

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

**Table of Contents**

24.	<a href="#">Comprehensive Transmission Planning Process .....</a>	<a href="#">3</a>
24.1	<a href="#">Overview .....</a>	<a href="#">3</a>
24.1.1	<a href="#">[NOT USED].....</a>	<a href="#">3</a>
24.1.2	<a href="#">[NOT USED].....</a>	<a href="#">3</a>
24.1.3	<a href="#">[NOT USED].....</a>	<a href="#">3</a>
24.1.4	<a href="#">[NOT USED].....</a>	<a href="#">3</a>
24.2	<a href="#">Nature of the Transmission Planning Process .....</a>	<a href="#">3</a>
24.2.1	<a href="#">[NOT USED].....</a>	<a href="#">5</a>
24.2.2	<a href="#">[NOT USED].....</a>	<a href="#">5</a>
24.2.3	<a href="#">[NOT USED].....</a>	<a href="#">5</a>
24.2.4	<a href="#">[NOT USED].....</a>	<a href="#">5</a>
24.3	<a href="#">Transmission Planning Process Phase 1 .....</a>	<a href="#">5</a>
24.3.1	<a href="#">Inputs to the Unified Planning Assumptions and Study Plan.....</a>	<a href="#">5</a>
24.3.2	<a href="#">Contents of the Unified Planning Assumptions and Study Plan .....</a>	<a href="#">6</a>
24.3.3	<a href="#">Stakeholder Input - Unified Planning Assumptions/Study Plan .....</a>	<a href="#">7</a>
24.3.4	<a href="#">Economic Planning Studies .....</a>	<a href="#">9</a>
24.3.5	<a href="#">[NOT USED].....</a>	<a href="#">10</a>
24.4	<a href="#">Transmission Planning Process Phase 2 .....</a>	<a href="#">10</a>
24.4.1	<a href="#">Conducting Technical Studies.....</a>	<a href="#">10</a>
24.4.2	<a href="#">Proposed Reliability Driven Transmission Solutions.....</a>	<a href="#">12</a>
24.4.3	<a href="#">Phase 2 Request Window .....</a>	<a href="#">12</a>
24.4.4	<a href="#">Comment Period of Conceptual Statewide Plan .....</a>	<a href="#">13</a>
24.4.5	<a href="#">Determination of Needed Transmission Solutions .....</a>	<a href="#">14</a>
24.4.6	<a href="#">Categories of Transmission Solutions.....</a>	<a href="#">14</a>
24.4.7	<a href="#">Description of Transmission Solutions .....</a>	<a href="#">26</a>
24.4.8	<a href="#">Additional Contents of Comprehensive Transmission Plan .....</a>	<a href="#">26</a>
24.4.9	<a href="#">Phase 2 Stakeholder Process.....</a>	<a href="#">27</a>
24.4.10	<a href="#">Transmission Plan Approval Process .....</a>	<a href="#">28</a>
24.5	<a href="#">Transmission Planning Process Phase 3 .....</a>	<a href="#">29</a>
24.5.1	<a href="#">Competitive Solicitation Process.....</a>	<a href="#">29</a>
24.5.2	<a href="#">Project Sponsor Application and Information Requirements .....</a>	<a href="#">32</a>
24.5.3	<a href="#">Project Sponsor and Proposal Qualification .....</a>	<a href="#">35</a>
24.5.4	<a href="#">Project Sponsor Selection Factors and Comparative Analysis.....</a>	<a href="#">38</a>
24.5.5	<a href="#">Notice to Project Sponsors.....</a>	<a href="#">39</a>
24.6	<a href="#">Obligation to Construct Transmission Solutions.....</a>	<a href="#">40</a>
24.6.1	<a href="#">Approved Project Sponsor Reporting Requirements.....</a>	<a href="#">40</a>
24.6.2	<a href="#">Delay in the Transmission Solution In-Service Date.....</a>	<a href="#">41</a>
24.6.3	<a href="#">Development and Submittal of Mitigation Plans .....</a>	<a href="#">41</a>
24.6.4	<a href="#">Inability to Complete the Transmission Solution .....</a>	<a href="#">41</a>
24.7	<a href="#">Documentation of Compliance with NERC Reliability Standards.....</a>	<a href="#">42</a>
24.8	<a href="#">Additional Planning Information .....</a>	<a href="#">42</a>
24.8.1	<a href="#">Information Provided by Participating TOs .....</a>	<a href="#">42</a>
24.8.2	<a href="#">Information Provided by Participating Generators .....</a>	<a href="#">43</a>
24.8.3	<a href="#">Information Requested from Load Serving Entities .....</a>	<a href="#">43</a>
24.8.4	<a href="#">Information from Planning Groups, BAAs and Regulators .....</a>	<a href="#">44</a>
24.8.5	<a href="#">Obligation to Provide Updated Information .....</a>	<a href="#">44</a>
24.9	<a href="#">Participating TO Study Obligation .....</a>	<a href="#">44</a>
24.10	<a href="#">Operational Review and Impact Analysis .....</a>	<a href="#">44</a>
24.10.1	<a href="#">[NOT USED].....</a>	<a href="#">45</a>
24.10.2	<a href="#">[NOT USED].....</a>	<a href="#">45</a>
24.10.3	<a href="#">[NOT USED].....</a>	<a href="#">45</a>
24.10.4	<a href="#">[NOT USED].....</a>	<a href="#">45</a>
24.11	<a href="#">[NOT USED].....</a>	<a href="#">45</a>
24.11.1	<a href="#">[NOT USED].....</a>	<a href="#">45</a>

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

<a href="#">24.11.2</a>	<a href="#">[NOT USED]</a>	<a href="#">46</a>
<a href="#">24.11.3</a>	<a href="#">[NOT USED]</a>	<a href="#">46</a>
<a href="#">24.12</a>	<a href="#">WECC and Regional Coordination</a>	<a href="#">46</a>
<a href="#">24.13</a>	<a href="#">Regional and Sub-Regional Planning Process</a>	<a href="#">46</a>
<a href="#">24.13.1</a>	<a href="#">Scope of Regional or Sub-Regional Planning Participation</a>	<a href="#">46</a>
<a href="#">24.13.2</a>	<a href="#">Limitation on Regional Activities</a>	<a href="#">47</a>
<a href="#">24.14</a>	<a href="#">Cost Responsibility for Transmission Additions or Upgrades</a>	<a href="#">47</a>
<a href="#">24.14.1</a>	<a href="#">Project Sponsor Commitment to Pay Full Cost</a>	<a href="#">47</a>
<a href="#">24.14.2</a>	<a href="#">Cost of Needed Addition or Upgrade to be Borne by PTO</a>	<a href="#">47</a>
<a href="#">24.14.3</a>	<a href="#">CRR Entitlement for Project Sponsors Not Recovering Costs</a>	<a href="#">47</a>
<a href="#">24.14.4</a>	<a href="#">RAC Treatment Of New Regional Transmission Facilities Costs</a>	<a href="#">48</a>
<a href="#">24.15</a>	<a href="#">Ownership of and Charges for Expansion Facilities</a>	<a href="#">49</a>
<a href="#">24.15.1</a>	<a href="#">Transmission Additions and Upgrades under TCA</a>	<a href="#">49</a>
<a href="#">24.15.2</a>	<a href="#">Access and Charges for Transmission Additions and Upgrades</a>	<a href="#">49</a>
<a href="#">24.16</a>	<a href="#">Expansion by Local Furnishing Participating TOs</a>	<a href="#">49</a>

**24. Comprehensive Transmission Planning Process**

**24.1 Overview**

The CAISO will develop a comprehensive Transmission Plan and approve transmission solutions using the Transmission Planning Process set forth in this Section 24. For purposes of this Section 24, transmission solutions include both entirely new transmission facilities and upgrades or additions to existing transmission facilities that are proposed, considered, and/or specified in the comprehensive Transmission Plan during Phase 2 to meet an identified need determined by the CAISO. Alternatives to transmission solutions are referred to as non-transmission solutions. Solutions to meet an identified need can be either transmission solutions or non-transmission solutions. The CAISO will analyze the need for transmission solutions in accordance with the methodologies and criteria set forth in this Section 24, the Transmission Control Agreement, and the applicable Business Practice Manuals. The comprehensive Transmission Plan will identify Merchant Transmission Facilities meeting the requirements for inclusion in the Transmission Plan and transmission solutions needed (1) to maintain System Reliability; (2) to satisfy the requirements of a Location Constrained Resource Interconnection Facility; (3) to maintain the simultaneous feasibility of allocated Long-Term CRRs; (4) as additional components or expansions to LGIP Network Upgrades are identified pursuant to Section 24.4.6.5; (5) to meet state, municipal, county and federal policy requirements and directives, including renewable portfolio standards policies; and (6) to reduce congestion costs, production supply costs, transmission losses, or other electric supply costs resulting from improved access to cost-effective resources. For purposes of this Section 24, the term “the year X/(X+1) planning cycle” will refer to the Transmission Planning Process initiated during year X to complete a comprehensive Transmission Plan in year X+1.

