrastructure investment
- Communicate major activities that may impact respective control areas
- Coordinate requests for planning or economic studies that appear to impact more than one control area.

5.2 Regional Coordination

CAISO actively participates at the WECC through various WECC committees such as the Board of Directors, Planning Coordination Committee, Operations Committee, and the TEPPC (Transmission Expansions Planning Policy Committee), among other subcommittees or workgroups. Through this participation, the CAISO seeks to:

- Exchange information, such as supplying data for the TEPPC data base and notifying WECC of potential projects that may impact multiple entities
- > Participate in regional technical studies, such as the WECC path rating process
- Participate in the review of proposed reliability and economic projects that may have regional impact
- > Potentially refer to TEPPC requests for economic studies that impact multiple sub-regions
- Cooperate in development and maintenance of the use in Transmission Planning analysis, including power flow, stability, dynamic voltage, and economic studies (*i.e.*, production cost simulation)

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- Obtain policy guidelines and standards and software recommendations to maximize uniformity in the west-wide Transmission Planning Process
- > Obtain path ratings for approved projects, when appropriate.

6. **Obligation to Build**

CAISO Tariff Sections 24.1.1, 24.1.2, 24.1.4, and 24.6

Section 24 of the CAISO Tariff governs the assignment of responsibility to construct transmission facilities identified as needed through the CAISO's Transmission Planning Process. That section requires a Participating TO to construct all transmission additions or upgrades determined by the CAISO to be "needed," where:

- The additions or upgrades to the transmission facilities are located within its PTO Service Territory, unless it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory
- The additions or upgrades are to existing transmission facilities that the Participating TO owns, which are part of the CAISO Controlled Grid and are located outside of its PTO Service Territory, unless any joint ownership arrangement does not permit
- The Participating TO is also a Local Furnishing Participating TO, if the CAISO or Project Sponsor tenders an application under Federal Power Act, Section 211, which requests the FERC to issue an order directing the Local Furnishing Partcipating TO to construct such facilities. After receiving the Section 211 application, the Local Furnishing Participating TO is required to waive its right to request service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act. The obligation to construct arises after the FERC order, if granted, is no longer subject to rehearing or appeal.

"Need" arises under Section 24 of the CAISO Tariff when the transmission upgrade or addition maintains System Reliability (see Section 4.2.1 of this BPM); promotes economic efficiency, including maintaining the feasibility of allocated LT-CRRs (see Sections 4.2.2 and 4.2.4 of this BPM); or constitutes a Location Constrained Resource Interconnection Facility (see Section 4.2.3 of this BPM).

It should be noted that the obligation to construct does not attach to all Participating TOs, but rather to those Participating TOs with PTO Service Territories. A PTO Service Territory is "the area in which an IOU, a Local Public Owned Electric Utility, or federal power marketing administration that has turned over its transmission facilities and/or Entitlements to ISO Operational Control is obligated to provide electric service to Load. A PTO Service Territory may be comprised of the Service Areas of more than one Local Public Owned Electric Utility, if they are operating under an agreement with the ISO for aggregation of their MSS and their MSS Operator is designated as the Participating TO." (CAISO Tariff, Appendix A.)

However, the obligation to construct is further subject to the following conditions:

- > The ability of the Participating TO, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws
- The presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 24 of the CAISO Tariff

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The right of the Participating TO to dispute any need determination under the CAISO's ADR Procedures

The obligation of a Participating TO to construct a needed transmission upgrade or addition further extends to a Merchant Transmission Facility, which is a transmission addition or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Transmission Access Charge (TAC) or Wheeling Access Charge (WAC) or other regulatory cost recovery mechanism. Rather than obtain a recovery of costs through a regulated rate, the Project Sponsor of the Merchant Transmission Facility obtains Merchant Congestion Revenue Rights in accordance with CAISO Tariff Section 36.11. (See Section 4.2.5 of this BPM and Section 4.2.4 of the BPM for Congestion Revenue Rights.) The Participating TO's obligation to construct a Merchant Transmission Facility is contingent on the Project Sponsor demonstrating that it is financially able to pay "the costs of the project to be constructed by the Participating TO," such that the Participating TO may require:

- > A demonstration of creditworthiness, such as an appropriate credit rating
- Sufficient security in the form of an unconditional and irrevocable letter of credit or other similar security sufficient to meet its responsibilities and obligations for the full costs of the transmission addition or upgrade

If the Participating TO cannot secure the necessary approvals and, therefore, is unable to construct the transmission upgrade or addition, the Participating TO shall notify the CAISO and the CAISO shall convene a technical meeting to evaluate alternative proposals. The CAISO may take any action reasonably appropriate, after coordination with the Participating TO, or Project Sponsor if not the Participating TO, and other affected Market Participants, to develop and evaluate alternatives, including the discretion to confer the right to construct the transmission addition or upgrade on a non-Participating TO. The obligation to construct can be distinct from the right to own. As noted, a non-Participating TO Project Sponsor (*e.g.*, a Transmission Owner), may retain ownership of a Merchant Transmission Facility notwithstanding the Participating TO's role in operating and maintaining the transmission upgrade or addition. Similarly, a Participating TO without a PTO Service Territory may hold ownership as well as responsibility for maintenance of a transmission upgrade or addition approved to promote economic efficiency, in accordance with Section 14 of the Transmission Control Agreement. In the latter case, the Participating TO sponsoring the project may, but is not required to, construct the project itself.

Transmission upgrades or additions to maintain System Reliability in accordance with Applicable Reliability Criteria and CAISO Planning Standards will primarily be sponsored, and therefore owned, by Participating TO's with PTO Service Territories. This arises from:

- The practice of those Participating TOs to perform annually, at the direction of the CAISO, reliability assessments of their PTO Service Territory that may cover all Loads within its geographic PTO Service Territory to ensure compliance with Applicable Reliability Criteria and CAISO Planning Standards
- The obligation of those Participating TOs to act as a Project Sponsor for transmission additions or upgrades in its PTO Service Territory identified or approved by the CAISO as needed to ensure System Reliability.

Similarly, to the extent that a transmission upgrade or addition constitutes the most efficient means to maintain the feasibility of allocated Long Term CRRs under Section 24.1.3 of the CAISO Tariff—apart from the expansion of, or acceleration of, an existing Transmission Project not sponsored by the PTO—the CAISO will direct the appropriate Participating TO to sponsor the needed transmission project. This is consistent with the CAISO's designation of Participating TO's

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with PTO Service Territories as the entity with the obligation to construct needed transmission upgrades or additions.

However, should the PTO prove to be unable or unwilling to fund and construct transmission upgrades or additions deemed as required to resolve reliability criteria violations or maintain the feasibility of LT- CRRs, the CAISO may exercise its right, as noted above, to seek a third-party Project Sponsor.

The Project Sponsor for Economic Transmission Projects will generally be the entity that submits the successful proposal through the Request Window process. To the extent the Project Sponsor cannot own, finance and construct the Economic Transmission Project, including where the project is proposed by the CAISO, the CAISO will designate one or more of the Participating TOs with PTO Service Territories in which the terminus of the transmission addition or upgrade will be located to act as Project Sponsor. Where two or more Participating TOs are designated as Project Sponsors, such CAISO designation will include the proportionate responsibility between or among Participating TOs to own, construct, and finance the transmission addition or upgrade. If a Participating TO(s) to assume the remainder or greater proportionate responsibility, and if no other Participating TO had been designated or is willing to increase its proportionate responsibility, the CAISO may solicit bids to finance, own, and construct the transmission addition or upgrade.

A Transmission Owner that is neither a Participating Transmission Owner, nor seeking Merchant Transmission Facility treatment under the CAISO Tariff, retains any rights to construct and expand transmission facilities as those rights would exist absent any other obligations the Transmission Owner may have under the CAISO Tariff.

7. Cost Allocation – Transmission Access Charge

There are four general mechanisms by which a Transmission Owner can recover, or attempt to recover, its revenue requirement associated with transmission facilities turned over to the CAISO's Operational Control. The selected mechanism will depend on whether the Project Sponsor is a Participating TO or not and, if a Participating TO, whether the transmission facility constitutes a network facility or a Location Constrained Resource Interconnection Facility. Figure 7 illustrates the three mechanisms.


Figure 7: Mechanisms for Cost Allocation

7.1 Merchant Transmission Facility

CAISO Tariff Section 24.1.1 and 36.11

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A Project Sponsor may elect to fund and construct a Merchant Transmission Facility. In this case, the Project Sponsor does not seek to recover the cost of the Merchant Transmission Facility transferred to the CAISO's Operational Control through the CAISO's Access Charge and Wheeling Access Charge or other regulatory cost recovery mechanisms. Instead, the Project Sponsor of a Merchant Transmission Facility seeks an allocation, at the Project Sponsor's election, of either CRR Options or Obligations that reflect the contribution of the facility to grid transfer capacity. The conditions for receiving CRRs, for determining of the quantity of CRRs to be allocated, and for determining potential revenue from allocated CRRs, are set forth in Section 36.11 of the CAISO Tariff and the BPM for Congestion Revenue Rights, located at http://www.caiso.com/1840/1840b23c226f0.html.

7.2 Negotiated Recovery

CAISO Tariff Section 24.7.3

Under the current version of the MRTU Tariff, a Project Sponsor that elects not to receive Merchant Transmission CRRs may still receive cost recovery other than through the Access Charge. The CAISO anticipates modifying this authority to apply solely to projects previously

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electing recovery under Section 24.7.3 of the "Simplified and Renumbered" ISO Tariff such that new transmission projects approved after the commencement of MRTU would not be eligible for negotiated rate recovery. Until such modification is made, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO, provided the upgrade or addition is under CAISO Operational Control, shall be entitled to receive a compensation package based on a negotiation between the Project Sponsor, CAISO and the relevant Participating TO. The compensation for the Project Sponsor shall be commensurate with the amount of additional transmission capacity that results from the upgrade, determined by subtracting the rating of the transmission facility before the upgrade or addition from the new rating for the upgraded or additional transmission facility. The full amount of capacity added to the system will be as determined through the regional reliability council process of the WECC. If the parties agree to a compensation package, the CAISO will provide notice of agreement on the CAISO Website. The CAISO will file a proposed compensation package with FERC.

7.3 PTO Transmission Facility

CAISO Tariff Section 24.7.2 and 24.7.4

A facility constructed by a Participating TO for transfer to the CAISO's Operational Control will be either a network transmission upgrade or addition, or a Location Constrained Resource Interconnection Facility.

7.3.1 Network Transmission Facility

A Participating TO's recovery of costs for facilities turned over to the CAISO Operational Control begins with its FERC-approved Transmission Revenue Requirement. The Transmission Revenue Requirement is comprised of the total annual authorized revenue requirements associated with such network transmission facilities and Entitlements. The Transmission Revenue Requirement includes the costs of transmission facilities and Entitlements and deducts Transmission Revenue Credits, credits for Standby Transmission Revenue, and the transmission revenue expected to be actually received by the PTO for Existing Rights and Converted Rights. The remainder of the Participating TO's Transmission Revenue Requirement is intended to be recovered through a combination of the CAISO's Transmission Access Charge (TAC) or Wheeling Access Charge (WAC).

The TAC is a charge paid by entities serving Load on the transmission and distribution systems of the Participating TOs under the CAISO's Operational Control. The TAC includes the High Voltage Access Charge for facilities at 200kV and above, the Transition Charge and the Low Voltage Access Charge. The Low Voltage Access Charge is collected by each Participating TO under its Transmission Owner Tariff, based on the transmission revenue requirement associated only with its own low voltage transmission facilities and Entitlements. The details of the High Voltage Access Charge and Transition Charge are set forth in Section 26 of the CAISO Tariff and Appendix F, Schedule 3.

The WAC is a charge assessed by the CAISO that is paid by a Scheduling Coordinator for Wheeling in accordance with Section 26.1. Wheeling can be in the form of a Wheel Out or Wheel Through. The former is defined as the use of the CAISO Controlled Grid for the transmission of energy from a Generating Unit located within the CAISO Controlled Grid to serve a Load located

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outside the transmission and distribution system of a Participating TO, except for Energy utilizing an Existing Contract. On the other hand, a Wheel Through is the use of the CAISO Controlled Grid for the transmission of Energy from a resource located outside the CAISO Controlled Grid to serve a Load located outside the transmission and distribution system of a Participating TO, except for Energy utilizing an Existing Contract. The WAC may also consist of a High Voltage Wheeling Access Charge and a Low Voltage Wheeling Access Charge. The details of the WAC are set forth in Section 26 of the CAISO Tariff and Appendix N, Part F.

