ISO TARIFF APPENDIX CC

For the purpose of enforcing Market Participant compliance with the forward reporting activities associated with resource adequacy and to enable the CAISO to assign Local Capacity Area Resource responsibility prior to the effective date of the CAISO Tariff as filed in FERC Docket No. ER06-615 and ER07-1257, the CAISO shall operate pursuant to this Appendix CC. This Appendix CC is included in the ISO Tariff to set forth temporary provisions that are based on tariff authority conditionally accepted in FERC Docket No. ER06-615 and as filed in Docket No. ER07-1257. These provisions enable the CAISO to: 1) require Load Serving Entities to elect between Reserving Sharing LSE and Modified Reserve Sharing LSE options; 2) define the information requirements for resource adequacy programs and the two Load Serving Entity options that must be provided to the CAISO; 3) require the submission from Load Serving Entities of monthly and annual Resource Adequacy Plans that set forth information, including identification of Local Capacity Area Resources; 4) determine the minimum amount of Local Capacity Area Resources needed in Local Capacity Areas and allocate responsibility to Load Serving Entities for such Local Capacity Area Resources; 5) require the registration of Use-Limited Resources and the submission of use plans by Use-Limited Resources; and 6) apply default resource counting protocols. This Appendix CC, therefore, does not replace or supersede thoseat provisions contained in the ISO Tariff.

PART A - RESOURCE ADEQUACY

40 RESOURCE ADEQUACY DEMONSTRATION FOR ALL SCHEDULING COORDINATORS SCHEDULING DEMAND IN THE CAISO CONTROL AREA.

40.1 Applicability.

A Load Serving Entity, and its Scheduling Coordinator, shall be exempt from Section 40 of this appendix, if the metered peak Demand of the Load Serving Entity did not exceed one (1) MW during the twelve months preceding the last date on which the Load Serving Entity can make the election in Section 40.1.1 of this appendix for the 2008 Resource Adequacy Compliance Year. Section 40 of this appendix shall apply to all other Load Serving Entities and their respective Scheduling Coordinators. For purposes of Section 40 of this appendix, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(j)(3).

40.1.1 Election of Load Serving Entity Status.

By December 18, 2007, via e-mail to reliabilityrequirements@caiso.com, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1 of this appendix, shall inform the CAISO whether each such LSE elects to be either: (i) a Reserve Sharing LSE or (ii) a Modified Reserve Sharing LSE for the 2008 Resource Adequacy Compliance Year. A Scheduling Coordinator for a Load-following MSS is not required to make an election under this Section. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.4 and 40.3 of this appendix.

The CAISO may confirm with the CPUC, Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for any LSE under its jurisdiction. The determination of the CPUC, Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, as appropriate, fails to make the election on behalf of an LSE in accordance with the Business Practice Manual, the LSE shall be deemed a Reserve Sharing LSE.

- 40.2 Information Requirements Regarding Resource Adequacy Programs.
- 40.2.1. Reserve Sharing LSEs.
- 40.2.1.1 Requirements for CPUC Load Serving Entities Electing Reserve Sharing LSE Status.

The information required by Section 40.2.1.1 of this appendix shall be provided to the CAISO as follows:

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC.
- (b) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) of this appendix shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 of this appendix shall apply.
- (d) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 of this appendix shall apply.
- (e) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Resource Adequacy Plan requirements, then Section 40.2.2.4 of this appendix shall apply.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: January 15, 2008 Effective: December 17, 2007

40.2.2 Requirements for Non-CPUC Load Serving Entities Electing Reserve Sharing LSE
Status, Including Default Provisions for CPUC Load Serving Entities.

40.2.2.1 Reserve Margin.

The information required by Section 40.2.2.1 of this appendix shall be provided to the CAISO pursuant to the instructions set forth in a CAISO Market Notice within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve

 Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the
 appropriate Local Regulatory Authority or federal agency for use in the annual Resource

 Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the

 Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix that has elected Reserve Sharing LSE status, the Reserve Margin for each month shall be no less than 15% of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.

40.2.2.2 Qualifying Capacity Criteria.

The information required by Section 40.2.2.2 of this appendix shall be provided to the CAISO pursuant to the instructions set forth in a CAISO Market Notice within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with a description of the criteria adopted by the Local Regulatory Authority or federal agency for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

40.2.2.3 Demand Forecasts.

The information required by Section 40.2.2.3 of this appendix shall be provided to the CAISO pursuant to the instructions set forth in a CAISO Market Notice within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix electing Reserve Sharing LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from the Demand Forecast information submitted to the California Energy Commission by each Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, necessary to develop or support the Demand Forecasts required by this Section.

40.2.2.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans for such Load Serving Entity. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The initial monthly Resource Adequacy Plan under this appendix shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.2.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Load Serving Entity as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan should identify all resources, including Local Capacity Area Resources, the Load Serving Entity will rely upon to satisfy the applicable month's peak hour Demand of the Load Serving Entity as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix and applicable Reserve Margin. Resource Adequacy Plans must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

40.2.3 Modified Reserve Sharing LSEs.

40.2.3.1 Reserve Margin.

The information required by Section 40.2.3.1 of this appendix shall be provided to the CAISO pursuant to the instructions set forth in a CAISO Market Notice within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

(a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the CPUC, Local Regulatory Authority, or federal agency, as appropriate, for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.

(b) For the Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status for which the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has not established a Reserve Margin, the Reserve Margin shall be no less than fifteen percent (15%) of the applicable month's peak hour Demand of the Load Serving Entity, as determined by the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.

40.2.3.2 Qualifying Capacity.

of this appendix.

The information required by Section 40.2.3.2 of this appendix shall be provided to the CAISO pursuant to the instructions set forthin a CAISO Market Notice within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with a description of the criteria for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Modified Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8

40.2.3.3 Demand Forecasts.

LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from Demand Forecast data submitted to the California Energy Commission by each Modified Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, to develop or support the Demand Forecast required by this Section 40.2.3.3 of this appendix.

40.2.3.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The monthly Resource Adequacy Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website for each Modified Reserve Sharing LSE served by the Scheduling Coordinator. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.3.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in

accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Modified Reserve Sharing LSE as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan must identify the resources the Modified Reserve Sharing LSE will rely upon to satisfy its forecasted monthly Demand and Reserve Margin as set forth in Section 40.2.3.1 of this appendix, for the relevant reporting period and must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

40.2.4 Load-Following MSS.

A Scheduling Coordinator for a Load-following MSS must provide an annual Resource Adequacy Plan on January 31, 2008 for 2008 Resource Adequacy Compliance Year that sets forth, at a minimum, the Local Capacity Area Resources, if any, procured by the Load-following MSS as described in Section 40.3 of this appendix. The annual Resource Adequacy Plan shall utilize the annual coincident peak Demand determination provided by the California Energy Commission for such Load-following MSS using Demand Forecast data submitted to the California Energy Commission by the Load-following MSS, or, if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load-following MSS, the annual coincident peak Demand Forecast produced by the CAISO for such Load-following MSS in accordance with its Business Practice Manual using Demand Forecast data submitted to the CAISO by the Load-following MSS.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: October 16, 2007

Effective: December 17, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1374

40.3 Local Capacity Area Resource Requirements Applicable to Scheduling

Coordinators for All Load Serving Entities.

40.3.1 Local Capacity Technical Study.

For 2008 Resource Adequacy Compliance Year, the CAISO's 2008 Local Capacity Technical Analysis, dated April 3, 2007, located at http://www.caiso.com/1bb5/1bb5ed3d46430.pdf on the CAISO Website shall constitute the Local Capacity Technical Study for purposes of Section 40 of this appendix. For the 2009 Resource Adequacy Compliance Year, on an annual basis, pursuant to the schedule set forth in the Business Practice Manual, the CAISO will, perform, and publish on the CAISO Website the Local Capacity Technical Study. The Local Capacity Technical Study shall identify Local Capacity Areas, determine the minimum amount of Local Capacity Area Resources in MW that must be available to the CAISO within each identified Local Capacity Area, and identify the Generating Units within each identified Local Capacity Area. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 and to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study and a schedule that provides for: (i) reasonable time for review of a draft Local Capacity Technical Study, (ii) reasonable time for Participating TOs to propose operating solutions, and (iii) release of the final Local Capacity Technical Study no later than 120 days prior to the date annual Resource Adequacy Plans must be submitted.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: October 16, 2007

Effective: December 17, 2007

40.3.1.1 Local Capacity Technical Study Criteria.

The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2 of this appendix. In performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency, as provided in NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0, as augmented by CAISO Reliability Criteria in accordance with the Transmission Control Agreement and Section 24.2.1 of Appendix EE. The CAISO Reliability Criteria shall include:

- (1) Time Allowed for Manual Readjustment: This is the amount of time required for the operation to take all actions necessary to prepare the system for the next contingency. This time should not be less than 30 minutes.
- (2) No voltage collapse or dynamic instability shall be allowed for the Category D event-any B1-4 system readjusted (Common Mode) L-2, as listed in Section 40.3.1.2.