**24.1.1 [NOT USED]**

**24.1.2 [NOT USED]**

**24.1.3 [NOT USED]**

**24.1.4 [NOT USED]**

**24.2 Nature of the Transmission Planning Process**

The CAISO will develop the annual comprehensive Transmission Plan and approve transmission solutions using a Transmission Planning Process with three (3) phases. In Phase 1, the CAISO will

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

develop and complete the Unified Planning Assumptions and Study Plan and, in parallel, begin development of a conceptual statewide plan. In Phase 2, the CAISO will complete the comprehensive Transmission Plan. In Phase 3, the CAISO will evaluate proposals to construct and own certain transmission solutions specified in the comprehensive Transmission Plan. The Transmission Planning Process shall, at a minimum:

- (a) Coordinate and consolidate in a single plan the transmission needs of the CAISO Balancing Authority Area for 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 previously approved transmission upgrades and additions, Demand Forecasts, Demand-side management, 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 Balancing Authority Areas, and coordinate with other Planning Regions and interconnected Balancing Authority Areas in accordance with, but not limited to, the Order 1000 Common Interregional Coordination and Cost Allocation Tariff Language in Section 24.18;
- (d) Identify existing and projected limitations of the CAISO Controlled Grid's physical, economic or operational capability or performance and identify transmission solutions , including alternatives thereto, deemed needed to address the existing and projected limitations;
- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units, including an assessment of the deliverability of such

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Generating Units in a manner consistent with CAISO interconnection procedures;  
and

- (f) Provide an opportunity for Interregional Transmission Projects submitted to the CAISO as a Relevant Planning Region to be evaluated as potential transmission solutions to CAISO regional transmission needs.

**24.2.1 [NOT USED]**

**24.2.2 [NOT USED]**

**24.2.3 [NOT USED]**

**24.2.4 [NOT USED]**

**24.3 Transmission Planning Process Phase 1**

Phase 1 consists of two (2) parallel processes: (1) the development of the Unified Planning Assumptions and Study Plan; and (2) initiation of the development of the statewide conceptual transmission plan, as discussed in Section 24.4.4.

**24.3.1 Inputs to the Unified Planning Assumptions and Study Plan**

The CAISO will develop Unified Planning Assumptions and a Study Plan using information and data from the approved Transmission Plan developed in the previous planning cycle. The CAISO will consider the following in the development of the Unified Planning Assumptions and Study Plan:

- (a) WECC base cases, as may be modified for the relevant planning horizon;
- (b) Transmission solutions approved by the CAISO in past Transmission Planning Process cycles, including solutions which the CAISO has determined address transmission needs in the comprehensive Transmission Plan developed in the previous planning cycle;
- (c) Category 2 policy-driven transmission solutions from a prior planning cycle as described in Section 24.4.6.6;
- (d) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.4.6.3;
- (e) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix V, Appendix Y or Appendix Z relating to the CAISO's Large Generator

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Interconnection Procedures and Appendices S and T relating to the CAISO's Small Generator Interconnection Procedures that were not otherwise included in the comprehensive Transmission Plan from the previous annual cycle;

- (f) Operational solutions validated by the CAISO in the Local Capacity Technical Study under Section 40.3.1;
- (g) Policy requirements and directives, as appropriate, including programs initiated by state, federal, municipal and county regulatory agencies;
- (h) Energy Resource Areas or similar resource areas identified by Local Regulatory Authorities;
- (i) Demand response programs that are proposed for inclusion in the base case or assumptions for the comprehensive Transmission Plan;
- (j) Generation and other non-transmission alternatives that are proposed for inclusion in long-term planning studies as alternatives to transmission solutions;
- (k) Beginning with the 2011/2012 planning cycle, Economic Planning Study requests submitted in comments on the draft Unified Planning Assumptions and Study;
- (l) Planned facilities in interconnected Balancing Authority Areas; and
- (m) The most recent Annual Interregional Information provided by other Planning Regions.

**24.3.2 Contents of the Unified Planning Assumptions and Study Plan**

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

- (a) The planning data and assumptions to be used in the Transmission Planning Process cycle, including, but not limited to, those related to Demand Forecasts and distribution, potential generation capacity additions and retirements, and transmission system modifications;
- (b) A description of the computer models, methodology and other criteria used in each technical study performed in the Transmission Planning Process cycle;
- (c) A list of each technical study to be performed in the Transmission Planning Process cycle and a summary of each technical study's objective or purpose;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (d) A description of significant modifications to the planning data and assumptions as allowed by Section 24.3.1(a) and consistent with Section 24.3.2;
- (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 the Transmission Planning Process cycle and the 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) To the maximum extent practicable, and where applicable, appropriate sensitivity analyses, including project or solution alternatives, to be performed as part of the technical studies;
- (h) Descriptions of the High Priority Economic Planning Studies as determined by the CAISO under section 24.3.4.2; and
- (i) Identification of state or federal, municipal or county requirements or directives that the CAISO will utilize, pursuant to Section 24.4.6.6, to identify policy-driven transmission solutions.

**24.3.3 Stakeholder Input - Unified Planning Assumptions/Study Plan**

- (a) Beginning with the 2011/2012 planning cycle and in accordance with the schedule set forth in the Business Practice Manual, the CAISO will provide a comment period during which Market Participants, electric utility regulatory agencies and all other interested parties may submit the following proposals for consideration in the development of the draft Unified Planning Assumptions and Study Plan:
  - (i) Demand response programs for inclusion in the base case or assumptions;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (ii) Generation and other non-transmission alternatives, consistent with Section 24.3.2(a) proposed as alternatives to transmission solutions; and
  - (iii) State, **municipal, county** or federal policy requirements or directives.
- (b) Following review of relevant information, including stakeholder comments submitted pursuant to Section 24.3.3(a), the CAISO will prepare and post on the CAISO Website a draft of the Unified Planning Assumptions and Study Plan. The CAISO will issue a Market Notice announcing the availability of such draft, soliciting comments, and scheduling a public conference(s) as required by Section 24.3.3(c);
- (c) No less than one (1) week subsequent to the posting of the draft Unified Planning Assumptions and Study Plan, the CAISO will conduct a minimum of one (1) public 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 meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice;
- (d) Interested parties will be provided a minimum of two (2) weeks following the first public meeting to provide comments on the draft Unified Planning Assumptions and Study Plan. Such comments may include Economic Planning Study requests based on the comprehensive Transmission Plan from the prior cycle. All comments on the draft Unified Planning Assumptions and the Study Plan will be posted by the CAISO to the CAISO Website;
- (e) Following the public conference(s), 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. The final Unified Planning Assumptions and Study Plan will include an explanation as to the public

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

policy requirements or directives that were selected for consideration in the current planning cycle as well as the suggested public policy requirements and directives that were not selected for consideration and the reasons therefor. The CAISO will post the base cases to be used in the technical studies to its secured website as soon as possible after the final Unified Planning Assumptions and Study Plan have been published;

- (f) A public policy requirement or directive selected for consideration in a transmission planning cycle will be carried over into subsequent transmission planning cycles unless the ISO determines that such public policy requirement or directive has been eliminated, modified, or is otherwise not applicable or relevant for transmission planning purposes in a current transmission planning cycle. The ISO will provide an explanation of any decision not to consider a previously identified public policy requirement or directive from consideration in the current transmission planning process cycle.

**24.3.4 Economic Planning Studies**

**24.3.4.1 CAISO Assessment of Requests for Economic Planning Studies**

Following the submittal of a request for an Economic Planning Study, the CAISO will determine whether the request shall be designated as a High Priority Economic Planning Study for consideration in the development of the comprehensive Transmission Plan. In making the determination, the CAISO will consider:

- (a) Whether the requested Economic Planning Study seeks to assess Congestion not identified or identified and not mitigated by the CAISO in previous Transmission Planning Process cycles;
- (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 or similar resource area assigned a high priority by the CPUC or CEC;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (c) Whether the requested Economic Planning Study is intended to address Local Capacity Area Resource requirements;
- (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; or
- (e) Whether the Economic Planning Study is intended to encompass the upgrades necessary to integrate new generation resources or loads on an aggregated or regional basis.

**24.3.4.2 Selection of High Priority Economic Planning Studies**

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. As appropriate, the CAISO will perform requested High Priority Economic Planning Studies, up to five (5); however, the CAISO retains discretion to perform more than five (5) High Priority Economic Planning Studies should stakeholder requests or patterns of Congestion or anticipated Congestion so warrant. Market Participants may, consistent with Section 24.3.1 and 24.3.2, 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 comprehensive Transmission Plan.

