12 CREDITWORTHINESS.

12.1 Credit Requirements.

The creditworthiness requirements in this section apply to the ISO’s CAISO’s acceptance of Schedules Bids, Inter-SC Trades, and to CRR Holders or Candidate CRR Holders, and to all transactions in any ISOCAISO Market. Each Scheduling Coordinator, CRR Holder, UDC or MSS shall either maintain an Approved Credit Rating (which may differ for different types of transactions with the ISOCAISO) or provide in favor of the ISOCAISO one of the following forms of security for an amount to be determined by the Scheduling Coordinator, CRR Holder, UDC or MSS and notified to the ISOCAISO under Section 12.3:

(a) an irrevocable and unconditional letter of credit confirmed by a bank or financial institution reasonably acceptable to the ISOCAISO;

(b) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISOCAISO;

(c) an unconditional and irrevocable guarantee by a company which has and maintains an Approved Credit Rating;

(d) a cash deposit standing to the credit of an interest bearing escrow account maintained at a bank or financial institution designated by the ISOCAISO;

(e) a certificate of deposit in the name of the ISOCAISO from a financial institution designated by the ISOCAISO; or

(f) a payment bond certificate in the name of the ISOCAISO from a financial institution designated by the ISOCAISO.

Letters of credit, guarantees, surety bonds, payment bond certificates, escrow agreements and certificates of deposit must cover all applicable outstanding and estimated liabilities including those identified under Section 12.3 and shall be in such form as the ISOCAISO may reasonably require from time to time by notice to Market Participants including Scheduling Coordinators, Candidate CRR Holders,
CRR Holders, UDCs or MSSs. A Scheduling Coordinator, CRR Holder, UDC or MSS, which does not maintain an Approved Credit Rating shall be subject to the limitations on trading set out in Section 12.3. Notwithstanding anything to the contrary in the ISOCAISO Tariff, a Scheduling Coordinator or UDC that had an Approved Credit Rating on January 3, 2001, and is an Original Participating Transmission Owner or is a Scheduling Coordinator for an Original Participating Transmission Owner shall not be precluded by Section 12.3 from scheduling transactions that serve a UDC’s Demand from –

1. a resource that the UDC owns; and

2. a resource that the UDC has under contract to serve its Demand.

12.2 Review of Creditworthiness.

The ISOCAISO may review the creditworthiness of any Scheduling Coordinator, CRR Holder, UDC or MSS which delays or defaults in making payments due under the ISOCAISO Tariff and, as a consequence of that review, may require such Scheduling Coordinator, Candidate CRR Holders, CRR Holder, UDC or MSS, whether or not it has (or is deemed to have) an Approved Credit Rating, to provide credit support in the form of:

(a) an irrevocable and unconditional letter of credit by a bank or financial institution reasonably acceptable to the ISOCAISO;

(b) a cash deposit standing to the credit of an interest-bearing escrow account maintained at a bank or financial institution designated by the ISOCAISO;

(c) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISOCAISO; or

(d) a payment bond certificate in the name of the ISOCAISO from a financial institution designated by the ISOCAISO.

The ISOCAISO may require the Scheduling Coordinator, Candidate CRR Holders, CRR Holder, UDC or MSS to maintain such credit support for at least one (1) year from the date of such delay or default.

12.3 Limitation on Trading.
A Scheduling Coordinator, CRR Holder, UDC or MSS that does not maintain an Approved Credit Rating, as defined with respect to either payment of the Grid Management Charge, or payment of other charges, shall maintain security in accordance with Section 12.1. For the avoidance of doubt, the ISO CAISO Security Amount is intended to cover the entity’s total outstanding and estimated liability, for either (i) Grid Management Charge; and/or (ii) Imbalance Energy, Ancillary Services, Grid Operations Charge, Wheeling Access Charge, High Voltage Access Charge, Transition Charge, Usage Charges, and FERC Annual Charges, including, but not limited to all outstanding and estimated liabilities for all charges identified in Section 11.1.2 of this CAISO Tariff. For purposes of security requirements for a CRR Obligation, the estimated liability shall be based on the net projected obligation of the CRR for the entire term of the CRR. An entity’s total outstanding and estimated liability shall be referred to as the estimated aggregate liability, which shall be determined pursuant to procedures set forth in the Business Practice Manuals. Each Scheduling Coordinator, Candidate CRR Holder, CRR Holder, UDC or MSS required to provide an ISO CAISO Security Amount under Section 12.1 shall notify the ISO CAISO of the initial ISO CAISO Security Amount (separated into amounts securing payment of the Grid Management Charge and amounts securing payments of other charges) that it wishes to provide at least fifteen (15) days in advance and shall ensure that the ISO CAISO has received such ISO CAISO Security Amount prior to the date the Scheduling Coordinator commences trading, a Candidate CRR Holder bids in the CRR Auction, or the UDC or MSS commences receiving bills for the High Voltage Access Charge and Transition Charge. A Scheduling Coordinator, CRR Holder, UDC or MSS may at any time increase its ISO CAISO Security Amount by providing additional guarantees or credit support in accordance with Section 12.1. A Scheduling Coordinator, UDC or MSS may reduce its ISO CAISO Security Amount by giving the ISO CAISO not less than fifteen (15) days notice of the reduction, provided that the Scheduling Coordinator, UDC or MSS is not then in breach of this Section 12.3. The ISO CAISO shall release, or permit a reduction in the amount of, such guarantees or other credit support required to give effect to a permitted reduction in the ISO CAISO Security Amount as the Scheduling Coordinator, UDC or MSS may select.

12.3.1 Limitation of Trades by Scheduling Coordinators.
Following the date on which a Scheduling Coordinator commences trading, the Scheduling Coordinator shall not be entitled to submit a Schedule Bid to the ISOCAISO and the ISOCAISO may reject any Schedule Bid or unbalanced portion of an ETC Self-Schedule submitted if, at the time of submission, the Scheduling Coordinator's ISOCAISO Security Amount is exceeded by the Scheduling Coordinator's estimated aggregate liability, for (i) Grid Management Charge and/or Imbalance Energy, Ancillary Services, Grid Operations Charge, Wheeling Access Charge, Usage Charges, and FERC Annual Charges on each Trading Day for which Settlement has not yet been made in accordance with Section 11.3.1 and the Scheduling Coordinator's estimated liability for High Voltage Access Charge and Transition Charge for which Settlement has not yet been made in accordance with Section 11.3. The ISOCAISO shall notify a Scheduling Coordinator if at any time such outstanding liabilities exceed 90% of the relevant portion of the ISOCAISO Security Amount. For the purposes of calculating the Scheduling Coordinator's estimated aggregate liability, the estimate shall include (1) outstanding charges for Trading Days for which Settlement data is available, and (2) an estimate of charges for Trading Days for which Settlement data is not yet available. To estimate charges for Trading Days for which Settlement data is not yet available, the ISOCAISO will consider available historical Settlement data, appropriately adjusted to reflect recent market prices and trends, or other available information for individual Scheduling Coordinators.

12.3.2 Limitation of Trades for UDC or MSSs.

Following the date on which a UDC or MSS commences operation, the UDC's or MSS's Scheduling Coordinator shall not be entitled to submit a Schedule to the ISO Bid and the ISOCAISO may reject any Schedule Bid or unbalanced portion of an ETC Self Schedule submitted if, at the time of submission, the UDC's or MSS's ISOCAISO Security Amount is exceeded by the UDC's or MSS's estimated aggregate liability, for Grid Management Charge, and/or High Voltage Access Charges and Transition Charges for which Settlement has not yet been made in accordance with Section 11.3. The ISOCAISO shall notify a UDC or MSS if at any time such outstanding liabilities exceed 90% of the relevant portion of the ISOCAISO Security Amount. For the purposes of estimating the UDC's or MSS's aggregate liability for High Voltage Access Charges and Transition Charges, the UDC's or MSS's liability shall be equal to the billed Demand use (in MWh) for a month in the UDC's or MSS's Service Area (including exports from the
Service Area) multiplied by the ISO's estimated High Voltage Access Charge and Transition Charge for that month, as such estimated cost is notified by the ISO to UDCs and MSSs from time to time.

12.3.1 The ISO shall notify the relevant Scheduling Coordinator if it rejects a Schedule Bid under Section 12.3 in which event the Scheduling Coordinator shall not be entitled to submit any further Schedules Bids until it has demonstrated to the ISO’s satisfaction that its ISO Security Amount has been increased sufficiently to avoid the limit on trading imposed under Section 12.3 from being exceeded.

12.3.2 The ISO may restrict, or suspend a Scheduling Coordinator's right to Schedule Bid or require the Scheduling Coordinator to increase its ISO Security Amount if at any time such Scheduling Coordinator's liability for Imbalance Energy is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled Bid by the Scheduling Coordinator.

12.4 Credit Obligation for New Responsible Utilities for RMR Costs.

30.6.1.3 If a Responsible Utility first executed a TCA after April 1, 1998 (a "New Responsible Utility") and if:

(i) the senior unsecured debt of the New Responsible Utility is rated or becomes rated at less than A- from Standard & Poor's ("S&P") or A3 from Moody's Investment Services ("Moody's"), and

(ii) Such ratings do not improve to A- or better from S&P or A3 or better from Moody's within 60 days,

the New Responsible Utility shall issue and confirm to the ISO an irrevocable and unconditional letter of credit in an amount equal to three times the highest monthly payment invoiced by the ISO to the New Responsible Utility (or the prior Responsible Utility) in connection with services under Reliability Must-Run Contracts in the last 3 months for which invoices have been issued. The letter of credit must be issued by a bank or other financial institution whose senior unsecured debt rating is not less than A from S&P and A2 from Moody's. The letter of credit shall be in such form as the ISO may reasonably require from time to time by notice to the New Responsible Utility and shall authorize the
ISO-CAISO or the Owner to draw on the letter of credit for deposit solely into the RMR Owner Facility Trust Account in an amount equal to any amount due and not paid by the Responsible Utility under the ISO-CAISO Invoice. The security provided by the New Responsible Utility pursuant to this Section 30.6.1.1.3 is intended to cover the New Responsible Utility's outstanding liability for payments it is liable to make to the ISO-CAISO under this Section 30.6.1.4, including monthly payments, any reimbursement for capital improvement, termination fees and any other payments to which the ISO-CAISO is liable under Reliability Must-Run Contracts.

12.5 Credit Obligations for CRR Holders and Candidate CRR Holders.

12.5.1 Credit Limits for CRR Auctions.

To establish available credit for participating in any CRR Auction, each Candidate CRR Holder must have an Approved Credit Rating or have provided security in a form consistent with Section 12 of this CAISO Tariff, which shall establish the amount of credit available to the Candidate CRR Holder. For a candidate CRR Holder that does not maintain an Approved Credit Rating, the amount of available credit for participating in a CRR Auction shall not exceed the difference between the value of security posted in accordance with this Section 12 of the CAISO Tariff and the Candidate CRR Holder's estimated aggregate liability.

12.5.2 Credit Requirements for CRR Obligations upon Allocation, Auction or Transfer.

The CAISO shall not release any CRR Obligations allocated, awarded in an auction, or proposed to be transferred to a Candidate CRR Holder, except upon receipt of security, in a form consistent with this Section 12 of the CAISO Tariff, equal to the value of the net projected obligation of the CRR for the entire term of the CRR, unless that Candidate CRR Holder has an Approved Credit Rating. The CAISO will determine the value of the net projected obligation of each CRR Obligation using appropriate methods, including proxy values or values based on experience, which shall be published in a Business Practice Manual. For negatively priced CRR Obligations awarded in an auction, the minimum value of the net projected obligation shall be set at the price determined in the auction. The CAISO may reassess its net projected obligation determinations at any time and shall require additional security if the determination
results in an increase in a CRR Holder’s aggregate estimated liability that is not covered by available security.
13 DISPUTE RESOLUTION.

13.1 Applicability.

13.1.1 General Applicability.

Except as limited below or otherwise as limited by law (including the rights of any party to file a complaint with FERC under the relevant provisions of the FPA), the ISOCALSO ADR Procedures shall apply to all disputes between parties which arise under the ISOCALSO Documents except where the decision of the ISOCALSO is stated in the provisions of this ISOCALSO Tariff to be final. The ISOCALSO ADR Procedures shall not apply to:

13.1.1.1 1) Disputes arising under contracts which pre-date the ISOCALSO Operations Date, except as the disputing parties may otherwise agree;

13.1.1.2 2) Disputes as to whether rates and charges set forth in this ISOCALSO Tariff are just and reasonable under the FPA.

13.1.2 Disputes Involving Government Agencies.

13.1.2.1 If a party to a dispute is a government agency the procedures herein which provide for the resolution of claims and arbitration of disputes are subject to any limitations imposed on the agency by law, including but not limited to the authority of the agency to effect a remedy. If the governmental agency is a federal entity, the procedures herein shall not apply to disputes involving issues arising under the United States Constitution.

13.1.3 Injunctive and Declaratory Relief.

Where the court having jurisdiction so determines, use of the ISOCALSO ADR Procedures shall not be a condition precedent to a court action for injunctive relief nor shall the provisions of California Code of Civil Procedures sections 1281 et seq. apply to such court actions.

13.2 Negotiation and Mediation.
13.2.1 Negotiation.

The ISOCAISO and Market Participants (party or parties) shall make good-faith efforts to negotiate and resolve any dispute between them arising under ISOCAISO Documents prior to invoking the ISOCAISO ADR Procedures outlined herein. Each party shall designate an individual with authority to negotiate the matter in dispute to participate in such negotiations.

13.2.2 Statement of Claim.

In the event a dispute is not resolved through such good-faith negotiations, any one of the parties may submit a statement of claim, in writing, to each other disputing party, the ISOCAISO ADR Committee, and the ISOCAISO Governing Board, which submission shall commence the ISOCAISO ADR Procedures. The statement of claim shall set forth in reasonable detail (i) each claim, (ii) the relief sought, including the proposed award, if applicable, (iii) a summary of the grounds for such relief and the basis for each claim, (iv) the parties to the dispute, and (v) the individuals having knowledge of each claim. The other parties to the dispute shall similarly submit their respective statements of claim within fourteen (14) days of the date of the initial statement of claim or such longer period as the chair of the ISOCAISO ADR Committee may permit following an application by the responding party. If any responding party wishes to submit a counterclaim in response to the statement of claim, it shall be included in such party's responsive statement of claim. A summary of the statements of claim shall be published by the ISOCAISO newsletter or WEnet on the CAISO’s secure communication system, and any other method adopted by the ISOCAISO ADR Committee. No Market Participant shall be considered as having received notice of a claim decided or relief granted by a decision made under these procedures unless the summary of the statements of claim published by the ISOCAISO includes such claim or relief.

13.2.3 Selection of Mediator.

After submission of the statements of claim, the parties may request mediation, if at least 75% of the disputing parties so agree, except that where a dispute involves three parties, at least two of the parties must agree to mediation. If the parties agree to mediate, the chair of the ISOCAISO ADR Committee shall distribute to the parties by facsimile or other electronic means a list containing the names of at least seven prospective mediators with mediation experience, or with technical or business experience in the
electric power industry, or both, as he or she shall deem appropriate to the dispute. The parties shall either agree upon a mediator from the list provided or from any alternative source, or alternate in striking names from the list with the last name on the list becoming the mediator. The first party to strike off a name from the list shall be determined by lot. The parties shall have seven days from the date of receipt of the ISO CAISO ADR Committee chair's list of prospective mediators to complete the mediator selection process and appoint the mediator, unless the time is extended by mutual agreement. The mediator shall comply with the requirements of Section 13.3.2.

13.2.4 Mediation.

The mediator and representatives of the disputing parties, with authority to settle the dispute, shall within fourteen (14) days after the mediator's date of appointment schedule a date to mediate the dispute. Matters discussed during the mediation shall be confidential and shall not be referred to in any subsequent proceeding. With the consent of all disputing parties, a resolution may include referring the dispute directly to a technical body (such as a WECC technical advisory panel) for resolution or an advisory opinion, or referring the dispute directly to FERC. The ISO CAISO shall publish notice of the referral of the dispute in the ISO newsletter or WEnet on the CAISO's secure communication system, and any other method adopted by the ISO CAISO ADR Committee.

13.2.5 Demand for Arbitration.

If the disputing parties have not succeeded in negotiating a resolution of the dispute within thirty (30) days of the initial statement of claim or, if within that period the parties agreed to mediate, within thirty (30) days of the parties first meeting with the mediator, such parties shall be deemed to be at impasse and any such disputing party may then commence the arbitration process, unless the parties by mutual agreement agree to extend the time. A party seeking arbitration shall provide notice of its demand for arbitration to the other disputing parties, the ISOCAISO ADR Committee and the ISOCAISO Governing Board, which shall publish notice of such demand in the ISOCAISO newsletter or electronic bulletin board, and any other method adopted by the ISOCAISO ADR Committee.

13.3 Arbitration.
13.3.1 Selection of Arbitrator.

13.3.1.1 Disputes Under $1,000,000.

Where the total amount of claims and counterclaims in controversy is less than $1,000,000 (exclusive of costs and interest), the disputing parties shall select an arbitrator from a list containing the names of at least 10 qualified individuals supplied by the ISOCAI SO ADR Committee, or if the ISOCAI SO is a party to the dispute, the names of at least ten (10) qualified individuals supplied by the American Arbitration Association within 14 days following submission of the demand for arbitration. If the parties cannot agree upon an arbitrator within the stated time, they shall take turns striking names from the list of proposed arbitrators. The first party to strike-off a name shall be determined by lot. This process shall be repeated until one name remains on the list, and that individual shall be the designated arbitrator.

13.3.1.2 Disputes of $1,000,000 or Over.

Where the total amount of claims and counterclaims in controversy is $1,000,000 or more (exclusive of interest and costs), the disputing parties may agree on any person to serve as a single arbitrator, or shall endeavor in good faith to agree on a single arbitrator from a list of ten (10) qualified individuals provided by the ISOCAI SO ADR Committee, or if the ISOCAI SO is a party to the dispute, the names of at least ten (10) qualified individuals supplied by the American Arbitration Association within fourteen (14) days following submission of the demand for arbitration. If the parties are unable to agree on a single arbitrator within the stated time, the party or parties demanding arbitration, and the party or parties responding to the demand for arbitration, shall each designate an arbitrator. Each designation shall be from the ISOCAI SO ADR Committee list of arbitrators no later than the tenth (10th) day thereafter. The two arbitrators so chosen shall then choose a third arbitrator.

13.3.2 Disclosures Required of Arbitrators.

The designated arbitrator(s) shall be required to disclose to the parties any circumstances which might preclude him or her from rendering an objective and impartial determination. Each designated arbitrator shall disclose:

13.3.2.1 Any direct financial or personal interest in the outcome of the arbitration;
13.3.2.2 Any information required to be disclosed by California Code of Civil Procedure Section 1281.9.; and

13.3.2.3 Any existing or past financial, business, professional, or personal interest that are likely to affect impartiality or might reasonably create an appearance of partiality or bias. The designated arbitrator shall disclose any such relationships that he or she personally has with any party or its counsel, or with any individual whom they have been told will be a witness. They should also disclose any such relationship involving members of their families or their current employers, partners, or business associates. All designated arbitrators shall make a reasonable effort to inform themselves of any interests or relationships described above. The obligation to disclose interests, relationships, or circumstances that might preclude an arbitrator from rendering an objective and impartial determination is a continuing duty that requires the arbitrator to disclose, at any stage of the arbitration, any such interests, relationships, or circumstances that arise, or are recalled or discovered. If, as a result of the continuing disclosure duty, an arbitrator makes a disclosure which is likely to affect his or her partiality, or might reasonably create an appearance of partiality or bias or if a party independently discovers the existence of such circumstances, a party wishing to object to the continuing use of the arbitrator must provide written notice of its objection to the other parties within ten (10) days of receipt of the arbitrator's disclosure or the date of a party's discovery of the circumstances giving rise to that party's objection. Failure to provide such notice shall be deemed a waiver of such objection. If a party timely provides a notice of objection to the continuing use of the arbitrator the parties shall attempt to agree whether the arbitrator should be dismissed and replaced in the manner described in Section 13.3.1. If within ten (10) days of a party's objection notice the parties have not agreed how to proceed the matter shall be referred to the ISOCAISO ADR Committee for resolution.

13.3.3 Arbitration Procedures.

The ISOCAISO ADR Committee shall compile and make available to the arbitrator and the parties standard procedures for the arbitration of disputes, which procedures (i) shall include provision, upon good cause shown, for intervention or other participation in the proceeding by any party whose interests may be affected by its outcome, (ii) shall conform to the requirements specified herein, and (iii) may be
modified or adopted for use in a particular proceeding as the arbitrator deems appropriate, in accordance with Section 13.3.4. The procedures adopted by the ISOCAISO ADR Committee shall be based on the latest edition of the American Arbitration Association Commercial Arbitration Rules, to the extent such rules are not inconsistent with this Section 13. Except as provided herein, all parties shall be bound by such procedures.