40.3.1.2 Local Capacity Technical Study Contingencies.

The Local Capacity Technical Study shall assess the following Contingencies:

Contingency Component(s)

NERC/WECC Performance Level A – No Contingencies

NERC/WECC Performance Level B - Loss of a single element

- 1. Generator (G-1)
- 2. Transmission Circuit (L-1)
- 3. Transformer (T-1)
- 4. Single Pole (dc) Line
- 5. G-1 system readjusted L-1

NERC/WECC Performance Level C – Loss of two or more elements

- 3. L-1 system readjusted G-1
- 3. G-1 system readjusted T-1 or T-1 system readjusted G-1
- 3. L-1 system readjusted T-1 or T-1 system readjusted L-1
- 3. G-1 system readjusted G-1
- 3. L-1 system readjusted L-1
- 4. Bipolar (dc) Line
- 5. Two circuits (Common Mode) L-2
- 9. SLG fault (stuck breaker or protection failure) for Bus section

WECC-S3. Two generators (Common Mode) G-2

D – Extreme event – loss of two or more elements

Any B1-4 system readjusted (Common Mode) L-2

All other extreme combinations D1-14.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: January 15, 2008

Effective: December 17, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1376

40.3.2 Allocation of Local Capacity Area Resource Obligations.

The CAISO will allocate responsibility for Local Capacity Area Resources to Scheduling Coordinators for

Load Serving Entities in the following sequential manner:

(a) The responsibility for the aggregate Local Capacity Area Resources required for all Local

Capacity Areas within each TAC Area as determined by the Local Capacity Technical Study will be

allocated to all Scheduling Coordinators for Load Serving Entities that serve Load in the TAC Area in

accordance with the Load Serving Entity's proportionate share of the LSE's TAC Area Load at the

time of the CAISO's annual coincident peak Demand set forth in the annual peak Demand Forecast

for the next Resource Adequacy Compliance Year as determined by the California Energy

Commission. Expressed as a formula, the allocation of Local Area Capacity Resource obligations will

be as follows: (Σ Local Capacity Area MW in TAC Area from the Local Capacity Technical Study) *

(LSE Demand in TAC Area at CAISO annual coincident peak Demand)/(Total TAC Area Demand at

the time of CAISO annual coincident peak Demand). This will result in a MW responsibility for each

Load Serving Entity for each TAC Area in which the LSE serves Load. The LSE may meet its MW

responsibility, as assigned under this Section, for each TAC Area in which the LSE serves Load by

procurement of that MW quantity in any Local Capacity Area in the TAC Area.

(b) For Scheduling Coordinators for Non-CPUC Load Serving Entities, the Local Capacity Area

Resource obligation will be allocated based on Section 40.3.2(a) of this appendix.

(c) For Scheduling Coordinators for CPUC Load Serving Entities, the CAISO will allocate the Local

Capacity Area Resource obligation based on an allocation methodology, if any, adopted by the

CPUC. However, if the allocation methodology adopted by the CPUC does not fully allocate the total

sum of each CPUC Load Serving Entity's proportionate share calculated under Section 40.3.2(a) of

this appendix, the CAISO will allocate the difference to all Scheduling Coordinators for CPUC Load

Serving Entities in accordance with their proportionate share calculated under 40.3.2(a) of this

Issued on: October 16, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1377

appendix. If the CPUC does not adopt an allocation methodology, the CAISO will allocate Local Capacity Area Resources to Scheduling Coordinators for CPUC Load Serving Entities based on Section 40.3.2(a) of this appendix.

Once the CAISO has allocated the total responsibility for Local Capacity Area Resources, the CAISO will inform the Scheduling Coordinator for each LSE of the LSE's specific allocated responsibility for Local Capacity Area Resources in each TAC Area in which the LSE serves Load.

40.3.3 Procurement of Local Capacity Area Resource Obligations by Load Serving Entities.

Nothing in Section 40 of this appendix obligates a Load Serving Entity to procure Local Capacity Area Resources to satisfy capacity requirements for each Local Capacity Area identified in the Local Capacity Technical Study. Scheduling Coordinators for Load Serving Entities may aggregate responsibilities for procurement of Local Capacity Area Resources. If a Load Serving Entity has procured Local Capacity Area Resources that satisfy generation capacity requirements for Local Capacity Areas, the Scheduling Coordinator for such Load Serving Entity shall include this information in its annual and monthly Resource Adequacy Plan(s).

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1378

40.4.7 Submission of Supply Plans.

- (a) Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Capacity shall provide the CAISO with annual and monthly Supply Plans verifying their agreement to provide Resource Adequacy Capacity during the 2008 Resource Adequacy Compliance Year or relevant month, as applicable. For 2008 Resource Adequacy Compliance Year, an annual Supply Plan or certification that a previously submitted annual Supply Plan for 2008 Resource Adequacy Compliance Year has not changed shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website, and the initial monthly Supply Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). Thereafter, Supply Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month. Prior to the requirement to submit Supply Plans to the CAISO in accordance with Section 40.4.7 of this appendix, monthly Supply Plans must be submitted in accordance with Section 40.6 of the ISO Tariff.
- (b) The Supply Plan must be in the form of the template provided on the CAISO Website, which shall include an affirmative representation by the Scheduling Coordinator submitting the Supply Plan that the CAISO is entitled to rely on the accuracy of the information provided in the Supply Plan.
- (c) The CAISO shall be entitled to take reasonable measures to validate the accuracy of the information submitted in Supply Plans under this Section of the appendix, including;
- (1) Comparing a Resource Adequacy Resource's Resource Adequacy Capacity against the Resource Adequacy Resource's Net Qualifying Capacity, if applicable. To the extent the Resource Adequacy Capacity of a Resource Adequacy Resource included in a Supply Plan is greater than the Resource Adequacy Resource's Net Qualifying Capacity, the CAISO will notify the respective Scheduling Coordinators for the Resource Adequacy Resource and each Load Serving Entity that has included the Resource Adequacy Resource on its Resource Adequacy Plan that the Resource Adequacy Capacity

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: January 15, 2008

Effective: December 17, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1378A

from the Resource Adequacy Resource shall be reduced to the Resource Adequacy Resource's Net Qualifying Capacity and that it will be considered a mismatch under Section 40.7 of this appendix. If the CAISO is not advised as to how the reduction in Resource Adequacy Capacity to conform with the Resource Adequacy Resource's Net Qualifying Capacity shall be allocated among each Load Serving Entity that included the Resource Adequacy Resource on its Resource Adequacy Plan, the CAISO will apply a pro rata reduction based on the Supply Plan.

- (a) Disputes regarding the CAISO's determination of Net Qualifying Capacity shall be subject to Section 40.5.2 of the CAISO Tariff.
- (b) The provisions of this Section shall not affect a Resource Adequacy Resource's Net Qualifying Capacity posted by the CAISO under Section 40.5.2 of the CAISO Tariff.
- (2) Other errors or inaccuracies identified by the CAISO in a Supply Plan shall be treated as a mismatch under Section 40.7 of this appendix.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1379

40.6.4 Additional Availability Requirements for Use-Limited Resources.

40.6.4.1 Registration of Use-Limited Resources.

Scheduling Coordinators for Use-Limited Resources, other than for hydroelectric Generating Units and Participating Load, including Pumping Load, must provide the CAISO an application in the form specified on the CAISO Website requesting registration of a specifically identified resource as a Use-Limited Resource. For any Use-Limited Resource that anticipates being included in an annual or monthly Resource Adequacy Plan and/or Supply Plan under this appendix, the registration shall be submitted by January 7, 2008. This application shall include specific operating data and supporting documentation including, but not limited to;

- 1) a detailed explanation of why the resource is subject to operating limitations;
- 2) historical data to show attainable MWhs for each 24-hour period during the preceding year, including, as applicable, environmental restrictions for NOx, SOx, or other factors; and
- 3) further data or other information as may be requested by the CAISO to understand the operating characteristics of the unit.

Within fifteen (15) Business Days after receipt of the application, the CAISO will respond to the Scheduling Coordinator as to whether or not the CAISO agrees that the facility is eligible to be a Use-Limited Resource. If the CAISO determines the facility is not a Use-Limited Resource, the Scheduling Coordinator may challenge that determination in accordance with the CAISO ADR Procedures.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: October 16, 2007 Effective: December 17, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
First Revised Sheet No. 1380
THIRD REPLACEMENT VOLUME NO. II
Superseding Original Sheet No. 1380

40.6.4.2 Use Plan.

The Scheduling Coordinator shall provide for the 2008 Resource Adequacy Compliance Year a proposed annual use plan for each Use-Limited Resource that is a Resource Adequacy Resource. The proposed annual use plan will delineate on a month-by-month basis the total MWhs of Generation, total run hours, expected daily supply capability (if greater than four hours) and the daily Energy limit, operating constraints, and the timeframe for each constraint. The CAISO will have an opportunity to discuss the proposed annual use plan with the Scheduling Coordinator and suggest potential revisions to meet reliability needs of the system. The Scheduling Coordinator shall then submit its final annual use plan. Scheduling Coordinators for Use-Limited Resources must submit the proposed and final annual use plans in accordance with the schedule set forth in the Business Practice Manual. The Scheduling Coordinator will be able to update the projections made in the annual use plan in the monthly Resource Adequacy Plans. Hydroelectric Generating Units and Pumping Load will be able to update use plans intra-monthly as necessary to reflect evolving hydrological and meteorological conditions. The annual use plan must reflect the potential operation of the Use-Limited Resource at a level no less than the minimum criteria set forth by the Local Regulatory Authority for qualification of the resource.