7.3.2 Location Constrained Resource Interconnection Facility

CAISO Tariff Section 26.6

Participating TOs finance the up-front costs of constructing Location Constrained Resource Interconnection Facilities (LCRIF). The recovery of costs for such facilities comes from two sources. First, the costs of any unsubscribed capacity of qualifying LCRIFs will be rolled into the CAISO's TAC, similar to a network transmission facility. As generation resources are developed in the area and connect to the LCRIFs, cost recovery will be transferred on a going forward, *pro rata* basis to those new generation owners, and the costs included in TAC will be reduced accordingly. Once the anticipated generation is fully developed and the capacity of the LCRIF fully subscribed, the going forward costs of the project will be borne entirely by generation developers and will not be included in the TAC. Thus, the costs associated with the unsubscribed portion of the LCRIF will be included in TAC, until additional generators are interconnected, at which time costs will be assigned to such generators.

8. Study Charges

The CAISO's costs of performing its Transmission Planning Process and producing the annual Transmission Plan are generally recovered through the CAISO's Grid Management Charge (GMC). The GMC consists of charge codes assessed monthly to participating Scheduling Coordinators for the purpose of recovering all of the CAISO's administrative and operating costs. GMC rates are calculated as set forth in Section 11 of the CAISO Tariff. The formula rate methodology provides Market Participants with the financial security of predictable GMC pricing, while ensuring that the CAISO is able to recover its actual costs in a timely manner. The charges are shown as a monthly charge on the Settlements Statements for the last day of each month, with billable quantities being published on daily statements where applicable. A detailed discussion of GMC is beyond the scope of this BPM. For more information on GMC please see:

- Section 11 of MRTU Tariff <u>http://www.caiso.com/1c40/1c407ff21c570.html</u>
- > BPM for Settlements and Billing http://www.caiso.com/17ba/17baa8bc1ce20.html
- Structure of GMC under MRTU GMC <u>http://www.caiso.com/1872/18728fb96b370.html</u>

To the extent that a proposed transmission project, or High Priority Economic Planning Study, is accepted by the CAISO for evaluation as part of the Study Plan, the costs of those activities will typically be borne, based on the division of responsibilities, either by the CAISO and recovered through existing GMC procedures and practices or by the third party assigned or accepting responsibility for the study task under the Study Plan in accordance with that entity's tariff authority. Participants in the Transmission Planning Process will be financially responsible for costs incurred in participating in the Transmission Planning Process, including activities in support of the CAISO or Participating TO evaluations. Further, the cost responsibilities of performing Interconnection Studies are governed by the CAISO's LGIP or SGIP Tariff language.

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However, there is an exception to the foregoing. Where a requested Economic Planning Study is not selected for High Priority status, and therefore is not included by the CAISO in the Study Plan, the study requestor may nevertheless conduct the study in coordination with the CAISO. The CAISO's costs of assisting the third-party requestor to conduct its own Economic Planning Study will be the responsibility of the study requestor, and such party will be asked to enter into a study agreement with the CAISO. The *pro forma* study agreement shall be posted to the CAISO Website under Transmission Planning. Further, the CAISO intends to evaluate the need to develop terms and conditions under which participants of projects included in the Study Plan would be required to contribute or otherwise pay for the cost of specific tasks or elements of the Transmission Planning Process. If necessary, this cost recovery process is expected to be restricted to a "time and materials" basis.

9. Stakeholders Process and Communications

9.1 Stakeholder Process

The CAISO initiates and coordinates a minimum of three stakeholder meetings annually as part of its Transmission Planning Process and development of its Transmission Plan. The CAISO may in its sole discretion arrange additional stakeholder meetings (*e.g.*, a meeting to discuss preliminary study results). The stakeholder meetings correspond to the three stages of development of the Transmission Plan. Thus, stakeholder meetings will be held to 1) facilitate development of the Unified Planning Assumptions and Study Plan; 2) review preliminary results of technical analyses; and 3) review the draft Transmission Plan.

All stakeholder meetings are open to Market Participants, regulatory entities, and other interested parties. In each case, notice of the stakeholder meeting will be given a reasonable time prior to the scheduled meeting through Market Notices and will be included in the CAISO event calendar found on the CAISO Website. Entities can subscribe to Market Notices through the CAISO Website at http://www.caiso.com/docs/2005/10/12/2005101209381421288.html. Teleconference and/or web conference services also will be provided for all stakeholder meetings. Further, stakeholders will be allowed to subscribe to any CAISO Transmission Planning Process e-mail service that also will provide notice of Transmission Planning Process activities, including the publication of draft and final Unified Planning Assumptions and Study Plans, technical study results, Transmission Plans, and other transmission planning reports. Stakeholders can subscribe to the CAISO Transmission Planning Process e-mail service by contacting regionaltransmission@caiso.com.

To the extent the CAISO delegates to the Participating TOs or other third parties, through the Study Plan, the responsibility to perform technical analyses, the CAISO also will require those entities to conduct a minimum of one stakeholder meeting, which also will be noticed through the CAISO's standard stakeholder notification mechanisms. In addition, the CAISO will include on the calendar of events maintained on the CAISO Website a schedule of the stakeholder meetings conducted jointly between the CAISO and any Participating TO or third party, as well as other relevant meetings of the CEC, CPUC, sub-regional, and regional planning groups.

For large transmission alternatives with significant capital outlays, additional stakeholder meetings may also be scheduled for the development of study plans and assumptions, identification of project alternatives to be considered, and to review study results. To maximize stakeholder and public participation, these additional meetings may be noticed both through standard CAISO stakeholder notice procedures, as well as through the media in the area in which the project will be located. Such additional meetings also may be held near the project's location.

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For all stakeholder events relating to the Transmission Planning Process, stakeholders will have the opportunity to submit comments on documents relevant to the meeting, and upon the meeting itself. Generally, comments will be submitted to <u>regionaltransmission@caiso.com</u>. The CAISO shall incorporate stakeholder comments in subsequent planning activities and decisional items relating to those activities. In the case of decisional items (*i.e.* adoption of final a Study Plan or final Transmission Plan), the CAISO will indicate the manner in which it responded to stakeholder comments.

9.2 Access to Transmission Planning Process Information

CAISO Tariff Sections 20.2 and 20.4

The CAISO provides access to non-confidential information related to the Transmission Planning Process, including data, assumptions, decision criteria, study methodologies, and results to all stakeholders through the Study Plan, interim study reports, study manuals, the Transmission Plan, and relevant BPMs. Public documents related to the Transmission Planning Process will be posted to the CAISO Website mainly under Transmission Planning section. The CAISO Website at Transmission Planning also will provide links to the websites of relevant transmission planning entities including, but not limited to, the CPUC, CEC, and those entities listed in Section 5.1 of this BPM.

The CAISO will attempt to minimize the instances in which the Transmission Planning Process requires the use of confidential information specifically designated by a particular market participant. Accordingly, the CAISO primarily will rely on WECC data to construct base cases for performing economic and reliability technical studies. Nevertheless, the CAISO shall maintain the confidentiality of information when:

- The information relates to procurement of resources submitted by LSEs under Sections 24.2.3.2 and 24.2.3.3 of the CAISO Tariff (CAISO Tariff Section 20.2(h)(1))
- The release of such information may harm the competitiveness of wholesale markets, as determined by the CAISO's Department of Market Monitoring (CAISO Tariff Section 20.2(h)(2))
- Release of such information may breach existing agreements and contracts, including previously executed Non-Disclosure Agreements (NDA) (CAISO Tariff Section 20.2(h)(3))
- The information involves third-party developed or other proprietary analysis tools, computer codes, or any other material that is protected by intellectual property rights (CAISO Tariff Section 20.2(h)(4))
- The information constitutes Critical Electric Infrastructure Information (CEII) in accordance with FERC regulations (CAISO Tariff Section 20.2(h)(5))

Apart from public information posted to the CAISO Website at Transmission Planning, the CAISO will post transmission planning documentation that may contain confidential information to the Market Participant Portal (<u>https://portal.caiso.com</u>). The Market Participant Portal is a web-portal that provides centralized access to secure CAISO applications based on CAISO Multi-Application digital certificates. The Market Participant Portal will have an application link to Transmission Planning. More information on the Market Participant Portal can be found in the MPP User Guide at http://www.caiso.com/1c41/1c418c2c8530.pdf.

As part of the application process, entities will be required to comply with the following requirements to gain access to confidential planning information:

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- Critical Energy Infrastructure Information may be provided to a requestor where such person is employed or designated by a Market Participant or electric utility regulatory agency within California to receive CEII, the requestor submits a statement as to the need for the CEII, and the requestor executes and returns to the CAISO the form of the nondisclosure agreement and non-disclosure statement available on the CAISO website under Transmission Planning. The CAISO may, at its sole discretion, reject a request for CEII and upon such rejection, the requestor will be directed to utilize the FERC procedures for access to the requested CEII.
- Information that is confidential under Section 20.2(h)(1) or 20.2.(h)(2) may be disclosed to any individual designated by a Market Participant, electric utility regulatory agency within California, or other stakeholder that signs and returns to the CAISO the form of the non-disclosure agreement, nondisclosure statement and certification that the individual is or represents a non-Market Participant, which is any person or entity not involved in a marketing, sales, or brokering function as market, sales, or brokering are defined in FERC's Standards of Conduct for Transmission Providers (18 C.F.R. § 358 et seq.) and
- Data base and other transmission planning information obtained from WECC may be disclosed to individuals designated by a Market Participant, electric utility regulatory agency within California, or other stakeholder in accordance with the procedures set forth as follows:
 - A Market Participant that is a member of WECC and that requests the WECC planning data base: (i) shall execute the Non-Disclosure Agreement which is available on the CAISO website under Transmission Planning and (ii) shall provide to the CAISO a non-disclosure statement, the form of which is attached as an exhibit to the Non-Disclosure Agreement executed by the Market Participant and by each employee and consultant of the Market Participant who will have access to WECC planning data base.
 - A Market Participant that is not a member of WECC and that requests the WECC planning data base: (i) shall execute the Non-Disclosure Agreement attached to this BPM, (ii) shall provide to the CAISO a fully executed WECC Non-Member Confidentiality Agreement for WECC Data, and (iii) shall provide to the CAISO a non-disclosure statement, the form of which is attached as an exhibit to the Non-Disclosure Agreement executed by the Market Participant and by each employee and consultant of the Market Participant who will have access to the WECC planning data base.
 - A non-Market Participant that is a member of the WECC and that requests the WECC planning data base: (i) shall reasonably demonstrate a legitimate business interest in the CAISO Markets, (ii) shall execute the Non-Disclosure Agreement and (iii) shall provide to the CAISO a non-disclosure statement, the form of which is attached as an exhibit to the Non-Disclosure Agreement executed by the non-Market Participant and by each employee and consultant of the non-Market Participant who will have access to the WECC planning data base.
 - A non-Market Participant that is not a member of the WECC and that requests the WECC planning data base: (i) shall reasonably demonstrate a legitimate business interest in the CAISO Markets, (ii) shall execute the Non-Disclosure Agreement, (iii) and shall provide to the CAISO a fully executed WECC Non-Member Confidentiality Agreement for WECC Data, and (iv) shall provide to the CAISO a non-disclosure statement, the form of which is attached as an exhibit to the Non-Disclosure Agreement executed by the non-Market Participant and by each

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employee and consultant of the non-Market Participant who will have access to the WECC planning data base.

10. Dispute Resolution Process

CAISO Tariff Section 13

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The ADR Procedures set forth in Section 13 of the CAISO Tariff apply to all disputes arising under CAISO Documents, including those related to the Transmission Planning Process. The ADR Procedures can be found at http://www.caiso.com/1bcc/1bcc/75734780ex.html The ADR Procedures provide for a three-tier process, progressing from negotiation to mediation to arbitration. Both substantive and procedural disputes arising from the Transmission Planning Process will be addressed through the existing ADR Procedures.



Attachment 1

Template - Study Plan in CAISO Transmission Plan

Section 1: Objectives

- · What this transmission planning effort attempts to achieve
- Roles and responsibilities of each entity contributing to each Transmission Plan component.

Section 2: Summary of CAISO Planning Process

- Overview of coordination process
- Schedules of all stakeholder meetings and other related activities
- Scope of each meeting
- Options available for stakeholder participation in the meeting, such as in-person, conference call, Webcast, etc.
- Location where information such as planning assumptions or other related documents will be available for Stakeholders
- Instructions for Stakeholders to receive notifications or communicate or provide comments to CAISO
- Contact persons and contact information of
 - o Overall planning process
 - o Subject matter experts (SME) for each technical study

Section 3: Planning Data

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- Load forecast Source of the load forecast, amount, and detailed methodology if original load is adjusted to the scope of each study
- Generation assumptions Source of new generation data and list of new generation projects modeled in the study
- Generation retirement Source of generation retirement data, list of generation retirement modeled in the studies
- Transmission Projects Source of Transmission Project information and list of Transmission Project modeled in the studies
- Import Source of Import data, amount of import modeled, and methodology to determine the import (*e.g.*, Import Allocation Methodology)
- Project proposals and study requests received during the Request Window

Section 4: Planning Studies

- List of all planning studies to be done in each Transmission Plan
- Each study defines:
 - The objective the study tries to achieve
 - The study assumptions (*e.g.*, study year, planning data applied to each study, or any modifications made to original planning data described in Section 4.1.3.)
 - Methodology Describe how the study will be performed (this may refer to appropriate Business Practice Manuals or documents that have been produced and posted on the CAISO website at [URL to be determined])
 - Criteria Reliability or criteria applied to each study, such as NERC/WECC or other standards being used
 - o Software and Tools List software and tools for each study



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- o Entity to perform the study
- Expected study results and location where Stakeholders may access pages dedicated to the study
- Stakeholder meetings or any major activities to be completed in addition to the regular schedules in CAISO Transmission Plan (if applicable)

Section 5: Comments, Responses, and Disputes

- Comments received from Stakeholders that need to be addressed in the study plan
- CAISO responses to the comments
- Records of disputes CAISO has received, particularly for the unified planning assumptions and the resolutions through the ADR process

The above template is based on the study plan for the 2008 Transmission Plan that CAISO discussed during the stakeholder meeting, June 11, 2007, available at http://caiso.com/1bf4/1bf4740146650.pdf.