13.3.4 Modification of Arbitration Procedures.

In determining whether to modify the standard procedures for use in the pending matter, the arbitrator shall consider (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, (iv) the amount in controversy, and (v) any representations made by the parties. Alternatively, the parties may, by mutual agreement, modify the standard procedures. In the event of a disagreement between the arbitrator and the agreement of the parties regarding arbitration procedures to be utilized, the parties' agreement shall prevail.

13.3.5 Remedies.

13.3.5.1 Arbitrator's Discretion.

The arbitrator shall have the discretion to grant the relief sought by a party, or determine such other remedy as is appropriate, unless the parties agree to conduct the arbitration "baseball" style. Unless otherwise expressly limited herein, the arbitrator shall have the authority to award any remedy or relief available from FERC, or any other court of competent jurisdiction. Where any ISOCAISO Document leaves any matter to be agreed between the parties at some future time and provides that in default of agreement the matter shall be referred to the ISOCAISO ADR Procedures, the arbitrator shall have authority to decide upon the terms of the agreement which, in the arbitrator's opinion, it is reasonable that the parties should reach, having regard to the other terms of the ISOCAISO Document concerned and the arbitrator's opinion as to what is fair and reasonable in all the circumstances.

13.3.5.2 "Baseball" Arbitration.

If the parties agree to conduct the arbitration "baseball" style, the parties shall submit to the arbitrator and exchange with each other their last best offers in the form of the award they consider the arbitrator should
make, not less than seven (7) days in advance of the date fixed for the hearing, or such other date as the arbitrator may decide. If a party fails to submit its last best offer in accordance with this Section, that party shall be deemed to have accepted the offer proposed by the other party. The arbitrator shall be limited to awarding only one of the proposed offers, and may not determine an alternative or compromise remedy.

13.3.6 Summary Disposition.

The procedures for arbitration of a dispute shall provide a means for summary disposition of a demand for arbitration, or a response to a demand for arbitration, that in the reasoned opinion of the arbitrator does not have a good faith basis in either law or fact. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration does not have a good faith basis in either law or fact, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. A determination made under this Section is subject to appeal pursuant to Section 13.4.

13.3.7 Discovery Procedures.

The procedures for the arbitration of a dispute shall include adequate provision for the discovery of relevant facts, including the taking of testimony under oath, production of documents and other things, the presentation of evidence, the taking of samples, conducting of tests, and inspection of land and tangible items. The nature and extent of such discovery shall be determined as provided herein and shall take into account (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, and (iv) the amount in controversy. The forms and methods for taking such discovery shall be as described in the Federal Rules of Civil Procedure, except as modified pursuant to Section 13.3.4.

13.3.8 Evidentiary Hearing.

The arbitration procedures shall provide for an evidentiary hearing, with provision for the cross-examination of witnesses, unless all parties consent to the resolution of the matter on the basis of a written record. The forms and methods for taking evidence shall be determined by the arbitrator(s) and modified pursuant to Section 13.3.4. The arbitrator may require such written or other submissions from
the parties as he or she may deem appropriate, including submission of direct and rebuttal testimony of
witnesses in written form. The arbitrator may exclude any evidence that is irrelevant, immaterial, unduly
repetitious or prejudicial, or privileged. The arbitrator shall compile a complete evidentiary record of the
arbitration which shall be available to the parties on its completion upon request.

13.3.9 Confidentiality.

Subject to the other provisions of this ISO/CAISO Tariff, any party may claim that information contained in
a document otherwise subject to discovery is “Confidential” if such information would be so characterized
under the Federal Rules of Evidence. The party making such claim shall provide to the arbitrator in
writing the basis for its assertion. If the claim of confidentiality is confirmed by the arbitrator, he or she
shall establish requirements for the protection of such documents or other information designated as
“Confidential” as may be reasonable and necessary to protect the confidentiality and commercial value of
such information. Any party disclosing information in violation of these provisions or requirements
established by the arbitrator, unless such disclosure is required by federal or state law or by a court order,
shall thereby waive any right to introduce or otherwise use such information in any judicial, regulatory, or
other legal or dispute resolution proceeding, including the proceeding in which the information was
obtained.

13.3.10 Timetable.

Promptly after the appointment of the arbitrator, the arbitrator shall set a date for the issuance of the
arbitration decision, which shall be no later than six months (or such date as the parties and the arbitrator
may agree) from the date of the appointment of the arbitrator, with other dates, including the dates for an
evidentiary hearing or other final submissions of evidence, set in light of this date. The date for the
evidentiary hearing or other final submission of evidence shall not be changed, absent extraordinary
circumstances. The arbitrator shall have the power to impose sanctions, including dismissal of the
proceeding, for dilatory tactics or undue delay in completing the arbitration proceedings.

13.3.11 Decision.
13.3.11.1 Except as provided below with respect to "baseball" style arbitration, the arbitrator shall issue a written decision granting the relief requested by one of the parties, or such other remedy as is appropriate, if any, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of the relevant ISO Documents, (iii) applicable United States federal law, including the FPA and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. Additionally, the arbitrator may consider relevant decisions in previous arbitration proceedings. A summary of the disputed matter and the arbitrator's decision shall be published in an ISO newsletter or electronic bulletin board and any other method adopted by the ISO ADR Committee, and maintained by the ISO ADR Committee.

13.3.11.2 In arbitration conducted "baseball" style, the arbitrator shall issue a written decision adopting one of the awards proposed by the parties, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of the relevant ISO Documents, (iii) applicable United States federal law, including the FPA and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. If the arbitrator concludes that no proposed award is consistent with the factors enumerated in (i) through (iv) above, or addresses all of the issues in dispute, the arbitrator shall specify how each proposed award is deficient and direct that the parties submit new proposed awards that cure the identified deficiencies. A summary of the disputed matter and the arbitrator's decision shall be published in an ISO newsletter or electronic bulletin board, and any other method adopted by the ISO ADR Committee. An award shall not be deemed to be precedential.

13.3.11.3 Where a panel of arbitrators is appointed pursuant to Section 13.3.1.2, a majority of the arbitrators must agree on the decision.

13.3.12 Compliance.

Unless the arbitrator's decision is appealed under Section 13.4, the disputing parties shall, upon receipt of the decision, immediately take whatever action is required to comply with the award to the extent the
award does not require regulatory action. An award that is not appealed shall be deemed to have the same force and effect as an order entered by the FERC or any court of competent jurisdiction.

13.3.13 **Enforcement.**

Following the expiration of the time for appeal of an award pursuant to Section 13.4.3, any party may apply to FERC or any court of competent jurisdiction for entry and enforcement of judgment based on the award.

13.3.14 **Costs.**

The costs of the time, expenses, and other charges of the arbitrator shall be borne by the parties to the dispute, with each side on an arbitrated issue bearing its pro-rata share of such costs, and each party to an arbitration proceeding bearing its own costs and fees. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration was made in bad faith, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. Notwithstanding the above, at the discretion of the arbitrator, the winning party in any dispute which has resulted in the enforcement of an important right affecting the public interest shall not be required to pay any of the costs of the arbitrator and may recover such of its own reasonable attorney fees, expert witness fees and other reasonable costs from the losing party to the dispute if (a) a significant benefit, whether pecuniary or non-pecuniary, has been conferred on the general public, (b) the necessity and financial burden of private enforcement are such as to make the award appropriate, and (c) such fees should not, in the interest of justice, be paid out of the recovery.

13.4 **Appeal of Award.**

13.4.1 **Basis for Appeal.**

A party may apply to the FERC or any court of competent jurisdiction to hear an appeal of an arbitration award only upon the grounds that the award is contrary to or beyond the scope of the relevant ISO/CAISO Documents, United States federal law, including, without limitation, the FPA, and any FERC regulations and decisions, or state law. Appeals shall, unless otherwise ordered by FERC or the court of competent jurisdiction, conform to the procedural limitations set forth in this Section 13.4.
13.4.2 Appellate Record.

The parties intend that FERC or the court of competent jurisdiction should afford substantial deference to the factual findings of the arbitrator. No party shall seek to expand the record before the FERC or court of competent jurisdiction beyond that assembled by the arbitrator, except (i) by making reference to legal authority which did not exist at the time of the arbitrator's decision, or (ii) if such party contends the decision was based upon or affected by fraud, collusion, corruption, misconduct or misrepresentation.

13.4.3 Procedures for Appeals.

13.4.3.1 If a party to an arbitration desires to appeal an award, it shall provide a notice of appeal to the ISO CAISO Governing Board, all parties and the arbitrator within 14 days following the date of the award. The appealing party must likewise provide notice to the ISO CAISO ADR Committee, which shall publish notice of the appeal in an ISO newsletter or on WEnet the CAISO’s secure communication system, and any other method adopted by the ISO CAISO ADR Committee.

Within ten (10) days of the filing of the notice of appeal, the appealing party must file an appropriate application, petition or motion with the FERC to trigger review under the FPA or with a court of competent jurisdiction. Such filing shall state that the subject matter has been the subject of an arbitration pursuant to the relevant ISO CAISO Document.

13.4.3.2 Within 30 days of filing the notice of appeal (or such period as FERC or the court of competent jurisdiction may specify) the appellant shall file the complete evidentiary record of the arbitration and a copy of the award with FERC or with the court of competent jurisdiction. The appellant shall serve copies of a description of all materials included in the submitted evidentiary record.

13.4.4 Award Implementation.

Implementation of the award shall be deemed stayed pending an appeal unless and until, at the request of a party, the FERC or the court of competent jurisdiction to which an appeal has been filed, issues an order dissolving, shortening, or extending such stay. However, a summary of each appeal shall be published in an ISO CAISO newsletter or electronic bulletin board, and any other method adopted by the ISO CAISO ADR Committee.
13.4.5 Judicial Review of FERC Orders.

FERC orders resulting from appeals shall be subject to judicial review pursuant to the FPA.

13.5 Allocation of Awards Payable by or to the ISCAISO.

13.5.1 Allocation of an Award.

If the ISCAISO must pay an award to a party pursuant to good faith negotiations or the ISCAISO ADR Procedures, the ISCAISO will recover the amount of the award from Market Participants and Scheduling Coordinators. If the ISCAISO receives an award from a party pursuant to good faith negotiations or the ISCAISO ADR Procedures, the ISCAISO will flow back the amount of the award to Market Participants and Scheduling Coordinators.

13.5.2 Timing of Adjustments.

Upon determination that an award is payable by or to the ISCAISO pursuant to good faith negotiations or the ISCAISO ADR Procedures, the ISCAISO shall calculate the amounts payable to and receivable from the party, Market Participants, and Scheduling Coordinators, as soon as reasonably practical, and shall show any required adjustments as a debit or a credit in a subsequent Preliminary Settlement Statement or, in the case of an amount payable by the ISCAISO to a party, as soon as the ISCAISO and that party may agree.

13.5.3 Method of Allocation.

13.5.3.1 Allocation to Market Participants.

The ISCAISO will use best efforts to determine which Market Participant(s) is or are responsible for and/or benefit from payment of an award by or to the ISCAISO and to allocate receipt of or payment for the award equitably to such Market Participant(s). In undertaking the allocation, the ISCAISO shall consider the extent of a Market Participant’s participation in affected markets and the ISCAISO Tariff in effect on the applicable Trading Day(s), and may consider any other relevant factor, including but not limited to, applicable contracts.

13.5.3.2 Residual Amounts.
Any awards for which the ISOCAISO is unable to identify Market Participants in accordance with 13.5.3.1 and any award amounts that the ISOCAISO is unable to collect that are not covered by Section 4.16.411.29.17.1 will be allocated to all Scheduling Coordinators through Neutrality Adjustments.
14.1 Uncontrollable Forces.

14.1.1 An Uncontrollable Force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities or any other cause beyond the reasonable control of the ISO or Market Participant which could not be avoided through the exercise of Good Utility Practice. Neither the ISO nor a Market Participant will be considered in default of any obligation under this Tariff if prevented from fulfilling that obligation due to the occurrence of an Uncontrollable Force.

14.1.2 Responsibilities of Affected Entity.

In the event of the occurrence of an Uncontrollable Force, which prevents the ISO or a Market Participant from performing any of its obligations under this Tariff, the affected entity shall (i) if it is the ISO, immediately notify the Market Participants in writing of the occurrence of such Uncontrollable Force and, if it is a Market Participant, immediately notify the ISO in writing of the occurrence of such Uncontrollable Force, (ii) not be entitled to suspend performance of its obligations under this Tariff in any greater scope or for any longer duration than is required by the Uncontrollable Force, (iii) use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform and resume full performance of its obligations hereunder, (iv) in the case of the ISO, keep the Market Participants apprised of such efforts, and in the case of the Market Participants, keep the ISO apprised of such efforts, in each case on a continual basis and (v) provide written notice of the resumption of its performance of its obligations hereunder.

14.3 Strikes, Lockouts or Labor Disputes.

Notwithstanding any of the foregoing, the settlement of any strike, lockout or labor dispute constituting an Uncontrollable Force shall be within the sole discretion of the entity involved in such strike, lockout or labor dispute and the requirement that an entity must use its best efforts to mitigate the effects of the
Uncontrollable Force and/or remedy its inability to perform and resume full performance of its obligations hereunder shall not apply to strikes, lockouts, or labor disputes.

**44.214.4 Market Participant’s Indemnity.**

Each Market Participant, to the extent permitted by law, shall indemnify the ISOCASIO and hold it harmless against all losses, damages, claims, liabilities, costs or expenses (including legal expenses) arising from any act or omission of the Market Participant except to the extent that they result from the ISOCASIO’s default under this ISOCASIO Tariff or negligence or intentional wrongdoing on the part of the ISOCASIO or of its officers, directors or employees.

**44.314.5 Limitation on Liability.**

**44.3.14.5.1 Liability for Damages.**

Except as provided for in Section 13.3.14, the ISOCASIO shall not be liable in damages to any Market Participant for any losses, damages, claims, liability, costs or expenses (including legal expenses) arising from the performance or non-performance of its obligations under this ISOCASIO Tariff, including but not limited to any adjustments made by the ISOCASIO in Inter-Scheduling Coordinator Trades, except to the extent that they result from negligence or intentional wrongdoing on the part of the ISOCASIO.

**44.3.214.5.2 Exclusion of Certain Types of Loss.**

The ISOCASIO shall not be liable to any Market Participant under any circumstances for any consequential or indirect financial loss including but not limited to loss of profit, loss of earnings or revenue, loss of use, loss of contract or loss of goodwill except to the extent that it results from except to the extent that it results from negligence or intentional wrongdoing on the part of the ISOCASIO.

**44.414.6 Potomac Economics, Ltd. Limitation Of Liability.**

Potomac Economics, Ltd. shall not be liable in damages to any Market Participant for any losses, damages, claims, liability, costs or expenses (including legal expenses) arising from its calculation of reference levels under its Consultant Agreement with the ISOCASIO dated as of September 3, 2002,
except to the extent that they result from negligence or intentional wrongdoing of Potomac Economics, Ltd.
Any amendment or other modification of any provision of this ISO CAISO Tariff must be in writing and approved by the ISO CAISO Governing Board in accordance with the bylaws of the ISO CAISO. Any such amendment or modification shall be effective upon the date it is permitted to become effective by FERC. Nothing contained herein shall be construed as affecting, in any way, the right of the ISO CAISO to furnish its services in accordance with this ISO CAISO Tariff, or any tariff, rate schedule or Scheduling Coordinator Agreement which results from or incorporates this ISO CAISO Tariff, unilaterally to make an application to FERC for a change in rates, terms, conditions, charges, classifications of service, Scheduling Coordinator Agreement, rule or regulation under FPA Section 205 and pursuant to the FERC’s rules and regulations promulgated thereunder. Nothing contained in this ISO CAISO Tariff or any Scheduling Coordinator Agreement shall be construed as affecting the ability of any Market Participant receiving service under this ISO CAISO Tariff to exercise its rights under Section 206 of the FPA and FERC’s rules and regulations thereunder.
16 EXISTING CONTRACTS.

16.1 Existing Contracts for Transmission Service. Continuation of Rights and Obligations of Non-Participating TOs Under Existing Contracts.

16.2.1.1 The transmission service rights and obligations of Non-Participating TOs under Existing Contracts, including all terms, conditions and rates of the Existing Contracts, as they may change from time to time under the terms of the Existing Contracts, will continue to be honored by the parties to those contracts, for the duration of those contracts. For the purpose of Section 16.2, the transmission service rights of Non-Participating TOs are called “Existing Rights.”

16.2.1.2 If a Participating TO is a party to an Existing Contract under which Existing Rights are provided, the Participating TO shall attempt to negotiate changes to the Existing Contract to align the contract’s scheduling and operating provisions with the ISO’s CAISO’s scheduling and operational procedures, rules and protocols, to align operations under the contract with ISO-CAISO operations, and to minimize the contract parties’ costs of administering the contract while preserving their financial rights and obligations as defined in Section 16.2.
In addition, the Participating TO shall attempt to negotiate changes to provisions in the Existing Contract to ensure that whenever transmission services under the Existing Contract are used to deliver power to a Market Participant that is subject to Access Charges under this CAISO Tariff, no duplicative charge for access to the ISO-CAISO Controlled Grid will be charged under the Existing Contract. For purposes of such negotiations, there shall be a presumption that any charges in an Existing Contract that were designed to recover the embedded cost of transmission facilities within the ISO-CAISO Controlled Grid will be fully recovered through the Access Charges established under Section 26.1 of this CAISO Tariff.

16.1.2 Right to Use and Ownership of Facilities. The ISO will accept valid Schedules from a Responsible Participating TO that is the Scheduling Coordinator for the Existing Contract rights holders, or from Existing Contract rights holders that are Scheduling Coordinators, or that are represented by a Scheduling Coordinator other than the Responsible Participating TO. Schedules submitted by Scheduling Coordinators to the ISO which include the use of Existing Rights must be submitted in accordance with Section 16.1, Section 16.2, and Section 30.2.7. The ISO may refuse to accept Schedules submitted pursuant to Existing Contracts which do not meet the requirements of the principles, protocols and rules referred to in this Section 16.1 and Section 16.2. The ISO will implement Sections 16.1 and 16.2 with respect to Existing Contracts after the close of the Hour-Ahead Market and in real time.

16.2.1.3 If a Non-Participating TO has an Existing Contract with a Participating TO under which the Non-Participating TO's transmission facilities, or a portion thereof, are subject to use by the Participating TO, the Non-Participating TO's rights to the use and ownership of its facilities shall remain unchanged, regardless of the Participating TO's act of turning over the Participating TO's entitlement to use the Non-Participating TO's facilities to the extent possible to the Operational Control of the ISO-CAISO. The CAISO will accept valid ETC Self-Schedules from a Participating TO that is the Scheduling Coordinator for the holder of Existing Rights, or from holders of Existing Rights that are Scheduling Coordinators, or that are represented by a Scheduling Coordinator other than the Participating TO. ETC Self-Schedules submitted by Scheduling Coordinators to the CAISO, which include the use of Existing Rights, must be submitted in accordance with Section 16.1 and Section 30.
The CAISO may refuse to accept ETC Self-Schedules submitted pursuant to Existing Contracts that do not meet the requirements of the principles, protocols and rules referred to in this Section 16.1.

16.1.3 **Existing Contract Dispute Resolution.**

The CAISO will, if requested, advise parties to Existing Contracts regarding the operational aspects of any Existing Contract renegotiations that they undertake.

16.2.1.4 If the parties to an Existing Contract are unable to reach agreement on the changes needed to meet the requirements of this CAISO Tariff Section 16.2.1.2 or Section 16.2.1.3, any disputes related thereto shall be addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law. The rights of the parties to seek changes or to challenge such changes, under the FPA or as otherwise provided by law, are preserved consistent with the terms of the Existing Contract. Unless and until the necessary changes to the Existing Contract are made, all terms and conditions of the Existing Contracts will continue to be honored by the parties to the Existing Contracts.