40.7 Compliance.

The CAISO will evaluate whether each annual and monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity under this appendix (including for 2008 each monthly Resource Adequacy Plan submitted pursuant to Sections 40.2.2 of the CAISO Tariff) demonstrates Resource Adequacy Capacity sufficient to satisfy the Load Serving Entity's (i) allocated responsibility for Local Capacity Area Resources under Section 40.3.2 of this appendix and (ii) applicable Demand and Reserve Margin requirements. In the case of an annual Reserve Margin requirement for 2008, the CAISO will also evaluate the annual Resource Adequacy Plan submitted under Section 40.2.1. If the CAISO determines that a Resource Adequacy Plan does not demonstrate Local Capacity Area Resources sufficient to meet its allocated responsibility under Section 40.3.2 of this appendix, compliance with applicable Demand and Reserve Margin requirements, or compliance with any other resource adequacy requirement in this appendix or adopted by the CPUC, Local Regulatory

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: March 5, 2008

Effective: January 1, 2008

Authority, or federal agency, as applicable, the CAISO will notify the relevant Scheduling Coordinator, CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the relevant Load Serving Entity, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the relevant Scheduling Coordinators, in an attempt to resolve any deficiency. The notification will include the reasons the CAISO believes a deficiency exists. If the deficiency relates to the demonstration of Local Capacity Area Resources in a Load Serving Entity's annual Resource Adequacy Plan, and the CAISO does not provide a written notice of resolution of the deficiency, the Scheduling Coordinator for the Load Serving Entity may demonstrate that the identified deficiency is cured by submitting a revised annual Resource Adequacy Plan within sixty (60) days after the annual Resource Adequacy Plan is due under Sections 40.2.3.4, 40.2.2.4 and 40.2.4 of this appendix. For all other identified deficiencies, at least ten (10) days prior the effective month of the relevant Resource Adequacy Plan, the Scheduling Coordinator for the Load Serving Entity shall (i) demonstrate that the identified deficiency is cured by submitting a revised Resource Adequacy Plan or (ii) advise the CAISO that the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has determined that no deficiency exists. In the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), if resolved, the relevant Scheduling Coordinator(s) must provide the CAISO with revised Resource Adequacy Plan(s) or Supply Plans, as applicable, at least ten (10) days prior to the effective month. If the CAISO is not advised that the deficiency or mismatch is resolved at least ten (10) days prior to the effective month, the CAISO will use the information contained in the Supply Plan to set the obligations of Resource Adequacy Resources under Section 40 of this appendix.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1382

CAISO Default Qualifying Capacity Criteria. 40.8

40.8.1 Applicability.

The criteria in Section 40.8 of this appendix shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in Section 40.8.1 of this appendix will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in Section 40.8.1 of this appendix.

40.8.1.2 **Nuclear and Thermal.**

Nuclear and thermal Generating Units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act addressed in Section 40.8.1.8 of this appendix below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

40.8.1.3 Hydro.

Hydroelectric Generating Units, other than Qualifying Facilities with contracts under the Public Utility Regulatory Policies Act, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Effective: December 17, 2007 CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1383

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net

dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow,

or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro

scenario (for example, using the 4th driest year from the last 20 years on record).

40.8.1.4 Unit-Specific Contracts.

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy

Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not

exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination

for that unit.

40.8.1.5 Contracts with Liquidated Damage Provisions.

Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C

of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro

forma agreement, or any other similar firm Energy contract that does not require the seller to source the

Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area entered

into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end of 2008. A

Scheduling Coordinator, however, cannot have more than 25% of its portfolio of Qualifying Capacity met

by contracts with liquidated damage provisions for 2008.

40.8.1.6 Wind and Solar.

As used in this Section, wind units are those wind Generating Units without backup sources of Generation

and solar units are those solar Generating Units without backup sources of Generation. Wind and solar

units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies

Act, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4

upon that section's effective date.

Effective: December 17, 2007

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area in which the Generating Unit is located.

40.8.1.7 Geothermal.

Geothermal Generating Units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities.

Qualifying Facilities must be subject to an effective Participating Generator Agreement or QF Participating Generator Agreement or must be System Units, unless they have a PURPA contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6 of this appendix, the Qualifying Capacity of Qualifying Facilities under PURPA contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

40.8.1.9 Participating Loads.

The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a three-year period on a per Dispatch basis or, if the Participating Load does not have three years of performance history, based on comparable evaluation data using similar programs. Participating Loads must be available at least 48 hours, and if the Participating Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1385

40.8.1.10 Jointly-Owned Facilities.

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1 of this appendix. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

40.8.1.11 Facilities under Construction.

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in Section 40.8 of this appendix. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

40.8.1.12 System Resources.

40.8.1.12.1 Dynamic System Resources.

Dynamic System Resources shall be treated similar to resources within the CAISO Control Area, except with respect to the deliverability screen under Section 40.5.2.1 of the CAISO Tariff. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: October 16, 2007 Effective: December 17, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1386

40.8.1.12.2 Non-Dynamic System Resources.

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Control Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

PART B - DEFINITIONS

Unless defined in this Appendix CC or the context otherwise requires, all capitalized terms and expressions used in this Appendix CC shall have the meaning as defined in the Master Definitions Supplement in Appendix A. The following capitalized terms and expressions used in this Appendix CC shall have the meanings set forth below unless otherwise stated or the context otherwise requires. If two or more capitalized terms are used together in a manner not uniquely defined in Appendix A or this Appendix CC, the meanings of each defined term apply.

CPUC Load Serving Entity

Any entity serving retail Load in the CAISO Control Area under the jurisdiction of the CPUC, including an electrical corporation under section 218 of the California Public Utilities Code, an electric service provider under section 218.3 of the California Public Utilities Code, and a community choice aggregator under section 331.1 of the California Public Utilities Code.

Dynamic Resource-Specific System Resource A Dynamic System Resource that is a specific generation resource outside the CAISO Control Area.

Firm Liquidated Damages Contract

A contract utilizing or consistent with Service Schedule C of the Western Systems Power Pool Agreement or the Firm Liquidated Damages product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area.

Load Serving Entity (LSE)

Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer, that (a) (i) serves End Users within the CAISO Control Area and (ii) has been granted authority or has an obligation pursuant to California state or local law, regulation, or franchise to sell electric energy to End Users located within the CAISO Control Area; (b) is a federal power marketing authority that serves End Users; or (c) is the State Water Resources Development System commonly known as the State Water Project of the California Department of Water Resources.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

FERC ELECTRIC TARIFF

THIRD REPLACEMENT VOLUME NO. II

First Revised Sheet No. 1388 Superseding Original Sheet No. 1388

Local Capacity Area Transmission constrained area as defined in the study referenced in

Section 40.3.1 of Appendix CC.

Local Capacity Area

Resources

Resource Adequacy Capacity from a Generating Unit listed in the technical study or Participating Load that is located within a Local Capacity Area capable of contributing toward the amount of capacity

required in a particular Local Capacity Area.

Local Capacity Technical

Study

Modified Reserve Sharing

LSE

The study performed by the CAISO pursuant to Section 40.3.

A Load Serving Entity whose Scheduling Coordinator has informed the CAISO in accordance with Section 40.1 of its election to be a Modified

Reserve Sharing LSE.

Non-CPUC Load Serving Entity

Any entity serving retail Demand in the CAISO Control Area not within the jurisdiction of the CPUC, including (i) a local publicly owned electric utility under section 9604 of the California Public Utilities Code and (ii) any federal entities, including but not limited to federal power marketing authorities, that serve retail Load.

Non-Dynamic Resource-Specific System Resource

A Non-Dynamic System Resource that is a specific generation resource

outside the CAISO Control Area.

Pumped-Storage Hydro Unit

A hydroelectric dam with the capability to produce electricity and the ability to pump water between reservoirs at different elevations to store such water for the production of electricity.

Pumping Load

A hydro pumping resource that is capable of responding to Dispatch

Instructions by ceasing to pump.

Reserve Margin

The amount of Resource Adequacy Capacity that a Scheduling Coordinator is required to maintain in accordance with Section 40.

Reserve Sharing LSE

A Load Serving Entity whose Scheduling Coordinator has informed the CAISO in accordance with Section 40.1 of its election to be a Reserve Sharing LSE.

Resource Adequacy Compliance Year Resource-Specific System A calendar year from January 1 through December 31.

Resource

Use-Limited Resource

A Dynamic or Non-Dynamic Resource-Specific System Resource.

A resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, is unable to operate continuously on a daily basis, but is able to operate for a minimum set of consecutive

Trading Hours each Trading Day.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: March 5, 2008 Effective: January 1, 2008

ISO TARIFF APPENDIX DD

SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1390

SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)

(For Generating Facilities No Larger Than 20 MW)

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007 Effective: November 16 Effective: November 16, 2007

Small Generator Interconnection Agreement

under the laws of	orporation, a California n he State of California ("I o individually as "Party"	SO") and
	, ,	or referred to
		
State:	Zip:	
	-	
	· · · · · · · · · · · · · · · · · · ·	
State:	Zip:	
	State:	State: Zip:

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

Article 1. Scope and Limitations of Agreement

- 1.1 This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Attachment 5.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Participating TO's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity in accordance with the ISO Tariff.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between or among the Parties.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: December 13, 2007

Effective: November 16, 2007

1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice. The Parties shall use the Large Generator Interconnection Agreement (ISO Tariff Appendix V or Appendix HH, as applicable) to interpret the responsibilities of the Parties under this Agreement.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Participating TO shall construct, operate, and maintain its Interconnection Facilities and Upgrades in accordance with this Agreement, and with Good Utility Practice. The ISO and the Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this Agreement.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Participating TO and any Affected Systems. The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook. In the event of a conflict between the terms of this Agreement and the terms of the Participating TO's Interconnection Handbook, the terms in this Agreement shall govern.
- 1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Participating TO and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the ISO Controlled Grid, the Participating TO's electric system, the Participating TO's personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.
- 1.5.6 The Participating TO and the ISO shall coordinate with Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall execute the Reliability Management System Agreement of the Western Electricity Coordinating Council prior to parallel operation of the Small Generating Facility. The Reliability Management System Agreement is provided as Attachment 8 to this Agreement.