ATTACHMENT D



Memorandum

 To: ISO Board of Governors
 From: Armando Perez, Vice-President, Planning and Infrastructure Development Gary DeShazo, Director, Regional Transmission - North
 Date: December 4, 2007
 Re: Decision on Authorization for Filing FERC Order No. 890 Transmission Planning Process

This memorandum requires Board approval.

EXECUTIVE SUMMARY

Management seeks Board approval to amend provisions of the MRTU Tariff related to the CAISO's Transmission Planning Process.¹ The proposed amendments serve to (1) satisfy the transmission planning requirements of the Federal Regulatory Energy Commission's (FERC) Order No. 890 and (2) conform the MRTU Tariff to the CAISO's current and anticipated Transmission Planning Process procedures. The changes to the MRTU Tariff resulting from Order No. 890 compliance will not have any impact on system specifications or the implementation schedule for MRTU.

FERC issued Order No. 890 to further address the potential for undue discrimination and preference in the provision of transmission service. Order No. 890 requires all transmission providers, including ISOs, to amend their existing open access transmission tariffs (OATT) to implement a coordinated, open and transparent transmission planning process that complies with nine planning principles specified in the order or, alternatively, demonstrate that their existing process is consistent with or superior to the requirements in the order.² The CAISO's existing tariff provisions governing its Transmission Planning Process are largely consistent with or superior to the Order No. 890 requirements. Even prior to Order No. 890, the CAISO initiated efforts to develop a more proactive, open, and transparent Transmission Planning Process, which is intended to ensure, over both short- and long-term planning horizons, a reliable, economically efficient transmission system that also facilitates achievement of State policy objectives. Accordingly, the CAISO has utilized the Order No. 890 compliance efforts do not reflect significant shifts or additions to CAISO policy. Rather, the CAISO has utilized the Order No. 890 compliance process to collaborate with stakeholders to refine, clarify, and better document elements of its recently implemented, more proactive Transmission Planning Process.

¹ The Governing Board was previously briefed on this item on October 17, 2007.

² A description of the Order No. 890 Planning Principles is included at Attachment 1. Created by: GD/RTN

The CAISO's Order No. 890 compliant Transmission Planning Process is memorialized both in the proposed amendments of the MRTU Tariff as well as in a newly created Business Practice Manual for the Transmission Planning Process (BPM). Consistent with other business processes under MRTU, the BPM contains specific implementation details that do not constitute "rates, terms and conditions" of transmission service under the Federal Power Act. A description of the CAISO's stakeholder activities related to this item and response to stakeholder comments are set forth in Attachment 2.

Major elements of the Transmission Planning Process addressed through the Order No. 890 tariff amendments that will be described in this memorandum:

- Description of the Transmission Planning Process Procedures
 - o Open season
 - o Creation of Unified Planning Assumptions and Study Plan
 - o Study Process and Transmission Plan
- Refinements to CAISO confidentiality provisions
- An explicit delegation of authority to management to approve transmission projects with an estimated capital cost of up to \$50 million. This represents an update to the current practice that grants management authority to approve transmission projects with estimated capital costs of up to \$20 million to account for increased project costs
- Refinements to standards for determining when transmission projects will be approved as "needed"
- Addition of explicit authority for the CAISO to propose and identify "economic" transmission projects and the assignment of Project Sponsor responsibility for such projects
- Addition of provisions governing the conduct of Economic Planning Studies
- Creation of a Grid Planning Standards Committee
- Refinements to the provisions identifying entities with obligations to construct approved transmission projects
- Refinements to regional coordination provisions

MOTION

Moved, that the ISO Board of Governors approve the FERC Order No. 890 proposal as outlined in the memorandum dated December 4, 2007, and related attachments; and

Moved, that the ISO Board of Governors authorize Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.

DISCUSSION

Description of Transmission Planning Process Elements

1. Description of Transmission Planning Process

The CAISO's Transmission Planning Process consists of three planning process stages and utilizes an "open season timeframe to allow for certain types of transmission information to be submitted to the CAISO." A temporal depiction of the process is as follows:



• Open Season

Under current CAISO practice, information from stakeholders affecting transmission service and proposed transmission projects can be submitted to the CAISO at any time during the planning cycle. The CAISO proposes to change this by the establishment of an "open season" during which certain types of transmission information and projects, most notably "economic" transmission projects, must be submitted to the CAISO for review. The creation of an open season will allow for a more coherent consideration of relevant information and projects during the planning cycle, permitting an appropriate assessment of competing alternatives to resolve the same transmission related problem, and better coordination with regional planning activities. The proposed Open Season will span a timeframe from January 1 through October 31 of each annual planning cycle.

• Unified Planning Assumptions and Study Plan Stages

The purpose of this stage is to determine the goals of, and agree upon assumptions for, the various studies to be performed as part of that year's Transmission Planning Process cycle. Information obtained from this process and from other entities such as the California Energy Commission, Participating Transmission Owners, Load Serving Entities, etc., will be integrated into the study process. It is also at this stage that the Transmission Planning Process coordinates and accounts for other planning functions, including the outcome of previously completed generator interconnection studies, resource adequacy related studies, and the assessment of resources, including those needed to meet state Renewable Portfolio Standard goals.

Once all of this information has been accumulated and reviewed by stakeholders, a Unified Planning Assumptions and Study Plan will be produced by the CAISO to provide stakeholders with a coordinated plan for completing all of the required studies during that planning cycle. The Unified Planning Assumptions and Study Plan will describe the basic planning assumptions and input, sources for those assumptions and input, how they will be applied, methodology, tools used, study criteria, (i.e., WECC Planning Standards), expected study output, and assignments for performing specific analyses.

• Perform Studies and Produce Transmission Plan Report

During the second stage, the CAISO performs technical studies and present initial results to stakeholders. The studies follow the Study Plan using the Unified Planning Assumptions to the maximum extent practical. The third stage of the Transmission Planning Process involves documenting the technical results and addressing stakeholder comments and concerns. The products resulting from this stage of the process are the CAISO Transmission Plan, which will be presented to the CAISO Board of Governors. It should be noted that the Transmission Plan may or may not include the final evaluations of larger transmission projects. Because of the substantial time needed to perform more complex transmission project assessments, such significant projects may be on a study schedule that calls for their review by the CAISO Board of Governors independently of the Transmission Plan. However, the Transmission Plan will account for and coordinate with all pending studies to ensure a complete plan is presented to all stakeholders.

2. Confidentiality and Information Exchange

Order No. 890 requires that the transmission provider develop guidelines for the submission of information to facilitate transmission planning. The CAISO has complied with this requirement by identifying specific information that must be provided by Participating Transmission Owners (Participating TOs) as well as information that the CAISO will request from other transmission customers or other entities, including that related to procurement plans, results of requests for offers, and other long-term supply arrangements. Given the commercially sensitive nature of this information, the CAISO will explicitly protect such information as confidentiality and subject to disclosure only to non-market participants as defined by FERC Standards of Conduct.

3. Increase in Dollar Value of Management's Authority to Approve Transmission Projects Without Concurrent Board Approval

Under current CAISO practice, all transmission upgrades or additions with an estimated capital cost of greater than \$20 million must be approved by the Governing Board to be deemed "needed" by the CAISO in accordance with the Tariff. In contrast, CAISO management may independently approve and direct a Project

Sponsor to proceed with a transmission upgrade or addition with an estimated capital cost of less than \$20 million. This practice has been in place since the early period of CAISO operation. Given the general increase in the cost of capital improvements over time, the dollar threshold triggering the Governing Board's approval should be updated to allow for small projects to be approved by Management while still requiring Governing Board approval for significant transmission projects. Management proposes a \$50 million threshold in place of the \$20 million threshold.

4. Refinements in Description of "Needed" Transmission Projects

Under the CAISO's existing Tariff, there are three general categories of transmission projects that will can be deemed "needed": (1) the project "promotes economic efficiency"; (2) the project "maintains System Reliability"; and (3) the project maintains the feasibility of Long Term Congestion Revenue Rights (Long Term CRRs) over their term. An additional category, pending for acceptance before FERC, is the CAISO's October 31, 2007 proposed Tariff provisions governing conditions for approval of Locational Constrained Resource Interconnection Facilities to facilitate the interconnection of generation whose primary fuel source is at a fixed location. The Order No. 890 filing will retain these four categories, but refine or clarify the standards to be applied to the determination of need for economic and reliability projects.

For economic transmission projects, the clarifications include:

- Maintaining the Merchant Transmission Facility classification, but specifying that such project must satisfy any CAISO operational concerns and not degrade the feasibility of allocated Long Term CRRs.
- Specifying that the CAISO must consider whether the benefit of the project outweigh its costs and that the benefit may include, but need not be limited to, a reduction in production costs, congestion cost, transmission losses, capacity costs, and environmental costs. Although several stakeholders questioned the explicit inclusion of "environmental costs" given the flexibility of the CAISO's Transmission Economic Assessment Methodology (TEAM), the term has been included to ensure there is no dispute regarding the scope of the CAISO's authority in this regard.
- Specifying that the cost of the project must considering maintaining the feasibility of Long Term CRRs.
- Specifying that the CAISO must consider transmission alternatives, including the acceleration or expansion of previously approved projects and demand management.

For reliability projects, the clarifications include:

Ensuring that reliability standards to be applied include not only NERC and WECC standards, but also CAISO Grid Reliability Standards developed by the CAISO in collaboration with stakeholders.

5. Addition of Explicit Authority for the CAISO to Propose Economic Transmission Projects

Under the CAISO's more proactive Transmission Planning Process, it takes the lead in evaluating congestion and opportunities to economically mitigate the congestion through transmission additions and upgrades. In addition, the CAISO assesses the economic efficiency of reducing the need for local capacity by expanding the transmission systems transfer capability into the "load pockets." Consequently, the CAISO must be able to propose economically efficient transmission projects and direct their construction. The Order No. 890 filing confirms this authority. Where the CAISO proposes and approves a project, it will designate one or more Participating Transmission Owners (Participating TOs), in whose service territory the project is located or the line will terminate, as the Project Sponsor with the responsibility to seek the necessary authority to construct the 6. Economic Planning Studies

As noted, the CAISO has long recognized, and incorporated, the need to plan the transmission system to enhance economic efficiency and market competitiveness. Projects such as the Palo Verde-Devers #2 500 kV line were approved to promote economic efficiency. Order No. 890 now recognizes the importance of this obligation and requires all transmission providers to publish information regarding "significant and recurring" congestion to send signals to market participants where transmission development should take place. The adoption of locational marginal prices under MRTU will inherently provide the market with significant and recurring" congestion and publishing a Congestion Data Summary covering Congestion during the prior year. The CAISO will utilize "significant and recurring" Congestion from this Congestion Data Summary as well as local capacity requirements to perform Economic Planning Studies, which are intended to provide preliminary assessments of the economic viability of realizing economic efficiencies through conceptual transmission upgrades or additions.

may solicit bids from other entities to finance, own and construct the identified transmission project.

In addition, the CAISO will allow stakeholders (as part of the open season) to request that the CAISO perform Economic Planning Studies of specifically identified constrained transmission elements. Economic Planning Studies are intended to provide preliminary assessments of the economic viability of realizing economic efficiencies through conceptual transmission upgrades or additions that provide can form the basis of actual transmission project submissions. The CAISO may designate up to five (5) requests as "High Priority." High Priority studies will be preformed by the CAISO without cost to the requesting party. The CAISO will select High Priority studies based on locations of significant and recurring congestion, the need for Locational Constrained Resource Interconnections, the need for reduction in local capacity requirements, and forecasts of future Congestion. As noted, it is the intent of the CAISO that Economic Planning Study information provides a foundational framework upon which project proposals can be submitted into the planning process through the open season.