**24.3.5 [NOT USED]**

**24.4 Transmission Planning Process Phase 2**

**24.4.1 Conducting Technical Studies**

- (a) In accordance with the Unified Planning Assumptions and Study Plan and with 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 to develop the comprehensive Transmission Plan,

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

including such technical studies and other assessments as are necessary in order to determine whether and how to include transmission solutions from the conceptual statewide transmission plan, Regional Transmission Facilities, or other alternatives identified by the CAISO during the Phase 2 studies in the comprehensive Transmission Plan. According to the schedule set forth in the applicable Business Practice Manual, the CAISO will post the preliminary results of its technical studies and proposed mitigation solutions on the CAISO Website. The CAISO's technical study results and mitigation solutions shall be posted not less than one-hundred and twenty (120) days after the final Unified Planning Assumptions and Study Plan are published, along with the results of the technical studies conducted by Participating TOs or other third parties at the direction of the CAISO;

- (b) All technical studies, whether performed by the CAISO, the Participating TOs or other third parties 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 results of each technical study. The CAISO will measure the results of the studies against Applicable Reliability Criteria, the CAISO Planning Standards, and other criteria established by the Business Practice Manual. After consideration of the comments received on the preliminary results, the CAISO will complete, or direct the completion of, the technical studies and post the final study results on the CAISO Website;
- (c) The CAISO technical study results will identify needs and proposed solutions to meet Applicable Reliability Criteria, CAISO planning standards, and other applicable planning standards. The CAISO and Participating TOs shall coordinate their respective transmission planning responsibilities required for compliance with the NERC Reliability Standards and for the purposes of

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

developing the annual Transmission Plan according to the requirements and time schedules set forth in the Business Practice Manual.

**24.4.2 Proposed Reliability Driven Transmission Solutions**

Pursuant to the schedule described in the Business Practice Manual and based on the technical study results, the CAISO, CEC, CPUC, and other interested parties may propose any transmission solutions deemed necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards through the Phase 2 Request Window. Participating TOs will submit such proposed transmission solutions through the Phase 2 Request Window within thirty (30) days after the CAISO posts its preliminary technical study results. The substantive description of reliability driven projects is set forth in Section 24.4.6.2.

**24.4.3 Phase 2 Request Window**

- (a) Following publication of the results of the technical studies, and in accordance with the schedule set forth in the Business Practice Manual, the CAISO will open a Request Window during Phase 2 for the submission of proposed transmission solutions for reliability-driven needs identified in the studies, Location Constrained Resource Interconnection Facility projects, demand response or generation proposed as alternatives to transmission solutions to meet reliability needs, proposals for Merchant Transmission Facility projects, proposed transmission solutions needed to maintain the feasibility of long-term CRRs and efficient or cost effective Regional Transmission Facility alternatives for meeting identified needs. The CEC, CPUC, and interested parties may submit potential reliability transmission solutions within the same timeframe established for Participating TOs to submit reliability transmission solutions, but they are not required to do so to the extent the Business Practice Manual grants them a longer period of time.
- (b) All solutions proposed during the Request Window must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposed transmission solutions must be within or connect to

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

the CAISO Balancing Authority Area or CAISO Controlled Grid. The CAISO will determine whether each of these proposed solutions will be considered in the development of the comprehensive Transmission Plan. In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will notify the party submitting the proposed solution of any deficiencies in the proposal and provide the party an opportunity to correct the deficiencies. Such proposed solutions can only be considered in the development of the comprehensive Transmission Plan if the CAISO determines that:

- (i) the proposed solution satisfies the information requirements for the particular type of solution submitted as set forth in templates included in the Business Practice Manual; and
  - (ii) the proposed solution is not functionally duplicative of transmission solutions that have previously been approved by the CAISO.
- (c) The duration of the Request Window will be set forth in the Business Practice Manual.

**24.4.4 Comment Period of Conceptual Statewide Plan**

Beginning in Phase 1, the CAISO will develop, or, in coordination with other regional or sub-regional transmission planning groups or entities, including interconnected Balancing Authority Areas, will participate in the development of a conceptual statewide transmission plan that, among other things, may identify potential transmission solutions needed to meet state and federal policy requirements and directives. The conceptual statewide transmission plan will be an input into the CAISO's Transmission Planning Process. The CAISO will post the conceptual statewide transmission plan to the CAISO Website and will issue a Market Notice providing notice of the availability of such plan. In the month immediately following the publication of the conceptual statewide transmission plan, the CAISO will provide an opportunity for interested parties to submit comments and recommend modifications to the conceptual statewide transmission plan or alternative solutions including potential interstate transmission solutions and proposals for access to resources located in areas not identified in the conceptual statewide transmission plan.

#### **24.4.5 Determination of Needed Transmission Solutions**

To determine which transmission solutions should be included in the comprehensive Transmission Plan, the CAISO will evaluate the conceptual transmission facilities identified in the statewide conceptual transmission plan or other solutions identified by the CAISO during the Phase 2 studies, proposed solutions for reliability-driven needs, LCRIF project proposals, proposals required to maintain the feasibility of long term CRRs, proposed Network Upgrades pursuant to Section 24.4.6.5 and the results of Economic Planning Studies or other economic studies the CAISO has performed and will consider potential transmission solutions and non-transmission or generation alternatives proposed by interested parties. In determining which transmission solutions should be included in the comprehensive Transmission Plan, (1) the CAISO shall consider the degree to which a Regional Transmission Facility may be substituted for one or more Local Transmission Facilities as a more efficient or cost effective solution to identified needs, and (2) the CAISO will not give undue weight or preference to the conceptual statewide plan or any other input in its planning process.

#### **24.4.6 Categories of Transmission Solutions**

##### **24.4.6.1 Merchant Transmission Facility Proposals**

The CAISO may include a proposed Merchant Transmission Facility in the comprehensive Transmission Plan if a Project Sponsor 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 by the CAISO 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 24.4.1, 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 Merchant Transmission Facility.

#### **24.4.6.2 Reliability Driven Solutions**

The CAISO, in coordination with each Participating TO with a PTO Service Territory will, as part of the Transmission Planning Process and consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission solutions 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 solutions, such as acceleration or expansion of existing transmission solutions, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads, storage facilities 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 and any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the solutions 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 or the applicable LGIP. The CAISO will determine the solution that meets the identified reliability need in the more efficient or cost effective manner.

#### **24.4.6.3 LCRIF Projects**

##### **24.4.6.3.1 Proposals for LCRIFs**

The CAISO, CPUC, CEC, a Participating TO, or any other interested parties 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 24.4.6.3.2; and
- (b) A description of the proposed facility, including the following information:
  - (1) Transmission studies demonstrating that the proposed facility satisfies Applicable Reliability Criteria and CAISO Planning Standards;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (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 facility.

**24.4.6.3.2 Criteria for Qualification as a LCRIF**

- (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 (2) 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 operate at or above 200 kV;
  - (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.

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

(b) The proponent of a facility that has been determined by the CAISO to meet the requirements of Section 24.4.6.3.2(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 the RTRR of a Participating TO will not cause the aggregate of the net investment of all LCRIFs (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6) included in the RTRRs of all Participating TOs to exceed fifteen (15) percent of the aggregate of the net investment of all Participating TOs in all transmission facilities reflected in their RTRRs (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6) in effect at the time of the CAISO's evaluation of the facility; and
- (2) Existing or prospective owners of LCRIGs have demonstrated their interest in connecting LCRIGs to the facility consistent with the requirements of Section 24.4.6.3.4, which establishes the necessary demonstration of interest.

**24.4.6.3.3 Responsibilities of Participating Transmission Owner**

Each Participating TO shall report annually to the CAISO the amount of its net investment in LCRIFs (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6), and its net investment in transmission facilities reflected in its RTRR (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6), to enable the CAISO to make the determination required under Section 24.4.6.3.2(b)(1).

**24.4.6.3.4 Demonstration of Interest in a LCRIF**

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

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (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 (25) percent 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 24.4.6.3.4(a) does not constitute sixty (60) percent 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:
  - (1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix Y shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and
  - (2) 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 (5) years or longer; or
    - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix Y; or

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (iii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, 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 (Appendix U) or Small Generator Interconnection Procedures (Appendix S), 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
- (iv) paying a deposit to the CAISO equal to five (5) percent of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward costs of Interconnection Studies performed in connection with the Large Generator Interconnection Procedures (Appendix U or Appendix Y, as applicable) or Small Generator Interconnection Procedures (Appendix S), 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.

**24.4.6.3.5 Coordination With 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

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

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.

**24.4.6.3.6 Evaluation of LCRIFs**

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.4.6.3.2 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 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:
  - (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 process 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.

#### **24.4.6.4 Solutions to Maintain the Feasibility of 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 solutions; (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 solutions required to ensure the continuing feasibility of allocated Long Term CRRs over the length of their terms and shall publish a Congestion Data Summary along with the results of the CAISO technical studies. In assessing the need for transmission solutions 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 solutions, such as acceleration or expansion of existing transmission solutions; 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 described in Section 11.2.4. 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 solutions that may be necessary under Section 24.4.6.4. The CAISO will determine the solution that meets the identified need to maintain the feasibility of long-term CRRs in the more efficient or cost effective manner.

#### **24.4.6.5 LGIP Network Upgrades**

Beginning with the 2011/2012 planning cycle, Network Upgrades originally identified during the Phase II Interconnection Study or Interconnection Facilities Study Process of the Large Generation Interconnection Process as set forth in Section 7 of Appendix Y that are not already included in a signed

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

LGIA may be assessed as part of the comprehensive Transmission Plan if these Network Upgrades satisfy the following criteria:

- (a) The Network Upgrades consist of new transmission lines 200 kV or above, and have capital costs of \$100 million or greater;
- (b) The Network Upgrade is a new 500 kV substation that has capital costs of \$100 million or greater; or,
- (c) The Network Upgrades have a capital cost of \$200 million or more.