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: July 28, 2008 Effective: September 29, 2008

1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the ISO Control Area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the ISO Tariff for the ISO Controlled Grid and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

1.7 Metering

The Interconnection Customer shall be responsible for the reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power

- 1.8.1 The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of each generating unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the ISO has established different requirements that apply to all similarly situated generators in the ISO Control Area on a comparable basis. The requirements of this paragraph shall not apply to wind generators and the requirements of Attachment 7 shall apply instead.
- 1.8.2 Payment to the Interconnection Customer for reactive power that the Small Generating Facility provides or absorbs when the ISO requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1 will be made by the ISO in accordance with the applicable provisions of the ISO Tariff.
- 1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

- 2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Participating TO and the ISO of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Participating TO and the ISO may, at their own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Participating TO and the ISO a written test report when such testing and inspection is completed.
- 2.1.2 The Participating TO and the ISO shall provide the Interconnection Customer written acknowledgment that they have received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Participating TO or the ISO of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007 Effective: November 16, 2007

2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Participating TO and the ISO shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Participating TO and the ISO shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Participating TO and the ISO shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Participating TO's Transmission System without prior written authorization of the Participating TO. The Participating TO will provide such authorization to the Interconnection Customer and the ISO once the Participating TO receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Participating TO and the ISO may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Participating TO and the ISO at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Participating TO and the ISO shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Participating TO and the ISO shall promptly file this Agreement with the FERC upon execution, if required.

3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of _____ years from the Effective Date (term specified in individual agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management
Issued on: December 13, 2007

Effective: November 16, 2007

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Participating TO and the ISO 20 Business Days written notice.
- 3.3.2 Any Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the ISO Controlled Grid. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this Agreement or such non-terminating Party otherwise is responsible for these costs under this Agreement.
- 3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection of the Small Generating Facility or associated Interconnection Facilities shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions

"Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; (2) that, in the case of the ISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the ISO Controlled Grid or the electric systems of others to which the ISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a nondiscriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, the Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the ISO or the Participating TO may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Participating TO or the ISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the ISO promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the ISO Controlled Grid, the Participating TO's Interconnection Facilities, or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration, and the necessary corrective action.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007

Effective: November 16, 2007

3.4.2 Routine Maintenance, Construction, and Repair

The Participating TO or the ISO may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the ISO Controlled Grid when necessary for routine maintenance, construction, and repairs on the ISO Controlled Grid or the Participating TO's electric system. The Party scheduling the interruption shall provide the Interconnection Customer with five Business Days notice prior to such interruption. The Party scheduling the interruption shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

The Interconnection Customer shall update its planned maintenance schedules in accordance with the ISO Tariff. The ISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the ISO Controlled Grid in accordance with the ISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the ISO.

3.4.3 Forced Outages

During any forced outage, the Participating TO or the ISO may suspend interconnection service to effect immediate repairs on the ISO Controlled Grid or the Participating TO's electric system. The Participating TO or the ISO shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Participating TO or the ISO shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection. The Interconnection Customer shall notify ISO, as soon as practicable, of all forced outages or reductions of the Small Generating Facility in accordance with the ISO Tariff.

3.4.4 Adverse Operating Effects

The Participating TO or the ISO shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the ISO Controlled Grid, the Participating TO's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Participating TO or the ISO may disconnect the Small Generating Facility. The Participating TO or the ISO shall provide the Interconnection Customer with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Participating TO and the ISO before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the ISO Controlled Grid or the Participating TO's electric system. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Participating TO's and the ISO's prior written authorization, the Participating TO or the ISO shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, the Participating TO's electric system, and the ISO Controlled Grid to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007 Effective: November 16, 2007

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 <u>Interconnection Facilities</u>

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Participating TO shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, the ISO, and the Participating TO.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Participating TO's Interconnection Facilities.

4.2 Distribution Upgrades

The Participating TO shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

Article 5. Cost Responsibility for Network Upgrades

5.1 Applicability

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

5.2 Network Upgrades

The Participating TO shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Participating TO elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.3 Transmission Credits

No later than thirty (30) days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the ISO and the Participating TO to receive Firm Transmission Rights as defined in and as available under the ISO Tariff at the time of the election in accordance with the ISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 5.3.1.

5.3.1 Repayment of Amounts Advanced for Network Upgrades

Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the cost of Network Upgrades. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007 Effective: November 16, 2007

commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this Agreement terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this Agreement is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Small Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

5.3.2 Special Provisions for Affected Systems

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the ISO Controlled Grid, as applicable, in accordance with the SGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the ISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System.

5.3.3 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

Article 6. Billing, Payment, Milestones, and Financial Security

6.1 <u>Billing and Payment Procedures and Final Accounting</u>

6.1.1 The Participating TO shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties. Notwithstanding the foregoing, any invoices between the ISO and another Party shall be submitted and paid in accordance with the ISO Tariff.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007

Effective: November 16, 2007

6.1.2 Within three months of completing the construction and installation of the Participating TO's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Participating TO shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Participating TO for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Participating TO shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Participating TO within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Participating TO shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, as defined in article 7.5.1, it shall immediately notify the other Parties of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) request appropriate amendments to Attachment 4. The Parties affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless (1) they will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) they have reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Participating TO's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Transmission Provider, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Participating TO and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Participating TO's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Participating TO under this Agreement during its term. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Participating TO, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Participating TO and must specify a reasonable expiration date.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 13, 2007

Effective: November 16, 2007

Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

7.1 <u>Assignment</u>

This Agreement may be assigned by any Party upon 15 Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 Any Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the Participating TO and the ISO of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Participating TO or the ISO, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Participating TO and the ISO of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

Each Party's liability to the other Parties for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall any Party be liable to the other Parties for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified Party is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified Party may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

- 7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this article, the amount owing to the indemnified Party shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

7.4 Consequential Damages

Other than as expressly provided for in this Agreement, no Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure."
- 7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Parties, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Parties informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.6 <u>Default</u>

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of another Party. Upon a Default, the affected non-defaulting Party(ies) shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the affected non-defaulting Party(ies) shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

Article 8. Insurance

- 8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Participating TO or ISO, except that the Interconnection Customer shall show proof of insurance to the Participating TO and ISO no later than ten Business Days prior to the anticipated Commercial Operation Date. If the Interconnection Customer is of sufficient credit-worthiness, it may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.
- The Participating TO agrees to maintain general liability insurance or self-insurance consistent with the Participating TO's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Participating TO's liabilities undertaken pursuant to this Agreement.
- 8.3 The ISO agrees to maintain general liability insurance or self-insurance consistent with the ISO's commercial practice. Such insurance shall not exclude coverage for the ISO's liabilities undertaken pursuant to this Agreement.
- The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to another Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.
- 9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Parties and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

- 9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Parties as it employs to protect its own Confidential Information.
- 9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
- 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

Article 10. Disputes

All disputes arising out of or in connection with this Agreement whereby relief is sought by or from ISO shall be settled in accordance with the provisions of Article 13 of the ISO Tariff, except that references to the ISO Tariff in such Article 13 of the ISO Tariff shall be read as reference to this Agreement. Disputes arising out of or in connection with this Agreement not subject to provisions of Article 13 of the ISO Tariff shall be resolved as follows:

- 10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (<u>e.g.</u>, mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible forone-half of any costs paid to neutral third-parties.
- 10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

Article 11. Taxes

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other Parties to maintain the other Parties' tax status.

 Nothing in this Agreement is intended to adversely affect the Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of ______ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by all of the Parties, or under article 12.12 of this Agreement.

12.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

12.4 Waiver

- 12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- 12.4.2 Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or Default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

12.10 Environmental Releases

Each Party shall notify the other Parties, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Parties copies of any publicly available reports filed with any governmental authorities addressing such events.

12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Participating TO or the ISO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The ISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations, except to the extent that the Parties otherwise mutually agree as provided herein.

Article 13. Notices

If to the Interconnection Customer: Interconnection Customer:

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

	Attention:			
	Attention:			
	City:		State:	Zip:
	Address: City: Phone:	_ Fax:		
If to the	ne Participating TO:			
	Participating TO:			
	Attention:			
	Address:			
	City:		State:	Zip:
	City:Phone:	_ Fax:		• • • • • • • • • • • • • • • • • • • •
If to ti	he ISO:			
11 10 11	California Independent Sys	stem Operator		
	Attention:			
	151 Blue Ravine Road			
	Folsom, CA 95630			
	Phone: 916-351-4400	Fax:		
	and Payment			
Billing	gs and payments shall be sen	t to the address	ses set out below:	
Interc	connection Customer:			
	Attention:			
	/ (ttorition.			
	Address:			
	Address:			Zip:
Partic	Address: City:		State:	
Partic	Address: City:		State:	
Partio	Address: City:		State:	

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Effective: November 16, 2007

Issued on: December 13, 2007

13.3 Alternative Forms of Notice

13.4

If to the Interconnection Customer:

Any notice or request required or permitted to be given by any Party to the other Parties and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and e-mail addresses set out below:

	Interconnection Customer:			
	Attention:			
	Address:			
	City:	<u></u>	State:	Zip:
	City:	Fax:		
If to the	e Participating TO:			
	Participating TO:			
	Attention:			
	Address:			
	City:	<u> </u>	State:	Zip:
	City:Phone:	Fax:	 	
If to the	e ISO:			
	California Independent Syster			
	Attention:	· · · · · · · · · · · · · · · · · · ·		
	151 Blue Ravine Road			
	Folsom, CA 95630 Phone: 916-351-4400	F		
	Phone: 916-351-4400	Fax:		
The Pa	ated Operating Representative arties may also designate operate necessary or convenient for the sthe point of contact with resp	iting represe ne administra	ation of this Agreement.	This person will also
Interco	nnection Customer's Operating	Representa	itive:	
	Interconnection Customer:			
	Attention:			
	Address:			
	City:Phone:		State:	Zip:
	Phone:	Fax:	 	
Particip	pating TO's Operating Represe	ntative:		
	Participating TO:			
	Attention:			
	Address			
	City:		State:	Zip:
	City:Phone:	Fax:		

ISO's C	Operating Representative	
	California Independent System Operator Attention: 151 Blue Ravine Road Folsom, CA 95630	
	Phone: 916-351-4400 Fax:	
13.5	<u>Changes to the Notice Information</u> Any Party may change this information by giving five Business Days written notice to the Parties prior to the effective date of the change.	other
Article	14. Signatures	
	NESS WHEREOF, the Parties have caused this Agreement to be executed by their respect uthorized representatives.	tive
For the	California Independent System Operator	
Name:		
Title:		
Date:		
For the	e Participating TO	
Name:		
Title:		
Date:		
For the	e Interconnection Customer	
Name:		
Title:		
Date:		

Attachment 1

Glossary of Terms

Affected System – An electric system other than the ISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the ISO Controlled Grid.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Business Day – Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

Commercial Operation Date – The date on which a Small Generating Facility commenced generating electricity for sale as agreed upon by the Participating TO and the Interconnection Customer.

Control Area – An electrical system or systems bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the interconnection. A Control Area must be certified by the applicable reliability council.

Default – The failure of a breaching Party to cure its breach under this Agreement.

Distribution System – Those non-ISO-controlled transmission and distribution facilities owned by the Participating TO.

Distribution Upgrades – The additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, ISO, Participating TO, or any Affiliate thereof.

Interconnection Facilities – The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Handbook – A handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's

Transmission System, as such handbook may be modified or superseded from time to time. The Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and applicable reliability standards.

Interconnection Request – A request, in accordance with the ISO Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the ISO Controlled Grid.

ISO Controlled Grid – The system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the ISO's Operational Control.

ISO Tariff – The ISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Material Modification – A modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

Network Upgrades – Additions, modifications, and upgrades to the Participating TO's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the ISO Controlled Grid to accommodate the interconnection of the Small Generating Facility with the ISO Controlled Grid. Network Upgrades do not include Distribution Upgrades.

Operational Control – The rights of the ISO under the Transmission Control Agreement and the ISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Operating Requirements – Any operating and technical requirements that may be applicable due to the ISO, Western Electricity Coordinating Council, Control Area, or the Participating TO's requirements, including those set forth in this Agreement.

Party or Parties – The Participating TO, ISO, Interconnection Customer or the applicable combination of the above.

Point of Interconnection – The point where the Interconnection Facilities connect with the Participating TO's Transmission System.

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Small Generating Facility – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Transmission Control Agreement – ISO FERC Electric Tariff No. 7.

Transmission System – The facilities owned and operated by the Participating TO and that have been placed under the ISO's Operational Control, which facilities form part of the ISO Controlled Grid.

Upgrades – The required additions and modifications to the Participating TO's Transmission System and Distribution System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1411

Attachment 2

Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Participating TO. The Participating TO will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management

Issued on: December 13, 2007 Effective: November 16, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1412

Attachment 3

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Effective: November 16, 2007

Issued on: December 13, 2007

Attachment 4

Milestones

In-Service Date:	
Critical milestones and responsibility as agreed to I	by the Parties:
Milestone/Date	Responsible Party
(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
. ,	
Agreed to by:	
For the ISO	Date
For the Participating TO	Date
For the Interconnection Customer	Date

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1414

Attachment 5

Additional Operating Requirements for the ISO Controlled Grid and Affected Systems Needed to **Support the Interconnection Customer's Needs**

The Participating TO and the ISO shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the ISO Controlled Grid.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Effective: November 16, 2007

Issued on: December 13, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1415

Attachment 6

Participating TO's Description of its Upgrades and Best Estimate of Upgrade Costs

The Participating TO shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Participating TO shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management

Issued on: December 13, 2007 Effective: November 16, 2007

Attachment 7

INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Attachment 7 sets forth requirements and provisions specific to a wind generating plant. All other requirements of this Agreement continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generating plants that have either: (i) interconnection agreements signed and filed with FERC, filed with FERC in unexecuted form, or filed with FERC as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

Post-transition Period LVRT Standard

All wind generating plants not covered by the transition period described above must meet the following requirements:

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the ISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the ISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the ISO Controlled Grid at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this Agreement in order to maintain a specified voltage schedule, if the system impact study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and ISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the system impact study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and ISO to protect system reliability. The Participating TO and ISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

Attachment 8

Reliability Management System Agreement

RELIABILITY MANAGEMENT SYSTEM AGREEMENT by and between [TRANSMISSION OPERATOR] and [GENERATOR]

THIS RELIABILIT	ΓΥ MANAGEMENT SYSTEM AGREE	MENT (the "Agreement"), is entered into this
day of	, 2002, by and between	(the "Transmission
Operator") and _	(the "Ger	erator").

WHEREAS, there is a need to maintain the reliability of the interconnected electric systems encompassed by the WSCC in a restructured and competitive electric utility industry;

WHEREAS, with the transition of the electric industry to a more competitive structure, it is desirable to have a uniform set of electric system operating rules within the Western Interconnection, applicable in a fair, comparable and non-discriminatory manner, with which all market participants comply; and

WHEREAS, the members of the WSCC, including the Transmission Operator, have determined that a contractual Reliability Management System provides a reasonable, currently available means of maintaining such reliability.

NOW, THEREFORE, in consideration of the mutual agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Transmission Operator and the Generator agree as follows:

1. PURPOSE OF AGREEMENT

The purpose of this Agreement is to maintain the reliable operation of the Western Interconnection through the Generator's commitment to comply with certain reliability standards.

2. DEFINITIONS

In addition to terms defined in the beginning of this Agreement and in the Recitals hereto, for purposes of this Agreement the following terms shall have the meanings set forth beside them below.

Control Area means an electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the Western Interconnection.

FERC means the Federal Energy Regulatory Commission or a successor agency.

Member means any party to the WSCC Agreement.

Party means either the Generator or the Transmission Operator and

Parties means both of the Generator and the Transmission Operator.

Reliability Management System or **RMS** means the contractual reliability management program implemented through the WSCC Reliability Criteria Agreement, the WSCC RMS Agreement, this Agreement, and any similar contractual arrangement.

Western Interconnection means the area comprising those states and provinces, or portions thereof, in Western Canada, Northern Mexico and the Western United States in which Members of the WSCC operate synchronously connected transmission systems.

Working Day means Monday through Friday except for recognized legal holidays in the state in which any notice is received pursuant to Section 8.

WSCC means the Western Systems Coordinating Council or a successor entity.

WSCC Agreement means the Western Systems Coordinating Council Agreement dated March 20, 1967, as such may be amended from time to time.

WSCC Reliability Criteria Agreement means the Western Systems Coordinating Council Reliability Criteria Agreement dated June 18, 1999 among the WSCC and certain of its member transmission operators, as such may be amended from time to time.

WSCC RMS Agreement means an agreement between the WSCC and the Transmission Operator requiring the Transmission Operator to comply with the reliability criteria contained in the WSCC Reliability Criteria Agreement.

WSCC Staff means those employees of the WSCC, including personnel hired by the WSCC on a contract basis, designated as responsible for the administration of the RMS.

3. TERM AND TERMINATION

3.1 Term. This Agreement shall become effective [thirty (30) days after the date of issuance of a final FERC order accepting this Agreement for filing without requiring any changes to this Agreement unacceptable to either Party. Required changes to this Agreement shall be deemed unacceptable to a Party only if that Party provides notice to the other Party within fifteen (15) days of issuance of the applicable FERC order that such order is unacceptable].

[Note: if the interconnection agreement is not FERC jurisdictional, replace bracketed language with: [on the later of: (a) the date of execution; or (b) the effective date of the WSCC RMS Agreement.]]

- **3.2 Notice of Termination of WSCC RMS Agreement.** The Transmission Operator shall give the Generator notice of any notice of termination of the WSCC RMS Agreement by the WSCC or by the Transmission Operator within fifteen (15) days of receipt by the WSCC or the Transmission Operator of such notice of termination.
- **3.3 Termination by the Generator.** The Generator may terminate this Agreement as follows: (a) following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within forty-five (45) days of the termination of the WSCC RMS Agreement;
- (b) following the effective date of an amendment to the requirements of the WSCC Reliability Criteria Agreement that adversely affects the Generator, provided notice of such termination is given within forty-five (45) days of the date of issuance of a FERC order accepting such amendment for filing, provided further that the forty-five (45) day period within which notice of termination is required may be extended by the Generator for an additional forty-five (45) days if the Generator gives written notice to the Transmission Operator of such requested extension within the initial forty-five (45) day period; or (c) for any reason on one year's written notice to the Transmission Operator and the WSCC.

- **3.4 Termination by the Transmission Operator.** The Transmission Operator may terminate this Agreement on thirty (30) days' written notice following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within thirty (30) days of the termination of the WSCC RMS Agreement.
- **3.5 Mutual Agreement.** This Agreement may be terminated at any time by the mutual agreement of the Transmission Operator and the Generator.