7. Grid Planning Standards Committee

The CAISO currently follows the CAISO Grid Planning Standards which were published in 2002 pursuant to existing Tariff authority. The CAISO Grid Planning Standards were developed by an informal CAISO Grid Planning Standards Committee in order to (1) address specifics not covered by NERC or WECC Planning Standards, (2) provide interpretations of NERC or WECC Planning Standards, and (3) determine whether certain criteria should be more stringent than NERC or WECC Planning Standards. The CAISO's Order No. 890 revisions include provisions that call for, at least, an annual meeting of the Grid Planning Standards Committee. The Grid Planning Standards Committee would be open to all interested parties and would function to review and provide advisory recommendations as to potential changes to the CAISO Grid Planning Standards.

8. Obligation to Construct Projects

The existing CAISO Tariff includes provisions governing the Participating TOs' obligation to construct transmission upgrades and additions. The Order No. 890 compliance filing clarifies the obligation of Participating TOs and other parties to propose transmission additions and upgrades. The CAISO intends to continue its current practice in which the Participating TOs with "service territories" will have the primary

obligation to ensure system reliability. In addition, such Participating TOs will have primary responsibility to sponsor and construct CAISO identified upgrades or additions to preserve the feasibility of allocated Long-term CRRs during their terms and any Locational Constrained Resource Interconnection Facilities identified by the CAISO as part of a "clustered" study conducted in accordance with the Large Generator Interconnection Procedures. However, any party may propose an economic transmission project or Locational Constrained Resource Interconnection Facility not otherwise identified by the CAISO through interconnection studies.

9. Regional Coordination

Ensuring regional coordination is an important objective of Order No. 890. The CAISO will enhance its existing provisions regarding coordination within the WECC by including specific requirements to exchange information with sub-regional planning groups and, in their absence, directly with interconnected neighbors. The CAISO is currently pursuing a bifurcated approach. First, the CAISO's Transmission Planning Process itself offers an open, transparent, and structured opportunity for interconnected neighbors to exchange planning information and objectives. Second, the CAISO is participating in the development of the California Sub-Regional Planning Group (CSPG), which hopes to encompass most of the transmission systems in California. Through either of these means, the CAISO would satisfy the requirement in Order No. 890 that transmission providers coordinate with neighboring systems to ensure simultaneous feasibility of their respective plans and assess the possibility of efficiencies through mutual cooperation.

Special Issues Identified by Stakeholders Not Addressed by the CAISO's Proposal

As a result of the stakeholder process described below, the CAISO has incorporated several changes to the Transmission Planning Process recommended by stakeholders. For example, the CAISO has eliminated the proposed "transmission queue" based on ambiguity as to its intended use. The CAISO has also refined its selection criteria for "high priority" Economic Planning Studies in response to stakeholder concerns. Nevertheless, several issues raised by stakeholders remain in dispute or not addressed by the CAISO as outside the scope of the current proceeding.

• Reformation of the Generator Interconnection Queue Process

Order No. 890 does not address or require any alterations to the generator interconnection procedures previously approved by FERC in its Order No. 2003 and progeny. FERC, the CAISO, and other entities within California and across the country nevertheless recognize that many interconnection procedures require reconsideration and potential modifications. FERC has opened a new docket to address interconnection procedures. The CAISO anticipates working with stakeholders both within the parameters of this FERC docket and, if necessary, independently to address such concerns. However, queue modifications are not part of the CAISO's Order No. 890 filing.

• Expedited Alternative Dispute Resolution (ADR) process

The CAISO Tariff contains an Order No. 890 compliant ADR process. However, given the potential importance of study inputs in study outcomes and the significant involvement of stakeholders in the creation and identification of base cases and study inputs for the planning cycle, a more expedited ADR process was requested by stakeholders to address disputes arising during this aspect of the Transmission Planning Process. CAISO Management considered an expedited ADR process applicable only to disputes arising from development of the Transmission Planning Process study plan and assumptions during the stakeholder process, but ultimately concluded that its existing Order No. 890-compliant ADR process is

sufficient at this point. However, the CAISO is committed to expeditiously resolving issues related to the study plan and assumptions. If an independent assessment or additional expertise would assist in addressing disputes during the process, the CAISO will rely on those resources to ensure prompt resolution.

Preserving Generator Deliverability

Under the state's resource adequacy program, as facilitated by the CAISO's MRTU Tariff, resources must be deliverable to serve Load in order to be entitled to count towards resource adequacy obligations and potentially receive an associated capacity payment. The CAISO has stated that it intends to utilize its existing generator interconnection queue process to ensure that new generator interconnections do not degrade the deliverability of existing generators. Moreover, the CAISO has noted that it will consider deliverability in analyzing the transmission project alternatives. However, Management has elected not to include in its Order No. 890 filing an explicit obligation to use the Transmission Planning Process to ensure the deliverability of existing generator retirements. The simple reason is that it may not be economically efficient to build a transmission upgrade or addition to preserve a generator's deliverability. If, in fact, an upgrade is economically efficient based on an increase in the availability of deliverable capacity, that project may be approved under the CAISO's existing category of economic transmission projects.

STAKEHOLDER PROCESS

The CAISO has augmented the stakeholder process outlined by the FERC in Order No. 890. A summary of the CAISO's stakeholder activities is set forth in Attachment 2. FERC directed the posting of a "strawman" and a draft of the transmission planning process, both of which were the subject of FERC-sponsored technical conferences. The CAISO complied with the FERC directives, but also posted for stakeholder review and comment two additional iterations of its BPM and two iteration of proposed CAISO Tariff language. Also, in addition to participating in the two FERC technical conferences, the CAISO held three of stakeholder meetings of its own. The final stakeholder meeting was held on November 14, 2007. The CAISO provided stakeholders until December 3, 2007 to provide final comments. Accordingly, while the CAISO has provided a preliminary stakeholder matrix as part of Attachment 2, it may be that a further review of the comments could lead to modifications or additions to that matrix. In this regard, to the extent the stakeholder comments trigger reconsideration of any fundamental element of the Transmission Planning Process, management will also provide an updated memorandum to the Board, if necessary. However, a preliminary review of the comments indicates that the stakeholder suggestions will lead only to refinements that are consistent with the policy positions outlined in this memorandum

CONCLUSION

The CAISO's current Transmission Planning Process largely satisfies the principles incorporated into Order No. 890. Nevertheless, the CAISO has utilized the Order No. 890 process to further enhance its Transmission Planning Process. CAISO management requests that the Board approve these efforts and authorize management to make the necessary filings with FERC to obtain approval of CAISO Tariff provisions consistent with this memorandum.

ATTACHMENT 1

Overview of Order No. 890 Transmission Planning Principles

The following briefly summarizes the nine principles included in Order No. 890 against which the CAISO's Transmission Planning Process will be measured. Those principles are:

- <u>Coordination</u> This principle requires that transmission providers create a voluntary forum for transmission customers and interconnected neighbors to provide input at the early stages of development of the transmission providers' transmission plan.
- 2. <u>Openness</u> This principle requires that transmission planning meetings be open to affected parties and that mechanisms be put into place to manage confidential information.
- *3.* <u>Transparency</u> This principle requires the disclosure of basic criteria, assumptions, and data that underlie the transmission plans as well as the status of upgrades identified in transmission plans. Knowledgeable third parties should be able to "replicate" the results of planning studies.
- 4. <u>Information Exchange</u> This principle requires the development of a schedule and guidelines for the submittal of information from affected parties on a uniform basis.
- 5. <u>Comparability</u> This principle requires that the transmission plan treat similarly situated entities equally.
- 6. <u>Dispute Resolution</u> This principle requires that the transmission provider implement a dispute resolution process that address both procedural and substantive issues that arise from the transmission planning process.
- 7. <u>Regional Participation</u> This principle requires that the transmission provider coordinate with interconnected systems to share system plans to ensure simultaneous feasibility, use consistent assumptions and data where possible, and potentially identify system enhancements that could relieve congestion or integrate new resources.
- 8. <u>Economic Planning Studies</u> This principle requires that the transmission planning process consider not only infrastructure to maintain reliability, but also to enhance the economic efficiency of the transmission system. In order to do so, the transmission provider must, at a minimum, identify and publish instances of "significant and recurring" congestion.
- <u>Cost Allocation</u> This principle is not intended to replace current cost allocation rules, but rather requires transmission providers to establish cost allocation rules for projects that do not fit under existing structures.

ATTACHMENT 2

Stakeholder Outreach Activities and Response to Comments

CAISO posted draft documents on the following dates:

- Strawman proposal
- Economic Planning Study White Paper
- Open Season White Paper
- Long Term CRR White Paper
- Draft Business Practice Manual
- 2nd draft Business Practice Manual
- Draft Tariff language
- 3nd draft Business Practice Manual
- 2nd draft Tariff language

May 11, 2007 and May 29, 2007 July 20, 2007 July 20, 2007 July 20, 2007 September 14, 2007 October 12, 2007 October 18, 2007 November 12, 2007 November 12, 2007

Stakeholders submitted three (3) rounds of written comments to the CAISO on the following dates:

- Round One May 24, 2007 8 sets of comments
- Round Two October 10, 2007 8 sets of comments
- Round Three September 14, 2007 8 sets of comments
- Round Four December 3, 2007 5 sets of comments

Stakeholder comments are posted at: http://www.caiso.com/1c1e/1c1edf2449c80.html

Other stakeholder efforts include:

- List conference calls- October 3 ,2007 (13 phone participants)
- List of stakeholder meetings -June 26 2007 (17 attendees & 18 phone participants) June 26 2007 (FERC Technical Conference- Phoenix) July 27, 2007 (38 attendees & 52 phone participants) October 23, 2007 (FERC Technical Conference –Denver) November 14, 2007 (24 Attendees & 25 phone participants)

Subject	Stakeholder Name/Comments	CAISO Response
	BAMx Comments	
Approval Standards	The CAISO should adopt standard defined terminology describing the reasons to approve a transmission project, thereby allowing all stakeholders to utilize the same terminology and thus greatly enhancing our communications and comments.	The CAISO has attempted to utilize terms consistently and has modified the BPM and tariff in response to BAMx comments. However, the CAISO continues to believe that the terms should not be defined in a manner that is too prescriptive and prevents the flexibility necessary to adapt to the specific circumstances of proposed transmission upgrades.
Open Season	BAMx and others have previously noted that the requirements for stakeholders to propose projects in November of year X-1 for year X grid plan is discriminatory and unworkable. While the 3rd Draft of the BPM in compliance with FERC Order No. 890 obligates "PTOs economic transmission upgrades or additions" to follow the Open Season process, it has not been made clear, as mentioned above, on what distinguishes an "economic project" from one that is defined as "reliability transmission upgrades or additions" when project justifications are inconsistently classified.	The CAISO does not believe the open season propsal is discriminatory or unworkable. The open season serves several purposes. First, the open season provides a time for the CAISO to seek and entities to information that can be used to develop the next year's Study Plan, including a description of anticipated transmission needs and other infrastructure concerns that may be address by the Transmission Planning Process. Second, the open season provides an opportunity for parties to propose specific solutions to address problems, concerns or results generated by the prior year's Transmission Planning Process. Accordingly, the CAISO believes the schedule and structure of the open season is reasonable for its intended purpose and allows all parties to propose economic transmission projects. While all transmission projects have potential economic are sufficient to enforce the distinction and the need for participation in the open season.
Approval Process	The timing of projects and their approval process remain confusing and opaque to stakeholders. Complete guidelines should be developed statewide for requesting CAISO approval.	The timing of approval is described. Projects with estimated capital costs of less than \$50 million are anticipated to be part of the Transmission Plan Report, which will be completed and presented to the Governing Board in January. Projects within this category included in the Transmission Plan Report have already been approved by CAISO management. Other projects that require Governing Board approval may or may not, because of study complexity, be completed in time for inclusion in the Transmission Plan Report and may be presented to the Governing Board on a separate schedule determined during the development of the Study Plan.

Subject	Stakeholder Name/Comments	CAISO Response
	We recognize an overall limitation of resources to make improvements to the CAISO planning process. Ideally	
	resources need to be added so that meaningful results are available to stakeholders about mid-year, not in	
	December.	
	One suggestion on ways to improve the process without necessarily increasing the resources applied is to go	If experience demonstrates that further refinement to the
	through a biennial transmission planning process. We recognize that would require a change in the tariff language	Transmission Planning Process is necessary, the CAISO
	and associated BPMs, but given FERC Order No. 890 compliance and MRTU tariff proposals, this may be an	will again proceed by means of a stakeholder process in
Biennial Process	opportune time to consider a biennial planning process.	which BAMx will have the opportunity to raise this issue.