The CAISO will post a list of the Network Upgrades eligible for assessment in the Transmission Planning Process in accordance with the schedule set forth in the applicable Business Practice Manual. Network Upgrades included in the comprehensive Transmission Plan may include additional components not included in the Network Upgrades originally identified during the Phase II Interconnection Study or may be expansions of the Network Upgrades originally identified during the Phase II Interconnection Study if the CAISO determines during the Transmission Planning Process that such components or expansions are needed under section 24.1. Network Upgrades identified in the LGIP Phase II studies but not assessed in the Transmission Planning Process will be included in Large Generator Interconnection Agreements, as appropriate. Network Upgrades assessed in the Transmission Planning Process but not modified or replaced will be included in Large Generator Interconnection Agreements, as appropriate. Construction and ownership of Network Upgrades specified in the comprehensive Transmission Plan under this section, including any needed additional components or expansions, will be the responsibility of the Participating TO if the Phase II studies identified the original Network Upgrade as needed and such Network Upgrade has not yet been set forth in an executed Large Generator Interconnection Agreement. To the extent that additional components or expansions to Network Upgrades remain the responsibility of the Participating TO and such Network Upgrades are subsequently abandoned, the Participating TO shall be presumed to be eligible, subject to prudence and any other applicable review by FERC, to include in its TRR the costs of such Network Upgrades if the costs attributable to the abandonment of such Network Upgrades (as modified, replaced or otherwise reconfigured in the Transmission Planning Process) exceed the amounts funded by Interconnection Customers pursuant to Appendix Y. This presumption shall not apply in the case of Network Upgrades which the applicable Participating TO agreed to up-front

fund independent of any obligation to fund pursuant to the Transmission Planning Process. If, through the Transmission Planning Process, the CAISO identifies any additional components or expansions of Network Upgrades that result in the need for other transmission solutions, the responsibility to build and own such transmission solutions will be determined by this Section 24, according to the category of those other transmission solutions. Any decision in the Transmission Planning Process to modify Network Upgrades identified in the Large Generator Interconnection Process will not increase the cost responsibility of the Interconnection Customer as described in Appendix Y, Section 7. Category 1 policy-driven transmission solutions identified under Section 24.4.6.7 could supplant the need for LGIP Network Upgrades that would be developed in subsequent Generator Interconnection Process cycles. To the extent that a Category 1 policy-driven transmission solution eliminates or downsizes the need for a Network Upgrade, the Interconnection Customer's cost responsibility for such Network Upgrade shall be eliminated or reduced. Any financial security posting shall be adjusted accordingly.

#### **24.4.6.6 Policy-Driven Transmission Solutions**

Once the CAISO has identified reliability-driven solutions, LCRIF projects eligible for conditional or final approval, solutions needed to maintain long-term CRR feasibility, qualified Merchant Transmission Facilities, and needed LGIP Network Upgrades as described in Section 24.4.6.5, the CAISO shall evaluate transmission solutions needed to meet state, municipal, county or federal policy requirements or directives as specified in the Study Plan pursuant to Section 24.3.2(i). Policy-driven transmission solutions will be either Category 1 or Category 2 transmission solutions. Category 1 transmission solutions are those which under the criteria of this section are found to be needed and are recommended for approval as part of the comprehensive Transmission Plan in the current cycle. Category 2 transmission solutions are those that could be needed to achieve state, municipal, county or federal policy requirements or directives but have not been found to be needed in the current planning cycle based on the criteria set forth in this section. The CAISO will determine the need for, and identify such policy-driven transmission solutions that efficiently and effectively meet applicable policies under alternative resource location and integration assumptions and scenarios, while mitigating the risk of stranded investment. The CAISO will create a baseline scenario reflecting the assumptions about resource locations that are most likely to occur and one or more reasonable stress scenarios that will be

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

compared to the baseline scenario. Any transmission solutions that are in the baseline scenario and at least a significant percentage of the stress scenarios may be Category 1 transmission solutions.

Transmission solutions that are included in the baseline scenario but which are not included in any of the stress scenarios or are included in an insignificant percentage of the stress scenarios, generally will be Category 2 transmission solutions, unless the CAISO finds that sufficient analytic justification exists to designate them as Category 1 transmission solutions. In such cases, the ISO will make public the analysis upon which it based its justification for designating such transmission solutions as Category 1 rather than Category 2. In this process, the CAISO will consider the following criteria:

- (a) commercial interest in the resources in the applicable geographic area (including renewable energy zones) accessed by potential transmission solutions as evidenced by signed and approved power purchase agreements and interconnection agreements;
- (b) the results and identified priorities of the California Public Utilities Commission's or California Local Regulatory Authorities' resource planning processes;
- (c) the expected planning level cost of the transmission solution as compared to the potential planning level costs of other transmission solutions;
- (d) the potential capacity (MW) value and energy (MWh) value of resources in particular zones that will meet the policy requirements, as well as the cost supply function of the resources in such zones;
- (e) the environmental evaluation, using best available public data, of the zones that the transmission is interconnecting as well as analysis of the environmental impacts of the transmission solutions themselves; the extent to which the transmission solutions will be needed to meet Applicable Reliability Criteria or to provide additional reliability or economic benefits to the CAISO grid;
- (f) potential future connections to other resource areas and transmission facilities;
- (g) resource integration requirements and the costs associated with these requirements in particular resource areas designated pursuant to policy initiatives;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (h) the potential for a particular transmission solution to provide access to resources needed for integration, such as pumped storage in the case of renewable resources;
- (i) the effect of uncertainty associated with the above criteria, and any other considerations, that could affect the risk of stranded investment; and
- (j) the effects of other solutions being considered for approval during the planning process.

**24.4.6.7 Economic Studies and Mitigation Solutions**

Once the CAISO has identified reliability-driven solutions, LCRIF projects eligible for conditional or final approval, qualified Merchant Transmission Facilities and policy-driven transmission solutions, the CAISO will conduct the High Priority Economic Planning Studies selected under Section 24.3.4 and any other studies that the CAISO concludes are necessary to determine whether additional transmission solutions are necessary to address:

- (a) 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) Local Capacity Area Resource requirements;
- (c) Congestion projected to increase over the planning horizon used in the Transmission Planning Process and the magnitude of that Congestion; or
- (d) Integration of new generation resources or loads on an aggregated or regional basis.

In determining whether additional transmission solutions are needed, the CAISO shall consider the degree to which, if any, the benefits of the transmission solutions outweigh the costs, in accordance with the procedures set forth in the Business Practice Manual. The benefits of the solutions may include 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. The cost of the transmission solution must consider any estimated costs identified under Section 24.4.6.4 to maintain the simultaneous feasibility of allocated Long Term CRRs for the length of their term. The CAISO, in

determining whether a particular solution is needed, shall also consider the comparative costs and benefits of viable alternatives to the particular transmission solution, including: (1) other potential transmission solutions, including those being considered or proposed during the Transmission Planning Process; (2) acceleration or expansion of any transmission solution already approved by the CAISO Governing Board or included in any CAISO comprehensive Transmission Plan, and (3) non-transmission solutions, including demand-side management.

**24.4.6.8 [Not Used]**

**24.4.7 Description of Transmission Solutions**

The transmission solutions identified in the draft and final comprehensive Transmission Plan that are subject to the competitive solicitation process will provide sufficient engineering detail to permit Project Sponsors to submit complete proposals, under section 24.5.1 to build the identified transmission solution. As further described in the Business Practice Manual, such details may include, but are not limited to:

- (a) Minimum Conductor Ampacity;
- (b) Approximate Line impedance required;
- (c) Approximate Series compensation levels;
- (d) Substation bus and breaker configuration;
- (e) Breaker clearing times;
- (f) Transformer characteristics (capacity, impedance, tap range);
- (g) Minimum Shunt capacitor and reactor sizes;
- (h) Minimum FACTS device specifications;
- (i) SPS requirements;
- (j) Planning level cost estimates;
- (k) Projected in-service date.

**24.4.8 Additional Contents of Comprehensive Transmission Plan**

In addition to the detailed descriptions of specific needed transmission solutions, the draft and final comprehensive Transmission Plan may include: (1) the results of technical studies performed under the Study Plan; (2) determinations and recommendations regarding the need for identified transmission solutions and their identification as either Local or Regional Transmission Facilities; (3) assessments of

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

solutions submitted as alternatives to the potential solutions to needs identified by the CAISO and studied during the Transmission Planning Process cycle; (4) results of Economic Planning Studies (except for the 2010/2011 cycle); (5) an update on the status of transmission solutions 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 solution; (6) a description of transmission solutions with an estimated capital investment of \$50 million or more for which additional studies are required before being presented to the CAISO Governing Board for approval following completion of the studies; (7) a description of Category 2 transmission solutions recommended for consideration in future planning cycles; (8) identification of Interregional Transmission Projects that were submitted in the current planning cycle, could potentially meet regional needs, and will be evaluated in the next planning cycle; and (9) determinations and recommendations regarding the need for Interregional Transmission Projects that have been evaluated and found to be more cost effective and efficient solutions to regional transmission needs and that satisfy all requirements relevant to meeting such needs.