4. COMPLIANCE WITH AND AMENDMENT OF WSCC RELIABILITY CRITERIA

- **4.1 Compliance with Reliability Criteria.** The Generator agrees to comply with the requirements of the WSCC Reliability Criteria Agreement, including the applicable WSCC reliability criteria contained in Section IV of Annex A thereof, and, in the event of failure to comply, agrees to be subject to the sanctions applicable to such failure. Each and all of the provisions of the WSCC Reliability Criteria Agreement are hereby incorporated by reference into this Agreement as though set forth fully herein, and the Generator shall for all purposes be considered a Participant, and shall be entitled to all of the rights and privileges and be subject to all of the obligations of a Participant, under and in connection with the WSCC Reliability Criteria Agreement, including but not limited to the rights, privileges and obligations set forth in Sections 5, 6 and 10 of the WSCC Reliability Criteria Agreement.
- **4.2 Modifications to WSCC Reliability Criteria Agreement.** The Transmission Operator shall notify the Generator within fifteen (15) days of the receipt of notice from the WSCC of the initiation of any WSCC process to modify the WSCC Reliability Criteria Agreement. The WSCC RMS Agreement specifies that such process shall comply with the procedures, rules, and regulations then applicable to the WSCC for modifications to reliability criteria.
- **4.3 Notice of Modifications to WSCC Reliability Criteria Agreement.** If, following the process specified in Section 4.2, any modification to the WSCC Reliability Criteria Agreement is to take effect, the Transmission Operator shall provide notice to the Generator at least forty-five (45) days before such modification is scheduled to take effect.
- **4.4 Effective Date.** Any modification to the WSCC Reliability Criteria Agreement shall take effect on the date specified by FERC in an order accepting such modification for filing.
- **4.5 Transfer of Control or Sale of Generation Facilities.** In any sale or transfer of control of any generation facilities subject to this Agreement, the Generator shall as a condition of such sale or transfer require the acquiring party or transferee with respect to the transferred facilities either to assume the obligations of the Generator with respect to this Agreement or to enter into an agreement with the Control Area Operator in substantially the form of this Agreement.

5. SANCTIONS

- **5.1 Payment of Monetary Sanctions.** The Generator shall be responsible for payment directly to the WSCC of any monetary sanction assessed against the Generator pursuant to this Agreement and the WSCC Reliability Criteria Agreement. Any such payment shall be made pursuant to the procedures specified in the WSCC Reliability Criteria Agreement.
- **5.2 Publication.** The Generator consents to the release by the WSCC of information related to the Generator's compliance with this Agreement only in accordance with the WSCC Reliability Criteria Agreement.
- **5.3 Reserved Rights.** Nothing in the RMS or the WSCC Reliability Criteria Agreement shall affect the right of the Transmission Operator, subject to any necessary regulatory approval, to take such other measures to maintain reliability, including disconnection, which the Transmission Operator may otherwise be entitled to take.

6. THIRD PARTIES

Except for the rights and obligations between the WSCC and Generator specified in Sections 4 and 5, this Agreement creates contractual rights and obligations solely between the Parties. Nothing in this Agreement shall create, as between the Parties or with respect to the WSCC: (1) any obligation or liability whatsoever (other than as expressly provided in this Agreement), or (2) any duty or standard of care whatsoever. In addition, nothing in this Agreement shall create any duty, liability, or standard of care whatsoever as to any other party. Except for the rights, as a third-party beneficiary with respect to Sections 4 and 5, of the WSCC against Generator, no third party shall have any rights whatsoever with respect to enforcement of any provision of this Agreement. Transmission Operator and Generator expressly intend that the WSCC is a third-party beneficiary to this Agreement, and the WSCC shall have the right to seek to enforce against Generator any provisions of Sections 4 and 5, provided that specific performance shall be the sole remedy available to the WSCC pursuant to this Agreement, and Generator shall not be liable to the WSCC pursuant to this Agreement for damages of any kind whatsoever (other than the payment of sanctions to the WSCC, if so construed), whether direct, compensatory, special, indirect, consequential, or punitive.

7. REGULATORY APPROVALS

This Agreement shall be filed with FERC by the Transmission Operator under Section 205 of the Federal Power Act. In such filing, the Transmission Operator shall request that FERC accept this Agreement for filing without modification to become effective on the day after the date of a FERC order accepting this Agreement for filing. [This section shall be omitted for agreements not subject to FERC jurisdiction.]

Any notice, demand or request required or authorized by this Agreement to be given in writing to a Party

8. NOTICES

:				
	Fax:	 		
:		 		

The designation of such person and/or address may be changed at any time by either Party upon receipt by the other of written notice. Such a notice served by mail shall be effective upon receipt. Notice transmitted by facsimile shall be effective upon receipt if received prior to 5:00 p.m. on a Working Day, and if not received prior to 5:00 p.m. on a Working Day, receipt shall be effective on the next Working Day.

9. APPLICABILITY

This Agreement (including all appendices hereto and, by reference, the WSCC Reliability Criteria Agreement) constitutes the entire understanding between the Parties hereto with respect to the subject matter hereof, supersedes any and all previous understandings between the Parties with respect to the subject matter hereof, and binds and inures to the benefit of the Parties and their successors.

10. **AMENDMENT**

No amendment of all or any part of this Agreement shall be valid unless it is reduced to writing and signed by both Parties hereto. The terms and conditions herein specified shall remain in effect throughout the term and shall not be subject to change through application to the FERC or other governmental body or authority, absent the agreement of the Parties.

11. INTERPRETATION

Interpretation and performance of this Agreement shall be in accordance with, and shall be controlled by, the laws of the State of but without giving effect to the provisions thereof relating to conflicts of law. Article and section headings are for convenience only and shall not affect the interpretation of this Agreement. References to articles, sections and appendices are, unless the context otherwise requires, references to articles, sections and appendices of this Agreement.

12. PROHIBITION ON ASSIGNMENT

This Agreement may not be assigned by either Party without the consent of the other Party, which consent shall not be unreasonably withheld; provided that the Generator may without the consent of the WSCC assign the obligations of the Generator pursuant to this Agreement to a transferee with respect to any obligations assumed by the transferee by virtue of Section 4.5 of this Agreement.

13. **SEVERABILITY**

If one or more provisions herein shall be invalid, illegal or unenforceable in any respect, it shall be given effect to the extent permitted by applicable law, and such invalidity, illegality or unenforceability shall not affect the validity of the other provisions of this Agreement.

14. **COUNTERPARTS**

This Agreement may be executed in counterparts and each shall have the same force and effect as an original.

IN WITNESS WHEREOF, the Transmission Operator and the Generator have each caused this Reliability Management System Agreement to be executed by their respective duly authorized officers as of the date first above written.

By:	 	 	
Name:			
Title:			
Ву:	 	 	
Name:			
Title:			

Issued on: December 13, 2007

ISO TARIFF APPENDIX EE

Transmission Expansion and Planning Process

PART A. Transmission Expansion and Planning Process

24.1 Determination of Need for Proposed Transmission Projects.

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

24.1.1 Economically Driven Projects.

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

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

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

(b) Where a Participating To, Market Participant, Project Sponsor, the CPUC, or CEC proposes a transmission addition or upgrade during the Request Window and the project is approved by the CAISO Governing Board or by CAISO management if the proposed transmission addition or upgrade has a capital cost of less than \$50 million in accordance with the Study Plan and the project is included in the CAISO annual Transmission Plan. In determining whether to approve the project, the CAISO Governing Board or CAISO management, as applicable, shall consider the degree to which, if any, the benefits of the project outweigh the costs, in accordance with the procedures and using the technical studies set forth in the Business Practice Manual. The benefits of the project may include, but need not be limited to, a calculation of any reduction in production costs, Congestion costs, Transmission Losses, capacity or other

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

electric supply costs resulting from improved access to cost-efficient resources, and environmental costs. The cost of the project must consider any estimated costs identified under Section 24.1.4 of this Appendix EE to maintain the simultaneous feasibility of allocated Long Term CRRs for the length of their term. The CAISO management or CAISO Governing Board, as appropriate, in determining whether to approve or recommend the project, shall also consider the comparative costs and benefits of viable alternatives to the proposed transmission upgrade or addition, including (1) other transmission additions or upgrades, or the effects of other transmission additions or upgrades proposed under Section 24.2 of this Appendix EE during the Transmission Planning Process cycle, (2) Demand-side management, (3) acceleration or expansion of any transmission upgrade or addition already approved by the CAISO Governing Board or included in any CAISO annual Transmission Plan, or (4) Generation.

(c) Where the CAISO proposes a transmission addition or upgrade during the CAISO's Transmission Planning Process and the project is approved by the CAISO Governing Board or included in the CAISO annual Transmission Plan and approved by CAISO management, as appropriate. In determining whether to approve the CAISO proposed transmission addition or upgrade, the CAISO Governing Board and CAISO management shall apply the same factors set forth in Section 24.1.1(b) of this Appendix EE. If approved by the CAISO Governing Board or CAISO management, as appropriate, the CAISO will designate one or more of the Participating TOs with PTO Service Territories in which the terminus of the transmission addition or upgrade will be located to act as Project Sponsor.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

Where two or more Participating TOs are designated as Project Sponsors, such CAISO designation will include the proportionate responsibility between or among Participating TOs to own, construct, and finance the transmission addition or upgrade. If a Participating TO refuses to act as a Project Sponsor under this Section 24.1.1(c) of this Appendix EE, the CAISO will first request other designated Participating TO(s) to assume the remainder or greater proportionate responsibility, and if no other Participating TO had been designated or is willing to increase its proportionate responsibility, the CAISO may solicit bids to finance, own, and construct the transmission addition or upgrade.