Subject	Stakeholder Name/Comments	CAISO Response
	CalWEA Comments	
Open Season	Needs identification: Allow all affected and interested parties, including PTOs, generation owners and developers, LSEs, neighboring TOs and sub-regional planning groups and the CAISO, to identify and present transmission needs and opportunities as part of an open season process: First Open Season. The goal of this process would be solely to focus on needs and opportunities, and not projects or solutions.[1] The CAISO would then work with all such parties to perform the necessary analyses to identify and prioritize transmission needs and opportunities.	The CAISO's Transmission Planning Process is intended to address identified transmission needs, including those identified by Market Participants. This will occur through the upfront identification of the criteria and methodology for studies as well as through collaborative development of studies to be performed as part of the Transmission Planning Process.
Open Season	Solutions to address confirmed needs/opportunities: Allow all affected and interested parties, through a Second Open Season process, to propose solutions (including transmission projects) to address all the verified high-priority transmission needs and opportunities. The CAISO would then work with all such parties to screen and consider such solutions as part of a "Master Transmission Plan" that would be developed, through its open and non-discriminatory transmission planning process, to resolve the needs and capture the opportunities identified through the First Open Season process.	The CAISO's open season is intended to perform this function.
	Master Plan development & implementation: CAISO would use agreed-upon criteria to select the least- cost/best-fit Transmission Master Plan. The PTOs would have the opportunity to construct the transmission projects selected in their service territories, consistent with their right of first refusal. Other eligible transmission developers could offer to build ISO-selected projects that the PTOs decline.	The CAISO does have the authority to compel PTOs to proceed with the siting, permiting and construction process for certain approved projects, and in those cases where PTOs may decline this responsibility, to seek other parties to act as Project Sponsor.
LGIP	 CalWEA proposes reforming the LGIP process to tie it tightly to the larger Transmission Planning Process, as envisioned by the FERC Order 890 Proceedings, namely: The current large interconnection queue backlog must be cleared, and projects that are not commercially viable must be "weeded out." The LGIP process should then be heavily streamlined, to focus on determining rational transmission cost responsibilities for interconnecting projects based on their selected level of deliverability, as opposed to planning for actual transmission development, which should occur in the larger Transmission Planning Process. Deliverability for interconnecting projects completing the LGIP process and signing Interconnection Agreements should be included as needs in the first open season referenced in Item A above. The Master Transmission Plan envisioned in Item B above would include the actual network and other transmission upgrades to address the interconnection needs of all generation projects with signed IAs; those upgrades will be determined considering those needs, as well as all other high-priority transmission- system reliability and economic needs and opportunities identified in Item A. 	The CAISO has not engaged in LGIP reform through the Order No. 890 process. However, it intends to actively participate in FERC Docket No. AD08-2-000, recently opened to address queue issues.

Subject	Stakeholder Name/Comments	CAISO Response
	PG&E Comments	
DDM Section 0.2	Section 9.2 defines a "non-Market Participant" as "any person or entity not involved in marketing, sales, or brokering function as market, sales, or brokering are defining in FERC's Standards of Conduct for Transmission Providers." To clarify that PG&E transmission planning engineers are non-Market Participants, PG&E recommends that the CAISO change the following sentence as indicated: "Information that is confidential under Section 20.2(f)(i) or 20.2.(f)(ii) of the CAISO Tariff may be disclosed to any individual or group (e.g., the transmission planning division(s) of a Participating TO) that signs the form of the non-disclosure agreement and certificate included as part of this BPM representing the individual or group is or represents a non-Market Participant, which is any person or entity not involved in a marketing, sales, or brokering function as market, sales, or brokering are defined in FERC's Standards of Conduct for Transmission Providers."	The CAISO does not believe that the suggested edit is necessary and that the existing language sufficiently
BPM Section 9.2		satisfies the intent of PG&E's concern.
	Section 9.2 specifies under what circumstances the Western Electricity Coordinating Council ("WECC") data base information may be disclosed to Market Participants that are WECC members. PG&E suggests	
	that it also specify under what circumstances such information may be disclosed to non-Market	
BPM Section 9.2	Participants that are WECC members?	The CAISO agrees to make this clarification.
Tariff Revisions		
Section 20.4(c):	20.4(c): Add a new section (iv) to clarify that transmission planning divisions of PTOs may have access to confidential generation outage and other planning information in order to plan the system, as follows:	This matter remains under CAISO consideration.
	In order to plan the CAISO Controlled Grid in conformance with Applicable Reliability Criteria, CAISO Grid Planning Standards and other applicable federal and state requirements, the CAISO may share individual Generating Unit Outage information and planning data with the transmission planning division(s) of a Participating TO whose system is significantly affected by the Generating Unit or planning data, respectively, and that signs the form of the non-disclosure agreement included as part of the Business Practice Manual for the Transmission Planning Process.	
Section		
24.1.3(b)(1),	24.1.3(b)(1), 24.1.3.1(a)(4) & 24.1.3.4(a): Change "the applicable CAISO grid planning standards,	
	including planning standards that are Applicable Reliability Criteria" to "all Applicable Reliability	
24.1.3.4(a):	Criteria and CAISO Grid Planning Standards," to be consistent with 24.1.2 and 24.2(a).	The CAISO agrees to make this clarification.
Section 24.2.1:	24.2.1: In the section heading, add "Standards" between "Planning" and "Committee."	The CAISO agrees to make this clarification.

Subject	Stakeholder Name/Comments	CAISO Response
	24.2.2: The use of <u>"within the CAISO Control Area</u> " at the end of the fourth sentence does not seem to	
	comply with Order 890 requirements for Economic Planning Studies to "encompass the study of upgrades	
	to integrate new generation resources or loads on an aggregated or regional basis." (Order No. 890, P.	
	548). PG&E also suggests adding "congestion relief" to the intended purposes of proposals for	
Section 24.2.2:	Economic Planning Studies, consistent with the language of Order 890.	The CAISO agrees to make this clarification.
Section	24.2.2.1(c): Change <u>"any"</u> to "such" before "sub-regional planning entity's preferred solution or	
24.2.2.1(c):	project."	The CAISO agrees to make this clarification.
	24.2.2.2(d): Change to "Whether resource and Demand information indicates that the Congestion	
Section	described in the study request is projected to increase over the ten year planning horizon and the	
24.2.2.2(d):	magnitude of that Congestion."	The CAISO agrees to make this clarification.
	24.2.5.3: Change to: "The Transmission Plan will be considered final once it has been presented to <i>and</i>	Governing Board approval. Accordingly, the CAISO
Section 24.2.5.3:	accepted by the CAISO Governing Board and will be posted on the CAISO Website."	declines to make this modification.
	24.6.3: Change to: "Where the conditions of Article 24.6.2 have been satisfied [i.e. the Participating TO	
	<i>cannot secure necessary approvals or property rights] and</i> it is possible for a third party to obtain all	
	approvals and property rights under applicable federal, state and local laws that are necessary to complete	
	the construction of transmission additions or upgrades required to be constructed in accordance with this	
	CAISO Tariff (including the use of eminent domain authority, where provided by state law), the CAISO	
	may confer on a third party the right to build the transmission addition or upgrade, which third party shall	The CAISO agrees that this section requires clarification and consistency with other provisions that allocate the
Section 24.6.3		responsibility for construction.
	24.7: Change the first sentence to: "The Project Sponsor will have responsibility for completing <i>the</i>	
	applicable <i>project planning coordination</i> requirements and rating study requirements, <i>including those of</i>	
	<i>the WECC</i> , to ensure that a proposed transmission addition or upgrade meets regional planning	
Section 24.7:	requirements."	The CAISO agrees to make this clarification.

Subject	Stakeholder Name/Comments	CAISO Response
	SCE Comments	
Section 24.11	SCE is concerned with the CAISO's draft language at Section 24.11 of the Draft MRTU tariff. Specifically, section 24.11 states: "The capacity on all transmission additions and upgrades constructed in accordance with this Section 24 that is owned by a Participating TO shall form part of the CAISO Controlled Grid and shall be operated and maintained by a Participating TO as required by the Transmission Control Agreement."	The CAISO intends to modify the proposed language to reflect the appropriate level of flexibility to facilitate jointly-owned transmission projects.
	As the CAISO is aware, one of the issues that may jeopardize the formation of the Pacific Southwest Planning Association (PSPA) is the jurisdictional control of jointly-owned transmission projects, particularly between PTOs and non-PTOs (i.e., municipalities). The proposed tariff language at Section 24.11 does not address the issue. SCE believes the CAISO should allow operational options such as not placing the transmission facilities of jointly-owned transmission projects under the CAISO's operational control. Similar to existing arrangements, a PTO could place its shared transmission capacity of the facility under the CAISO's control, and recover the costs of the assigned transmission capacity through the CAISO TAC. Such an arrangement could provide another mechanism to foster the development of needed transmission in California, and elsewhere.	
	TANC Comments	
Section 24.11	Section 24.11 (Ownership of and Charges for Expansion Facilities), has been revised so that Section 24.11.1 now provides <u>"The capacity on all</u> transmission additions and upgrades constructed in accordance with this Section 24 that is owned by a Participating TO shall form part of the CAISO Controlled Grid and shall be operated and maintained by a Participating TO as required by in accordance with the Transmission Control Agreement."	The CAISO intends to modify the proposed language to reflect the appropriate level of flexibility to facilitate jointly-owned transmission projects.
	However, Section 6 (Obligation to Build) of the BPM (in page 48) provides language that is inconsistent with the revised draft Section 24.11.1. The BPM provides in pertinent part that "any transmission additions or upgrades constructed pursuant to Section 24 of the CAISO Tariff must be transferred to the CAISO's Operational Control for inclusion in the CAISO Controlled Grid. As a result, regardless of ownership, the transmission upgrade or addition included in the CAISO Controlled Grid must be operated and maintained by a PTO after the PTO has entered into a TCA."	
	The ISO should clarify and the proposed BPM or MRTU Tariff language should reflect that: (1) where transmission additions are developed jointly by a Participating Transmission Owner ("PTO") and other non-PTO's, the non-PTO's portion of the transmission additions need not be transferred to the ISO's Operational Control; and (2) a transmission project that is jointly developed by PTO's and entities outside of the ISO Control Area will not be required to become part of the ISO's Control Area or balancing authority area.	

Subject	Stakeholder Name/Comments	CAISO Response
	Section 24.2.5.1 (Technical Studies) provides that the IS0 will perform or	
	direct the performance by third parties of technical studies and other	
	assessments necessary for the Transmission Plan and Transmission Planning	
	Process. Since "third parties" include non-jurisdictional Market Participants	
	or entities that are in neighboring control areas, this Section should be revised	
	to recognize that the performance of such technical studies by nonjurisdictional	
	Market participants or entities that are in neighboring control	
	areas, shall be provided voluntarily. Similarly BPM section 2.1.2.3 (Stage 2:	
	Technical Studies and Presentation) at page 16, and section 4.2 (Performance	The CAISO will clarify that the CAISO can direct PTOs
	of Technical Studies and Other Necessary Review Procedures) at page 36,	and Project Sponsors to perform specific tasks and that
	should be revised to clarify the same voluntary performance of technical	all other participation by Market Participants shall be
Section 24.2.5.1	studies by non-jurisdictional entities.	voluntary.
	TANC Comments	
	Section 24.4 (Participating TO Study Obligation) provides that the PTO will	
	be directed by the IS0 to coordinate with the Project Sponsor and other	
	Market Participants to perform any study necessary to determine the	
	appropriate facilities to be constructed in accordance with the ISO's	The CAISO will clarify that the CAISO can direct PTOs
	Transmission Planning Process. This Section should be revised to recognize	and Project Sponsors to perform specific tasks and that
	that the coordination by any non-jurisdictional Market Participant and the	all other participation by Market Participants shall be
Section 24.4	PTO shall be provided voluntarily.	voluntary.
	Page 12 of the BPM, which provides in section 2.1.1 (Roles of Participants in	· ·
	the Transmission Planning Process) the Roles and Responsibilities of	
	"Publicly Owned Utilities," should be revised to include the term "voluntary,"	
	so that the sentence reads "Participate in the CAISO Transmission Planning	
Page 12 of the	Process; voluntarily exchange information and coordinate plans with CAISO	
BPM	and PTOs."	See above.
	The IS0 has added proposed language to Section 20.2 (Confidential	
	Information) to make information received under Section 24.2.3.2	
	(Information Requested from Other Market Participants) confidential.	
	Information received under Section 24.2.3.3 (Information Requested from	
	Interconnected Control Areas, Sub-Regional Planning Groups and Electric	
	Utility Regulatory Agencies) may also require confidential treatment. Thus,	
	the first sentence of that Section should be revised to add the phrase 'Market	
	Participants or other third parties" so that it reads, "The following information	
	provided to the CAISO by Scheduling Coordinators, Market Participants or	
Section 20.2	other third parties shall be treated by the CAISO as confidential."	The CAISO is considering this suggestion.
	The timelines in BPM section 3.2 (Open Season Submission Process) at page	
	24 significantly affects terms and conditions of the transmission planning	
	process and should be included in the Tariff (i.e., 7 days to supplement	The CAISO disagrees and feels the BPM is the
BPM section 3.2	submissions and 30 days to submit details of project).	appropriate place for scheduling detail of this nature.