16.1.4 16.2.1A **Conversion of Participating TOs’ Rights and Obligations Under Existing Contracts.**

16.2.1A.1 Parties who are entitled to transmission service rights under Existing Contracts and who choose to become Participating TOs must, at the time of becoming a Participating TO, convert those rights by converting them to “Converted Rights” in accordance with Section 4.3.1.6, which are described in Section 16.2.2. A party who ceases to be a Participating TO at or before the end of the five year period beginning at the ISO Operations Date shall be entitled to resume service under any Existing Contract to which it is then a party, so long as that contract has not expired or been terminated. For the purposes of Sections 16.1 and 16.2, Pacific Gas & Electric Company, Southern California Edison Company and San Diego Gas & Electric Company will be deemed to have converted all rights that they may hold under Existing Contracts to Converted Rights as described in Section 16.2.2 with effect from the ISO Operations Date. Schedules that utilize Converted Rights shall be submitted by a Scheduling Coordinator that has been certified in accordance with Section 4.5.1.
16.2.1A.2 As part of the conversion referred to in Section 16.2.1A.1, modifications to an Existing Contract may be needed. Any required modifications must be agreed upon by all parties to the contract. Failure of the parties to reach agreement on the modifications required under Section 16.2.1A.1 shall be addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law consistent with the terms of the Existing Contract. The rights of the parties to challenge such changes, under the FPA or as otherwise provided by law, are preserved.

16.2 ISO Administration of Existing Contracts for Transmission Service.

16.2.1 Continuation of Rights and Obligations of Non-Participating TOs Under Existing Contracts.

16.2.1.1 The transmission service rights and obligations of Non-Participating TOs under Existing Contracts, including all terms, conditions and rates of the Existing Contracts, as they may change from time to time under the terms of the Existing Contracts, will continue to be honored by the parties to those contracts, for the duration of those contracts. For the purpose of Section 16.2, the transmission service rights of Non-Participating TOs are called “Existing Rights.”

16.2.1.2 If a Participating TO is a party to an Existing Contract under which Existing Rights are provided, the Participating TO shall attempt to negotiate changes to the Existing Contract to align the contract’s scheduling and operating provisions with the ISO’s scheduling and operational procedures, rules and protocols, to align operations under the contract with ISO operations, and to minimize the contract parties’ costs of administering the contract while preserving their financial rights and obligations as defined in Section 16.2.

In addition, the Participating TO shall attempt to negotiate changes to provisions in the Existing Contract to ensure that whenever transmission services under the Existing Contract are used to deliver power to a Market Participant that is subject to Access Charges under this Tariff, no duplicative charge for access to the ISO-Controlled Grid will be charged under the Existing Contract. For purposes of such negotiations, there shall be a presumption that any charges in an Existing Contract that were designed to recover the embedded cost of transmission facilities within the ISO-Controlled Grid will be fully recovered through the Access Charges established under Section 26.1 of this Tariff.
16.2.1.3 If a Non-Participating TO has an Existing Contract with a Participating TO under which the Non-Participating TO's transmission facilities are subject to use by the Participating TO, the Non-Participating TO's rights to the use and ownership of its facilities shall remain unchanged, regardless of the Participating TO's act of turning over the Participating TO's entitlement to use the Non-Participating TO's facilities to the extent possible to the Operational Control of the ISO.

16.2.1.4 If the parties to an Existing Contract are unable to reach agreement on the changes needed to meet the requirements of Section 16.2.1.2 or Section 16.2.1.3, any disputes related thereto shall be addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law. The rights of the parties to seek changes or to challenge such changes, under the FPA or as otherwise provided by law, are preserved consistent with the terms of the Existing Contract. Unless and until the necessary changes to the Existing Contract are made, all terms and conditions of the Existing Contracts will continue to be honored by the parties to the contracts.

16.2.1A Conversion of Participating TOs' Rights and Obligations Under Existing Contracts.

16.2.1A.1 Parties who are entitled to transmission service rights under Existing Contracts and who choose to become Participating TOs must, at the time of becoming a Participating TO exercise those rights by converting them to "Converted Rights", which are described in Section 16.2.2. A party who ceases to be a Participating TO at or before the end of the five year period beginning at the ISO Operations Date shall be entitled to resume service under any Existing Contract to which it is then a party, so long as that contract has not expired or been terminated. For the purposes of Sections 16.1 and 16.2, Pacific Gas & Electric Company, Southern California Edison Company and San Diego Gas & Electric Company will be deemed to have converted all rights that they may hold under Existing Contracts to Converted Rights as described in Section 16.2.2 with effect from the ISO Operations Date. Schedules that utilize Converted Rights shall be submitted by a Scheduling Coordinator that has been certified in accordance with Section 4.5.1.

16.2.1A.2 As part of the conversion referred to in Section 16.2.1A.1, modifications to an Existing Contract may be needed. Any required modifications must be agreed upon by all parties to the contract. Failure of the parties to reach agreement on the modifications required under Section 16.2.1A.1 shall be
addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law consistent with the terms of the Existing Contract. The rights of the parties to challenge such changes, under the FPA or as otherwise provided by law, are preserved.

16.2.2 Converted Rights.

16.2.2.1 A recipient of transmission service under an Existing Contract that chooses to become a Participating TO and convert its rights to ISO transmission service, and the Participating TO which provides the transmission service under the Existing Contract shall change the terms and conditions of the contract to provide that:

16.2.2.1.1 The recipient of the transmission service received under an Existing Contract that has converted its rights to ISO transmission service shall turn over Operational Control of its transmission entitlement to the ISO for management by the ISO in accordance with the ISO’s scheduling, Congestion Management, curtailment and other ISO Protocols;

16.2.2.1.2 The recipient of the transmission service under an Existing Contract that has converted its rights to ISO transmission service shall obtain all future transmission services within, into (starting at the ISO Controlled Grid), out of, or through the ISO Controlled Grid using the ISO’s scheduling and operational procedures and protocols and the ISO Tariff and any applicable TO Tariff, provided that this provision shall not affect the rights, if any, of the contract parties to extend Existing Contracts.

16.2.2.1.3 [Not Used]

16.2.2.1.4 For the capacity represented by its rights, the recipient of firm transmission service under an Existing Contract that has converted its rights to ISO transmission service shall be entitled to receive the Usage Charge revenues for the capacity (and/or alternatives to such revenues, such as physical transmission rights or transmission congestion contracts, should they exist) and all Wheeling revenue credits throughout the term that the capacity is available under the Existing Contract. The recipient of less than firm service shall receive these revenues in proportion to the degree of firmness and the terms and conditions of their service.

16.2.2.1.5 The recipient of the transmission service received under an Existing Contract that has converted its rights to ISO transmission service shall continue to have the obligation to pay the provider of
the service for its transmission service at the rates provided in the Existing Contract, as they may change from time to time under the terms of the Existing Contract, or as mutually agreed between the contract parties, through the term of the contract, subject to the terms and conditions of the contract, including the rights of the parties to the contract to seek unilateral or other changes pursuant to Section 205 or Section 206 of the Federal Power Act and the FERC’s Rules and Regulations or as otherwise provided by law.

16.2.2 Other aspects of such an Existing Contract may also need to be changed. If the parties to the contract are unable to negotiate such changes, they shall seek appropriate changes through the mechanisms provided within the contract, including the rights, if any, to seek unilateral or other changes pursuant to Section 205 or Section 206 of the Federal Power Act and the FERC’s Rules and Regulations or as otherwise provided by law.

16.2.3 ISO Treatment of Non-Participating TOs Existing Rights.

16.2.3.1 For the purposes of Section 16.2, Existing Rights fall into one of three general categories: firm transmission service, non-firm transmission service, and conditional firm transmission service. The parties to an Existing Contract shall notify the ISO which Existing Rights fall into each category, through the operating instructions described in this section and in Section 16.2.4A.

(i) For each Existing Contract, the party providing transmission service (the “Responsible PTO”) shall be responsible for the submission of transmission rights/curtailment instructions to the ISO on behalf of the holders of Existing Rights, unless the parties to the Existing Contract agree otherwise. For the purposes of this ISO Tariff, such otherwise agreed party will be acting in the role of Responsible PTO.

(ii) In accordance with the ISO Tariff, the parties to Existing Contracts will attempt to jointly develop and agree on any instructions that will be submitted to the ISO. To the extent there is more than one Participating TO providing transmission service under an Existing Contract or there is a set of Existing Contracts which are interdependent from the point of view of submitting instructions to the ISO involving more than one Participating TO, the relevant Participating TOs will designate a single Participating TO as the Responsible
PTO and will notify the ISO accordingly. If no such Responsible PTO is designated by the relevant Participating TOs or the ISO is not notified of such designation, the ISO shall designate one of them as the Responsible PTO and notify the relevant Participating TOs accordingly.

(iii) The parties to an Existing Contract shall also be responsible to submit to the ISO any other necessary operating instructions based on their contract interpretations needed by the ISO to enable the ISO to perform its duties.

16.2.3.1.1 The ISO will have no role in interpreting Existing Contracts. The parties to an Existing Contract will, in the first instance, attempt jointly to agree on any operating instructions that will be submitted to the ISO. In the event that the parties to the Existing Contract cannot agree upon the operating instructions submitted by the parties to the Existing Contract, the dispute resolution provisions of the Existing Contract, if applicable, shall be used to resolve the dispute; provided that, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the ISO shall implement the Participating TO's operating instructions. If both parties to an Existing Contract are Participating TOs and the parties cannot agree to the operating instructions submitted by the parties, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the ISO shall implement the operating instructions of the first Participating TO for which the Existing Contract is an Encumbrance.

16.2.3.2 The ISO’s scheduling protocols will accommodate Existing Rights, so that the holders of Existing Rights will receive the same priorities (in scheduling, curtailment, assignment and other aspects of transmission system usage) to which they are entitled under their Existing Contracts.

16.2.3.3 Scheduling deadlines and operational procedures associated with Existing Rights will be honored by the ISO.

16.2.3.4 All contractual provisions that have been communicated to the ISO in writing in accordance with Section 16.2.3.1 by the parties to the Existing Contracts, shall be honored by the ISO and the parties to the Existing Contracts and shall be implemented in accordance with the terms and conditions of the relevant Existing Contracts so notified.
16.2.3.4.1 The holders of Existing Rights will not be responsible for paying Usage Charges related to those rights, nor will they be entitled to receive Usage Charge revenues related to those rights.

16.2.3.4.2 Other than any existing rights to such revenues under the Existing Contracts, the holders of Existing Rights will not be entitled to an allocation of revenues from Wheeling Out or Wheeling Through services on the ISO Controlled Grid, related to those rights.

16.2.3.4.3 The holders of Existing Rights shall continue to pay the providers of the Existing Rights at the rates provided in the associated Existing Contracts, as they may change from time to time under the terms of the Existing Contracts.

16.2.3.4.4 [Not Used]

16.2.3.4.5 Parties with Existing Rights shall continue to pay for Transmission Losses or Ancillary Services requirements in accordance with such Existing Contracts as they may be modified or changed in accordance with the terms of the Existing Contract. Likewise the Participating TOs shall continue to provide Transmission Losses and any other Ancillary Services to the holder of the rights under an Existing Contract as may be required by the Existing Contracts. To the extent that Transmission Losses or Ancillary Service requirements associated with Existing Rights are not the same as those under the ISO's rules and protocols, the ISO will not charge or credit the Participating TO for any cost differences between the two, but will provide the parties to the Existing Contracts with details of its Transmission Losses and Ancillary Services calculations to enable them to determine whether the ISO's calculations result in any associated shortfall or surplus and to enable the parties to the Existing Contracts to settle the differences bilaterally or through the relevant TO Tariff. Each Participating TO will be responsible for recovering any deficits or crediting any surpluses associated with differences in assignment of Ancillary Services requirements, through its bilateral arrangements or its Transmission Owner's Tariff.

16.2.4 ISO Protocols Shall Accommodate Existing Rights.

The ISO will implement the provisions of Section 16.2.3. The objective will be to ensure that under the ISO tariff, Existing Rights will enjoy the same relative priorities vis-à-vis new, ISO-provided transmission uses, as they would under the Existing Contracts and the FERC Order 888 tariffs. Under the ISO tariff:
16.2.4A Existing scheduling rules, curtailment priorities and any other relevant terms and conditions associated with the scheduling and day-to-day implementation of transmission rights will be documented in sets of operating instructions provided to the ISO by the parties to the Existing Contracts. The documentation of these operating instructions, and disputes related to these operating instructions, will be handled in accordance with the terms of Section 16.2.3.1.1.

16.2.4A.1 The operating instructions will be submitted to the ISO electronically, by the Responsible PTO, utilizing a form provided by the ISO in a format similar to the one set out in the Standard Template – Transmission Rights/Curtailment Instructions. The instructions will include the following information at a minimum and such other information as the ISO may reasonably require to enable it to carry out its functions under the ISO Tariff and ISO Protocols (the letters below correspond with the letters of the instructions template in the Standard Template – Transmission Rights/Curtailment Instructions:

(a) a unique contract reference number (Existing Contract reference number that will be assigned by the ISO and communicated to the Responsible PTO on the completed instruction and that references a single Existing Contract or a set of interdependent Existing Contracts; the provisions of Section 30.4.2 will apply to the validation of scheduled uses of Existing Contract transmission rights);

(b) whether the instruction can be exercised independent of the ISO’s day-to-day involvement (Yes/No);

(c) name of an operational single point of contact for instructions and a 24-hour a day telephone number for the Responsible PTO;

(d) name(s) and number(s) of Existing Contract(s);

(e) path name(s) and location(s) (described in terms of the Zones in which the point(s) of receipt and point(s) of delivery are located);

(f) names of the party(ies) to the Existing Contract(s);
(g) Scheduling Coordinator ID code: the ID number of the Scheduling Coordinator who will submit Schedules which make use of the Existing Contract(s) for the party(ies) indicated in (f);

(h) type(s) of rights, by rights holder, by Existing Rights;

(i) type(s) of service, by rights holder, by Existing Contract (firm, conditional firm, or non-firm), with priorities for firm and conditional firm transmission services indicated in Schedules using Adjustment Bids as described in the SP;

(j) amount of transmission service, by rights holder, by Existing Contract expressed in MW;

(k) for Day-Ahead scheduling purposes, the time of the day preceding the Trading Day at which the Scheduling Coordinator submits Schedules to the ISO referencing the Existing Contract(s) identified in the instructions;

(l) for Hour-Ahead or real-time scheduling purposes, the number of minutes prior to the start of the Settlement Period of delivery at which the Scheduling Coordinator may submit Schedule adjustments to the ISO regarding the Existing Rights under the Existing Contract(s) identified in the instructions;

(m) whether or not real-time modifications to Schedules associated with Existing Rights are allowed at any time during the Settlement Period;

(n) Service period(s) of the Existing Contract(s);

(o) any special procedures which would require curtailments to be implemented by the ISO in any manner different than that specified in Section 7.4.12. Any such instructions submitted to the ISO must be clear, unambiguous, and not require the ISO to make any judgments or interpretations as to the meaning intent, results, or purpose of the curtailment procedures or the Existing Contract (otherwise, they will not be accepted by the ISO); and
any special procedures relating to curtailments during emergency conditions. Any such instructions submitted to the ISO must be clear, unambiguous, and not require the ISO to make any judgments or interpretations as to the meaning, intent, results, or purpose of the curtailment procedures or the Existing Contract (otherwise, they will not be accepted by the ISO).

16.2.4A.2 The Responsible PTOs shall submit the operating instructions to the ISO associated with Existing Contracts or sets of interdependent Existing Contracts thirty (30) days prior to either (a) the ISO Operations Date or (b) the date on which the scheduling or curtailment of the use of the Existing Rights is to commence pursuant to Sections 16.1 or 16.2. The ISO will not accept Schedules which include the use of Existing Rights, unless the Responsible PTO has provided the ISO with the information required in the Transmission Control Agreement and this Section 2.4, including transmission rights/curtailment instructions supplied in a form and by means of communication specified by the ISO.

16.2.4A.3 Updates or changes to the operating instructions must be submitted to the ISO by the Responsible PTO, on an as needed or as required basis determined by the parties to the Existing Contracts. The ISO will implement the updated or changed instructions as soon as practicable but not later than seven (7) days after receiving clear and unambiguous details of the updated or changed instructions. If the ISO finds the instructions to be inconsistent with respect to the ISO Protocols or the ISO Tariff, the ISO will notify the Responsible PTO within forty-eight (48) hours after receipt of the updated or changed instructions indicating the nature of the problem and allowing the Responsible PTO to resubmit the instructions as if they were new, updated or changed instructions. If the ISO finds the updated or changed instructions to be acceptable, the ISO will time-stamp the updated instructions as received, confirm such receipt to the Responsible PTO, and indicate the time at which the updated instructions take effect if prior to the seven (7) day deadline referred to above.

16.2.4B To the extent that the operating instructions can be exercised independently of the ISO by the parties to the Existing Contract and the results forwarded to the ISO, the operating instructions shall be exercised by the Participating TOs, and the outcomes shall be forwarded to the ISO. The determination of whether the operating instructions can be "exercised independently of the ISO by the
parties to the Existing Contract” shall be made using the same procedures described in Section 16.2.3.1.1.

16.2.4C To the extent that the operating instructions can not be exercised independently of the ISO and the results forwarded to the ISO (because, for example, they require iteration with the ISO’s scheduling process, would unduly interfere with the ISO’s real-time management of curtailments or would unduly interfere with the ability of the holder of rights to exercise its rights), the operating instructions will be provided to the ISO for day-to-day implementation. These instructions will be provided by the Responsible PTO to the ISO for implementation unless the parties to the Existing Contracts otherwise agree that the rights holder will do so. For these instructions, the Scheduling Coordinators representing the holders of Existing Rights will submit their Schedules to the ISO for implementation in accordance with the instructions. In this case, the ISO shall act as the scheduling agent for the Participating TOs with regard to Existing Rights.

16.2.4D The ISO shall determine, based on the information provided by the Participating TOs and contract rights holders under Sections 16.2.4B and 16.2.4C, the transmission capacities that (i) must be reserved for firm Existing Rights, (ii) may be allocated for use as ISO transmission service (i.e., new firm uses), (iii) must be reserved by the ISO for conditional firm Existing Rights, and (iv) remain for any non-firm Existing Rights for which a Participating TO has no discretion over whether or not to provide such non-firm service.

16.2.4E The ISO shall coordinate the scheduling of Existing Rights with the scheduling of ISO transmission service, using the ISO’s Day-Ahead scheduling rules and protocols. In doing so, the ISO shall subtract, from the capacity that is available for the ISO to schedule in the ISO’s Day-Ahead scheduling process, an appropriate amount of transmission capacity reflecting the amount and nature of the Existing Rights.

16.2.4F For those Existing Rights the use of which has not been scheduled by the rights holders by the start of the ISO’s Hour-Ahead scheduling process, the ISO shall coordinate the scheduling of Existing Rights with the scheduling of ISO transmission service, using the ISO’s Hour-Ahead scheduling protocols. In doing so, the ISO may, at its own discretion, consider as available for the ISO to schedule in
its Hour-Ahead scheduling process, any or all of the transmission capacity associated with Existing Rights the use of which has not been scheduled by the rights-holders in the ISO’s Hour-Ahead scheduling process. The provisions shall apply to real-time changes in Interconnection schedules under Existing Contracts.

**16.2.4G** The ISO shall recognize that the obligations, terms or conditions of Existing Contracts may not be changed without the voluntary consent of all parties to the contract (unless such contract may be changed pursuant to any applicable dispute resolution provisions in the contract or pursuant to Section 205 or Section 206 of the FPA and the FERC’s Rules and Regulations or as otherwise provided by law).

**16.2.4H** The parties to Existing Contracts shall remain liable for their performance under the Existing Contracts. The ISO shall be liable in accordance with the provisions of this ISO Tariff for any damage or injury caused by its non-compliance with the operating instructions submitted to it pursuant to this Section 16.2.

**16.2.4I** Unless specified otherwise, in the event that the dispute resolution mechanisms prescribed in an Existing Contract, including all recourses legally available under the contract, can not, in the first instance, result in a resolution of such a dispute, the ISO’s ADR Procedure will be used to resolve any disputes between the ISO and the Participating TO regarding any aspects of the implementation of Section 16.1 and 16.2, including the reasonableness of a Participating TO’s operating instructions or any other decision rules which the Participating TO may submit to the ISO as part of the operational protocols. The transmission rights-holder(s) under the Existing Contract shall have standing to participate in the ISO ADR Procedure.

**16.2.4.1** Allocation of Forecasted Total Transfer Capabilities.

**16.2.4.2** Prioritization of Transmission Uses.

The following rules are designed to enable the ISO to honor Existing Contracts in accordance with Sections 16.1 and 16.2 of the ISO Tariff. Regardless of the success of the application of such rules, it is intended that the rights under Existing Contracts will be honored as contemplated by the ISO Tariff. In each of the categories described in Section 23, the terms and conditions of service may differ among
transmission contracts. These differences will be described by each Responsible PTO in the instructions submitted to the ISO in advance of the scheduling process. In addition, Generation, Inter-Scheduling Coordinator Energy Trade imports or external imports in one Zone must be matched by an equal magnitude of Demand, Inter-Scheduling Coordinator Energy Trade exports or external exports in an adjacent Zone (see Section 16.2.4.3 for a summary of allowable linkages). Scheduling and curtailment priorities associated with each category will be defined by Scheduling Coordinators through the use of contract usage templates submitted as part of their Schedules.