**24.4.9 Phase 2 Stakeholder Process**

- (a) According to the schedule and procedures set forth in the Business Practice Manual, the CAISO will schedule one (1) public meeting after the CAISO technical study results have been posted and Participating TOs have submitted (i) the results of technical studies conducted at the direction of the CAISO (if applicable); and (ii) reliability-driven solutions. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice. Interested parties will be provided a minimum two (2) week period to provide written comments regarding the technical study results and the proposals submitted by the Participating TOs.
- (b) The CAISO will schedule at least one (1) other public meeting before the draft comprehensive Transmission Plan is posted to provide information about any policy-driven transmission solution evaluations or economic planning studies that have been completed since the prior public meeting was held, as well as updated information about any studies or evaluations that are still in progress. Notice of

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

such meeting, web conference or teleconference will be provided to stakeholders via Market Notice.

- (c) In accordance with the schedule and procedures in the Business Practice Manual, but not less than one-hundred and twenty (120) days after the results of the CAISO's technical studies are posted and not less than six (6) weeks after the Request Window closes, the CAISO will post a draft comprehensive Transmission Plan. The CAISO will subsequently conduct a public conference regarding the draft comprehensive Transmission Plan and solicit comments, consistent with the timelines and procedures set forth in the Business Practice Manual. Additional 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 the revised draft comprehensive Transmission Plan to the CAISO Website.

**24.4.10 Transmission Plan Approval Process**

The revised draft comprehensive Transmission Plan, along with the stakeholder comments, will be presented to the CAISO Governing Board for consideration and approval. Upon approval of the plan, all needed transmission solutions and Interregional Transmission Projects, net of all transmission and non-transmission alternatives considered in developing the comprehensive Transmission Plan, will be deemed approved by the CAISO Governing Board. Following Governing Board approval, the CAISO will post the final comprehensive Transmission Plan to the CAISO Website. According to the schedule set forth in the Business Practice Manual, transmission solutions with capital costs of \$50 million or less can be approved by CAISO management and may proceed to permitting and construction prior to Governing Board approval of the plan. Such CAISO management approved transmission solutions may be subject to a competitive solicitation process, consistent with Section 24.5, on an accelerated schedule that will allow the approved Project Sponsor to proceed to permitting and construction prior to Governing Board approval of the plan. CAISO management may also expedite approval of a transmission

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

solution ahead of the approval schedule for other solutions with capital costs of \$50 million or less if: (1) there is an urgent need for approval of the solution ahead of the schedule established in the Business Practice Manual; (2) there is a high degree of certainty that approval of the transmission solution will not conflict with other solutions being considered in Phase 2; and (3) the need to accelerate a solution is driven by the CAISO's study process or by external circumstances. Should the CAISO find that a transmission solution with capital costs of \$50 million or less is needed on an expedited basis, after a stakeholder consultation process, CAISO management shall brief the Governing Board at a regularly-scheduled or special public session prior to approving the transmission solution and conducting a competitive solicitation, if appropriate. A Participating Transmission Owner will have the responsibility to construct, own, finance and maintain any Local Transmission Facility deemed needed under this section 24 that is located entirely within such Participating Transmission Owner's PTO Service Territory or footprint, as well as any upgrade or addition to an existing transmission facility. The provisions of Section 24.5 will apply to a Regional Transmission Facility deemed needed under this section 24. Section 24.5 will also apply to any transmission solutions that are associated with both Regional Transmission Facilities and Local Transmission Facilities but for which the CAISO determines that it is not reasonable to divide construction responsibility among multiple Project Sponsors. Construction and ownership of a selected Interregional Transmission Project shall be determined in accordance in Section 24.17.3.

**24.5 Transmission Planning Process Phase 3**

**24.5.1 Competitive Solicitation Process**

According to the schedule set forth in the Business Practice Manual, in the month following the CAISO Governing Board's approval of the comprehensive Transmission Plan, the CAISO will initiate a period of at least two (2) months that will provide an opportunity for Project Sponsors to submit specific proposals to finance, own, and construct the Regional Transmission Facilities subject to competitive solicitation identified in the comprehensive Transmission Plan. If the transmission solution adopted in Phase 2 involves an upgrade or improvement to, addition on, or a replacement of a part of an existing Participating TO facility, the Participating TO will construct and own such upgrade, improvement, addition or

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

replacement facilities unless a Project Sponsor and the Participating TO agree to a different arrangement. For Regional Transmission Facilities with capital costs of \$50 million or less that were approved by CAISO management before Governing Board approval of the comprehensive Transmission Plan, the two month period will be initiated following management approval of the facility, and the Project Sponsor selection process may follow an accelerated schedule described in the Business Practice Manual. Such proposals must include plan of service details and supporting information as set forth in the Business Practice Manual sufficient to: (1) enable the CAISO to determine whether the Project Sponsor meets the qualification criteria specified in section 24.5.3.1; (2) enable the CAISO to determine whether a Project Sponsor's proposal meets the proposal qualification criteria in section 24.5.3.2; and (3) enable the CAISO, if there are multiple qualified Project Sponsors bidding on the same Regional Transmission Facility, to conduct a comparative analysis of the proposals and Project Sponsors and select an Approved Project Sponsor as described in section 24.5.2.5. The project proposal will identify the authorized governmental body from which the Project Sponsor will seek siting approval for the project. Within 30 days after the CAISO posts the draft comprehensive Transmission Plan to its website, for each Regional Transmission Facility identified in the comprehensive Transmission Plan that is subject to competitive solicitation, the CAISO will post, for informational purposes only, those existing qualification criteria and selection factors, in addition to any binding cost containment commitments, which the CAISO believes are key for purposes of selecting an Approved Project Sponsor for the particular transmission solution, consistent with the comparative analysis described in section 24.5.4 and the project sponsor qualification and selection criteria specified in sections 24.5.3.1 and 24.5.4, respectively. Thus, Project Sponsors will have a minimum of ninety (90) days after the posting of key selection criteria before the deadline for submitting proposals to construct, own, operate, and maintain a transmission solution subject to competitive solicitation. The posting of such key criteria is solely intended to provide information to Project Sponsors to assist them in the preparation of their applications and to highlight specific topics to which particular attention should be paid in the application given their importance in connection with a particular Regional Transmission Facility. The posting of the key selection criteria is not a replacement or substitute for the qualification and selection criteria set forth in sections 24.5.3.1 and 24.5.4, and in its comparative analysis conducted in accordance with section 24.5.4, the ISO is required to comparatively

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

assess all of the qualification and selection criteria, not just those listed as key selection criteria. In its posting of the key selection criteria, the ISO cannot add new or different criteria than those already specified in sections 24.5.3.1 and 24.5.4. To determine the key criteria for each transmission solution subject to competitive solicitation, the ISO will consider: (1) the nature, scope and urgency of the need for the transmission solution; (2) expected severity of siting or permitting challenges; (3) the size of the transmission solution, potential financial risk associated with the transmission solution, expected capital cost magnitude, cost overrun likelihood and the ability of the Project Sponsor to contain costs; (4) the degree of permitting, rights-of-way, construction, operation and maintenance difficulty; (5) risks associated with the construction, operation and maintenance of the transmission solution; (6) technical and engineering design difficulty or whether specific expertise in design or construction is required; (7) special circumstances or difficulty associated with topography, terrain or configuration; (8) specific facility technologies or materials associated with the transmission solution; (9) binding cost containment measures, including cost caps; (10) abandonment risk; and (11) whether the overall cost of the transmission solution impacts the ISO's prior determination of, and inclusion in, the comprehensive Transmission Plan of the more efficient or cost effective solution during Phase 2 of the transmission planning process.

The posting of the key selection criteria shall not undermine the ISO's prior determination in Phase 2 of the transmission planning process of the more efficient or cost-effective transmission solution to be reflected in the comprehensive Transmission Plan, nor shall the posting of the key criteria replace or be inconsistent with the ISO's obligation under section 24.5.4 to undertake a comparative analysis of each Project Sponsor with respect to each Project Sponsor qualification and selection criterion. If the CAISO determines in Phase 2 of the transmission planning process that more than one transmission solution could constitute the more efficient or cost-effective solution to meet a specific identified need depending on the outcome of the competitive solicitation, the CAISO shall have the authority to identify more than one potential transmission solution in the comprehensive Transmission Plan. Under those circumstances, based on the outcome of the competitive solicitation, the CAISO will make the final determination of which alternative transmission solution identified in the Board-approved comprehensive

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Transmission Plan constitutes the more efficient or cost-effective transmission solution to be selected for construction.

**24.5.2 Project Sponsor Application and Information Requirements**

All project sponsors must submit a Project Sponsor application form as set forth in the Business Practice Manual and posted on the CAISO website. Any entity may submit a Project Sponsor application to finance, construct, own, operate and maintain a transmission solution identified in the comprehensive Transmission Plan subject to the competitive solicitation process. There is no requirement that a Project Sponsor first be qualified before it may submit a Project Sponsor application for such a transmission solution.