Subject	Stakeholder Name/Comments	CAISO Response
	BPM section 3.4 (Screening Process) provides at page 29 that the IS0 will	
	perform a maximum of five High Priority Studies on behalf of stakeholders,	
	but retains discretion to perform greater than five. Also BPM section 4.2.2.1	
	(Economic Planning Studies (Congestion Studies)) provides at page 39 this	
	same five study concept, but that the IS0 may elect to conduct more studies if	
	congestion conditions warrant. This five-study-minimum concept should be	
	included in the Tariff, as it significantly affects the transmission planning	
BPM section 3.4	process.	The CAISO agrees to make this modification.
	a project, the costs of which will be funded by the Project Sponsor and	
	recovered through Congestion Revenue Ri&ts ("CRRs") rather than through	
	the ISO's TAC or other regulatory means, and that a Merchant Project is	
	considered an economic project. Draft Section 24 of the Tariff does not use	
	the term "Merchant Transmission Project," but instead uses the term	
	"Merchant Transmission Facility." The concept of fonding such costs through	
	CRRs does not appear in the similar term "Merchant Transmission Facility,"	
	as it is defined in the MRTU Tariff, nor does the relationship between	
	merchant and economic projects appear in the Tariff definition. See also, e.g.,	
	BPM section 2.1.4 (Transmission Projects Identified Through the	
	Transmission Planning Process), page 20, BPM section 4.2.5 (Merchant	
	Transmission Process), page 43, BPM section 7.1 (Merchant Transmission	
	Facility), page 50. Although Section 36.1 1 of the MRTU Tariff does link the	
Draft Section 24	concept of CRRs and Merchant Transmission Facilities, the relationship	The CAISO has ensured appropriate use of defined
of Tariff	between Merchant projects and CRRs is not clear, and should be specifically	terms in its final version of the Tariff and BPM.
	The capitalized term "Grid Planning Standards" should be defined in the	
Misc.	Tariff.	The CAISO agrees to make this modification.
	The ISO's draft Tariff language provides that the definition of the term	
	"Economic Planning Study" is to be determined. However, the BPM defines	
	the term to mean "A technical study conducted by the CAISO or a third party	
	annually as part of the CAISO Transmission Planning Process to identify and	
	address congestion and explore opportunities and/or conceptual plans to	
	mitigate such congestion or othenvise improve market efficiency." The	The CAISO will include a definition of Economic
Misc.	definition of this term should be finalized and included in the Tariff.	Planning Study in the Tariff.
	Proposed definitions for the terms "Study Plan" and "Unified Planning	
	Assumptions" reference Section 24.4.3, however such a section does not exist	
	in the November 12 version of the draft Tariff. Thus, the Section reference	
Section 24.4.3	should be corrected.	The CAISO agrees to make this modification.
Section 24.1.3.1	In Section 24.1.3.1 (c), the reference to Section 24.1.4.1 (b)(l) should be	
(c):	revised to reference Section 24.1.3.1 (b)(l).	The CAISO agrees to make this modification.

ATTACHMENT E

Matrix Re CAISO Transmission Planning Process Consistency with Order No. 890 Transmission Planning Process Staff White Paper

Order 890 White Paper Bullets	
Coordination	
 Describe whether any committees or meeting structures (formal or informal) will be used to conduct planning activities. Many transmission providers already have formal and informal structures in place for addressing transmission planning. While the use of meetings can facilitate open dialogue on planning issues, Staff encourages transmission providers to consider all processes to simplify stakeholder involvement, such as solicitation of written comments on issues 	Sections 24.2.4.3, 24.2.5.1, and 24.2.5.2 provide for at least 3 Stakeholder meetings (see also Business Practice Manual (BPM) Section 9.1) and Section 24.2.1 provides for a Planning Standards Committee. Section 24.2 provides for Request Window, initial solicitation of comments from Participating TOs (24.2.3.1), Participating Generators, (24.2.3.2), Load Serving Entities (24.2.3.3), regional and sub- regional planning groups, and regulatory agencies (24.2.3.4); solicitation of comments on Draft Unified Planning Assumptions and Study Plan 24.2.4.3); solicitation of comments on technical studies 24.2.5.1); and solicitation of comments on draft Transmission Plan
 that arise during development of a transmission plan. Any meetings held should be on a comparable basis. Staff does not recommend adopting separate processes that segregate customers, such as holding meetings that only LSEs can attend but not merchant plant owners or holding meetings that only network customers can attend but not point-to-point customers. 	24.2.5.2. Stakeholder conferences under Section 24.2 are publicly noticed through market notices and the CAISO Website and are open to all stakeholders. (See also BPM Section 9.1)
• If groups or committees are used, describe how they will be formed, the responsibilities of each, and how decisions will be made within the group and/or committee.	Only Committee is Planning Standards Committee. See below.

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Order 890 White Paper Bullets	
 Transmission providers should supplement existing processes that do not provide sufficient opportunity for customers and other stakeholders to participate in the planning process. For example, the opportunity for parties to comment on a transmission plan during review by a state commission only provides after-the-fact input, not participation in the underlying development of the plan. To the extent a transmission provider relies on existing processes, the transmission provider should identify how that those processes may have been modified to satisfy coordination requirements. 	Not Applicable.
Describe the frequency of meetings to be held and other planning-related communications.	Sections 24.2.1, 24.2.4.3, 24.2.5.1, 24.2.5.2, 24.2.5.3 establish the minimum number of stakeholder meetings for each step of the process and the requirement for public notice of the opportunity for comments and for posting of all transmission planning documents. (See also BPM Sections 3.2, 3.4, 4.1.2, 4.3, and 9.1.)

Order 890 White Paper Bullets	
 Many transmission providers already have stakeholder meetings incorporated into their annual transmission planning cycle. Staff recommends that the schedule for such meetings, or other planning related communication, provide an opportunity for input regarding: data gathering and customer input into study development; review of study results; review of draft transmission plans; and coordination of draft plans with those of neighboring transmission providers. 	Section 24.2 establishes opportunities for comment on data gathering, study results, and draft transmission plan. Stakeholders may comment on draft Unified Planning Assumptions and Study Plan (Section 24.2.4.3); solicitation of comments on technical studies (Section 24.2.5.1); and solicitation of comments on draft Transmission Plan (Section 24.2.5.2). (See also BPM Sections 3.2, 4.1.2, 4.3, and 9.1.) Neighboring Transmission providers may attend stakeholder conferences and submit comments. The CAISO also solicits input from neighboring Control Areas and regional and sub-regional planning groups under Section 24.2.3.3 and 24.8. (See also BPM Sections 3.2, 3.3 and 5.1 and 5.2.)
Describe the procedures used to notice meetings and other planning-related communications.	Section 24.2 sets forth notice requirements. The Unified Planning Assumptions and Study Plan under Section 24.2.4.2 will provide procedures for notice and communications, as does the BPM (see BPM Section 9.1).

Orde	r 890 White Paper Bullets	
0100	Staff suggests use of a	The CAISO Website already has
	transmission planning page on	transmission planning pages on which
	OASIS containing information	notice of all stakeholder proceedings is
	such as:	provided and a calendar is maintained.
	• notice procedures and e-	Contact persons are identified in the
	mail addresses for points	posted notice. The CAISO Website allows
	of contact and questions;	Market Participants to register to receive
	• a calendar of meetings	Market Notices on their choice of topics
	and other significant	and allow secure access to applications
	events, such as release of	upon proper certification. (See BPM
	draft reports, final	Section 9.2)
	reports, data, etc.;	
	• a subscription page that	In addition, the Unified Planning
	allows stakeholders to	Assumptions and Study Plan will be
	sign up to an email	posted in the transmission planning section
	distribution list to receive	of the CAISO Website, providing a
	meeting notice and other	complete schedule of stakeholder meetings
	announcements; andthe form in which	and comment opportunities. (Section
		24.2.4.2(f).)
	meetings will take place (i.e., in person,	
	teleconference, webinar,	
	etc.).	
0	Staff also encourages	Section 24.2 and definition of Market
	transmission providers to have	Notice in the tariff and BPM Section 9.1
	mechanisms in place to notify	include market notice and email
	affected parties of the	requirements. The CAISO Website allows
	development of a potential	Market Participants to register to receive
	project, or other significant	Market Notices on their choice of topics and
	events, and invite them to	to receive other email notices through a
	participate in related planning	transmission planning subscription process.
	meetings.	
Open		
	ibe who the participants will be in	Tariff describes the obligations of and
-	anning process, including expected	opportunities for participants. BPM Table 3
	pants for any groups or	includes specific chart compiling and
	ittees used.	detailing the roles.
0	Transmission providers should describe the composition of any	The composition of the only committee (Grid Planning Committee) set forth in
	committees or groups used in the	Section 24.2.1.
	planning process. All parties	50011011 24.2.1.
	interested in the planning	
	process should be allowed to	
	participate, as relevant.	
	r p are, as relevant.	

Order 890 White Paper Bullets	
 In order for an open planning process to be successful, transmission providers and stakeholders alike should be committed to sharing and reviewing planning-related data and analyses. The sharing and review of information should commence early in the process and be ongoing, rather than commencing only after the transmission provider has prepared a final draft plan without stakeholder input. 	The CAISO's Transmission Planning Process provides for the early exchange of data and open and transparent participation in the development of study scope, objectives, and inputs through the Request Window and development of the Unified Planning Assumptions and Study Plan. (Sections 24.2.1, 24.2.2, 24.2.3, 24.2.4.) Section 20.4 and BPM Section 9.2 provide the criteria for obtaining access to confidential material.
• Describe what data is confidential/CEII, the criteria to be used to identify such data, and the eligibility criteria and process for obtaining access.	Section 20, including specifically Section 20.2, sets forth specific criteria for identifying confidential information and Section 20.4 and BPM Section 9.2 set forth criteria for obtaining access to such information.
 Staff recommends that transmission providers identify clear rules governing (i) party access, (ii) disclosure to FERC, state commissions, and other authorized parties, including the timeline for disclosure, (iii) use and applicability of non- disclosure agreements or other arrangements, and (iv) procedures regarding breach and liability. 	Section 20.4 sets forth rules for parties, FERC, state regulators, and use of non- disclosure agreements. The non-disclosure agreement identified in the BPM address procedures for breach and liability.
 Rules governing confidentiality should be developed with input from interested stakeholders and state commissions to ensure an appropriate level of information sharing. Confidentiality rules should be made publicly available, such as by posting on OASIS, including any form nondisclosure agreements or similar documents. 	The transmission planning Tariff language has undergone an extensive stakeholder process. Rules are posted as part of Tariff and BPM, and forms are posted as identified in BPM

Order 890 White Paper Bullets	
 Confidentiality rules should 	Tariff does not distinguish between
apply equally to information	information provide to and by the CAISO.
provided by the transmission	1 5
provider and information	
provided to the transmission	
provider. Transmission providers	
cannot be expected to plan for	
transmission customers that	
either cannot or do not provide	
data regarding their needs.	
Transparency	
Describe the transmission planning	Sections 24.2.2, 24.2.3, and 24.2.5 describe
cycle and important milestones in the	the transmission planning cycle and
cycle-e.g., timelines/dates for data	milestones. BPM Table 1 describes specific
exchange, studies, presentation of	timelines dates.
studies to transmission customers, etc.	
• Staff recommends identifying in	Section 24.2 and BPM Sections 2.1.3, 3,
Attachment K the frequency of	and 4 describe the frequency of the
transmission plans and the	Transmission Planning Process and its
planning study horizons used.	planning horizon. CAISO has no native
Study periods should be	load.
consistent with those used to	
plan the system for native load	
customers.	
• Provide a flow chart	BPM Figures $1 - 6$ provide flow charts.
diagramming the steps of the	
planning process, from initiation	
of the process to execution of the	
plan. The flow chart should	
include where in the planning	
process various resources (e.g.,	
generation, demand response,	
transmission) are considered.	
Order 890 White Paper Bullets	
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Describe the transmission planning	Tariff Section 24.2 describes the
methodology and protocols used to	transmission planning process in detail.
develop transmission plans.	Specific methodologies are set forth in BPM
	Section 4.2 and must be disclosed as part of
	the Unified Planning Assumptions and
	Study Plan under Section 24.2.4.2.
 Transmission providers should 	BPM 4.2 describes methodology for
clearly describe in their	technical studies, and section 24.2.4
Attachment K the methodology	describes process for determining
(load flow, stability, short	establishing assumptions, software,
circuit, voltage collapse, and	methodology, and other criteria for
production cost), criteria used, ¹	technical studies, which will be specified in
and process for establishing	the posted Unified Planning Assumptions
assumptions, as well as the	and Study Plan. Section 24.1 establishes
methodology for determining	the criteria for approval of economically
import and export capability in	driven projects, reliability driven projects,
regional studies. The	Location Constrained Resource
transmission provider also	Interconnection Facilities, and project to
should provide a description of	maintain the feasibility of long term CRRs.
the criteria for the design of new	BPM 4.2 describes various required
facilities or the qualification of	reliability criteria, including NERC
demand resources, which should	Reliability Standards (such as TPL-001
be implemented on a comparable	through TPL-004).
basis.	Under Section 24242 the Unified
• Any software or analytical tools	Under Section 24.2.4.2, the Unified
used in the planning process	Planning Assumptions and Study Plan will
should be identified and described.	specify the software and methodology to be
	used in technical studies. Section 24.2.4 sets for the stakeholder
• Describe the procedure for	process for Unified Planning Assumptions
communicating with customers and	and Study Process.
other stakeholders regarding the basic	and Study FIOLESS.
criteria, assumptions, and data that	
underlie the transmission provider's	
system plan.	