(a) Transmission capacity for Schedules will be made available to holders of firm Existing Rights in accordance with this Section and the terms and conditions of their Existing Contracts. In the event that the firm uses of these rights must be curtailed, they will be curtailed on the basis of priority expressed in contract usage templates. So as not to be curtailed before any other scheduled use of Congested Inter-Zonal Interface capacity, the ISO’s Congestion Management software will assign high priced Adjustment Bids to the scheduled uses (for example, a difference of $130,000/MWh to $140,000/MWh for Demand or external exports and a difference of -$130,000/MWh to -$140,000/MWh for Generation or external imports). This range will be reserved strictly for use in association with the prioritization of firm Existing Rights to use available Inter-Zonal Interface transmission capacity. These high priced Adjustment Bids are only for the ISO’s use, in the context of Inter-Zonal Congestion Management, in recognizing the various levels of priority that may exist among the scheduled uses of firm transmission service. These high priced Adjustment Bids will not affect any other rights under Existing Contracts. To the extent that the MW amount exceeds the MW amount specified in the Existing Contract, the excess scheduled amount will be treated as a new firm use of ISO transmission services as described in (b) below. Note that, in some instances, for a particular Inter-Zonal Interface, there may be multiple Scheduling Coordinators submitting Schedules under several different Existing Contracts on behalf of several Existing Contract rights holders. In these circumstances, and to the extent the rights holders desire to coordinate the prioritization of their firm uses of the Inter-Zonal Interface, their Scheduling Coordinators will make the arrangements among themselves ahead of the ISO’s scheduling process. In the absence of a valid contract usage template associated with Existing Contract rights, the ISO will treat the
scheduled use of transmission service as a “price-taker” of ISO transmission service subject to Usage Charges.

(b) ISO transmission service (i.e., “new firm uses”) will be priced in accordance with the ISO Tariff. Usage Charges associated with the ISO’s Congestion Management procedures, as described in Section 27.1.1.5, will be based on Adjustment Bids. In the absence of an Adjustment Bid, the ISO will treat the scheduled “new firm use” of ISO transmission service as a price-taker paying the Usage Charge established by the highest valued use of transmission capacity between the relevant Zones.

(c) Transmission capacity will be made available to holders of conditional firm Existing Rights in a manner similar to that done prior to the ISO Operations Date; that is, allocated, as available, based on the agreed priority. The levels of priority will be expressed in the contract usage templates associated with the Schedules. To the extent that the MW amount in a schedule exceeds the MW amount specified in the contract usage template, the excess scheduled amount will be treated as a new firm use of ISO transmission services as described in (b) above. Note that, in some instances, for a particular Inter-Zonal Interface, there may be multiple Scheduling Coordinators submitting Schedules under several different Existing Contracts on behalf of several Existing Contract rights holders. In these circumstances, and to the extent the rights holders desire to coordinate the prioritization of their conditional firm uses of the Inter-Zonal Interface, their Scheduling Coordinators will make the arrangements among themselves ahead of the ISO’s scheduling process. In the absence of a valid contract usage template associated with Existing Contract rights, the ISO will treat the scheduled use of transmission service as a “price-taker” of ISO transmission services subject to Usage Charges.

(d) Transmission capacity will be made available to holders of non-firm Existing Rights in a manner similar to that done prior to the ISO Operations Date; that is, treated as the lowest valued use of available transmission capacity. Non-firm uses of transmission capacity under Existing Contracts will be indicated in Schedules submitted by Scheduling Coordinators as $0.00/MWh Adjustment Bids. Therefore, there will be no contract reference number associated with non-firm Existing Contract rights.

16.2.4.3 Allowable Linkages.
As indicated in Section 16.2.4.2, Generation, Inter-Scheduling Coordinator Energy Trade imports or external imports in one Zone must be matched by an equal magnitude of Demand. Inter-Scheduling Coordinator Energy Trade exports or external exports in the same Zone or in an adjacent Zone.

16.2.5 ————The Day-Ahead Process.

16.2.5.1 ————Validation.
The ISO will coordinate the scheduling of the use of Existing Rights with new firm uses in the Day-Ahead process. The ISO will validate the Schedules submitted by Scheduling Coordinators on behalf of the rights holders for conformity with the instructions previously provided by the Responsible PTO. Invalid Schedules will be rejected and the ISO will immediately communicate the results of each Scheduling Coordinator’s validation to that Scheduling Coordinator via WEnet.

16.2.5.2 ————Scheduling Deadlines.
Those Existing Contract rights holders who must schedule the use of their rights by the deadline for the submission of Schedules in the Day-Ahead Market must do so. After this time, the ISO will release these unused rights as available for new firm uses (not subject to recall).

16.2.5.3 ————Reservation of Firm Transmission Capacity.
As an initial step in performing its Day-Ahead Congestion Management analysis, the ISO will determine the amount of transmission capacity that is available by subtracting, from the total transfer capability of the Inter-Zonal Interface, the unused portions of capacity applicable to firm Existing Rights. For purposes of Congestion Management, the total transfer capability of the Inter-Zonal Interface is therefore adjusted downward by an amount equal to the unused portions of firm Existing Rights. By reserving these blocks of unused transmission capacity, Existing Contracts rights holders are able to schedule the use of their transmission service on the timelines provided in their Existing Contracts after the deadline of the ISO’s Day-Ahead scheduling process (in other words, after 1:00 pm on the day preceding the Trading Day), but prior to the deadline of the ISO’s Hour-Ahead scheduling process (in other words, two hours ahead of the Settlement Period).

16.2.5.4 ————Allocation of Inter-Zonal Interface Capacities.
In the ISO’s Congestion Management analysis of the Day-Ahead Market, for each Inter-Zonal Interface:
(a) if all scheduled uses of transmission service fit within the adjusted total transfer capability, all are accepted (in other words, there is no Congestion);

(b) if all scheduled uses of transmission service do not fit within the adjusted total transfer capability, scheduled uses of non-firm Existing Rights will be curtailed, pro rata, to the extent necessary. If the remaining scheduled uses of transmission service still do not fit within the adjusted total transfer capability, uses of conditional firm Existing Rights will be curtailed (based upon the levels of priority expressed in the contract usage templates for Schedules as described in Section 16.2.4.2) to the extent necessary;

(c) if Congestion still exists after curtailing all lower priority schedules (e.g., requesting non-firm and conditional firm uses of transmission service under Existing Contracts), the remaining transmission capacity (that is not already reserved as firm Existing Rights) is priced based upon Adjustment Bids. To the extent there are insufficient Adjustment Bids to fully mitigate the remaining Congestion, the default Usage Charge will apply and the ISO will curtail ISO transmission service (in other words, new firm uses other than Firm Transmission Rights uses evaluated in the Day-Ahead process), pro rata, to the extent necessary;

(d) if Congestion still exists after curtailing all new firm uses (other than Firm Transmission Rights uses) in the Day-Ahead scheduling process, scheduled uses of Firm Transmission Rights are then curtailed, pro rata, to the extent necessary; and

(e) if Congestion still exists after curtailing ISO new firm uses and uses of Firm Transmission Rights, scheduled uses of firm Existing Rights are then curtailed (based upon the priorities expressed in the contract usage templates associated with the Schedules as described in Section 16.2.4.2) to the extent necessary.

16.2.6 The Hour-Ahead Process.

16.2.6.1 Validation.

The ISO will coordinate the scheduling of the use of Existing Rights with new firm uses, in the Hour-Ahead process. The ISO will validate the submitted Schedules for conformity with the instructions provided by the Responsible PTOs. Invalid schedules will be rejected and the ISO will immediately
communicate the results of each Scheduling Coordinator’s validation to that Scheduling Coordinator via WEnet.

### 16.2.6.2 Scheduling Deadlines.

Those rights holders who must schedule the use of their rights by the deadline for the submission of Schedules in the Hour-Ahead Market must do so. After this time, the ISO will release these unused rights as available for new firm uses (not subject to recall).

### 16.2.6.3 Acceptance of Firm Transmission Schedules.

Before allocating any remaining transmission capacity under the following provisions of this Section 16.2, the ISO will accept Schedules associated with firm Existing Rights (subject to validation under 16.2.6.1), allocating transmission capacity for use by these rights holders.

### 16.2.6.4 Reservation of Firm Transmission Capacity.

The ISO will adjust the total transfer capabilities of Inter-Zonal Interfaces with respect to firm Existing Rights as it does in its Day-Ahead process described in this Section 16.2. Therefore, holders of Existing Rights are still able to exercise whatever scheduling flexibility they may have under their Existing Contracts after the Schedules and bids submittal deadline of the ISO’s Hour-Ahead scheduling process, as described further in Section 16.2.7.

### 16.2.6.5 Allocation of Inter-Zonal Interface Capacities.

In the ISO’s Congestion Management analysis of the Hour-Ahead Market, for each Inter-Zonal Interface:

(a) if all scheduled uses of transmission service fit within the total transfer capability, all are accepted (in other words, there is no Congestion);

(b) if all scheduled uses of transmission service do not fit within the total transfer capability, scheduled uses of non-firm Existing Rights will be curtailed, pro rata, to the extent necessary. If the remaining scheduled uses of transmission service still do not fit within the total transfer capability, scheduled uses of conditional firm Existing Rights will be curtailed (based upon the levels of priority expressed in the contract usage templates for the Schedules as described in Section 16.2.4.2) to the extent necessary;
if Congestion still exists after curtailing all lower priority schedules (e.g., representing non-firm and conditional firm uses of transmission service under Existing Contracts), the remaining transmission capacity (the subject of firm Existing Rights) is priced based upon Adjustment Bids. To the extent there are insufficient Adjustment Bids to fully mitigate the remaining Congestion, the default Usage Charge will apply and the ISO will curtail ISO transmission service (in other words, new firm uses including new firm uses of Firm Transmission Rights), pro rata, to the extent necessary; and

(d) — if Congestion still exists after curtailing ISO new firm uses, scheduled uses of firm Existing Rights will be curtailed (based upon the priorities expressed in the contract usage template associated with the Schedules as described in Section 16.2.4.2) to the extent necessary.

16.2.7 The ISO’s Real-Time Process.

Consistent with Section 16.2.6.4, the ISO will honor those scheduling flexibilities that may be exercised by holders of Existing Rights through their respective Scheduling Coordinators during the ISO’s real-time processes to the extent that such flexibilities do not interfere with or jeopardize the safe and reliable operation of the ISO-Controlled Grid or Control Area operations. The real-time processes described in Sections 16.2.7.1 and 16.2.7.2 will occur during the three hours following the ISO’s receipt of Preferred Hour-Ahead Schedules (that is, from two hours ahead of the start of the Settlement Period through the end of such Settlement Period).

16.2.7.1 Inter-Control Area Changes to Schedules that Rely on Existing Rights.

Changes to Schedules that occur during the ISO’s real-time processes that involve changes to ISO Control Area imports or exports with other Control Areas (that is, inter-Control Area changes to Schedules) will be allowed and will be recorded by the ISO based upon notification received from the Scheduling Coordinator representing the holder of the Existing Rights. The ISO must be notified of any such changes to external import/export schedules. The ISO will receive notification of real-time changes to external import/export schedules, by telephone, from the Scheduling Coordinator representing the holder of the Existing Rights. The timing and content of any such notification must be consistent with the instructions previously submitted to the ISO by the Responsible PTO. The ISO will manually adjust the Scheduling Coordinator’s schedule to conform with the other Control Area’s net schedule in real time, and
the notifying Scheduling Coordinator will be responsible for and manage any resulting Energy imbalance. These Imbalance Energy deviations will be priced and accounted to the Scheduling Coordinator representing the holder of Existing Rights in accordance with the Section 11.

16.2.7.2 Intra-Control Area Changes to Schedules that Rely on Existing Rights.

Changes to Schedules that occur during the ISO’s real-time processes that do not involve changes to ISO Control Area imports or exports with other Control Areas (that is, intra-Control Area changes to Schedules) will be allowed and will give rise to Imbalance Energy deviations. These Imbalance Energy deviations will be priced and accounted to the Scheduling Coordinator representing the holder of Existing Rights in accordance with the Section 11.

16.4 Transmission Rights and Curtailment Instructions

16.4.1 Responsibility to Create TRTC Instructions

In accordance with Section 16.2 Each Participating TO and holders of Existing Rights holder of transmission rights under an Existing Contract will work with the ISO-CAISO to develop operational protocols (which shall be based on existing protocols and procedures to the extent possible) which the Transmission Rights and Transmission Curtailment (“TRTC”) Instructions that allow existing contractual rights Existing Contracts to be exercised in accordance with Section 16.2 in a way that:

(i) maintains the existing scheduling and curtailment priorities under the Existing Contract; (ii) is minimally burdensome to the ISO-CAISO (i.e., creates the least impact on the ISO’s CAISO’s preferred operational protocols, rules and procedures); (iii) to the extent possible, imposes no additional financial burden on either the Participating TO or the holder of Existing contract Rights holder (beyond that in the Existing Contract); (iv) consistent with the terms of the Existing Contracts, makes as much transmission capacity not otherwise utilized by the holder of Existing Rights holder of the transmission rights as possible available to the ISO-CAISO for allocation to Market Participants; (v) is minimally burdensome to the Participating TO and the Existing Rights holder of the transmission rights from an operational point of
view; and (vi) does not require the ISO-CAISO to interpret or underwrite the economics of the Existing Contract.  

16.2.3.1 (ii) In accordance with the CAISO Tariff, the parties to Existing Contracts will attempt to jointly develop and agree on any TRTC instructions that will be submitted to the ISO-CAISO.  

16.2.3.1 (iii) The parties to an Existing Contract shall also be responsible to submit to the CAISO any other necessary operating instructions based on their contract interpretations needed by the CAISO to enable the CAISO to perform its duties.

16.4.2 Responsible PTO for Multiple Participating TO Parties to an Existing Contract.

To the extent there is more than one Participating TO providing transmission service under an Existing Contract or there is a set of Existing Contracts which are interdependent from the point of view of submitting instructions to the ISO-CAISO involving more than one Participating TO, the relevant Participating TOs will designate a single Participating TO as the Responsible PTO and will notify the ISO-CAISO accordingly. If no such Responsible PTO is designated by the relevant Participating TOs or the ISO-CAISO is not notified of such designation, the ISO-CAISO shall designate one of them as the Responsible PTO and notify the relevant Participating TOs accordingly. The responsible PTO designated pursuant to this section shall have the same responsibility as the Participating TO under this Section 16.4.

16.4.3 Scheduling Coordinator Responsibilities

The Scheduling Coordinator designated by the parties to an Existing Contract as the responsible entity for submitting ETC Self-Schedules for the relevant Existing Contract shall submit ETC Self-Schedules consistent with the terms and conditions specified in the TRTC, which shall be validated as specified in Section 16.6.

16.4.4 Submission of TRTC Instructions.

16.2.3.1 (i) For each Existing Contract, the party Providing TO providing transmission service (the “Responsible PTO”) under the Existing Contract (or the responsible PTO identified in Section 16.4.2) shall be responsible for the submission of transmission rights/curtailment obligated to submit the TRTC instructions to the ISO-CAISO electronically on behalf of the holders of Existing Rights,
unless the parties to the Existing Contract agree otherwise. For the purposes of this ISO Tariff, such otherwise agreed party will be acting in the role of Responsible PTO. The Participating TO shall notify the CAISO in writing the identity of the responsible party for submission of the TRTC as decided by the parties to the Existing Contract and the term of such agreement between the parties to the Existing Contract. The Participating TO shall undertake all obligations with respect to the submission of the TRTC Instructions to the CAISO and any subsequent obligations that follow with respect to the creation, management and updates to the TRTCs. The CAISO is responsible for implementing only one TRTC for each Existing Contract and only those TRTC Instructions that have been received and accepted by the CAISO. The Participating TO shall submit the TRTC Instructions to the CASIO associated with Existing Contracts or sets of interdependent Existing contracts thirty (30) days prior to the date on which the scheduling or curtailment of the use of the Existing Rights is to change or commence.

16.4.5 TRTC Instructions Content.

16.2.4A.1 The Responsible Participating TO with respect to an Existing Contract or set of interdependent Existing Contracts is required to submit to the ISO, in accordance with the timing requirements of Section 16.2.4A.2 and 16.2.4A.3, the instructions that are necessary to implement the exercise of Existing Rights in accordance with the ISO Tariff. Operating TRTC Instructions will be submitted to the ISO electronically, by the Responsible PTO, utilizing a form provided by the ISO in a format similar to the one set out in the Standard Template – Transmission Rights/Curtailment Instructions. The instructions will include the following information at a minimum and such other information as the ISO CAISO may reasonably require the Participating TO to provide to enable it the CAISO to carry out its functions under the ISO-CAISO Tariff, Operating Procedures and Business Practice Manuals and ISO Protocols (the letters below correspond with the letters of the instructions template in the Standard Template – Transmission Rights/Curtailment Instructions:

(a1) A unique contract reference number for each source and sink combination applicable to the Existing Contract (Existing Contract reference number or CRN that will be assigned by the ISO-CAISO and communicated to the Responsible Participating TO on the completed instruction and that references a single Existing Contract or a set of
interdependent Existing Contracts for each source and sink combination; the provisions of Section 30.4.2 will apply to the validation of scheduled uses of Existing Contract transmission rights);

(b2) Whether the instruction can be exercised independent of the ISO’s CAISO’s day-to-day involvement (“Yes/No”);

(e3) Name of an operational single point of contact for instructions and a 24-hour a day telephone number for the Participating TO Responsible PTO contact for Existing Contract issues or the agreed upon party;

(d4) Name(s) and number(s) of Existing Contract(s) that are represented by the unique CRN;

(e5) Transmission path name(s) and location(s) (described in terms of the Zones in which the point(s) of receipt and point(s) of delivery are located);

(f6) Names of the party(ies) to the Existing Contract(s);

(g7) Scheduling Coordinator Business Associate Identification ("BAID") code— the BAID number of the Scheduling Coordinator who will submit ETC Self-Schedules which make use of the Existing Contract(s) for the party(ies) indicated in (f);

(h8) Type(s) of service, amount of service right in MW, by the holder of the rights holder, by Existing Rights;

(i) Type(s) of service, by rights holder, by Existing Contract type of service (firm, conditional firm, or non-firm), with priorities for firm and conditional firm transmission services indicated in Schedules using Adjustment Bids as described in the SP;

(j) Amount of transmission service, by rights holder, by Existing Contract expressed in MW; For ETC Self-Schedules submitted in the DAM Day-Ahead scheduling purposes, the time of the day preceding the Trading Day at which the Scheduling Coordinator submits ETC Self-Schedules to the ISO—CAISO referencing the Existing
Contract(s) identified in the instructions and the section of the Existing Contract that provides this reference;

For ETC Self-Schedules submitted in the Hour-Ahead HASP, for the HASP and RTM, or real-time scheduling purposes, the number of minutes prior to the start of the Settlement Period of delivery Operating Hour at which the Scheduling Coordinator may submit ETC Self-Schedule adjustments to the ISO-CAISO regarding the Existing Rights under the Existing Contract(s) identified in the TRTC Instructions and the section of the Existing Contract that provides this right for reference;

Whether or not real-time modifications to Schedules associated with Existing Rights are allowed at any time during the Settlement Period Operating Hour and the section of the Existing Contract that provides this right for reference;

Term or Service period(s) of the Existing Contract(s);

Any special procedures which would require the CAISO to implement curtailments to be implemented by the ISO in any manner different than pro rata reduction of the transfer capability of the transmission line that specified in Section 7.4.12. Any such instructions submitted to the ISO-CAISO must be clear, unambiguous, and not require the ISO-CAISO to make any judgments or interpretations as to the meaning, intent, results, or purpose of the curtailment procedures or the Existing Contract and the section of the Existing Contract that provides this right for reference, otherwise, they will not be accepted by the CAISO; and.

Any special procedures relating to curtailments during emergency conditions. Any such instructions submitted to the ISO must be clear, unambiguous, and not require the ISO to make any judgments or interpretations as to the meaning, intent, results, or purpose of the curtailment procedures or the Existing Contract (otherwise, they will not be accepted by the ISO).