24.1.1.1 Information Requirements for Economic Transmission Projects.

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

24.1.2 Reliability Driven Projects.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.1 of this Appendix EE, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 of the CAISO Tariff or the applicable LGIP. Based on the study results, and as part of the Transmission Planning Process described in the Business Practice Manual, the CAISO, CEC, CPUC, Project Sponsors and other Market Participants shall be free to propose any transmission upgrades or additions deemed necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 of this Appendix EE is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

24.1.3. Location Constrained Resource Interconnection Facility Projects.

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

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

- (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.

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

- (a) The CAISO shall conditionally approve a facility as a Location Constrained Resource

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

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II Sul

First Revised Sheet No. 1430 Superseding Original Sheet No. 1430

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

(c) 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), the portion of the capital costs of LCRIFs credited to its TRR, and its net investment in High Voltage Transmission Facilities reflected in its High Voltage TRR (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 24.1.3.1(b)(1) of this Appendix EE.

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

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

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) of Appendix EE does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
 - (1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, 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 GG 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

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: July 28, 2008 Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1431A

- (2) have demonstrated interest in the LCRIF by one of the following methods:
 - executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
 - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix GG; or

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: July 28, 2008 Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II Support Suppor

First Revised Sheet No. 1432 Superseding Original Sheet No. 1432

(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 AA), 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 percent (5%) 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 GG, as applicable) or Small Generator Interconnection Procedures (Appendix AA), whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

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

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

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: July 28, 2008 Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II Sup

First Revised Sheet No. 1433 Superseding Original Sheet No. 1433

Effective: September 29, 2008

24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.

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

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISOPlanning 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.

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: July 28, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1434

24.1.4 Maintaining the Feasibility of Allocated Long Term CRRs.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

24.2 Transmission Planning Process and Coordination of Technical Studies.

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

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

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

24.2.1 Unified Planning Assumptions and Study Plan.

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

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

- (1) WECC base cases for the relevant planning horizon;
- (2) Transmission upgrades and additions approved by the CAISO in past Transmission Planning Process cycles and scheduled to be energized within the planning horizon;
- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of this Appendix EE;
- (4) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix GG, or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix AA relating to the CAISO's Small Generator Interconnection Procedures;
- (5) Operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) Regulatory initiatives, as appropriate, including state regulatory agency initiated programs;

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) Results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

24.2.1.2 General Scope of Unified Planning Assumptions and Study Plan.

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

- (a) The planning data and assumptions to be used, to the maximum extent possible, as a base case for each technical study to be performed in the Transmission Planning Process cycle, including, but not limited to, those related to Demand Forecasts and distribution, generation capacity additions and retirements, and transmission system modifications;
- (b) A list of each technical study to be performed in the Transmission Planning
 Process cycle and a summary of the technical study's objective or purpose;
- (c) A description of any modifications to the planning data and assumptions developed as the general base case in Section 24.2.1.2(a) of this Appendix EE made in each technical study performed in the Transmission Planning Process cycle;
- (d) A description of the software tools, methodology and other criteria used in each technical study performed in the Transmission Planning Process cycle;
- (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 means for notification of any changes
 thereto, the location on the CAISO Website of information relating to the

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

technical studies performed in the Transmission Planning Process cycle, and the name of a contact person at the CAISO for each technical study performed in the Transmission Planning Process cycle;

- (g) A list and description of each Economic Planning Study studied by the CAISO as a High Priority Economic Planning Study under Section 24.9 of this Appendix EE identified in the past Transmission Planning Process; and
- (h) To the maximum extent practicable, and where applicable, appropriate sensitivity analyses, including project or solution alternatives, to be performed as part of technical studies.

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

- (a) Following review of relevant information, the CAISO will prepare and post on the CAISO Website a draft Unified Planning Assumptions and Study Plan. The CAISO will issue a Market Notice announcing the availability such draft, soliciting comments, and scheduling a public conference(s) as required by Section 24.2.1.3(c) of this Appendix EE.
- (b) All comments on the draft Unified Planning Assumptions and Study Plan will be posted by the CAISO to the CAISO Website.
- Subsequent to the posting of the draft Unified Planning Assumptions and Study Plan, the CAISO will conduct a minimum of one 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 and such notice shall be posted to the CAISO Website.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

Original Sheet No. 1436C

(d) Following the public conference(s) required by Section 24.2.1.3(c) of this

Appendix EE, and under the schedule set forth in the Business Practice Manual,
the CAISO will determine and publish to the CAISO Website the final Unified
Planning Assumptions and Study Plan in accordance with the procedures set
forth in the Business Practice Manual.

24.2.2 Technical Studies.

24.2.2.1 Performance of Technical Studies

(a) In accordance with the Unified Planning Assumptions and Study Plan, and the procedures and deadlines in the Business Practice Manual, the CAISO will perform, or direct the performance by third parties of, technical studies and other assessments necessary for the Transmission Plan and Transmission Planning Process. The CAISO technical studies will include a Congestion Data Summary, as further described in the Business Practice Manual. According to the detailed schedule set forth in the Business Practice Manual, the CAISO will post the preliminary results of its technical studies and proposed mitigation solutions on the CAISO Website. Within one month after the posting of these results. Participating TOs or other third parties will submit the results of the technical assessments conducted at the direction of the CAISO to be posted to the CAISO Website. Subsequently, the CAISO will conduct a minimum of one public conference that provides an opportunity for comments on the preliminary results and mitigation proposals. Additional public meetings, web conferences, or teleconferences may be scheduled as needed. All meetings, web conferences, or teleconferences shall be noticed by Market Notice and shall be posted to the CAISO Website.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

- (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 the preliminary and final results of each technical study. The CAISO will measure the results of the studies against NERC planning standards, WECC planning standards, and the CAISO Planning Standards, and other criteria established by the Business Practice Manual. After consideration of the 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.
- The CAISO technical study results will identify needs and proposed solutions to meet applicable WECC planning standards, NERC planning standards and other applicable planning standards. Pursuant to the schedule described in the Business Practice Manual, Participating TOs will submit transmission projects and alternative solutions through the Request Window in response to needs and proposed solutions identified by CAISO, as well as projects and solutions to reliability needs identified by the Participating TOs.
- (d) 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 developing the annual Transmission Plan according to the requirements and time schedules set forth in the Business Practice Manual.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Second Revised Sheet No. 1437 Superseding First Sheet No. 1437

24.2.3 Request Window.

All requests for Economic Planning Studies and transmission upgrades or additions must be submitted by Market Participants, CPUC, CEC, or Project Sponsors through the Request Window, in accordance with Section 24 of Appendix EE and the Business Practice Manual, to be considered for inclusion in the annual Transmission Plan. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. All proposals submitted through the Request Window must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. The following proposals will only be considered for inclusion in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1 of this Appendix EE;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 of this Appendix EE not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or Appendix GG;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies; and
- (f) Reliability-driven projects described in Section 24.1.2.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

24.2.3.1 CAISO Assessment of Request Window Proposals.

Following the submittal of a proposal for a transmission addition or upgrade, Demand response program, or generation project during the Request Window in accordance with Section 24.2.3 of this Appendix EE, the CAISO will determine whether the proposal will be included in the Unified Planning Assumptions or Study Plan as appropriate. A proposal can only be included in the Unified Planning Assumptions or Study Plan upon the determination by the CAISO that:

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

In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will notify the Participating TO, Market Participant, Project Sponsor, the CEC or CPUC submitting the proposal of any deficiencies in the proposal and provide the Market Participant an opportunity to correct the deficiencies. The failure to correct the deficiency precludes the proposal from inclusion in the Study Plan. The CAISO will notify the party submitting the proposal whether or not the proposal will be included in the Study Plan.

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

Following the submittal of a request for an Economic Planning Study during the Request Window in accordance with Section 24.2.3 of this Appendix EE, the CAISO will determine whether the request shall be designated as a High Priority Economic Planning Study for inclusion in the Unified Planning Assumptions and Study Plan. In making the determination, the CAISO will consider:

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

24.2.3.3 High Priority Economic Planning Studies

- (a) In accordance with the schedule and procedures set forth in the Business Practice Manual, the CAISO will post to the CAISO Website the list of selected High Priority Economic Planning Studies to be included in the draft Unified Planning Assumptions and Study Plan. The CAISO may assess requests for Economic Planning Studies individually or in combination where such requests may have common or complementary effects on the CAISO Controlled Grid. The CAISO will perform a maximum of five High Priority Economic Planning Studies; however, the CAISO retains discretion to perform greater than five High Priority Economic Planning Studies should stakeholder requests or patterns of Congestion or anticipated Congestion so warrant. In performing High Priority Economic Planning Studies, the CAISO will batch or cluster proposed Economic Planning Studies where (1) such studies will address the same patterns of Congestion or anticipated Congestion; (2) such studies will address patterns of Congestion or anticipated Congestion that are in related locations; or (3) such studies seek to integrate new generation resources or loads that impact the same facilities.
- (b) High Priority Economic Planning Studies shall be performed in accordance with the standards and procedures established in the Business Planning Manual.