¹ Staff recommends that planning criteria reference the NERC Reliability Standards (such as TPL-001 through TPL-004) and any other reliability criteria used, including regional or local applicable criteria if any. Such standards address the types of simulations and assessments that must be performed to ensure that reliable systems are developed to meet present and future system needs, assumptions for which should be consistent with planning activities.

Order	890 White Paper Bullets	
	The transmission provider should describe how assumptions regarding transmission, generation, and demand response resources are developed. Details regarding the type of resource (i.e., transmission, generation, or demand response), rating or size, responsiveness and other operating information should be readily available to stakeholders at all stages of the planning process.	Section 24.2.4.2 provides for the sharing of the information through the Unified Planning Assumptions and Study Plan. Additional information is provided at each stage of the Transmission Planning Process. (See also Sections 24.2.5.1 and 24.2.5.2.)
0	Staff recommends that transmission providers clearly identify the process that an interested party should follow to obtain access to the underlying data used for transmission planning, such as load flow base cases and associated files needed for transmission planning, e.g., contingency files, and whether such data will be subject to confidentiality protections. Access could be provided, for example, through a secure File Transfer Protocol (FTP) site which has supporting technical information for transmission planning studies, such as power flow models, contingency files, monitored element files, solution and control options, parameters, and criteria, and output of analytical tools. Access via an "e-room" or OASIS may also be appropriate.	Under section 24.2.4.2, the basic information should be included in the Unified Planning Assumptions and Study Plan. BPM Section 9.2 also describes web- based procedures for obtaining transmission planning data.

Ordar 800 White Danar Pullats	
Order 890 White Paper BulletsOStaff recommends that transmission providers give participants the opportunity to question and discuss the initial assumptions used. Transmission providers should identify the process for this dialogue, whether through in-person meetings, written submissions, or other forms of communication.	Section 24.2.4 provides for stakeholder review of draft Unified Planning Assumptions and Study Plan. (See also BPM Section 4.1.2.)
 Staff also recommends development of a process to notify interested parties of changes or updates in the data bases used for transmission planning, and whether made by the transmission provider independently or in response to a stakeholder concern. Notification could be made, for example, through e-mail distribution lists or OASIS postings. 	Interested parties will be made aware of data updates through the annual development of the Unified Planning Assumptions and through the stakeholder process to address the preliminary results of the technical studies. (Sections 24.2.4.3 and 24.2.5.1.)
Describe how, and when, transmission plans and other planning information will be presented to customers and other stakeholders.	Section 24.2 sets the annual sequence of the transmission planning cycle. BPM Table 1 includes specific timelines. The actual dates will be included in the Unified Planning Assumptions and Study Plan under Section 24.2.4.2. (See also BPM Sections 4.1.2 and 4.3.)

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 Staff recommends that transmission providers develop a transmission plan briefing paper that describes the plan in a manner that is understandable to stakeholders (e.g., describing any needs, the underlying assumptions, applicable planning criteria, and methodology used to determine the need), rather than simply reporting engineering results. For example, user-friendly diagrams of combined path ATC facilitate customer review of transmission plans. 	Much of the required information is to be included in the Unified Planning Assumptions and Study Report per Section 24.2.4.2. Section 24.2.5.2 establishes the minimum content for the Transmission Plan. Inasmuch as the Transmission Plan is being prepared for submittal to the CAISO Governing Board, whose members have a variety of backgrounds, it will be prepared in a manner understandable to stakeholders.
 Identify a knowledgeable technical point of contact to respond to questions regarding modeling criteria, assumptions, and data underlying transmission system plans. Staff recommends involving customers early in the process to facilitate a two-way exchange of information, rather than simply notifying customers at the end of the process of study results and outputs. 	Section 24.4.2.4 requires that the Unified Planning Assumptions and Study Plan include the contact person for technical studies. Section 24.4.2.4 calls for stakeholder review of Unified Planning Assumptions and Study Plan – the first step of the process after solicitation of information from stakeholders – before they are final.
 Describe the procedure for sharing information regarding the status of upgrades identified in the transmission plan. Transmission providers should identify the frequency of updates 	Each Transmission Plan must include the status of previously approved projects under 24.2.5.2. The annual Transmission Plan must include the status of previously approved projects.
regarding the status of upgrades or alternatives, and how such upgrades or alternatives are reflected in future plan development (i.e., in-service, under construction, planned, proposed, or concept).	Under Section 24.2.4.1, the input to the Unified Planning Assumptions includes projects schedule to be energized in the planning horizon, operational solutions for Local Capacity Area requirement, and regulatory initiatives. Under Section 24.2.3.1, data obtained from Participating TOs addresses energy efficiency programs and interruptible Loads.

Order 890 White Paper Bullets	
 Staff also encourages transmission providers to 	Upgrades identified by the CAISO are included in the development of the
establish a process by which	Transmission Plan which, as described
stakeholders can discuss,	above, provides for frequent stakeholder
question, or propose alternatives for any upgrades identified by	input.
the transmission provider.	
Information Exchange	
• Describe the obligations and methods	Sections. 24.2.2, 24.2.3, 24.2.4, and 24.2.5
for customers to submit data to the	provide the various opportunities and
transmission provider.	requirements for the submission of data.
 Staff recommends that transmission providers, in consultation with customers, identify procedures for submission of data by transmission customers. Transmission providers should consider data provided by both network and point-to-point customers. 	The Transmission Planning Process, which provides procedures for submission of data, was developed through an extensive stakeholder process. Moreover, stakeholder involvement continues. After the initial solicitation of information, the United Planning Assumptions and Study plan will provide procedures for submission of additional data as necessary. CAISO Tariff does not provide network or point-to-point service as the existing under the <i>pro forma</i> tariff.
• Staff encourages transmission customers to consider providing the transmission provider the following types of data, to the maximum extent practical and consistent with protection of proprietary information: ²	Not applicable to transmission providers. However, Section 24.3 is consistent with this recommendation.
 Transmission providers should identify how information provided by each class of customer is used in the planning process. 	Section 24.2 identifies each stage in which customers submit data and how it is used in the Unified Planning Assumptions and Study Plan, technical studies, and Transmission Plan.
• Describe the schedule and procedures for submission of information by transmission customers.	See same discussions above re stakeholders.

² Staff notes that the Modeling, Data, and Analysis (MOD) Reliability Standards have specific requirements for generator owners, transmission owners and load-serving entities to provide data to planning authorities, resource planners and regional reliability organizations. Transmission providers and customers must at a minimum follow the latest Commission-approved version of these standards.

Order 890 White Paper Bullets	
• Transmission providers should	See same discussions above re stakeholders.
establish a schedule by which	
customers provide necessary	
information early in the planning	
process, so that it may be	
effectively used in the	
development of data inputs. Staff	
recommends that the exchange	
of information be a continual,	
two-way process as the	
transmission provider moves	
through the study process.	
• Data exchange could be	See same discussion above re stakeholders.
accomplished through automated	(See also BPM Section 9.2.)
means, such as through an "e-	
room," subject to appropriate	
confidentiality restrictions.	
• Regardless of the process used,	Not applicable to transmission providers.
transmission customers should	
provide the transmission	
provider with timely written	
notice of material changes in any	
information previously provided	
relating to its load, its resources,	
or other aspects of its facilities or	
operations affecting the	
transmission provider's ability to	
provide service.	
Dispute Resolution	
• Describe the process(es) that will be	Sections 13 of the CAISO Tariff and BPM
used to resolve planning-related	10 provide for resolution of disputes
disputes.	through a dispute resolution procedure.

Order	· 890 White Paper Bullets	
01401	Staff recommends that	Section 13 provides for a three-step dispute
	transmission providers consider	resolution procedure: good faith
	a three-step dispute resolution	negotiation, mediation, and arbitration.
	process of negotiation,	negotiation, mediation, and arotration.
	mediation, and arbitration, in	
	that order, providing for the	
	opportunity to file a complaint	
	with the Commission only during the negotiation or	
	6 6	
	mediation step. Due to the time and resource commitment with	
	arbitration, Staff encourages	
	parties to select either arbitration	
	or filing a complaint with the	
	Commission.	
0	In the event an existing dispute	No modifications required for Section 13 to
	resolution process is relied upon,	meet Order No. 890 requirements.
	transmission providers should	
	identify any modifications to that	
	process that may be needed to	
	accommodate planning-related	
	disputes.	
0	Staff also recommends that	Section 13 provides for publication of a
	transmission providers address	summary of disputes and of resolution.
	whether, and if so how,	
	information regarding past and	
	present disputes is shared with	
	other stakeholders.	
	be the issues, procedural and	All potential issues are subject to uniform
	ntive, that will be addressed	dispute resolution procedures.
throug	h a particular dispute resolution	
proces		
0	Transmission providers may	The CAISO has chosen not to institute a
	wish to tailor dispute resolution	separate expedited procedure.
	processes for particular types of	
	disputes. For example, expedited	
	processes may be appropriate for	
	narrower disputes, such as those	
	regarding data inputs, while a	
	more elaborate process might be	
	appropriate for broader issues,	
	such as disputes regarding the	
	methodologies or criteria used in	
	the planning process.	

Order 890 White Paper Bullets	
• To the extent existing regional	Not applicable.
processes are used to resolve	
disputes, transmission providers	
should identify any limitation on	
the scope of issues that can be	
addressed in the regional forum	
and alternate processes for	
resolution of local issues.	
Regional Participation	
• Identify the entities with which the	Per Order No. 890, CAISO process is itself
transmission provider engages in	a sub-regional process. Section 24.8 and
regional planning and the	BPM 5.2 describe broader regional and sub-
responsibilities of each entity in the	regional planning and identify the entities,
planning process.	at a minimum, with whom the CAISO will
	actively coordinate.

Order 890 White Paper Bullets	
 Transmission providers should identify the interconnected systems with which they will coordinate regional plans. If planning obligations are shared between multiple transmission providers, the duties of each should be identified clearly so that customers know who is responsible for what activity and how each transmission provider is satisfying its obligations under Order No. 890. 	See above discussion. Until a California sub-regional planning organization is created, the CAISO will share obligations with respect to Economic Planning Studies as set forth in BPM Section 4.2.2.1. Other planning obligations may be shared in the case of joint or sub-regional projects, in which case obligations would be arranged through mutual agreement.
 If planning activities are performed by a regional entity, the participants in those activities and their obligations to each other and the regional entity should be identified. Any agreements governing the relationship with, or the responsibilities of, the regional entity and its participants should be explained and placed in context, so that customers understand the relationship between them. It would not be sufficient to merely refer to agreements without explaining how the obligations arising under those agreements satisfy the principles set forth in Order No. 890.³ 	See above. The only agreements in which this CAISO is a party at this time would involve those generally associated with WECC membership.

³ Transmission providers should abide by Commission precedent to determine whether such agreements should be filed for Commission review.

Order 890 White Paper Bullets	
 Staff encourages entities participating in regional planning activities to consider use of subregional groups to facilitate the planning process. If used, the responsibilities of subregional groups should be identified, as well as the mechanisms those groups will use to coordinate among themselves and with regional entities. 	Participation in sub-regional groups is described in Section 24.8 and BPM Section 5.
 Ultimately, it is each transmission provider's obligation to comply with the requirements of Order No. 890. To the extent a transmission provider relies on or coordinates with other entities to conduct planning activities, the roles and obligations of all participants should be clearly stated so that the Commission can understand how the transmission provider's legal obligations are being fulfilled. 	See above. CAISO is not "relying upon" regional entities to conduct planning activities, but is coordinating with them. Further, the CAISO may assign Participating TOs responsibility for conducting components of technical studies in accordance with Section 24.2.4.2, but those studies must be conducted pursuant to the Unified Planning Assumptions and Study Plan to the maximum extent possible and any deviations must be explained pursuant to Section 24.2.5.1
Describe the interaction between local planning and regional planning activities.	CAISO planning is sub-regional under Order No. 890. Roles of local Participating TOs and Load Serving Entities are described in Section 24.2 and the BPM <i>see</i> , <i>e.g.</i> , BPM Table 3.
	BPM 5 describes interaction with WECC planning and California planning.