16.4.6 Changes and Updates to TRTC Instructions.
16.2.4A.3 Updates or changes to the operating TRTC Instructions must be submitted to the ISO CAISO through a revised set of TRTC Instructions by the Participating TO Responsible PTO, on an as needed or as required basis determined by the parties to the Existing Contracts. The ISO-CAISO will implement the updated or changed TRTC Instructions as soon as practicable but not later than seven (7) days after receiving clear and unambiguous details of the updated or changed Instructions under normal conditions. If the ISO-CAISO finds the TRTC Instructions to be inconsistent with respect to the ISO Protocols or the CAISO Tariff, the ISO-CAISO will notify the Participating TO Responsible PTO within forty-eight (48) hours after receipt of the updated or changed TRTC Instructions indicating the nature of the problem and allowing the Responsible Participating TO to resubmit the TRTC Instructions as if they were new, updated or changed TRTC Instructions. If the ISO-CAISO finds the updated or changed TRTC Instructions to be acceptable, the ISO-CAISO will time-stamp the updated TRTC Instructions as received, confirm such receipt to the Responsible Participating TO, and indicate the time at which the updated instructions take effect if prior to the seven (7) day deadline referred to above. In the event of a System Emergency, the CAISO will implement such submitted changes to the TRTC as soon as practical.

16.4.7 Treatment of TRTC Instructions.

16.4.7.1 TRTC Instructions Can Be Exercised Independently

16.2.4B To the extent that the operating TRTC instructions can be exercised independently of the ISO-CAISO by the parties to the Existing Contract and the results forwarded to the ISOCAISO, the operating TRTC Instructions shall be exercised by the Participating TOs, and the outcomes shall be forwarded to the ISOCAISO. The determination of whether the operating TRTC Instructions can be “exercised independently of the ISO-CAISO” by the parties to the Existing Contract” shall be made using the same procedures described in Section 16.2.3.1.1 16.4.8.

16.4.7.2 TRTC Instructions Cannot Be Exercised Independently

16.2.4C To the extent that the operating TRTC Instructions cannot be exercised independently of the ISO-CAISO and the results forwarded to the ISO-CAISO (because, for example, they require iteration with the ISO’s CAISO’s Bid submission and scheduling process, would unduly interfere with the ISO’s
CAISO’s management of the real-time management of Market, including curtailments, or would unduly interfere with the ability of the holder of rights to exercise its rights), the operating TRTC instructions will be provided to the ISO-CAISO for day-to-day implementation. These TRTC instructions will be provided by the Responsible Participating TO to the ISO-CAISO for implementation unless the parties to the Existing Contracts otherwise agree that the holder of the Existing rights will do so. For these instructions, the Scheduling Coordinators representing the holders of Existing Rights will submit their Schedules to the CAISO for implementation in accordance with the instructions. In this case, the CAISO shall act as the scheduling agent for the Participating TOs with regard to Existing Rights.

16.4.8 CAISO Role in Existing Contracts.

16.2.3.1.1 The CAISO will have no role in interpreting Existing Contracts. The parties to an Existing Contract will, in the first instance, attempt jointly to agree on any operating TRTC instructions that will be submitted to the CAISO. In the event that the parties to the Existing Contract cannot agree upon the operating TRTC instructions submitted by the parties to the Existing Contract, the dispute resolution provisions of the Existing Contract, if applicable, shall be used to resolve the dispute; provided that, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the CAISO shall implement the Participating TO’s operating TRTC instructions. If both parties to an Existing Contract are Participating TOs and the parties cannot agree to the operating TRTC instructions submitted by the parties, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the CAISO shall implement the operating TRTC instructions of the first Participating TO for which the Existing Contract is an Encumbrance. The CAISO shall not be responsible for resolution of any disputes that arise over the accuracy of the TRTC Instructions consistent with its obligations in Section 16.4.5.

16.4.9 Implementation of TRTC Instructions.

16.2.4D The ISO-CAISO shall determine, based on the information provided by the Participating TOs and contract rights holders under Sections 16.2.4B and 16.2.4CTRTC Instructions, the transmission capacities that (i) must be reserved for firm Existing Rights at Scheduling Points, (ii) may be allocated for use as ISO-CAISO transmission service (i.e., new firm uses), (iii) must be reserved by the ISO-CAISO for
conditional firm Existing Rights, and (iv) remain for any non-firm Existing Rights for which a Participating TO has no discretion over whether or not to provide such non-firm service.

**16.2.4E** The ISO-CAISO shall coordinate the scheduling of Existing Rights with the scheduling of ISO-CAISO transmission service, using the ISO’s CAISO’s Day-Ahead Bid submission rules described in Section 30 scheduling rules and protocols. In doing so, the ISO-CAISO shall subtract, from the capacity that is available for the ISO to schedule in the ISO’s Day-Ahead scheduling process, an appropriate amount of transmission capacity reflecting the amount and nature of the Existing Rights. Create an automated day-to-day verification process based on parameters provided by the Participating TO for the Existing Contract to serve as the basis for ETC Self-Schedule validation. The Participating TO will be responsible for: (1) the accuracy of the data files against which the CAISO will validate the ETC Self-Schedule; and (2) providing the data file to the holder of Existing Rights as well as the CAISO.

**16.2.4G** The ISO-CAISO shall recognize that the obligations, terms or conditions of Existing Contracts may not be changed without the voluntary consent of all parties to the contract (unless such contract may be changed pursuant to any applicable dispute resolution provisions in the contract or pursuant to Section 205 or Section 206 of the FPA and the FERC’s Rules and Regulations or as otherwise provided by law).

**16.2.4H** The parties to Existing Contracts shall remain liable for their performance under the Existing Contracts. The ISO-CAISO shall be liable in accordance with the provisions of this ISO-CAISO Tariff for any damage or injury caused by its non-compliance with the operating TRTC Instructions submitted to it pursuant to this Section 16.4.2.

**16.2.4I** Unless specified otherwise, in the event that the dispute resolution mechanisms prescribed in an Existing Contract, including all recourses legally available under the contract, can not, in the first instance, result in a resolution of such a dispute, the ISO’s CAISO’s ADR Procedure will be used to resolve any disputes between the ISO-CAISO and the Participating TO regarding any aspects of the implementation of Section 16.1 and 16.2, including the reasonableness of a Participating TO’s operating TRTC Instructions or any other decision rules which the Participating TO may submit to the ISO-CAISO as part of the operational protocols TRTC Instructions. The transmission holders of Existing Rights—
The holder(s) under the Existing Contract shall have standing to participate in the ISO–CAISO ADR Procedure.

16.5 Treatment of Existing Contracts for Transmission Service

16.2.3.2 The ISO’s scheduling protocols will accommodate Existing Rights, so that the holders of Existing Rights will receive the same priorities (in scheduling, curtailment, assignment and other aspects of transmission system usage) to which they are entitled under their Existing Contracts.

16.2.3.3 In addition, Scheduling deadlines and operational procedures associated with Existing Rights will be honored by the CAISO, provided such information is explicitly included in the TRTC Instructions. The CAISO will accommodate and honor Existing Rights as follows:

(1) For Existing Rights that permit schedule changes over Scheduling Points with other Control Areas, the CAISO will reserve transmission capacity equal to the Existing Rights transmission capacity and make a corresponding adjustment in its determination of ATC. For Existing Rights that permit schedule changes after the Market Close of the Day-Ahead Market, the CAISO will reserve transmission capacity equal to the unscheduled ETC amount of transmission capacity for that Scheduling Point.

(2) For Existing Rights within the CAISO Control Area, the CAISO will only set-aside capacity associated with the Existing Rights to the extent that the Scheduling Coordinator submits a valid ETC Self-Schedule in the Day-Ahead Market.

(3) In the HASP, the CAISO will give valid ETC Self-Schedules priority over other non-ETC Day-Ahead Schedules and HASP Bids. In the event of a reduction in capacity on the transmission path associated with the Existing Right, the CAISO will honor the Existing Rights priority in accordance with this Section 16.

(4) When the Existing Contract permits, the CAISO will allow the holder of Existing Rights to make changes to the scheduled amounts of supply after the submission of HASP ETC Self-Schedules in accordance with the TRTC Instructions established for such changes. The CAISO will, as necessary, redisplay non-ETC resources to accommodate valid ETC Self-Schedule changes in Real-Time.
All contractual provisions that have been communicated to the ISO/CAISO in writing in accordance with this Section 16.2.3.1 by the parties to the Existing Contracts, shall be honored by the ISO/CAISO and the parties to the Existing Contracts and shall be implemented by the CAISO in accordance with the terms and conditions of the relevant Existing Contracts so notified.

16.5.1 System Emergency Exceptions.

4.2.1 The CAISO will honor the terms of Existing Contracts, provided that in a System Emergency and circumstances in which the CAISO considers that a System Emergency is imminent or threatened, holders of Existing Rights must follow CAISO operating orders even if those operating orders directly conflict with the terms of Existing Contracts. For this purpose CAISO operating orders to shed Load shall not be considered as an impairment to public health or safety. This section does not prohibit a Scheduling Coordinator from modifying its Schedule or re-purchasing Energy in the Hour-Ahead HASP/RT Market.

16.6 Valid ETC Self-Schedules.

The CAISO will accept a valid ETC Self-Schedule from a Scheduling Coordinator. That Scheduling Coordinator shall be either the holder of Existing Rights or its designee, the Participating TO, (in the case that no Scheduling Coordinator has been so identified by the parties to the Existing Contract, the Participating TO shall be the Scheduling Coordinator for the holder of the Existing Contract). ETC Self-Schedules submitted by Scheduling Coordinators to the CAISO, which use Existing Rights, must be submitted in accordance with this CAISO Tariff.

16.6.1 Validation of ETC Self-Schedules.

An ETC Self-Schedule is a valid ETC Self-Schedule when the CAISO has determined that the ETC Self-Schedule, submitted to the CAISO pursuant to the requirements for Bids in Sections 30, properly reflects Existing Rights consistent with the TRTC Instructions, is labeled with a unique Existing Contract identifier, and includes balanced sources and sinks, within the ETCs capacity limits.

16.1.2 The ISO will accept valid Schedules from a Responsible Participating TO that is the Scheduling Coordinator for the Existing Contract rights holders, or from Existing Contract rights holders that are Scheduling Coordinators, or that are represented by a Scheduling Coordinator other than the Responsible Participating TO. Schedules submitted by Scheduling Coordinators to the ISO which include the use of
Existing Rights must be submitted in accordance with Section 16.1, Section 16.2, and Section 30.2.7. The ISO may refuse to accept Schedules submitted pursuant to Existing Contracts which do not meet the requirements of the principles, protocols and rules referred to in this Section 16.1 and Section 16.2. The ISO will implement Sections 16.1 and 16.2 with respect to Existing Contracts after the close of the Hour-Ahead Market and in real-time.

16.6.2 Treatment of Invalid ETC Self-Schedules.

16.6.2.1 Inconsistent with the TRTC Instructions.

Except for the reasons listed below in 16.6.2, if the CAISO finds that the ETC Self-Schedule is not consistent with the TRTC Instructions, the CAISO shall find that the ETC Self-Schedule is not valid. If the CAISO finds the ETC Self-Schedule to be invalid, the CAISO shall notify the Scheduling Coordinator and convert the ETC Self-Schedule to an ordinary Self-Schedule and treat the ETC Self-Schedule as an ordinary Self-Schedule as such for terms of scheduling priority and settlements.

16.6.2.2 Unbalanced ETC Self-Schedules.

If the ETC Self-Schedule is not balanced, the ETC Self-Schedule will not be a Valid ETC-Self-Schedule and the CAISO will: (i) remove any scheduling priority for the entire ETC Self-Schedule; (ii) apply the ETC settlement treatment pursuant to Sections 11.2.1.5 and 11.5.7.1 to the valid balanced portions only; and (iii) assess any charges, and make any payments consistent with the treatment of ordinary Self-Schedules for the unbalanced portions.

16.6.2.3 Exceeds Capacity Limits in Existing Contracts as Reflected in TRTC Instructions.

If the ETC Self-Schedule exceeds the capacity limits in Existing Contracts as reflected in TRTC Instructions, the ETC Self-Schedule will not be a valid ETC-Self-Schedule and the CAISO will: (i) remove any scheduling priority for the entire ETC Self-Schedule; (ii) apply the ETC settlement treatment pursuant to Sections 11.2.1.5 and 11.5.7.1 to the valid balance portions within the capacity limits of the Existing Contract as reflected in the TRTC Instructions; and (iii) assess any charges, and make any payments consistent with the treatment of ordinary Self-Schedules for the portions in excess of the capacity limits of the Existing Contract as reflected in the TRTC Instructions.
16.6.3 Treatment of Valid ETC Self-Schedules

The resulting Valid ETC Schedules shall have the following Settlement treatment:

(1) The CAISO will apply the ETC Settlement treatment in Sections 11.2.1.5 and 11.5.7.1.

(2) The CAISO shall base the Marginal Cost of Losses on LMP differentials at the Existing Contract source(s) and sink(s) identified in the valid ETC Self-Schedule.

(3) Other than any existing rights to such revenues under the Existing Contracts, the holders of Existing Rights will not be entitled to an allocation of revenues from the CAISO, including Access Charge revenue from Wheeling Out or Wheeling Through services on the ISO Controlled Grid, related to those Existing Rights.

(4) Parties with Existing Rights shall continue to pay for Transmission Losses or Ancillary Services requirements in accordance with such Existing Contracts as they may be modified or changed in accordance with the terms of the Existing Contract. Likewise, the Participating TOs shall continue to provide Transmission Losses and any other Ancillary Services to the holder of the rights under an Existing Contract as may be required by the Existing Contracts. To the extent that Transmission Losses or Ancillary Service requirements associated with Existing Rights are not the same as those under the ISO’s rules and protocols, the ISO will not charge or credit the Participating TO for any cost differences between the two, but will provide the parties to the Existing Contracts with details of its Transmission Losses and Ancillary Services calculations to enable them. The CAISO will charge Scheduling Coordinators submitting the ETC Self-Schedule for Transmission Losses and Ancillary Services in accordance with the CAISO Tariff and any shortfall or surplus between the CAISO charges and the Existing Rights shall be settled bilaterally between the Existing Contract parties or through the relevant TO Tariff. To enable holders of Existing Rights to determine whether the ISO’s CAISO’s calculations result in any associated shortfall or surplus and to enable the parties to the Existing Contracts to settle the differences bilaterally or through the relevant TO Tariff, the CAISO shall calculate and provide the Scheduling Coordinator’s Settlements the amounts paid for the MCL for the amounts MWh submitted with a valid ETC Self-Schedule. Each Participating TO will be responsible for recovering any deficits or crediting any surpluses associated with differences in assignment of Transmission Losses.
and Transmission Loss Requirements and/or Ancillary Services requirements, through its bilateral arrangements or its Transmission Owner’s Tariff.

16.7 [Not Used]

16.8 [Not Used]

16.2.5 The Day-Ahead Process.

16.2.5.1 Validation.

The ISO will coordinate the scheduling of the use of Existing Rights with new firm uses in the Day-Ahead process. The ISO will validate the Schedules submitted by Scheduling Coordinators on behalf of the rights holders for conformity with the instructions previously provided by the Responsible PTO. Invalid Schedules will be rejected and the ISO will immediately communicate the results of each Scheduling Coordinator’s validation to that Scheduling Coordinator via WEnet.

16.2.5.2 Scheduling Deadlines.

Those Existing Contract rights holders who must schedule the use of their rights by the deadline for the submission of Schedules in the Day-Ahead Market must do so. After this time, the ISO will release these unused rights as available for new firm uses (not subject to recall).

16.2.6–16.9 The Hour-Ahead Process. HASP.

16.2.6.1 Validation.

The ISO will coordinate the scheduling of the use of Existing Rights with new firm uses, in the Hour-Ahead process. The ISO will validate the submitted Schedules for conformity with the instructions provided by the Responsible PTOs. Invalid schedules will be rejected and the ISO will immediately communicate the results of each Scheduling Coordinator’s validation to that Scheduling Coordinator via WEnet.

16.2.6.2 16.9.1 Scheduling Deadlines.
Those rights holders of Existing Rights who have Existing Rights as reflected in the TRTC Instructions that allow scheduling after the close of the Day-Ahead Market must may schedule submit ETC Self- Schedules for the use of their rights by the deadline for the submission of Schedules Market Close for in the HASP. Hour-Ahead Market must do so. After this time, the ISO will release these unused rights as available for new firm uses (not subject to recall).

16.2.7.10 The ISO’s CAISO’s Real-Time Process.

Consistent with this Section 16.2.6.4, the ISO-CAISO will honor those scheduling flexibilities that may be exercised by holders of Existing Rights through their respective Scheduling Coordinators during the ISO’s CAISO’s real-Time processes to the extent that such flexibilities do not interfere with or jeopardize the safe and reliable operation of the CAISO Controlled Grid or Control Area operations. The real-time processes described in Sections 16.2.7.1 and 16.2.7.2 will occur during the three hours following the ISO’s receipt of Preferred Hour-Ahead Schedules (that is, from two hours ahead of the start of the Settlement Period through the end of such Settlement Period).

16.2.7.11 Inter-Control Area Changes to Schedules-Bids that Rely on Existing Rights.

Changes to ETC Self-Schedules that occur during the ISO-CAISO’s real-Time Market processes that involve changes to ISO-CAISO Control Area imports or exports with other Control Areas (that is, inter-Control Area changes to ETC Self-Schedules) will be allowed and will be recorded by the ISO-CAISO based upon notification received from the Scheduling Coordinator representing the holder of the Existing Rights. Scheduling Coordinators representing the holder of the Existing Right must notify The ISO-CAISO of any such changes to external import/export in submitted ETC Self-Schedules. Scheduling Coordinators representing the holder of the Existing Right must notify the ISO-CAISO will receive notification of real-Time Market changes to external import/export schedules in submitted ETC Self-Schedules, by telephone, from the Scheduling Coordinator representing the holder of the Existing Rights. The timing and content of any such notification must be consistent with the TRTC instructions previously submitted to the ISO-CAISO by the Responsible PTO. The ISO-CAISO will manually adjust or update the HASP Schedule for the Scheduling Coordinator’s schedule to conform with the other Control Area’s net ETC Self-schedule Schedule in real-Time, and the
notifying Scheduling Coordinator will be responsible for and manage any resulting Energy imbalance. These Imbalance Energy deviations will be priced and accounted to the Scheduling Coordinator representing the holder of Existing Rights in accordance with the Real-Time LMP Section 14.

16.2.7.216.12 Intra-Control Area Changes to Schedules that Rely on Existing Rights.

Changes to ETC Self-Schedules that occur during the ISO’s CAISO’s real-time processes that do not involve changes to CAISO Control Area imports or exports with other Control Areas (that is, intra-Control Area changes to Schedules) will be allowed and will give rise to Imbalance Energy deviations. These Imbalance Energy deviations will be priced and accounted to the Scheduling Coordinator representing the holder of Existing Rights in accordance with the Real-Time LMP.
Transmission Ownership Rights represent transmission capacity on facilities that are located within the CAISO Control Area that are either wholly or partially owned by an entity that is not a Participating TO. In implementing the Day-Ahead Market, the HASP, the Real-Time Market and CRRs, the CAISO will proceed as follows:

(1) For TOR capacity on Scheduling Points that are modeled radially in the FNM, the CAISO will reduce the available transmission capacity of the Scheduling Point by the amount of the TOR.

(2) For TOR capacity that is internal to the CAISO Control Area and modeled as part of the looped network, the CAISO will not set aside capacity on the facility, but will instead provide highest priority source-to-sink scheduling rights to the TOR holder. The source and sink points for such scheduling rights will be determined by the TOR holder and the CAISO, consistent with the TOR holder’s rights, in a manner that ensures the ability of the TOR holder to fully utilize its rights.

(3) TORs will not be entitled to CRR Auction revenue, the balance of any CRR accounts or the Wheeling Access Charge, but will be settled in accordance with Sections 11.2.1.5 and 11.5.7 for transactions on their TOR systems.
19 DEMAND FORECASTS.

19.1 Scheduling Coordinator Demand Forecast Responsibilities.

19.1.1 Data to be Submitted to the ISOCAISEO by Scheduling Coordinators. At the time specified in Section 19.1.3, each Scheduling Coordinator shall submit to the ISOCAISEO its Weekly Peak Demand Forecast by Congestion Zone UDC service territory reflecting (1) the Weekly Peak Demand Forecasts of the UDCs that it proposes to Schedule and (2) any other non-UDC Weekly Peak Demand that it proposes to Schedule. All Weekly Peak Demand Forecasts submitted shall include Demand Forecasts for the following 52 weeks.

19.1.2 Format of Demand Forecasts. Demand Forecasts must be submitted to the ISOCAISEO electronically in the format set forth in Section 19.1.5.

19.1.3 Timing of Submission of Demand Forecasts. The Demand Forecasts described in this Section shall be submitted by Scheduling Coordinators to the ISOCAISEO on a monthly basis by noon of the 18th working day of the month.