 Market Participants may conduct Economic Planning Studies that have not been designated as High Priority Economic Planning Studies at their own expense and may submit such studies for consideration in the development of the Transmission Plan when the CAISO provides notice of the public meeting regarding technical study results pursuant to Section 24.2.2.2.1(a) of this Appendix EE.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

24.2.4 Development and Approval of Transmission Plan.

- (a) In accordance with the schedule and procedures in the Business Practice Manual, the CAISO will post a draft Transmission Plan. The CAISO will subsequently conduct a public conference regarding the draft 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 a final Transmission Plan to the CAISO Website.
- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 of this Appendix EE, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions submitted as alternatives to the potential solutions to transmission needs identified by the CAISO and studied during the Transmission Planning Process cycle; (4) results of Economic Planning Studies performed during the Transmission Planning Process cycle; (5) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition; and (6) to the extent available, the results of Interconnection Studies.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

- (c) Transmission upgrades or additions that are Large Projects will be subject to a separate study and public participation process. The study and public participation process for Large Projects may encompass more than one Transmission Planning Process cycle. Large Projects will be identified in the Transmission Plan for each cycle but will be presented to the CAISO Governing Board for approval in accordance with the study and public participation schedule established for that project.
- (d) Transmission upgrades or additions with capital costs of less than \$50 million that do not require approval by the CAISO Governing Board will be identified in the Transmission Plan but will be separately approved by CAISO management according to the procedures in the Business Practice Manual.
- (e) Other projects requiring CAISO Governing Board approval will be identified in the Transmission Plan but will be submitted for approval in accordance with the project timeline in accordance with the procedures in the Business Practice Manual.

24.2.4.1 Presentation to the CAISO Governing Board.

The CAISO will present the Transmission Plan to the CAISO Governing Board in accordance with the schedule set forth in the Business Practice Manual. The Transmission Plan will be considered final once it has been presented to the CAISO Governing Board and will be posted on the CAISO Website.

24.2.4.2 Obligation to Construct Transmission Projects Included in Transmission Plan.

A Participating TO that has a PTO Service Territory shall be obligated to construct all transmission additions and upgrades that are determined by the CAISO Governing Board or management, as applicable, to be needed in accordance with the requirements of Section 24 of this Appendix EE, not

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

including conditional approvals and determinations of need under Section 24.1.3.1(a), and which: (1) are additions or upgrades to transmission facilities that are located within its PTO Service Territory, unless (a) it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory or (b) it does not own the facility being upgraded or added and the Project Sponsor is a Participating TO that elects to construct the transmission upgrade; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities that it owns, that are part of the CAISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 24.7 of the CAISO Tariff. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of a TO's obligations under this CAISO Tariff or as those rights may be conferred by the CAISO or may arise or exist pursuant to this CAISO Tariff.

24.2.4.3 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.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1440D

24.3 Additional Planning Information.

24.3.1 Information Provided by Participating TOs.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1441

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.

24.3.2 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.

24.3.3 Information Requested from Load Serving Entities.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
Second Revised Sheet No. 1442
THIRD REPLACEMENT VOLUME NO. II
Superseding First Revised Sheet No. 1442

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

In accordance with Section 24.8 of this Appendix EE, the CAISO shall obtain or solicit from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection 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.

24.3.5 Obligation to Provide Updated Information.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 1443 THIRD REPLACEMENT VOLUME NO. II Superseding First Revised Sheet No. 1443

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1444

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: December 21, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1445

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: December 21, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1446

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: December 21, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 1447 THIRD REPLACEMENT VOLUME NO. II Superseding First Revised Sheet No. 1447

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 1448 THIRD REPLACEMENT VOLUME NO. II Superseding First Revised Sheet No. 1448

[NOT USED]

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: October 31, 2008

Effective: September 29, 2008

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1449

24.4 Participating TO Study Obligation.

The Participating TO constructing or expanding facilities in accordance with Section 24.2.4.2 of this Appendix, will be directed by the CAISO to coordinate with the Project Sponsor or Participating TO(s) with PTO Service Territories in which the transmission upgrade or addition will be located, 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.

24.5 Operational Review.

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

24.6 State and Local Approval and Property Rights.

- 24.6.1 The Participating TO obligated to construct facilities under this Section 24 must make a good faith effort to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of the required transmission additions or upgrades. This obligation includes the Participating TO's use of eminent domain authority, where provided by state law.
- 24.6.2 If the Participating TO cannot secure any such necessary approvals or property rights and consequently is unable to construct a transmission addition or upgrade found to be needed in accordance with Section 24.1 of this Appendix, it shall promptly notify the CAISO and the Project Sponsor, if any, and shall comply with its obligations under the TO Tariff to convene a technical meeting to evaluate alternative proposals. The CAISO shall take such action as it reasonably considers appropriate, in coordination with the Participating TO, the Project Sponsor, if any, and other affected Market Participants, to facilitate the development and evaluation of alternative proposals including, where possible, conferring on a third party the right to build the transmission addition or upgrade as set forth in Section 24.6.3 of this Appendix.
- 24.6.3 Where the conditions of Section 24.6.2 of this Appendix have been satisfied and it is possible for a third party to obtain all approvals and property rights under applicable federal, state and local laws that are necessary to complete the construction of transmission additions or upgrades required to be constructed in accordance with this CAISO Tariff (including the use of eminent domain authority, where provided by state law), the CAISO may confer on a third party the right to build the transmission addition or upgrade, which third party shall enter into the Transmission Control Agreement in relation to such transmission addition or upgrade.

24.7 WECC and Regional Coordination.

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

24.8 Regional and Sub-Regional Planning Process.

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

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

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

Original Sheet No. 1451A

(c) transmit to applicable regional and sub-regional planning groups or interconnected Control Areas information on technical studies performed as part of the CAISO Transmission Planning Process;

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

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

24.8.2 Limitation on Regional Activities.

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

24.9 CAISO Planning Standards Committee.

The CAISO shall maintain a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan under Section 24.2.1.3 of this Appendix EE; however, additional meetings, web conferences, teleconferences may be scheduled as needed. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee. The CAISO Vice President of Market and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of the effective date of Section 24.2 of this Appendix EE, and must include in the report to the CAISO Governing Board a summary of the positions of parties with respect to the proposed modifications to the CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market Participants or other interested parties.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

PART B. - DEFINITIONS

Facility

CAISO Planning	Reliability Criteria that: (1) address specifics not covered in the NERC
Standards	and WECC planning standards: (2) provide interpretations of the NERC

and WECC planning standards specific to the CAISO Controlled Grid; and (3) identify whether specific criteria should be adopted that are more

stringent than the NERC and WECC planning standards.

CEC The California Energy Commission or its successor.

Congestion Data

A report issued by the CAISO on the schedule set forth in the Business

Summary

Practice Manual that sets forth historic Congestion on the CAISO

Controlled Grid.

Critical Energy
Infrastructure Information shall have the meaning given the term in the regulations of FERC at 18 C.F.R. § 388.12, et seq.

Economic Planning Study A study performed to provide a preliminary assessment of the potential

cost effectiveness of mitigating specifically identified Congestion.

High Priority Economic
Planning Study

An Economic Planning Study performed by the CAISO for inclusion in the Transmission Plan and for which the CAISO assumes cost responsibility.

Long Term Congestion A Congestion Revenue Right differentiated by season and time-of-use Revenue Right (Long

A Congestion Revenue Right differentiated by season and time-of-use period (on-peak and off-peak) with a term of ten years

Term CRR)

period (on-peak and off-peak) with a term of ten years.

Merchant Transmission

A transmission facility or upgrade that is part of the CAISO Controlled

Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management Issued on: December 21, 2007 Effective: December 21, 2007

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

THIRD REPLACEMENT VOLUME NO. II

Substitute Original Sheet No. 1454

NERC Reliability Standards for Modeling, Data and Analysis (NERC MOD Standards) A set of NERC Reliability Standards applicable to the transmission

planning process.

Planning Standards Committee

The committee appointed under Section 24.2.1.

Request Window The period of time as set forth in the Business Practice Manual during

which transmission additions or upgrades, requests for Economic Planning Studies, and other transmission related information is

submitted to the CAISO in accordance with Section 24.2.3 of Appendix

EE.

Study Plan The plan to be developed pursuant to Section 24.2.1 of Appendix EE,

which sets forth the technical studies to be performed during the annual

Transmission Planning Process.

Transmission PlanThe report prepared by the CAISO on annual basis pursuant to Section

24 of Appendix EE, which documents the outcome of the Transmission

Planning Process as defined in the Study Plan.

Transmission Planner A designation by NERC regarding responsibility to perform specified

transmission planning functions in accordance with the NERC Reliability

Standards.

Transmission Planning

Process

The process by which the CAISO assesses the CAISO Controlled Grid

as set forth in Section 24 of Appendix EE.

Unified Planning Assumptions The assumptions to be developed pursuant to Section 24.2.1 of

Appendix EE and used, to the maximum extent possible, in performing

technical studies identified in the Study Plan as part of the annual

Transmission Planning Process.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

Original Sheet No. 1455

ISO TARIFF APPENDIX FF

Procedures for Addressing Parallel Flows

Issued by: Anjali Sheffrin, Ph.D., Chief Economist Issued on: June 16, 2008 Effective: October 11, 2007

Original Sheet No. 1456

PROCEDURES FOR ADDRESSING PARALLEL FLOWS

The North American Electric Reliability Corporation's (NERC) Qualified Path Unscheduled Flow Relief for the Western Electricity Coordinating Council (WECC), Reliability Standard WECC-IRO-STD-006-0 filed by NERC in Docket No. RR07-11-000 on March 26, 2007, and approved by the Commission on June 8, 2007, and any amendments thereto, are hereby incorporated and made part of this Tariff. See www.nerc.com for the current version of the NERC's Qualified Path Unscheduled Flow Relief Procedures for WECC.

Issued by: Anjali Sheffrin, Ph.D., Chief Economist

Issued on: June 16, 2008 Effective: October 11, 2007