Order 890 White Paper Bullets	
 Transmission providers should 	Truly local planning is integrated into the
explain whether the processes	plan for the CAISO region, so it is one
used local planning are the same	process. To the extent the CAISO meets the
as those used for regional	eight principles, local planning will also.
planning. If different, the	As noted above, the activities of
transmission provider should	Participating TOs as NERC Transmission
provide enough detail for	Planners are coordinated and vetted through
customers to understand where	the CAISO's Transmission Planning
to address particular issues. For	Process with the CAISO retaining approval
example, if separate processes	authority.
are used for local planning and	
regional planning Attachment K	Broader regional coordination is not under
should clearly identify those	the control of the CAISO.
processes and the method	
transmission provider will use to	
delineate the activities	
undertaken each process. The	
transmittal letter accompanying	
the transmission provider's	
Attachment K should describe	
how both the local and the	
regional planning process satisfy	
the other eight principles.	

Order 890 White Paper Bullets	
 Transmission providers also should address whether the data assumptions used in local planning will be the same as those used for regional planning. For example, planning horizons for local and regional planning should, to the extent possible, be consistent so that load and resource assumptions will, in turn, be consistent. Staff encourages transmission providers to develop common data bases for local and regional planning activities so that data inputs are consistent. Similarly, regional entities engaged in planning activities should describe efforts achieve consistency in the data assumptions used by neighboring regional entities. 	Consistency of data on the local and regional level is encouraged by 1) the use of WECC data as the foundation for the Unified Planning Assumptions and 2) any technical studies must be conducted pursuant to the Unified Planning Assumptions and Study Plan to the maximum extent possible and any deviations must be explained pursuant to Section 24.2.5.1.
Describe any inter-regional planning activities in which the transmission provider or regional entity participates.	WECC activities are described in BPM 5.2. The CAISO remains actively engaged in pursuing the creation of a California sub- regional planning group that, if imlemented, will be an inter-regional planning activity in that it involves multiple control area for which regional planning is conducted.

Order 890 White Paper Bullets	
 Staff encourages parties to identify planning activities that can be performed on an interregional basis. Among other things, inter-regional coordination should strive for consistency in planning data and assumptions and address system enhancements that could relieve transmission congestion across multiple regions could be identified. For example, long-range studies can be used to identify multi-state backbone projects to enhance reliability and address shifting load and generation patterns. Describe the process for reviewing and 	See above.
coordinating the results of subregional, regional and inter-regional planning activities.	planning is included in Section 24.8 and BPM 5.
 Any processes for certifying or approving the results of a subregional or regional study should be clearly described. If processes for reviewing a subregional or regional study are different than those used for local planning, those differences should also be identified so that customers understand how to be involved in each. 	The results of any regional or sub-regional studies would be included as inputs to the Transmission Planning Process under Section 24.2.3.4.
 Staff also recommends a process for determining whether transmission plans developed on a local, subregional, regional, and inter-regional basis are simultaneously feasible. 	Input of regional or sub-regional studies will be solicited as input to the Transmission Planning Process under Section 24.2.3.4. BPM 5.2 describes process of working with WECC to coordinate plans.

Order 890 White Paper Bullets	
• Staff recognizes that the various	See above and transmittal letter.
regions are at different stages of	
development of subregional and	
1 0	
regional planning process and	
that these processes can and should evolve over time. Staff	
therefore recommends that each	
transmission provider describe,	
as part of the transmittal letter to	
its compliance filing:	
 The forms of subregional or 	
regional planning that occur	
today in the transmission	
provider's region;	
 The modifications or 	
improvements to such	
processes that are being	
proposed as part of	
compliance with Order No.	
890;	
• The reasons why a	
particular subregion or	
region was chosen to	
address compliance with	
Principle No. 7;	
 The process by which the 	
proposed subregional or	
regional planning processes	
can evolve over time as	
stakeholders gain	
experience with them (e.g.,	
in undertaking additional	
studies as experience is	
gained with the initial	
studies; in formalizing	
stakeholder and state agency	
participation; in exchanging	
data, etc.).	
Economic Planning Studies	
• Describe the scope of economic	Section 24.2 provides the process as
planning undertaken by the transmission	discussed below.
provider on behalf of its native load and	
OATT customers.	

Order 900 White Dener Dullate	
Order 890 White Paper Bullets	Section 24.9 and BPM 3.3 and 3.4 describe
• Transmission providers should	
state the type of economic	types of economic planning studies and on
planning studies that are	whose behalf performed. CAISO has no
performed and the classes of	native load, so comparability not applicable
transmission users on whose	in that regard.
behalf they are performed. If the	
same economic planning studies	
are performed on behalf of some	
users (e.g., native load) but not	
others users of the grid, the	
transmission provider should	
explain how the requirements of	
comparability are satisfied.	
 The transmission provider 	Section 24.1 and BPM Sections 4.2.1 and
should explain whether	4.2.2.2 describe the specific treatment and
reliability and economic projects	criteria for reliability and economic
are considered separately and, if	projects. Economic considerations are
so, how the economic benefits of	included in assessing alternative solutions to
reliability projects are	reliability projects and reliability benefits
considered and vice versa. Staff	may be considered in assessing economic
encourages transmission	transmission projects.
providers to consider whether	
reliability projects could be	
modified or changed to increase	
economic benefits and/or resolve	
economic constraints.	
Describe the process by which	Section 24.2.4.1, 24.9 and BPM 3.3, 3.4 and
economic planning studies can be	8 establish procedures for publishing study-
requested and the procedures for	related information.
publishing study-related information.	

Order 890 White Paper Bullets	
 Transmission providers should identify the number of high priority economic studies they will perform on behalf of stakeholders within a particular timeframe (e.g., year) and a schedule for the submission and processing of requests. Any procedures for considering requests for economic studies received in excess of the specified amount, or received outside the normal schedule, also should be identified. 	Section 24.2.2.2 provides that the CAISO will choose a maximum of five High Priority Economic Planning Studies (although it retains the right to choose more if stakeholder requests and congestion so indicate). Section 24.2.2.2 also provides procedures for proposing studies and for the CAISO's consideration. Section 24.9 and BPM 8 provide for studies in excess of CAISO high priority designations at the expense of the proponent. BPM Section 3.4.2 and 4.2.2.1 also describe the coordination with WECC regarding
 Staff recommends providing an open forum for all stakeholders to identify and prioritize which studies will be requested. For example, a transmission provider could adopt procedures for stakeholders to form a self-governing group to identify and prioritize economic study requests. The stakeholder group, or the transmission provider itself, should consider adopting procedures to govern the clustering or batching of similar requests. 	Economic Planning Study requests. Economic Planning Studies are evaluated through the entire planning process, with the extensive stakeholder involvement in that process. The selection of High Priority Economic Planning Studies is reviewed as part of the stakeholder evaluation of the draft Unified Planning Assumptions and Study Plan. (Section 24.2.4.2 and 24.2.4.3 and BPM Section 4.1.)

Order 890 White Paper Bullets	
 Any requirements for the exchange of data with requesting parties unique to economic planning studies should be clearly identified, as well as any policies regarding use of generic industry data in place of customer specific data. Staff encourages development of "adaptive" processes with feedback loops that enable planners to build on prior economic planning studies and stakeholders to tailor requests in subsequent planning cycles. 	There are no requirements unique to economic planning studies other than those in the requirement of specifying the constraint or facilities to be studied in BPM 3.3.5.
 Transmission providers should state the procedures for posting requests for studies, and responses to the requests, such as through OASIS postings or an "e-room" linked to the transmission provider's website (subject to confidentiality requirements). 	Section 24.2.2.2 provides for the submittal of requests during the Request Window and the CAISO process of the requests. BPM 3.2 provides procedures for requesting studies. BPM 4.1.2 provides that CAISO will review submissions in coordination with stakeholders to develop draft Unified Planning Assumptions and Study Plan.
 Describe the mechanism for recovering costs incurred to perform economic planning studies. Transmission providers should indicate how the cost of performing the high priority studies requested by stakeholders are reflected in their OATT rates. 	Sections 11 and 24.9 and BPM Section 8 include cost recovery mechanisms for economic planning studies. BPM Section 8 explains how costs are handled through GMC.
 Transmission providers should also identify the mechanism for recovering the cost of additional economic studies from those stakeholder(s) that requested the study. Cost Allocation 	Section 24.9 and BPM 8 place the cost of additional studies on the requester.

Order 890 White Paper Bullets		
• Describe the methodology for allocating	Section 24.7 and the transmission Access	
costs associated with reliability and	charge provisions provide recovery	
economic upgrades.	mechanism.	
 Transmission providers and 	Provisions provide certainty and have	
stakeholders should consider the	previously been approved as consistent with	
guidance provided by the	Commission guidance.	
Commission in recent orders		
regarding cost allocation issues. ⁴		
In those orders, the Commission		
stressed the need for ex ante		
certainty through definite cost		
allocation rules and clear rules		
for identifying who benefits		
from specific projects. Of		
course, Order No. 890		
recognizes the importance of		
flexibility and regional		
differences as well and, thus, a		
one-size-fits-all approach is		
neither necessary nor		
appropriate. Staff nonetheless		
encourages transmission		
providers to consider this		
precedent when developing cost		
allocation rules for their own		
system or region.		

⁴ See Midwest Independent Transmission System Operator, Inc., 114 FERC ¶ 61,106 (2006), on reh'g, 117 FERC ¶ 61,241 (2006), on reh'g, 118 FERC ¶ 61,208 (2007); PJM Interconnection, L.L.C., 119 FERC ¶ 61,067 (2007); PJM Interconnection, L.L.C., 119 FERC ¶ 61,063 (2007); California Independent System Operator Corporation, 119 FERC ¶ 61,061 (2007).

Order 890 White Paper Bullets	
• For transmission owners or	Section 24.10 and the transmission Access
regions that propose to roll-in	Charge, the costs of all new High Voltage
the cost of certain facilities	Facilities under the CAISO's operational
across more than one	control are allocated equally to all users of
transmission owner, parties	the CAISO Controlled Grid. High Voltage
should consider the factors	Facilities are defined as those of 500 kv and
addressed in recent precedent to	above. The Transmission Control
determine which projects should	Agreement provides the criteria for the
qualify for rolled in treatment	CAISO's assumption of operational control.
(e.g., reliability or economic),	
what criteria is used for project	
approval (e.g., net benefits using	
production cost simulations), and	
at which voltage level rules will	
apply (e.g., 500 kv and above).	

Order 890 White Paper Bullets	
 For transmission owners or 	This is not applicable to the CAISO's
regions that seek to rely on a	rolled-in treatment of new transmission
"beneficiaries pay" approach, as	facilities, except with regard to LCRI
much detail as possible should	facilities. Section 24.1.3 addresses LCRI
be provided regarding how the	facilities; it provides certainty and is
approach will be applied. A one-	consistent with the Commission Declaratory
sentence statement that "project	Order.
costs will be allocated to project	
beneficiaries" does not provide	
ex ante certainty regarding how	
the method will be applied in	
any particular instance.	
Participants using this method	
are therefore encouraged to	
address, among other things:	
 how beneficiaries will be 	
identified and whether	
classes of customers will	
be identified for purposes	
of allocating project	
costs; and	
 how project costs will be 	
allocated to an entity	
whose needs my not have	
given rise to the upgrade,	
but that nevertheless has	
a need during the	
planning horizon that is	
met in whole or in part	
by that upgrade; and, bow identified	
now identified	
beneficiaries may address alternatives or deferrals	
of transmission line	
costs, such as through the installation of distributed	
resources.	

Order 890 White Paper Bullets	
 Similarly, transmission owners and regions seeking to rely on a "requester pays" approach should include as much detail as possible on how that approach will be applied. A one-sentence statement that "project costs will be allocated to those who request them" does not provide ex ante certainty regarding how the method will be applied in a particular instance. Participants using this method are therefore encouraged to address, among other things: how project costs will be allocated when more than one entity requests them; how project costs will be allocated when the requested project accelerates or expands an upgrade that was already planned for native load customers; and, how project costs will be allocated for "lumpy 	Not applicable to the CAISO's rolled-in treatment of new facilities.
additions" in which the upgrade is far larger than needed by the requester.	
 Regardless of what cost allocation methodology is chosen by a transmission provider, Staff encourages transmission providers to be clear about how the methodology will work. Transmission providers should also explain how the particular methodology is comparable to how they would allocate costs to themselves, and their native load customers, for similar types of upgrades. 	This is not applicable because the CAISO has no native load.

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Order	890 White Paper Bullets	
0	Staff encourages transmission	During the stakeholder process on the
	providers to work with	Transmission Planning Process, no entity
	stakeholders and state agencies	indicated a need to compensate other
	to determine if any other entities	entities.
	are in need of cost recovery for	
	planning related activities and, if	
	so, how those costs will be	
	recovered.	
0	Transmission providers should	See above.
	also describe whether costs	
	associated with planning	
	activities will be allocated to any	
	particular customers, including	
	whether any regional cost	
	allocation agreements are	
	contemplated.	