19.1.4 Forecast Standards.

19.1.4.1 Avoiding Duplication.

Scheduling Coordinators submitting Demand Forecasts to the ISOCAISEO shall ensure, to the best of their ability, that any Demand they are forecasting is not included in another Scheduling Coordinator’s Demand Forecasts. To accomplish this, each Scheduling Coordinator’s Demand Forecasts should only reflect those End-Use Customers who they actually have under contract and who have notified their UDC or previous Scheduling Coordinator of their intention to change to another Scheduling Coordinator, and which are actually scheduled to convert.

19.1.4.2 Required Performance.

Scheduling Coordinators submitting its Demand Forecasts to the ISOCAISEO shall take all necessary actions to provide Demand Forecasts that reflect the best judgment of the submitting Scheduling Coordinator to help avoid potential System Reliability concerns and to enable the ISOCAISEO
to administer a meaningful market for Energy and Ancillary Services. From time to time the ISOCAISO may publish information on the accuracy of Scheduling Coordinator Demand Forecasts.

19.1.4.3 Incomplete or Unsuitable Demand Forecasts.

If the Demand Forecasts supplied by a Scheduling Coordinator to the ISOCAISO are, in the ISOCAISO’s opinion, incomplete or otherwise unsuitable for use, or a particular Demand Forecast has not been supplied by a Scheduling Coordinator to the ISOCAISO as required under this Section, the ISOCAISO will substitute the last valid Demand Forecast received from the Scheduling Coordinator in replacement for any incomplete, unsuitable or not supplied Demand Forecasts.

19.1.5 Scheduling Coordinator Demand Forecast Format. This template is used to post 52 Weeks Demand Forecast.

19.1.5.1 Scheduling Coordinator’s ID code.

19.1.5.2 Forecast Weekly Maximum Generation capacity for each of the next 52 weeks.

19.1.5.3 Forecast Weekly Maximum Demand for each of the next 52 weeks.

19.2 UDC Responsibilities.

19.2.1 Data to be Submitted to the ISOCAISO by UDCs.

At the time specified in Section 19.2.3, each UDC shall submit to the ISOCAISO its Weekly Peak Demand Forecasts by Congestion Zone UDC service area reflecting the Weekly Peak Demand Forecast for Load expected to be served by facilities under the control of the UDC. All Weekly Peak Demand Forecasts submitted shall include Demand Forecasts for the following 52 weeks.

19.2.2 Format of Demand Forecasts.

Demand Forecasts must be submitted to the ISOCAISO electronically in the format set forth in Section 19.2.5.

19.2.3 Timing of Submission of Demand Forecasts.
The Demand Forecasts described in this Section shall be submitted by UDC to the ISOCAISO on a monthly basis by noon of the twelfth working day of the month.

19.2.4 Forecast Standards.

19.2.4.1 Avoiding Duplication.

Each UDC submitting Demand Forecasts to the ISOCAISO and its Scheduling Coordinator shall ensure, to the best of its ability, that any Demand Forecasts that it is submitting to the ISOCAISO and its Scheduling Coordinator are not duplicated in another Scheduling Coordinator’s Demand Forecasts.

19.2.4.2 Required Performance.

Each UDC submitting its Demand Forecasts to the ISOCAISO and its Scheduling Coordinator shall take all necessary actions to provide Demand Forecasts that reflect the best judgment of the submitting UDC to help avoid potential System Reliability concerns and to enable the ISOCAISO to administer a meaningful market for Energy and Ancillary Services. The ISOCAISO may publish information on the accuracy of UDC Demand Forecasts from time to time.

19.2.5 UDC Demand Forecast Format. This template is for use by the Scheduling Coordinators to forecast their direct-access loads for each UDC. The forecast must be for seven (7) future days including the current Day-Ahead Market.

19.2.5.1 Scheduling Coordinator’s ID code.

19.2.5.2 Trading Day of current Day-Ahead Market (month/day/year).

19.2.5.3 UDC’s ID code.

19.2.5.4 Hourly Demand Forecast for the 168 hours beginning with the first hour of the current Day-Ahead Market.

19.3 ISOCAISO Responsibilities.

19.3.1 [NOT USED]Advisory-Control-Area-Demand-Forecasts.
The ISO will publish on the ISO Website and supply to the Scheduling Coordinators advisory Control Area Demand Forecasts comprised of Hourly Demand Forecasts for each Congestion Zone for each Settlement Period of the relevant Trading Day. The ISO will publish this information in accordance with the timing requirements set forth in the SP.

19.3.2 ISO CAISO Demand Forecasts.

The ISO CAISO shall publish monthly on the ISO CAISO Website on the following two (2) Demand Forecasts for the next 52 weeks.

19.3.2.1 Consolidated Scheduling Coordinator Forecast. This forecast will be developed by adding together the Weekly Peak Demand Forecasts of the individual Scheduling Coordinators.

19.3.2.2 Independent ISO CAISO Forecast. This forecast will be developed by the ISO CAISO.

The ISO CAISO may, at its discretion, publish on the ISO CAISO Website additional Demand Forecasts for two or more years following the next year.

19.3.3 System Adequacy Reports.

The ISO CAISO will publish the following reports comparing the projected aggregate Generation capacity to the peak forecast Demands, as calculated in accordance with this Section.

19.3.3.1 Annual Reports. On an annual basis and within eight weeks after receiving the annual or updated long-range planned Outage schedules from all Participating Generators, the ISO CAISO shall publish on the ISO CAISO Website a report comparing the aggregated weekly peak Generation capacity to the weekly peak forecast Demand for the next 52 weeks;

19.3.3.2 Quarterly Reports. On a quarterly basis, the ISO CAISO shall publish on the ISO CAISO Website a report comparing the aggregated weekly peak Generation capacity to the weekly peak forecast Demand for the next 3 months; and

19.3.3.3 Monthly Reports. On a monthly basis, the ISO CAISO shall publish on the ISO CAISO Website a report comparing the aggregated weekly peak Generation capacity to the weekly peak forecast Demand for the next month.
19.3.3.4 The ISOCAISO shall, on the basis of the information supplied by Participating Generators under Section 4.6.1.4.6 and other information available to the ISOCAISO, prepare and publish on the CAISO Website forecast aggregate available Generation capacity and forecast Demand on an annual, quarterly and monthly basis. In publishing these forecasts, the ISOCASIO shall identify any expected Congestion conditions caused by planned Outages of Participating Generators.
20 CONFIDENTIALITY.

20.1 ISOCAISO.

The ISOCAISO shall maintain the confidentiality of all of the documents, data and information provided to it by any Market Participant that are treated as confidential or commercially sensitive under Section 20.2; provided, however, that the ISOCAISO need not keep confidential: (1) information that is explicitly subject to public data exchange through WEnet pursuant to Section 6 of this ISOCAISO Tariff; (2) information that the ISOCAISO or the Market Participant providing the information is required to disclose pursuant to this ISOCAISO Tariff, or applicable regulatory requirements (provided that the ISOCAISO shall comply with any applicable limits on such disclosure); or (3) information that becomes available to the public on a non-confidential basis (other than as a result of the ISOCAISO’s breach of this ISOCAISO Tariff).

20.2 Confidential Information.

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

(a) individual bBids for Supplemental Energy;

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

(c) individual bids for Ancillary Services;

(b) CRR bids and other CRR Allocation nomination information;

(d) transactions between Scheduling Coordinators, including Inter-SC Trades;

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

20.3 Other Parties.
No Market Participant shall have the right hereunder to receive from the ISOCAISO or to review any documents, data or other information of another Market Participant to the extent such documents, data or information is to be treated as in accordance with Section 20.2; provided, however, a Market Participant may receive and review any composite documents, data, and other information that may be developed based upon such confidential documents, data, or information, if the composite document does not disclose such confidential data or information relating to an individual Market Participant and provided, however, that the ISOCAISO may disclose information as provided for in its bylaws.

20.4 Disclosure.

Notwithstanding anything in this Section 20 to the contrary,

(a) The ISOCAISO: (i) shall publish individual bids for Supplemental Energy, individual bids for Ancillary Services, and individual Adjustment Bids, provided that such data are published no sooner than six (6) months after the Trading Day with respect to which the bid or Adjustment Bid was submitted and in a manner that does not reveal the specific resource or the name of the Scheduling Coordinator submitting the bid or Adjustment Bid, but that allows the bidding behavior of individual, unidentified resources and Scheduling Coordinators to be tracked over time; and (ii) may publish data sets analyzed in any public report issued by the ISOCAISO or by the Market Surveillance Committee, provided that such data sets shall be published no sooner than six (6) months after the latest Trading Day to which data in the data set apply, and in a manner that does not reveal any specific resource or the name of any Scheduling Coordinator submitting bids or Adjustment Bids included in such data sets.

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

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

(i) If the FERC, or its staff, during the course of an investigation or otherwise, requests information that is confidential or commercially sensitive. In providing the information to FERC or its staff, the ISOCAISO shall take action consistent with 18 C.F.R. §§ 1b.20 and 388.112, and request that the information be treated as confidential and non-public by the FERC and its staff and that the information be withheld from public disclosure. The ISOCAISO shall provide the requested information to the FERC or its staff within the time provided for in the request for information. The ISOCAISO shall notify an affected Market Participant within a reasonable time after the ISOCAISO is notified by FERC or its staff that a request for disclosure of, or decision to disclose, the confidential or commercially sensitive information has been received, at which time the ISOCAISO and the affected Market Participant may respond before such information would be made public; or

(ii) In order to maintain reliable operation of the ISOCAISO Control Area, the ISOCAISO may share critical operating information, system models, and planning data with other WECC Reliability Coordinators, who have executed the Western Electricity Coordinating Council Confidentiality Agreement for Electric System Data, or are subject to similar confidentiality requirements; or

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

20.5 Confidentiality.

The ISOCAISO shall implement and maintain a system of communications with Scheduling Coordinators that includes the strict use of passwords for access to data to ensure compliance with Section 20. Access within the ISOCAISO to such data on ISOCAISO’s communications systems, including databases and backup files, shall be strictly limited to authorized ISOCAISO personnel through the use of passwords and other appropriate means.
21 SCHEDULE VALIDATION TOLERANCES [NOT USED]

21.1 Temporary Simplification of Schedule Validation Tolerances.

Notwithstanding any other provision in the ISO Tariff, including the ISO Protocols, a Schedule shall be treated as a Balanced Schedule when aggregate Generation, adjusted for Transmission Losses, is within 20 MW of aggregate Demand, or such lower amount, greater than 1 MW, as may be established from time to time by the ISO. The ISO may establish the Schedule validation tolerance level at any time, between a range from 1 MW to 20 MW, by giving seven days’ notice published on the ISO’s “Home Page,” at http://www.ISO.com or such other Internet address as the ISO may publish from time to time.

21.2 Application.

Notwithstanding any other provision in this Tariff, including the ISO Protocols, the temporary simplification measure specified in this Section 21 shall have effect until discontinued by a Notice of Full-Scale Operations issued by the Chief Executive Officer of the ISO.

21.3 Notices of Full-Scale Operations.

21.3.1 When the Chief Executive Officer of the ISO determines that the ISO is capable of implementing this ISO Tariff, including the ISO Protocols, without modification in accordance with a temporary simplification measure specified in this Section 21, he shall issue a notice (“Notice of Full-Scale Operations”) and shall specify the relevant temporary simplification measure and the date on which it will permanently cease to apply, which date shall be not less than seven (7) days after the Notice of Full-Scale Operations is issued.

21.3.2 A Notice of Full-Scale Operations shall be issued when it is posted on the ISO Internet "Home Page," at http://www.caiso.com or such other Internet address as the ISO may publish from time to time.
22 MISCELLANEOUS.

22.1 Audits.

22.1.1 Materials Subject to Audit.

The ISOCAISO’s financial books, cost statements, accounting records and all documentation pertaining to its operation as a state chartered independent institution which controls the operation of the ISOCAISO Controlled Grid to ensure open, non-discriminatory transmission access to all Market Participants and promotes the efficient use and reliable operation of the ISOCAISO Controlled Grid in accordance with this ISOCAISO Tariff, are subject to audit in the manner prescribed below:

22.1.2 ISOCAISO Audit Committee.

The ISOCAISO Governing Board shall have overall audit responsibility for the ISOCAISO. The ISOCAISO Audit Committee shall make recommendations to the ISOCAISO Governing Board in relation to the approval, initiation and scheduling of the following audits:

22.1.2.1 Certified Financial Statement Audit.

Each year, an audit by an external independent certified public accounting firm shall be performed. This audit will be conducted in accordance with generally accepted auditing standards to verify that the ISOCAISO’s financial statements are in compliance with generally accepted accounting principles and fairly present, in all material respects, the financial position, results of operation and cash flows for the audit period. The audit report will be addressed to the ISOCAISO Governing Board, copies will be provided to the ISOCAISO Audit Committee, and, upon request, to Market Participants.

22.1.2.2 Operations Audit.

Each year, an independent accounting firm shall review the ISOCAISO management's compliance with its operations policies and procedures. The ISOCAISO Audit Committee will appoint an independent firm to do this audit. This audit may also include material issues raised by Market Participants and approved by the ISOCAISO Audit Committee for inclusion in the audit scope. The audit report will be addressed to the ISOCAISO Governing Board, copies provided to the ISOCAISO Audit Committee, and upon request, to
22.1.2.3 Code of Conduct Audits.

On a periodic basis, but not less than once a year, an independent accounting firm shall conduct a management review of governors, officers, employees, substantially full-time consultants, or contractors of the ISO CAISO for compliance with the ISO CAISO Code of Conduct to ensure adherence to the highest standards of lawful and ethical conduct in their activities. The audit report shall be addressed to the ISO CAISO Audit Committee with copies provided to the ISO CAISO Governing Board and, upon request, to Market Participants.

22.1.2.4 Interim Audits.

At such other intervals agreed upon by a majority of the ISO CAISO Audit Committee members, audits may be undertaken for specific issues and concerns of Market Participants that the ISO CAISO Audit Committee believes, at its sole discretion, to be of significant and critical magnitude to the ISO CAISO. Such audits will be conducted by an independent accounting firm. The costs of such an audit will be borne by the requesting Market Participant(s), unless the ISO CAISO Audit Committee determines otherwise. Interim audits will be conducted during normal business hours, after reasonable notice has been given to the ISO CAISO, and in accordance with the guidelines to be established by the ISO CAISO Audit Committee.

22.1.3 Audit Results.

Exceptions identified as a result of an audit will be reviewed with the ISO CAISO Audit Committee. The results of the audits and actions to be taken by the ISO CAISO as a result of the audit shall be mailed to Market Participants upon request.

22.1.4 Availability of Records.

The ISO CAISO will provide full and complete access to all financial books, cost statements, accounting records, and all documentation pertaining to the requirements of the specific audits being performed. Records relating to audits will be retained until the records retention requirements of the ISO CAISO are satisfied or until the audit issues are fully resolved, whichever is the later. The right of access to records
does not require the creation of new records, reports, studies, or evaluations not already available.

**22.1.5 Confidentiality of Information.**

All proprietary information obtained through any audits will remain strictly confidential. All auditors shall sign a confidentiality agreement prior to being accepted as auditors by the ISOCAISO Audit Committee.

**22.1.6 Payments.**

Any payments agreed to between Market Participants and the ISOCAISO as a result of an audit, or directed by FERC, or disclosed by the ISOCAISO in reviews of its own books and records shall include interest computed at the rate calculated in accordance with the methodology specified for interest on refunds in FERC’s regulations at 18 C.F.R § 35.19(a)(2)(iii) (as amended from time to time) from the due date to the date such adjustments are due.

**22.2 Assignment.**

Obligations and liabilities under this ISOCAISO Tariff and any Scheduling Coordinator Agreement or other agreements giving contractual effect to this ISOCAISO Tariff shall be binding on the successors and assigns of the parties to such agreements. No assignment of any Scheduling Coordinator Agreement or other agreements giving contractual effect to this ISOCAISO Tariff shall relieve the original party from its obligations or liabilities to the ISOCAISO under this ISOCAISO Tariff or any such agreement arising or accruing due prior to the date of assignment.

**22.3 Term and Termination.**

**22.3.1** This ISOCAISO Tariff, shall become effective on the date it is permitted to become effective by the FERC.

**22.3.2** This ISOCAISO Tariff shall terminate upon approval of termination by the ISOCAISO Governing Board in accordance with the bylaws of the ISOCAISO and receipt of any necessary regulatory approval from FERC.

**22.4 Notice.**

**22.4.1 Effectiveness.**
Any notice, demand, or request in accordance with this ISOCAISO Tariff, unless otherwise provided in this ISOCAISO Tariff or in any ISO Protocol, shall be in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service.

22.4.2 Addresses.

Notices to the ISOCAISO shall be sent to such address as shall be notified by the ISOCAISO to Market Participants from time to time. Notices issued by the ISOCAISO to any Scheduling Coordinator shall be delivered to the address of the Scheduling Coordinator included in the Scheduling Coordinator Application Form. Notices to any Market Participant other than a Scheduling Coordinator shall be delivered by the ISOCAISO to the address given to it by the Market Participant. The ISOCAISO and any Market Participant may at any time change their address for notice by notifying the other party in writing.

22.4.3 Notice of Changes in Operating Rules and Protocols, Procedure and Business Practice Manuals.

The ISOCAISO shall give all Market Participants notice of at least thirty (30) days of any changes or proposed changes in its operating rules, procedures and protocols, Operating Procedures or Business Practice Manuals, unless: (1) a different notice period is specified by state or Federal law or (2) the change is reasonably required to address an emergency affecting the ISOCAISO Controlled Grid or its operations, in which case the ISOCAISO shall give Market Participants as much notice as is reasonably practicable. Any notices issued under this provision shall be delivered in accordance with the procedures set out in Section 22.4 of this ISOCAISO Tariff and, in the case of the ISO Protocols, Operating Procedures and Business Practice Manuals, Section 22.11 of this ISOCAISO Tariff.

22.5 Waiver.

Any waiver at any time by the ISOCAISO or any Market Participant of its rights with respect to any default under this ISOCAISO Tariff, or with respect to any other matter arising in connection with this ISOCAISO Tariff, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter.
arising in connection with this ISOCAI SO Tariff. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

22.6 Staffing and Training To Meet Obligations.

The ISOCAI SO shall engage sufficient staff to perform its obligations under this ISOCAI SO Tariff in a satisfactory manner consistent with Good Utility Practice. The ISOCAI SO shall make its own arrangements for the engagement of all staff and labor necessary to perform its obligations hereunder and for their payment. The ISOCAI SO shall employ (or cause to be employed) only persons who are appropriately qualified, skilled and experienced in their respective trades or occupations. ISOCAI SO employees and contractors shall abide by the ISOCAI SO Code of Conduct for employees contained in the ISOCAI SO bylaws and approved by FERC.

22.7 Accounts and Reports.

The ISOCAI SO shall notify Market Participants of any significant change in the accounting treatment or methodology of any costs or any change in the accounting procedures, which is expected to result in a significant cost increase to any Market Participant. Such notice shall be given at the earliest possible time, but no later than, sixty (60) days before implementation of such change.

22.8 Applicable Law and Forum.

This ISOCAI SO Tariff shall be governed by and construed in accordance with the laws of the State of California, except its conflict of laws provisions. Market Participants irrevocably consent that any legal action or proceeding arising under or relating to this ISOCAI SO Tariff to which the ISOCAI SO ADR Procedures do not apply, shall be brought in any court of the State of California or any federal court of the United States of America located in the State of California. Market Participants irrevocably waive any objection that they may have now or in the future to said courts in the State of California as the proper and exclusive forum for any legal action or proceeding arising under or related to this ISOCAI SO Tariff.

22.9 Consistency with Federal Laws and Regulations.

(a) Nothing in the CAISO Tariff shall compel any person or federal entity to: (1) violate federal statutes or regulations; or (2) in the case of a federal agency, to exceed its statutory authority, as defined
by any applicable federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this CAISO Tariff is inconsistent with any obligation imposed on any person or federal entity by federal law or regulation to that extent, it shall be inapplicable to that person or federal entity. No person or federal entity shall incur any liability by failing to comply with a CAISO Tariff provision that is inapplicable to it by reason of being inconsistent with any federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or federal entity shall use its best efforts to comply with the CAISO Tariff to the extent that applicable federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

(b) If any provision of this CAISO Tariff requiring any person or federal entity to give an indemnity or impose a sanction on any person is unenforceable against a federal entity, the ISOCAISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are necessary to give effect to any provisions of this CAISO Tariff that are not enforceable against the federal entity.

(c) To the extent that the ISOCAISO suffers any loss as a result of being unable to enforce any indemnity as a result of such enforcement being in violation of federal laws or regulations to which it is entitled under the CAISO Tariff under this Section or otherwise, it shall be entitled to recover such loss through the Grid Management Charge.