**24.5.2.1 Project Sponsor Information Requirements**

The application to be submitted to the CAISO by an entity desiring to become an Approved Project Sponsor shall include the following general information (as well as related details) in response to the questions on the application form:

- (a) The following financial information:
  - (i) A proposed financial plan demonstrating that adequate capital resources are available to the Project Sponsor to finance the transmission solution, and that constructing, operating and maintaining the facilities will not significantly impair the Project Sponsor's creditworthiness or financial condition;
  - (ii) A showing from the Project Sponsor's most recent audited financial statements that the Project Sponsor's assets are in excess of liabilities as a percentage of the total cost of the transmission solution;
  - (iii) Financial funding ratios from the most recent audited financial statements;
  - (iv) Credit arrangements between affiliated entities, including corporate parent, and compliance with regulatory restrictions and requirements; and,
  - (v) Bankruptcy, dissolution, merger or acquisition history;
- (b) The credit rating from Moody's Investor Services and Standard & Poors of the Project Sponsor, or its parent company, controlling shareholder, or any other entity providing a bond guaranty or corporate commitment to the Project Sponsor,;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (c) Information showing the Project Sponsor's ability to assume liability for major losses resulting from failure of, or damage to, the transmission facility, including damage after the facility has been placed into operation;
- (d) The projected in-service date of each transmission solution with a construction plan and timetable;
- (e) A description of the Project Sponsor's proposed engineering, construction, maintenance and management teams, including relevant capability and experience;
- (f) A description of the Project Sponsor's resources for operating and maintaining the transmission solution after it is placed in-service;
- (g) A discussion of the capability and experience of the Project Sponsor that would enable it to comply with all on-going scheduling, operating, and maintenance activities required for each transmission solution, including those required by the tariff, business practice manuals, policies, rules, guidelines, and procedures established by the CAISO;
- (h) Resumes for all key management personnel, including contractors, that will be involved in obtaining siting approval and other required regulatory approvals and for constructing, operating and maintaining each transmission solution;
- (i) A description of the Project Sponsor's business practices that demonstrate consistency with Good Utility Practice for proper licensing, designing and right-of-way acquisition for constructing, operating and maintaining transmission solutions that will become part of the CAISO Controlled Grid;
- (j) The Project Sponsor's previous record regarding construction, operation and maintenance of transmission facilities within and outside the CAISO Controlled Grid;
- (k) The Project Sponsor's pre-existing procedures and practices for acquiring and managing right of way and other land for transmission facility, or, in the absence of preexisting procedures or practices, a detailed description of its plan for right of way and other land acquisition;
- (l) A description of existing rights of way or substations upon which all or a portion of the transmission facility can be located and incremental costs, if any, that would be incurred

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

in connection with placing new or additional facilities associated with the transmission solution on such existing rights of way;

- (m) The Project Sponsor's preexisting practices or procedures for mitigating the impact of the transmission solution on affected landowners and for addressing public concerns regarding facilities associated with the transmission solution. In the absence of such preexisting practices or procedures, the Project Sponsor shall provide a detailed plan for mitigating such impacts and addressing public concerns;
- (n) A description of the following and any related or relevant information regarding:
  - (i) the proposed structure types and composition, conductor size and type;
  - (ii) the proposed route and rights of way; and
  - (iii) a plan for addressing topography issues;
- (o) Cost containment capabilities and cost cap, if any;
- (p) Description of the Project Sponsor's plan for complying with standardized maintenance and operation practices and all applicable reliability standards;
- (q) Any other strengths and advantages that the Project Sponsor and its team may have to build and own the transmission solution, as well as any specific efficiencies or benefits demonstrated in its Project Sponsor proposal; and
- (r) The authorized government body from which the Project Sponsor will seek siting approval for the transmission solution and the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, as well as its history of imposing such measures.

Additional details about the information that must be submitted is set forth in the Business Practice Manual and on the application form. On the CAISO's request, the Project Sponsor will provide additional information that the CAISO reasonably determines is necessary to conduct its qualification and selection evaluation with respect to the particular transmission solutions that are subject to competitive solicitation.

**24.5.2.2 Posting Applications With Sufficient Information**

Upon receipt of a Project Sponsor's application, the CAISO will review the application for completeness and will verify that the application contains sufficient information for the CAISO to determine whether the

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Project Sponsor is qualified to be selected as an Approved Project Sponsor. By the deadline set forth in the Business Practice Manual, the ISO will notify each Project Sponsor whether the application is complete or whether additional information is required. Project Sponsors will be given an opportunity to cure any deficiencies in their application submissions in accordance with the schedule set forth in the Business Practice Manual. After the end of the cure period, and subject to the confidentiality provisions set forth in Tariff section 20, the CAISO will post to its Website a list of Project Sponsors whose applications contain sufficient information and have met the requirements set forth in the Business Practice Manual.

**24.5.2.3 Multiple Project Sponsor Proposals: Collaboration**

If two (2) or more Project Sponsors submit proposals to finance, own, and construct the same transmission solution, the CAISO will, upon request, facilitate an opportunity for the Project Sponsors to collaborate with each other to submit a joint proposal to meet such need. Following the collaboration period, if any Project Sponsors submit a joint proposal, the CAISO will determine whether the joint Project Sponsors are qualified to finance, construct, own, operate and maintain the transmission solution in accordance with the qualification criteria described in section 24.5.3.

**24.5.3 Project Sponsor and Proposal Qualification**

**24.5.3.1 Project Sponsor Qualification**

After posting the list of information-sufficient applications and, if applicable, after the conclusion of any applicable collaboration process under Section 24.5.2.2, the CAISO will evaluate the information submitted by each Project Sponsor in response to the questions on the application pertaining to sections 24.5.2.1(a)-(i) to determine whether the Project Sponsor has demonstrated that its team is physically, technically, and financially capable of (i) completing the needed transmission solution in a timely and competent manner; and (ii) operating and maintaining the transmission solution in a manner that is consistent with Good Utility Practice and applicable reliability criteria for the life of the project, based on the following qualification criteria:

- (a) whether the Project Sponsor has assembled a sufficiently-sized team with the manpower, equipment, knowledge and skill required to undertake the design, construction, operation and maintenance of the transmission solution;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (b) whether the Project Sponsor and its team have sufficient financial resources, including, but not limited to, satisfactory credit ratings and other financial indicators as well as the demonstrated ability to assume liability for major losses resulting from failure of any part of the facilities associated with the transmission solution;
- (c) whether the Project Sponsor has (1) proposed a schedule for development and completion of the transmission solution consistent with need date identified by the CAISO; and (2) has the ability to meet that schedule;
- (d) whether the Project Sponsor and its team have the necessary technical and engineering qualifications and experience to undertake the design, construction, operation and maintenance of the transmission solution;
- (e) whether the Project Sponsor makes a commitment to become a Participating TO for the purpose of turning the Regional Transmission Facility that the Project Sponsor is selected to construct and own as a result of the competitive solicitation process over to the ISO's Operational Control , to enter into the Transmission Control Agreement with respect to the transmission solution, to adhere to all Applicable Reliability Criteria and to comply with NERC registration requirements and NERC and WECC standards, where applicable.

If the CAISO determines that a Project Sponsor meets these criteria, it shall be deemed a qualified Project Sponsor.

**24.5.3.2 Proposal Qualification**

After evaluating the Project Sponsor's qualifications as described in section 24.5.3.1, the ISO will determine whether the transmission solution proposed by a Project Sponsor is qualified for consideration, based on the following criteria:

- (a) Whether the proposed design of the transmission solution is consistent with needs identified in the comprehensive Transmission Plan;
- (b) Whether the proposed design of the transmission solution satisfies Applicable Reliability Criteria and CAISO Planning Standards;

### **24.5.3.3 Posting Qualified Project Sponsors and Proposals**

The CAISO will post a list of qualified Project Sponsors and proposals in accordance with the schedule set forth in the Business Practice Manual. Once the list has been posted, the CAISO will provide any Project Sponsors who did not meet the Project Sponsor qualification criteria or whose proposal did not meet the proposal qualification criteria a period within which to cure deficiencies in the application submission, as set forth in the Business Practice Manual. The CAISO will evaluate any additional information provided by these Project Sponsors and will re-post the list of qualified Project Sponsors, if necessary, once the re-assessment has been completed and in accordance with the schedule in the Business Practice Manual.

### **24.5.3.4 Single Qualified Project Sponsor and Proposal**

If only one (1) Project Sponsor, including joint Project Sponsors resulting from a collaboration, submits a proposal to finance, own, and construct a specific transmission solution and the CAISO determines that the Project Sponsor is qualified to own and construct the transmission solution under the criteria set forth in section 24.5.3.1 and the proposal meets the proposal qualification criteria in section 24.5.3.2, the Project Sponsor will be the Approved Project Sponsor and must initiate the process of seeking siting approval, and any other necessary approvals, from the appropriate authority or authorities within one-hundred twenty (120) days of CAISO approval.

### **24.5.3.5 Multiple Qualified Project Sponsors and Proposals: Selection of Approved Project Sponsor**

If there are multiple qualified Project Sponsors and proposals for the same transmission solution, the CAISO will select one qualified Approved Project Sponsor based on a comparative analysis of the degree to which each Project Sponsor's proposal meets the qualification criteria set forth in section 24.5.3.1 and the selection factors set forth in 24.5.4. The CAISO will engage an expert consultant to assist with the selection of the Approved Project Sponsor. Thereafter, the Approved Project Sponsor must initiate the process of seeking siting approval, and any other necessary approvals, from the appropriate authority or authorities within one-hundred twenty (120) days of CAISO approval.

#### **24.5.4 Project Sponsor Selection Factors and Comparative Analysis**

The CAISO will conduct a comparative analysis to select an Approved Project Sponsor from among multiple project sponsor proposals, as described in section 24.5.3.5. The purpose of this comparative analysis is to take into account all transmission solutions being proposed by competing Project Sponsors seeking approval of their transmission solution and to select a qualified Project Sponsor which is best able to design, finance, license, construct, maintain, and operate the particular transmission facility in a cost-effective, efficient, prudent, reliable, and capable manner over the lifetime of the facility, while maximizing overall benefits and minimizing the risk of untimely project completion, project abandonment, and future reliability, operational and other relevant problems, consistent with Good Utility Practice, applicable reliability criteria, and CAISO Documents. To conduct this comparative analysis, the CAISO will use the qualification criteria described in section 24.5.3.1 as well as the following selection factors:

- (a) the current and expected capabilities of the Project Sponsor and its team to finance, license, and construct the facility and operate and maintain it for the life of the solution;
- (b) the Project Sponsor's existing rights of way and substations that would contribute to the transmission solution in question;
- (c) the experience of the Project Sponsor and its team in acquiring rights of way, if necessary, that would facilitate approval and construction, and in the case of a Project Sponsor with existing rights of way, whether the Project Sponsor would incur incremental costs in connection with placing new or additional facilities associated with the transmission solution on such existing right of way;
- (d) the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet that schedule of the Project Sponsor and its team;
- (e) the financial resources of the Project Sponsor and its team;
- (f) The technical and engineering qualifications and experience of the Project Sponsor and its team;

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

- (g) if applicable, the previous record regarding construction and maintenance of transmission facilities, including facilities outside the CAISO Controlled Grid of the Project Sponsor and its team;
- (h) demonstrated capability to adhere to standardized construction, maintenance and operating practices of the Project Sponsor and its team;
- (i) demonstrated ability to assume liability for major losses resulting from failure of facilities of the Project Sponsor;
- (j) demonstrated cost containment capability of the Project Sponsor and its team, specifically, binding cost control measures the Project Sponsor agrees to accept, including any binding agreement by the Project Sponsor and its team to accept a cost cap that would preclude costs for the transmission solution above the cap from being recovered through the CAISO's Transmission Access Charge, and, if none of the competing Project Sponsors proposes a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, and its history of imposing such measures; and
- (k) any other strengths and advantages the Project Sponsor and its team may have to build and own the specific transmission solution, as well as any specific efficiencies or benefits demonstrated in their proposal.

**24.5.5 Notice to Project Sponsors**

The CAISO will notify Project Sponsors as to results of the project evaluation process in accordance with the schedule and procedures set forth in the Business Practice Manual. Within 10 Business Days after selecting an Approved Project Sponsor(s) for a needed transmission solution, the CAISO will post on the CAISO website a report regarding the selection of the Approved Project Sponsor(s). The report will set forth in a detailed manner the results of the comparative analysis undertaken by the CAISO, the reasons for the CAISO's decision(s), and how the CAISO's decision is consistent with the objectives identified in section 24.5.4. The report will specifically identify the role of the selection factors set forth in 24.5.4 in determining, or not determining, the ultimate selection of project sponsors.

## **24.6 Obligation to Construct Transmission Solutions**

The Approved Project Sponsor selected to construct the needed transmission solution or the applicable Participating TO where there is no Approved Project Sponsor, 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 solution. This obligation includes the Approved Project Sponsor's use of eminent domain authority, where provided by state law. A Participating TO in whose PTO Service Territory or footprint either terminus of the transmission solution is located shall be obligated to construct all regional transmission solutions included in the comprehensive Transmission Plan for which there is no Approved Project Sponsor either from the first competitive solicitation or future competitive solicitations. The Approved Project Sponsor shall not sell, assign or otherwise transfer its rights to finance, construct and own the needed transmission solution, or any element thereof, before the facilities have been energized and, if applicable, turned over to the CAISO's Operational Control unless the CAISO has not approved such proposed transfer.

### **24.6.1 Approved Project Sponsor Reporting Requirements**

Starting one hundred and twenty (120) days after the Project Sponsor, or Participating TO with a service territory pursuant to section 24.6 above, has been notified by the CAISO that it has been selected as an Approved Project Sponsor, such Approved Project Sponsor must submit a construction plan to the CAISO. At a minimum, and as further described in the Business Practice Manual, the construction plan will provide information on the following: land acquisition and permitting, materials procurement, and construction financing. Every ninety (90) days thereafter until the transmission solution has been energized and placed under CAISO Operational Control, the Approved Project Sponsor shall provide to the CAISO a construction plan status report. The status report shall conform to the format set forth in the Business Practice Manual and include, among other things, the following information: project schedule, status of obtaining necessary environmental permits and meeting licensing requirements, status of right-of-way acquisition, status of design and engineering, any changes in the continuing ability of the Approved Project Sponsor to meet the design specifications of the transmission solution and the date upon which the transmission solution was found to be needed in the Transmission Plan. Unless the Approved Project Sponsor is the Participating TO in whose Participating TO service territory the project is

wholly located, the CAISO shall provide a copy of the Approved Project Sponsor's status report to the Participating TO(s) in whose Participating TO service territory the transmission solution is fully or partially located and to any Participating TO with which the facilities interconnects. According to the schedule set forth in the Business Practice Manual, the CAISO shall, after providing the Participating TO(s) a copy of the report, hold a call with the Participating TO(s) to review whether the transmission solution completion date proposed by the Approved Project Sponsor can reasonably be expected to be met and to review any other items of concern to either the CAISO or the Participating TO(s).

#### **24.6.2 Delay in the Transmission Solution In-Service Date**

If the CAISO determines that the proposed completion date has been delayed beyond the date upon which the transmission solution was found to be needed, the CAISO shall issue a market notice stating that it is necessary for the CAISO, the Approved Project Sponsor (to the extent the Approved Project Sponsor has not abandoned the project), and the applicable Participating TO(s) to develop a plan to address potential NERC reliability standards violations as set forth in Section 24.6.3 as well as any other issues that may be of material concern arising from the delay of the transmission solution. If the potential NERC reliability standards violations, or other issues of material concern, cannot be promptly and adequately addressed, the CAISO will take appropriate action including but not limited to, determining that an alternate Approved Project Sponsor is necessary to complete the transmission solution as set forth in Section 24.6.4.

#### **24.6.3 Development and Submittal of Mitigation Plans**

If the CAISO determines that a delay in the date upon which a transmission solution is proposed to be energized may cause one or more Participating TO(s) or the CAISO to violate a NERC reliability standard, the CAISO shall identify the potential violation and direct the impacted Participating TO(s) to develop a mitigation plan. The CAISO or the impacted Participating TOs shall take any and all reasonable actions necessary to meet the requirements of the mitigation plan.

#### **24.6.4 Inability to Complete the Transmission Solution**

If the CAISO determines that the Approved Project Sponsor cannot secure necessary approvals or property rights or is otherwise unable to construct a transmission solution, or if the CAISO finds that an alternative Project Sponsor is necessary pursuant to Section 24.6.2, or if the Approved Project Sponsor

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

determines that it is unable to proceed with construction of the transmission solution and so notifies the CAISO, the CAISO shall take such action as it reasonably considers appropriate, in coordination with the Participating TO and other affected Market Participants, to facilitate the development and evaluation of alternative solutions. In conducting such evaluation the CAISO will consider (1) the reasons that the Approved Project Sponsor was unable to construct the transmission solution; (2) whether the transmission solution is still needed; and (3) whether there are other solutions that could replace the original transmission solution as it was originally configured. For reliability driven transmission solutions, the CAISO may, at its discretion, direct the Participating TO in whose PTO Service Territory or footprint either terminus of the transmission solution is located, to build the transmission solution, or the CAISO may open a new solicitation for Project Sponsors to finance, own, and construct the transmission solution. For all other transmission solutions, the CAISO shall open a new solicitation for Project Sponsors to finance, own, and construct the transmission solution. Where there is no Approved Project Sponsor, the CAISO shall direct the Participating TO in whose PTO Service Territory or footprint either terminus of the transmission solution is located, to finance, own and construct the transmission solution. The previous Approved Project Sponsor shall be obligated to work cooperatively and in good faith with the CAISO, the new Approved Project Sponsor (if any) and the affected Participating TO, to implement the transition. The obligations of the Participating TO to construct the transmission solution will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of a Participating 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.

**24.7 Documentation of Compliance with NERC Reliability Standards**

The Transmission Plan and underlying studies, assessments, information and analysis developed during the Transmission Planning Process, regardless of whether performed by CAISO or by Participating TOs or other third parties at the direction of CAISO, shall be used by the CAISO as part of its documentation of compliance with NERC Reliability Standards.