22.10 ISOCAISO Grid Operations Committee: Changes To ISO Protocols.

22.10.1 ISO Grid Operations Committee.

The ISOCAISO Grid Operations Committee shall coordinate activities relating to the ISOCAISO Controlled Grid and shall consider suggestions for changes to the ISO-ProtoCAISO Operating Procedures, in accordance with the procedures set out in Article IV, Section 4 of the ISOCAISO’s bylaws.

22.11 Operating Procedures and Business Practice Manuals Development and
Amendment Process.

The CAISO shall prepare, maintain, promulgate and update the Operating Procedures and Business Practice Manuals. The Operating Procedures and Business Practice Manuals shall be consistent with the CAISO Tariff, and any NERC or WECC operating policies, guidelines and standards, and shall be available on the CAISO’s website. The CAISO Governing Board shall establish a stakeholder process in order to ensure that all affected parties have an opportunity to comment on any Business Practice Manual. Under that process, the CAISO and stakeholders shall consider whether any amendments to the CAISO Tariff are necessary in order to ensure the consistency of the CAISO Tariff and the Business Practice Manuals. The CAISO Governing Board may direct the CAISO to file for acceptance at the FERC of any necessary amendment to the CAISO Tariff to ensure that the Business Practice Manuals are supported by adequate authority under the CAISO Tariff.

ISO Protocol Amendment Process.

The ISO Governing Board shall establish an ISO Protocol amendment process in order to ensure that all affected parties have an opportunity to participate. Under that process, the ISO shall file for acceptance at the FERC any amendment to an ISO Protocol that is on file with the FERC.

22.12 [Not Used]

22.13 Scheduling Responsibilities and Obligations.

Nothing in this ISOCAISO Tariff is intended to permit or require the violation of Federal or California law concerning hydro-generation and Dispatch, including but not limited to fish release requirements, minimum and maximum dam reservoir levels for flood control purposes, and in-stream flow levels. In carrying out its functions, the ISOCAISO will comply with and will have the necessary authority to give instructions to Participating TOs and Market Participants to enable it to comply with requirements of environmental legislation and environmental agencies having authority over the ISOCAISO in relation to Environmental Dispatch and will expect that submitted Schedules will support compliance with the requirements of environmental legislation and environmental agencies having authority over Generators in relation to Environmental Dispatch. In contracting for Ancillary Services and Imbalance Energy the ISOCAISO will not act as principal but as agent for and on behalf of the relevant Scheduling
Coordinators.
ARTICLE II – TRANSMISSION SERVICE

23 CATEGORIES OF TRANSMISSION CAPACITY.

References to new firm uses shall mean any use of ISOCAISO transmission service, except for uses associated with Existing Rights or TORs. Prior to the start of the Day-Ahead scheduling process for each Inter-Zonal Control Area Interface, the ISOCAISO will allocate the forecasted total transfer capability of the Interface to four categories. This allocation will represent the ISOCAISO’s best estimates at the time, and is not intended to affect any rights provided under Existing Contracts or TORs, except as provided in Section 16.2.6. The ISOCAISO’s forecast of total transfer capability for each Inter-Zonal Control Area Interface will depend on prevailing conditions for the relevant Trading Day, including, but not limited to, the effects of parallel path (unscheduled) flows and/or other limiting operational conditions. This information will be posted on WEnet-OASIS by the ISO in accordance with Appendix Y of this CAISO Tariff. In accordance with Section 16.2.4D of the ISO Tariff, the four categories are as follows:

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

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

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

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

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

24.1 Determination of Need.

A Participating TO or any other Market Participant may propose a transmission system addition or upgrade. The ISOCAISO will determine that a transmission addition or upgrade is needed where it will promote economic efficiency or maintain System Reliability as set forth below.

24.1.1 Economically Driven Projects.

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

24.1.1.1(1) If the Participating TO or any party questions the economic need for the project (except where the Project Sponsor commits to pay the full cost of construction) the proposal will be submitted to the ISO ADR Procedures for resolution.

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

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

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

24.1.1.3.2(b) If neither any Market Participant nor the ISOCAISO disputes the Project Sponsor’s showing, then the proposal is determined to be needed.

24.1.1.3.3(c) If any Market Participant or the ISOCAISO disputes the Project Sponsor’s showing, the disputing Market Participant, the ISOCAISO, or the Project Sponsor may submit to resolution through the ISOCAISO ADR Procedure the issue of whether the transmission addition or upgrade is needed on the ground that its economic benefits exceed its costs. If a Market Participant fails to raise through the ISOCAISO ADR Procedure a dispute as to whether a proposed transmission addition or upgrade is needed, then the Market Participant shall be deemed to have waived its right to raise such dispute at a later date. The determination under the ISOCAISO ADR Procedure as to whether the transmission addition or upgrade is needed, including any determination by FERC or on appeal of a FERC determination in accordance with that process, shall be final.

24.1.2 Reliability Driven Projects.

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

24.2 Transmission Planning and Coordination.

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

24.2.1 Transmission Expansion Plan

24.2.1.1 Responsibility of the Participating TO

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

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

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

24.2.1.2 Review of Transmission Expansion Plans by the CAISO.

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

24.2.2 Regional Planning Process.

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

24.3 Studies to Determine Facilities to be Constructed.
Where a Participating TO is obligated to construct or expand facilities in accordance with this ISO CAISO Tariff or where the ISO CAISO or any Market Participant requests that a Facility Study be carried out, the Participating TO (in coordination with the ISO CAISO or the relevant Market Participants as the case may require), shall perform the necessary study or studies to determine the appropriate facilities to be constructed in accordance with the terms set forth in the TO Tariff. The scope of and assumptions for any studies requested by a Project Sponsor of a transmission addition or upgrade on economic grounds must be acceptable to the Project Sponsors and the ISO CAISO. Any dispute relating to a Facility Study Agreement (including any dispute over the scope of the study or its assumptions) shall be resolved through the ISO CAISO ADR Procedures.

24.4 Operational Review.

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

24.5 State and Local Approval and Property Rights.

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

24.5.2 If the Participating TO cannot secure any such necessary approvals or property rights and consequently is unable to construct a transmission addition or upgrade, it shall promptly notify the ISO CAISO and the Project Sponsor and shall comply with its obligations under the TO Tariff to convene a technical meeting to evaluate alternative proposals. The ISO 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.

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

24.6  WECC and Regional Coordination.

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

24.7  Cost Responsibility for Transmission Additions or Upgrades.

Cost responsibility for transmission additions or upgrades constructed pursuant to this Section 24 (including the responsibility for any costs incurred under Section 24.6) shall be determined as follows:

24.7.1 Where a Project Sponsor commits to pay the full cost of a transmission addition or upgrade as set forth in subsection (2) of Section 24.1.1.2, the full costs shall be borne by the Project Sponsor.

24.7.2 Where the need for a transmission addition or upgrade is determined by the ISOCAISO or as a result of the ISOCAISO ADR Procedure as set forth in subsection (3) of Section 24.1.1.3, the cost of the transmission addition or upgrade shall be borne by the Participating TO that will be the owner of the transmission addition or upgrade and shall be reflected in its Transmission Revenue Requirement.
Provided that the ISOCAISO has Operational Control of the transmission upgrade or addition, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive a compensation package based on a negotiation between the Project Sponsor, CAISO and the relevant Participating Transmission Owner. The compensation for the Project Sponsor shall be commensurate with the amount of additional transmission capacity that results from the upgrade determined by subtracting the rating of the transmission facility before the upgrade or addition from the new rating for the upgraded or additional transmission facility. The full amount of capacity added to the system will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor. If the parties agree to a compensation package, the CAISO will provide notice of agreement on the CAISO Website. In the event of a dispute, the CAISO will file a proposed compensation package with the Commission.

(a) its share, as determined in subsection (d) below, of the Wheeling revenues calculated in accordance with Section 26.1.4.3 that are attributable to the transmission addition or upgrade, which shall be determined by using the capacity increase, if any, of a Scheduling Point, to the extent such increase results from the addition or upgrade, as the rating increase for purposes of subsection (d) below;

(b) its share, as determined in subsection (d) below, of the proceeds of the FTR auction for FTRs defined on the Inter-Zonal Interface of which the transmission addition or upgrade forms a part as set forth in Section 36.5.3, provided that the Project Sponsor does not receive FTRs from the ISO in accordance with Section 36.4.3 of the ISO Tariff; and

(c) its share, as determined in subsection (d) below, of the Congestion revenues provided as calculated pursuant to Section 27.1.2.1.6 on the Inter-Zonal Interface of which the transmission addition or upgrade forms a part.

(d) The Project Sponsor’s share of Wheeling, Congestion and FTR auction revenues for the upgraded transmission facility shall be the number that is determined by dividing the number that
is determined by subtracting the rating of the transmission facility before the upgrade or addition from the new rating for the upgraded or additional transmission facility by the new rating for the upgraded or additional transmission facility. The Participating TO's share of Wheeling, Congestion and FTR auction revenues for the upgraded or additional transmission facility shall be the number that is determined by subtracting the Project Sponsor's share from one hundred percent (100%). Such allocated shares shall become effective on the date the new rating takes effect. The full amount of capacity added to the system will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor.

24.7.4 Once a New Participating TO has executed the Transmission Control Agreement and it has become effective, the cost for New High Voltage Facilities for all Participating TOs shall be included in the ISO CAISO Grid-wide component of the High Voltage Access Charge in accordance with Schedule 3 of Appendix F, unless and with respect to Western Path 15 only, cost recovery is provided in Section 24.7.3. The Participating TO who is supporting the cost of the New High Voltage Facility shall include such costs in its High Voltage Transmission Revenue Requirement, regardless of which TAC Area the facility is geographically located.

24.8 Ownership of and Charges for Expansion Facilities.

24.8.1 All transmission additions and upgrades constructed in accordance with this Section 24 shall form part of the ISOCAISO Controlled Grid and shall be operated and maintained by a Participating TO in accordance with the Transmission Control Agreement.

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

24.9 Expansion by “Local Furnishing” Participating TOs.

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

25.1 Applicability.

This Section 25 and the Standard Large Generator Interconnection Procedures (LGIP) or ISOCAISO Tariff Appendix W, as applicable, shall apply to:

(a) each new Generating Unit that seeks to interconnect to the ISOCAISO Controlled Grid;
(b) each existing Generating Unit connected to the ISOCAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
(c) each existing Generating Unit connected to the ISOCAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; and
(d) each existing qualifying facility Generating Unit connected to the ISOCAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2 below.

25.1.1 The owner of a Generating Unit described in Section 25.1 (a), (b), or (c), or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with the LGIP or ISOCAISO Tariff Appendix W, as applicable.

25.1.2 If the owner of a qualifying facility described in Section 25.1(d), or its designee, represents that the total capability and electrical characteristics of the qualifying facility will be substantially unchanged, then that entity must submit an affidavit to the ISOCAISO and the applicable Participating TO representing that the total capability and electrical characteristics of the qualifying facility will remain substantially unchanged. If there is any change to the total capability and electrical characteristics of the qualifying facility, however, the affidavit shall include supporting information describing any such changes. The ISOCAISO and the applicable Participating TO shall have the right to verify whether or not the total capability or electrical characteristics of the qualifying facility have changed.
or will change.

25.1.2.1 If the ISO CAISO and the applicable Participating TO confirm that the electrical characteristics are substantially unchanged, then that request will not be placed into the interconnection queue. However, the owner of the qualifying facility, or its designee, will be required to execute either a Standard Large Generator Interconnection Agreement in accordance with Section 11 of the LGIP or an interconnection agreement in accordance with ISO CAISO Tariff Appendix W, as applicable.

25.1.2.2 If the ISO CAISO and the applicable Participating TO cannot confirm that the total capability and electrical characteristics are and will be substantially unchanged, then the owner of the qualifying facility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with either the LGIP or ISO CAISO Tariff Appendix W, as applicable.

25.2 Interconnections to the Distribution System.

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the ISO CAISO Controlled Grid consistent with the Standard Large Generator Interconnection Procedures. In addition, each Participating TO will provide to the ISO CAISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the ISO CAISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

25.3 Maintenance of Encumbrances.

No new Generating Unit shall adversely affect the ability of the applicable Participating TO to honor its Encumbrances existing as of the time an Interconnection Customer submits its Interconnection Request to the ISO CAISO. The applicable Participating TO, in consultation with the ISO CAISO, shall identify any such adverse effect on its Encumbrances in the Interconnection System Impact Study performed under
Section 7 of the LGIP or under Section 5.1 of ISOCAISO Tariff Appendix W, as applicable. To the extent the applicable Participating TO determines that the connection of the new Generating Unit will have an adverse effect on Encumbrances, the Interconnection Customer shall mitigate such adverse effect.
TRANSMISSION RATES AND CHARGES.

26.1   Access Charges.

All Market Participants withdrawing Energy from the CAISO Controlled Grid shall pay Access Charges in accordance with this Section 26.1 and Appendix F, Schedule 3. Prior to the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charge for each Participating TO shall be determined in accordance with the principles set forth in this Section 26.1 and in Section 5 of the TO Tariff. The Access Charge shall comprise two components, which together shall be designed to recover each Participating TO’s Transmission Revenue Requirement. The first component shall be the annual authorized revenue requirement associated with the transmission facilities and Entitlements turned over to the Operational Control of the CAISO by a Participating TO approved by FERC. The second component shall be based on the Transmission Revenue Balancing Account (TRBA), which shall be designed to flow through to the Participating TO’s Transmission Revenue Credits calculated in accordance with Section 5 of the TO Tariff and other credits identified in Sections 6 and 8 of Schedule 3 in Appendix F of the CAISO Tariff.

Commencing on the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charges shall be paid by any UDC or MSS Operator that is serving Gross Load in a PTO Service Territory, and shall consist, where applicable, of a High Voltage Access Charge, a Transition Charge and a Low Voltage Access Charge. High Voltage Access Charges and Low Voltage Access Charges shall each comprise two components, which together shall be designed to recover each Participating TO’s High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement, as applicable. The first component shall be based on the annual authorized Transmission Revenue Requirement associated with the high voltage or low voltage, as applicable, transmission facilities and Entitlements turned over to the CAISO Operational Control by a Participating TO. The second component shall be the Transmission Revenue Balancing Account (TRBA), which shall be designed to flow through the Participating TO’s Transmission Revenue Credits associated with the high voltage or low voltage, as applicable, transmission facilities and Entitlements and calculated in accordance with Section 5 of the TO Tariff and other credits identified in Section 6 and 8 of Schedule 3 of Appendix F of the...
Each Participating TO shall provide in its TO Tariff filing with FERC an appendix to such filing that states the Participating TO’s High Voltage Transmission Revenue Requirement, its Low Voltage Transmission Revenue Requirement (if applicable) and its Gross Load used in developing the rate. The allocation of each Participating TO’s Transmission Revenue Requirement between the High Voltage Transmission Revenue Requirement and the Low Voltage Transmission Revenue Requirement shall be undertaken in accordance with Section 11 of Schedule 3 of Appendix F. To the extent necessary, each Participating TO shall make conforming changes to its TO Tariff.

The applicable High Voltage Access Charge and the Transition Charge shall be paid to the ISO-CAISO by each UDC and MSS Operator based on its Gross Load connected to a High Voltage Transmission Facility in a PTO Service Territory, either directly or through intervening distribution facilities, but not through a Low Voltage Transmission Facility. The applicable High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge for the applicable Participating TO shall be paid by each UDC and MSS Operator based on its Gross Load in the PTO Service Territory. The applicable High Voltage Access Charge and Transition Charge shall be assessed by the ISO-CAISO as a charge for transmission service under this ISO-CAISO Tariff, shall be determined in accordance with Schedule 3 of Appendix F, and shall include all applicable components of the High Voltage Access Charge and Transition Charge set forth therein.

The Low Voltage Access Charge for each Participating TO is set forth in that Participating TO’s TO Tariff. Each Participating TO shall charge for and collect the Low Voltage Access Charge, as provided in its TO Tariff. If a Participating TO is using the Low Voltage Transmission Facilities of another Participating TO, such Participating TO shall also be assessed the Low Voltage Access Charge of the other Participating TO by such other Participating TO. The ISO-CAISO shall provide to the applicable Participating TO a statement of the amount of Energy delivered to each UDC and MSS Operator serving Gross Load that utilizes the Low Voltage Transmission Facilities of that Participating TO on a monthly basis. If a UDC or MSS Operator that is serving Gross Load in a PTO Service Territory has Existing Rights to use another Participating TO’s Low Voltage Transmission Facilities, such entity shall not be charged the Low Voltage Access Charge for delivery of Energy to Gross Load for deliveries using the Existing Rights. Each Participating TO shall recover Standby Transmission Revenues directly from the Standby Service
Customers of that Participating TO through its applicable retail rates.

26.1.1 **Publicly Owned Electric Utilities Access Charge.**

Local Publicly Owned Electric Utilities whose transmission facilities are under ISOCAISO Operational Control shall file with the FERC their proposed High Voltage Transmission Revenue Requirements, and any proposed changes thereto, under procedures determined by the FERC to be applicable to such filings and shall give notice to the ISOCAISO and to all Scheduling Coordinators of any such filing. A prospective New Participating TO that is a Local Publicly Owned Electric Utility shall submit its first proposed High Voltage Transmission Revenue Requirement to the FERC and the ISOCAISO at the time the Local Publicly Owned Electric Utility submits its application to become a New Participating TO in accordance with the Transmission Control Agreement. Federal power marketing agencies whose transmission facilities are under ISOCAISO Operational Control shall develop their High Voltage Transmission Revenue Requirement pursuant to applicable federal laws and regulations.

The procedures for public participation in a federal power marketing agency’s ratemaking process are posted on the federal power marketing agency’s website. Each federal power marketing agency shall also post on its website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency’s High Voltage Transmission Revenue Requirement. At the time the federal power marketing agency submits its application to become a New Participating TO in accordance with the Transmission Control Agreement, it shall submit its first proposed High Voltage Transmission Revenue Requirement to the FERC and the ISOCAISO.

26.1.2 **High Voltage Access Charge and Transition Charge Settlement.**

UDCs and MSS Operators serving Gross Load in a PTO Service Territory shall be charged on a monthly basis, in arrears, the applicable High Voltage Access Charge and Transition Charge. The High Voltage Access Charge and Transition Charge for a billing period is calculated by the ISOCAISO as the product of the applicable High Voltage Access Charge or Transition Charge, as applicable, and Gross Load connected to the facilities of the UDC and MSS Operator in the PTO Service Territory. The High Voltage Access Charge and Transition Charge are determined in accordance with Schedule 3 of Appendix F of the ISOCAISO Tariff. These rates may be adjusted from time to time in accordance with Schedule 3 to
Appendix F. During the 10-year transition period described in Section 4 of Schedule 3 of Appendix F of the ISO
CAISO Tariff, a UDC or MSS Operator that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge and the Transition Charge applicable to its transactions as a UDC or MSS Operator; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 26.1.3.

26.1.3 Disbursement of High Voltage Access Charge and Transition Charge Revenues.

The ISO
CAISO shall collect and pay, on a monthly basis, to Participating TOs all High Voltage Access Charge and Transition Charge revenues at the same time as other ISO
CAISO charges and payments are settled. High Voltage Access Charge revenues received with respect to the High Voltage Access Charge and the Transition Charge shall be distributed to Participating TOs in accordance with Appendix F, Schedule 3, Section 10.

26.1.4 Wheeling.

Any Scheduling Coordinator or other such entity scheduling a Wheeling transaction shall pay to the ISO
CAISO the product of (i) the applicable Wheeling Access Charge, and (ii) the total hourly schedules of Wheeling in kilowatt-hours for each month at each Scheduling Point associated with that transaction. Schedules that include Wheeling transactions shall be subject to the Congestion Management procedures and protocols any charges resulting from the CAISO Markets in accordance with Sections 27.1.1 and 27.1.2.

26.1.4.1 Wheeling Access Charge.

The Wheeling Access Charge shall be determined by the TAC Area and transmission ownership or Entitlement, less all Encumbrances, associated with the Scheduling Point at which the Energy exits the ISO
CAISO Controlled Grid. The Wheeling Access Charge for Scheduling Points contained within a single TAC Area, that are not joint facilities, shall be equal to the High Voltage Access Charge for the applicable TAC Area in accordance with Section 3 of Appendix F plus the applicable Low Voltage Access Charge if the Scheduling Point is on a Low Voltage Transmission Facility. Wheeling Access Charges shall not apply for Wheeling under a bundled non-economy Energy coordination agreement of a
26.1.4.2  **Wheeling Over Joint Facilities.**

To the extent that more than one Participating TO owns or has Entitlement to transmission capacity, less all Encumbrances, exiting the **ISOCAISO** Controlled Grid at a Scheduling Point, the Scheduling Coordinator shall pay the **ISOCAISO** each month a rate for Wheeling at that Scheduling Point which reflects an average of the Wheeling Access Charge applicable to those Participating TOs, weighted by the relative share of such ownership or Entitlement to transmission capacity, less all Encumbrances, at such Scheduling Point. If the Scheduling Point is located at High Voltage Transmission Facilities, the Wheeling Access Charge will consist of a High Voltage Wheeling Access Charge component. Additionally, if the Scheduling Point is located at Low Voltage Transmission Facilities, the applicable Low Voltage Wheeling Access Charge component will be added to the Wheeling Access Charge. The methodology for developing the weighted average rate for Wheeling at each Scheduling Point is set forth in Appendix H.