**24.8 Additional Planning Information**

**24.8.1 Information Provided by Participating TOs**

In addition to any information that must be provided to the CAISO under the NERC Reliability Standards,

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

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.

**24.8.2 Information Provided by Participating Generators**

In addition to any information that must be provided to the CAISO under the NERC Reliability 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.

**24.8.3 Information Requested from Load Serving Entities**

In addition to any information that must be provided to the CAISO under the NERC Reliability 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 Balancing Authority Area; and (3) Demand Forecasts, including forecasted effect of Energy efficiency and Demand response programs.

#### **24.8.4 Information from Planning Groups, BAAs and Regulators**

In accordance with Section 24.8 , the CAISO shall obtain or solicit from interconnected Balancing Authority 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 process 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.

#### **24.8.5 Obligation to Provide Updated Information**

If material changes to the information provided under Sections 24.8 occur during the annual Transmission Planning Process, the providers of the information must provide notice to the CAISO of the changes.

#### **24.9 Participating TO Study Obligation**

The Participating TO constructing or expanding facilities 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, neighboring Balancing Authority Areas, 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.

#### **24.10 Operational Review and Impact Analysis**

The CAISO will perform an analysis on the ISO Controlled Grid and an operational review of all Regional Transmission 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 solutions included in the comprehensive Transmission Plan provide for acceptable Operational Flexibility and meet all their requirements for proper integration with the CAISO Controlled Grid. This analysis includes identifying the impacts of Regional Transmission Facilities on neighboring Planning Regions or Balancing Authority Areas, including the resulting need, if any, for new solutions in such neighboring Planning Regions or

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Balancing Authority Areas. If the CAISO finds that a Regional Transmission Facility does not provide for acceptable Operational Flexibility, does not adequately integrate with the CAISO Controlled Grid or causes impacts on neighboring Planning Regions, transmission systems or Balancing Authority Areas, the CAISO shall coordinate with the operators of neighboring Balancing Authority Areas or transmission systems, if applicable, to reassess and redesign the Regional Transmission Facility to be constructed. If the impacts caused by Regional Transmission Facilities proposed to be added to the CAISO Controlled Grid can be mitigated through other solutions on the ISO Controlled Grid or through operational adjustments, the costs of such solutions shall be recovered through the CAISO's Regional Access Charge as part of the costs of the transmission solution. The CAISO shall not be responsible for compensating another transmission provider, Planning Authority, or Balancing Area Authority for the costs of any required solutions, or other consequences, on their systems associated with Regional Transmission Facilities, whether identified by the CAISO or the neighboring system, unless the CAISO voluntarily agrees to bear such costs pursuant to a written agreement with the neighboring system; provided that the CAISO will not agree to bear such costs until it first discusses the matter with stakeholders and provides stakeholders with an opportunity to submit comments. Transmission solutions that do not provide acceptable Operational 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. Any costs of required transmission facilities in neighboring transmission systems associated with Regional Transmission Facilities that the CAISO agrees to bear will be recovered through the CAISO's Regional Access Charge, and all relevant tariff provisions pertaining to the calculation, billing, and recovery of the Regional Access Charge, and any related applicable provisions, shall apply.

**24.10.1 [NOT USED]**

**24.10.2 [NOT USED]**

**24.10.3 [NOT USED]**

**24.10.4 [NOT USED]**

**24.11 [NOT USED]**

**24.11.1 [NOT USED]**

**24.11.2 [NOT USED]**

**24.11.3 [NOT USED]**

**24.12 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.

**24.13 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 sub-regional coordinated planning processes.

**24.13.1 Scope of Regional or Sub-Regional Planning Participation**

The CAISO will collaborate with adjacent transmission providers and existing sub-regional planning organizations through existing processes. This collaboration involves a reciprocal exchange of information, to the maximum extent possible and subject to applicable confidentiality restrictions, 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 whenever possible. 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 Balancing Authority 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:
  - (i) coordinate, to the maximum extent practicable, planning assumptions, data and methodologies utilized by the CAISO, regional and sub-regional planning groups or interconnected Balancing Authority Areas;
  - (ii) ensure transmission expansion plans of the CAISO, regional and sub-

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

regional planning groups or interconnected Balancing Authority 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 Balancing Authority 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 Balancing Authority Areas.

**24.13.2 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, in which the Participating TO or Market Participant voluntarily participated.

**24.14 Cost Responsibility for Transmission Additions or Upgrades**

Cost responsibility for transmission additions or upgrades constructed pursuant to this Section 24 (including the responsibility for any costs incurred under Section 24.11) shall be determined as follows:

**24.14.1 Project Sponsor Commitment to Pay Full Cost**

Where a Project Sponsor commits to pay the full cost of a transmission addition or upgrade as set forth in subsection (2) of Section 24.4.6.1, the full costs shall be borne by the Project Sponsor.

**24.14.2 Cost of Needed Addition or Upgrade to be Borne by PTO**

Where the need for a transmission addition or upgrade is determined by the CAISO, 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.

**24.14.3 CRR Entitlement for Project Sponsors Not Recovering Costs**

Provided that the CAISO has Operational Control of the Merchant Transmission Facility, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive Merchant CRRs as provided in Section 36.11. The full amount of capacity added to the system by such transmission upgrades or additions will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor.

**24.14.3.1 Western Path 15**

Pursuant to its Project Sponsor status as specified in Section 4.3.1.3, consistent with FERC's findings in Docket Nos. EL04-133-001, ER04-1198-000, and ER04-1198-001, issued on May 16, 2006 (115 FERC ¶ 61,178), Western Path 15 shall receive compensation associated with transmission usage rights modeled for Western Path 15. In the event that Western Path 15 has an approved rate schedule that returns excess revenue from any compensation obtained from the CAISO associated with the transmission usage rights for Western Path 15, such revenue shall be returned to the CAISO through a procedure established by the CAISO and the Western Area Power Administration for that purpose.

**24.14.3.2 FPL Energy, LLC**

Pursuant to its Project Sponsor status, consistent with FERC's findings in Docket No. ER03-407, issued on June 15, 2006 (115 FERC ¶ 61, 329), FPL Energy, LLC shall receive Merchant CRRs associated with transmission usage rights modeled for the Blythe Path 59 upgrade, such Merchant CRRs to be in effect for a period of thirty (30) years, or the pre-specified intended life of the Merchant Transmission Facility, whichever is less, from the date Blythe Path 59 was energized. For the purpose of allocating Merchant CRRs to FPL Energy, LLC over the Blythe Path 59 upgrade, the allocation of CRR Options in the import (east to west, from the Blythe Scheduling Point to the 230 kV side of the 161 kV to 230 kV transformer at the Eagle Mountain substation) as well as of CRR Options in the export (west to east) direction will be based on 57.1 percent of the total upgrade (96 MW out of the 168 MW), which is FPL Energy, LLC's share of the total upgrade as approved by FERC in the letter order issued by FERC on June 15, 2006 in Docket No. ER03-407 (115 FERC ¶ 61,329).

**24.14.4 RAC Treatment Of New Regional Transmission Facilities Costs**

Once a New Participating TO has executed the Transmission Control Agreement and it has become effective, the cost for new Regional Transmission Facilities for all Participating TOs shall be included in the CAISO Grid-wide component of the Regional Access Charge in accordance with Schedule 3 of

California Independent System Operator Corporation  
Fifth Replacement FERC Electric Tariff

Appendix F, unless and with respect to Western Path 15 only, cost recovery is provided in Section 24.14.3. The Participating TO who is supporting the cost of the new Regional Transmission Facility shall include such costs in its Regional Transmission Revenue Requirement.

**24.15 Ownership of and Charges for Expansion Facilities**

**24.15.1 Transmission Additions and Upgrades under TCA**

All transmission additions and upgrades constructed by Participating TOs in accordance with this Section 24 that form part of the CAISO Controlled Grid shall be operated and maintained by a Participating TO in accordance with the Transmission Control Agreement. Where such transmission additions and upgrades are jointly developed by Participating TOs and non-Participating TOs, nothing herein shall be construed to require that the non-Participating TO transfer its portion of the transmission additions or upgrades to the CAISO's Operational Control or place such facilities within the CAISO's Balancing Authority Area.

**24.15.2 Access and Charges for Transmission Additions and Upgrades**

Each Participating TO that owns or operates transmission additions and upgrades constructed in accordance with this Section 24 shall provide access to them and charge for their use in accordance with this CAISO Tariff and its TO Tariff.

**24.16 Expansion by Local Furnishing Participating TOs**

Notwithstanding any other provision of this CAISO Tariff, a Local Furnishing Participating TO shall not be obligated to construct or expand facilities (including interconnection facilities as described in Section 8 of the TO Tariff), unless the CAISO or Project Sponsor has tendered an application under FPA Section 211 that requests FERC to issue an order directing the Local Furnishing Participating TO to construct such facilities pursuant to Section 24. The Local Furnishing Participating TO shall, within ten (10) days of receiving a copy of the Section 211 application, waive its right to a request for service under FPA Section 213(a) and to the issuance of a proposed order under FPA Section 212(c). Upon receipt of a final order from FERC that is no longer subject to rehearing or appeal, such Local Furnishing Participating TO shall construct such facilities in accordance with this Section 24.