26.1.4.3  **Disbursement of Wheeling Revenues.**

The **ISOCAISO** shall collect and pay to Participating TOs and other entities as provided in Section 24.7.3 all Wheeling revenues at the same time as other **ISOCAISO** charges and payments are settled. For Wheeling revenues associated with CRRs allocated to Load Serving Entities outside the CAISO Control Area, the CAISO shall pay to the Participating TOs and other entities as provided in Section 24.7.3 any excess prepayment amounts within thirty (30) days of the end of the term of the CRR Allocation. The **ISOCAISO** shall provide to the applicable Participating TO and other entities as provided in Section 24.7.3 a statement of the aggregate amount of Energy delivered to each Scheduling Coordinator using such Participating TO’s Scheduling Point to allow for calculation of Wheeling revenue and auditing of disbursements. Wheeling revenues shall be disbursed by the **ISOCAISO** based on the following:

26.1.4.3.1  **Scheduling Point with All Participating TOs in the Same TAC Area.**

With respect to revenues received for the payment of High Voltage Wheeling Access Charges for Wheeling to a Scheduling Point at which all of the facilities and Entitlements, less all Encumbrances, are
owned by Participating TOs in the same TAC Area, Wheeling revenues shall be disbursed to each such Participating TO based on the ratio of each Participating TO’s High Voltage Transmission Revenue Requirement to the sum of all such Participating TO’s High Voltage Transmission Revenue Requirements. If the Scheduling Point is located at a Low Voltage Facility, revenues received with respect to Low Voltage Wheeling Access Charges for Wheeling to that Scheduling Point shall be disbursed to the Participating TOs that own facilities and Entitlements making up the Scheduling Point in proportion to their Low Voltage Transmission Revenue Requirements. Additionally, if a Participating TO has a transmission upgrade or addition that was funded by a Project Sponsor, the Wheeling revenue allocated to such Participating TO shall be disbursed as provided in Section 24.7.3.

26.1.4.3.2 Scheduling Point without All Participating TOs in the Same TAC Area.

With respect to revenues received for the payment of Wheeling Access Charges for Wheeling to a Scheduling Point at which the facilities and Entitlements, less all Encumbrances, are owned by Participating TOs in different TAC Areas, Wheeling revenues shall be disbursed to such Participating TOs as follows. First, the revenues shall be allocated between such TAC Areas in proportion to the ownership and Entitlements of transmission capacity, less all Encumbrances, at the Scheduling Point of the Participating TOs in each such TAC Area. Second, the revenues thus allocated to each TAC Area shall be disbursed among the Participating TOs in the TAC Area in accordance with Section 26.1.4.3.1.

26.1.4.4 Information Required from Scheduling Coordinators.

Scheduling Coordinators that schedule Wheeling Out or Wheeling Through transactions to a Bulk Supply Point, or other point of interconnection between the ISOCAISO Controlled Grid and the transmission system of a Non-Participating TO, that are located within the ISOCAISO Control Area, shall provide the ISOCAISO, within 5 days from the end of the calendar month to which the relevant Trading Day relates, details of such transactions scheduled by them (other than transactions scheduled pursuant to Existing Contracts) sorted by Bulk Supply Point or point of interconnection for each Settlement Period (including kWh scheduled). The ISOCAISO shall use such information, which may be subject to review by the ISOCAISO, to settle Wheeling Access Charges and payments. The ISOCAISO shall publish a list of the Bulk Supply Points or interconnection points to which this Section 26.1.4.4 applies together with details of
the electronic form and procedure to be used by Scheduling Coordinators to submit the required
information on the ISOCAISO Website “Home Page”.

26.1.5 Unbundled Retail Transmission Rates.

The Access Charge for unbundled retail transmission service provided to End-Users by a FERC-
jurisdictional electric utility Participating TO shall be determined by the FERC and submitted to the
ISOCAISO for information only. For a Local Publicly Owned Electric Utility, retail transmission service
rates shall be determined by the Local Regulatory Authority and submitted to the ISOCAISO for
information only.

26.2 Tracking Account.

If the Access Charge rate methodology implemented pursuant to Section 26.1 results in Access Charge
rates for any Participating TO which are different from those in effect prior to the ISOCAISO Operations
Date, an amount equal to the difference between the new rates and the prior rates for the remainder of
the period, if any, during which a cost recovery plan established pursuant to Section 368 of the California
Public Utilities Code (as added by AB 1890) is in effect for such Participating TO shall be recorded in a
tracking account. The balance of that tracking account will be recovered from customers and paid to the
appropriate Participating TO after termination of the cost recovery plan set forth in Section 368 of
California Public Utilities Code (as added by AB 1890). The recovery and payments shall be based on an
amortization period not exceeding three years in the case of electric corporations regulated by the CPUC
or five years for Local Publicly Owned Electric Utilities.

26.3 Addition of New Facilities After ISOCAISO Implementation.

The costs of transmission facilities placed in service after the ISOCAISO Operations Date shall be
recovered consistent with the cost recovery determinations made pursuant to Appendix F, Schedule 3
and Section 24.7.3.

26.4 Effect on Tax-Exempt Status.

Nothing in this Section shall compel any Participating TO to violate any restrictions applicable to facilities
financed with tax-exempt bonds or contractual restrictions and covenants regarding the use of
transmission facilities.

26.5 Transition Mechanism.

During the ten-year transition period described in Section 4 of Schedule 3 to Appendix F, the Original Participating TOs collectively shall pay to the ISO each year an amount equal to, annually, for all New Participating TOs, the amount, if any, by which the New Participating TO's cost of Existing High Voltage Facilities associated with Gross Loads in the PTO Service Territory of the New Participating TO is increased by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F. Responsibility for such payments shall be allocated to Original Participating TOs in accordance with Schedule 3 to Appendix F. Amounts payable by Original Participating TOs under this section shall be recoverable as part of the Transition Charge calculated in accordance with Schedule 3 of Appendix F. Amounts received by the ISO under this section shall be disbursed to New Participating TOs with Existing High Voltage Facilities based on the ratio of each New Participating TO's net increase in costs in the categories described in the first sentence of this section, to the sum of the net increases in such costs for all New Participating TOs with Existing High Voltage Facilities.
ARTICLE III – MARKET OPERATIONS

27 CAISO MARKETS AND PROCESSES.

In the Day-Ahead and Real-Time time frames the CAISO operates a series of procedures and markets that together comprise the CAISO Markets Processes. In the Day-Ahead time frame, the CAISO conducts the MPM-RRD, an Integrated Forward Market (IFM) and the Residual Unit Commitment (RUC) process. In the Real-Time time frame, the CAISO conducts the Market Power Mitigation and Reliability Requirement Determination, the Hour Ahead Scheduling Process (HAS), the Short Term Unit Commitment (STUC), the Real-Time Unit Commitment (RTUC) and the five-minute Real-Time Dispatch (RTD). The CAISO Markets Processes utilize transmission and security constrained unit commitment and dispatch algorithms in conjunction with a full network model to optimally commit, schedule and Dispatch resources and determine marginal prices for Energy, Ancillary Services and RUC Capacity. Congestion Revenue Rights are available and entitle holders of such instruments to a stream of hourly Payments or Charges associated with revenue the CAISO collects or pays from the Marginal Cost of Congestion component of hourly Day-Ahead LMPs. Through the operation of the CAISO Markets Processes the CAISO develops Day-Ahead Schedules, Day-Ahead AS Awards and RUC Schedules, HASP Advisory Schedules, HASP Intertie Schedules and AS Awards, Real-Time AS Awards and Dispatch Instructions to ensure that sufficient supply resources are available in Real-Time to balance Supply and Demand and operate in accordance with Reliability Criteria.

27.1 Locational Marginal Pricing.

The CAISO Markets are based on Locational Marginal Prices.

27.1.1 Locational Marginal Prices for Energy.

The LMP for Energy at any PNode is the marginal cost of serving the next increment of Demand at that PNode consistent with existing transmission facility constraints and the performance characteristics of resources. The LMPs calculated in the IFM, the HASP for Scheduling Points, and the RTD are based on Energy Bid Curves. The LMP at any given PNode is comprised of three cost components: the System Marginal Energy Cost (SMEC); Marginal Cost of Losses (MCL); and, Marginal Cost of Congestion (MCC).
The IFM calculates LMPs for each Trading Hour of the next Trading Day. The HASP, which is an hourly run of the RTUC with the time horizon that starts at the beginning of the next Trading Hour, calculates fifteen-minute LMPs (HASP Intertie LMPs) for that Trading Hour. The simple average of the four fifteen-minute LMPs for the Trading Hour computed at each Scheduling Point produces hourly LMPs for HASP Settlement of Energy at that Scheduling Point. The Real-Time Dispatch runs every five minutes throughout each Trading Hour and calculates five-minute LMPs for the next Dispatch Interval. The CAISO uses the Resource-Specific Settlement Interval LMPs for Settlements of the Real-Time Market.

27.1.1.1 System Marginal Energy Cost.

The System Marginal Energy Cost (SMEC) component of the LMP reflects the marginal cost of providing Energy from a designated reference location. For this designated reference location the CAISO will utilize a distributed Reference Bus whose constituent PNodes are weighted in prespecified proportions referred to as Reference Bus distribution factors. The SMEC shall be the same throughout the system.

27.1.1.2 Marginal Cost of Losses.

For all PNodes and Aggregated PNodes in the CAISO Control Area, including Scheduling Points, the use of the FNM in the DAM and the RTM processes incorporates Transmission Losses. At each PNode or Aggregated PNode, the Marginal Cost of Losses is the System Marginal Energy Cost multiplied by the marginal loss factor at that PNode or Aggregated PNode. The Marginal Cost of Losses at a Location (PNode or APNode) may be positive or negative depending on whether an increase in Demand at that Location marginally increases or decreases the cost of Transmission Losses, using the distributed Reference Bus to balance it. The marginal loss factors are determined through a process that calculates the sensitivities of Transmission Losses with respect to changes in injection at each Location in the FNM. For CAISO Controlled Grid facilities outside the CAISO Control Area, the CAISO shall assess the cost of Transmission Losses to Scheduling Coordinators using each such facility based on the quantity of losses agreed upon with the neighboring Control Area multiplied by the LMP at the PNode of the interface with the neighboring Control Area. The MCLs calculated for Locations within the CAISO Control Area shall not reflect the cost of transmission losses on those facilities.

27.1.1.3 Marginal Cost of Congestion.
The Marginal Cost of Congestion at a PNode reflects a linear combination of the shadow prices of all binding constraints in the network, each multiplied by the corresponding Power Transfer Distribution Factor (PTDF). The Marginal Cost of Congestion may be positive or negative depending on whether a power ejection (i.e., incremental Load increase) at that Location marginally increases or decreases Congestion.

### 27.2 Load Aggregation Points (LAP)

The CAISO shall create Load Aggregation Points and shall maintain Default LAPs at which all Demand shall Bid and be settled, except as provided in Section 27.2.1 and Section 30.5.3.2.

#### 27.2.1 Metered Subsystems

A specific LAP with its own LDFs will be created for each Metered Subsystem. These MSS LAPs are separate from the Default LAPs, and the load distribution factors of the Default LAP do not reflect any MSS Load.

#### 27.2.2 Determination of LAP Prices

##### 27.2.2.1 IFM LAP Prices

The IFM LAP Price for a given Trading Hour is the weighted average of the individual IFM LMPs at the PNodes within the LAP, with the weights equal to the nodal Demand associated with that LAP that is scheduled by the IFM. The weights used in calculating the Default LAP prices will equal the total Demand scheduled by the IFM in each Default LAP except for the Demand specified in Sections 27.2.1 and 30.5.3.2.

##### 27.2.2.2 Real-Time Market LAP Prices

The Hourly Real-Time LAP Price is computed as described in Section 11.5.2.2. The weights used for calculating the Hourly Real-Time LAP Price at the time the RTM runs will not exclude the Demand specified in Sections 27.2.1 and 30.5.3.2. The weights used for calculating Hourly Real-Time LAP Price used for Settlements will be calculated based on meter data and will appropriately exclude the Demand specified in Sections 27.2.1 and 30.5.3.2. Hourly Real-Time LAP Price are further adjusted for Settlements purposes as described in Section 11.5.2.2.
27.3 Trading Hubs.

The CAISO shall create and maintain Trading Hubs, including Existing Zone Generation Trading Hubs, to facilitate bilateral energy transactions in the CAISO Control Area. Each Trading Hub will be based on a pre-defined set of PNodes. The CAISO shall calculate Trading Hub prices for each Settlement Period or Settlement Interval based on an average of the LMPs at the PNodes that constitute the Trading Hub. There will be three Existing Zone Generation Trading Hubs, which correspond geographically to the three Existing Zones. Each Existing Zone Generation Trading Hub will be comprised of an aggregation of PNodes for Generating Units within the corresponding Existing Zone, whose associated LMPs will be used to establish an Existing Zone Generation Trading Hub price representing the weighted-average price paid to Generating Units in that Existing Zone. The weights applied to the constituent nodal LMPs in each Existing Zone will be determined annually and separately for each season and on-peak and off-peak period based on the ratio of the prior year's total output of Energy at that PNode to the total Generation output in that Existing Zone, for the corresponding season and on-peak or off-peak period. The specification of seasons will be identical to the seasons used in the annual CRR Allocation, and the annual calculation of Existing Zone Generation Trading Hub weights will be performed in a timely manner to be coordinated with the annual CRR Allocation and CRR Auction processes.

27.4 Optimization in the CAISO Markets Processes.

The CAISO runs the DAM, HASP and RTM and their component CAISO Markets Processes utilizing a set of integrated optimization programs, including SCUC and SCED.

27.4.1 Security Constrained Unit Commitment.

The CAISO uses SCUC to run the MPM-RRD processes associated with the DAM and the HASP, the IFM, the RUC, the HASP, the STUC and the RTUC. SCUC uses a multi-interval Time Horizon to commit and schedule resources and to meet Demand for which Bids have been submitted and procure AS in the IFM, and to meet the CAISO Forecast of CAISO Demand in the MPM-RRD, RUC, HASP, STUC and RTUC. In the Day-Ahead MPM-RRD, IFM and RUC processes the SCUC optimizes over the 24 hourly intervals of the next Trading Day. In the RTUC, which runs every 15 minutes, the SCUC optimizes over from four to seven 15-minute intervals comprising a portion of the current or imminent Trading Hour and
the entire subsequent Trading Hour. In the HASP, which is a special run of the RTUC that runs once per hour just before the top of the hour, and its associated MPM-RRD process, the SCUC optimizes over seven 15-minute intervals comprising the last 45 minutes of the imminent Trading Hour and the entire subsequent Trading Hour. Following the HASP run of the RTUC, each of the next three runs of the RTUC successively drops one 15-minute interval from the front of the optimization Time Horizon. In the STUC the SCUC optimizes over seventeen fifteen-minute intervals comprising the last 15 minutes of the imminent Trading Hour and the entire next four Trading Hours. The CAISO will also utilize the SCUC algorithm on a two-day-ahead basis to commit Extremely Long Start Resources, for which commitment in the DAM does not provide sufficient time to start-up and be available to supply Energy during the next Trading Day.

27.4.1.1 Timing of Unit Commitment Instructions

For the Time Horizon of any given CAISO Markets Process, the associated SCUC optimization will typically commit resources having different start-up times, not all of which need to be started up immediately upon completion of that CAISO Markets Process. The CAISO may defer issuing a start-up instruction to a resource that can be started at a later time and still be available to supply Energy at the time the CAISO Markets Process indicated it would be needed. The CAISO shall re-evaluate the need to commit such resources in a subsequent CAISO Markets Process based on the most recent forecasts and other information about system conditions.

27.4.2 Security Constrained Economic Dispatch.

SCED is the optimization engine used to run the RTD to determine the optimal five-minute Dispatch Instructions throughout the Trading Hour consistent with resource and transmission constraints within the CAISO Control Area. The SCED runs every five minutes and utilizes a Time Horizon comprised of up to 13 five-minute intervals, but produces Dispatch Instructions only for the first five-minute interval of that time horizon. The SCED produces LMPs at each PNode that are used for Settlements as described in Section 11.5.

27.5 Full Network Model.
27.5.1 **Description of FNM for CAISO Markets.**

The FNM is a representation of the CAISO Control Area that enables the CAISO to conduct power flow analyses to identify transmission constraints for the optimization of the CAISO Markets. External Control Areas are not modeled, except for transmission facilities for which Participating TOs have converted their scheduling rights. Resources are modeled at the appropriate network nodes. For the CAISO Markets Processes, the FNM incorporates Transmission Losses and models and enforces all network Constraints, which are reflected in the Day-Ahead Schedules, AS and RUC Awards, HASP Intertie Schedules, Dispatch Instructions and the LMPs resulting from each CAISO market process. For the HASP, STUC, RTUC and the RTD processes, the Real-Time power flow parameters developed from the State Estimator are applied to the FNM. In the FNM the Scheduling Points on the boundaries of the CAISO Controlled Grid and CAISO Control Area are modeled radially, except as described in Section 27.5.3 regarding embedded and adjacent Control Areas.

27.5.2 **Metered Subsystems.**

The FNM includes a full model of MSS transmission networks used for power flow calculations and congestion management in the CAISO Markets Processes. Network constraints (i.e. circuit ratings, thermal ratings, etc.) within the MSS, or at the its boundaries, shall be monitored but not enforced in the CAISO's FNM. If overloads are observed in the forward markets are internal to the MSS or at the MSS boundaries and are attributable to MSS operations, the CAISO shall communicate such events to the Scheduling Coordinator for the MSS and coordinate any manual re-dispatch required in Real-Time. If, independent of the CAISO, the Scheduling Coordinator for the MSS is unable to resolve Congestion internal to the MSS or at the MSS boundaries in Real-Time, the CAISO will use Exceptional Dispatch Instructions on Resources that have been Bid into the HASP and RTM to resolve the Congestion. The costs of such Exceptional Dispatch will be allocated pursuant to the provisions specified in Section 11.5.6. Consistent with Section 4.9, the CAISO and MSS Operator shall develop specific procedures for each MSS to determine how network constraints will be handled.

27.5.3 **Embedded Control Areas and Adjacent Control Areas.**

To the extent sufficient data is available or adequate estimates can be made for the embedded Control Areas and adjacent Control Areas, the FNM will include a full model of embedded Control Areas and
adjacent Control Areas used for power flow calculations and congestion management in the CAISO Markets Processes. The CAISO monitors but does not enforce the network constraints for embedded Control Areas or adjacent Control Areas in running the CAISO Markets Processes. The CAISO models the resistive component for transmission losses on embedded Control Areas and adjacent Control Areas but does not allow such losses to determine LMPs.

### 27.6 State Estimator

The State Estimator produces a power flow solution based upon the modeled representation of the electrical network and available Real-Time SCADA telemetry. When this solution is applied to the FNM, it provides a reference of system conditions for determining Dispatch Instructions. The State Estimator also provides a reference for Real-Time Load Distribution Factors used to distribute the Real-Time CAISO Forecast of CAISO Demand as well as provide a source of historical data for the LDF library. If the State Estimator is not capable of providing CAISO with a solution to clear the CAISO Markets, the CAISO shall use the last best State-Estimator solution for determining Dispatch Instructions, provided the State Estimator is not unavailable for an extended period. If the State Estimator is not available for an extended period of time, the CAISO shall use the Load Distribution Factors from the Load Distribution Factors library as applicable to the prevailing system and time of use conditions to determine Dispatch Instructions.

### 27.7 Constrained Output Generators

#### 27.7.1 Start-Up and Minimum Load Costs and Energy Bids of Constrained Output Generators

COGs will be eligible to set LMPs in the IFM based on their Energy Bids, as set out in this Section 27.7.1. Before each calendar year, the COG must elect one of the methods described in Section 27.7.1 for specifying its Start-Up Costs and Minimum Load Costs, and must elect one of the methods described in Sections 27.7.1.2 and 27.7.1.3 for determining its Energy Bids.

##### 27.7.1.1 Start-Up and Minimum Load Options

A COG may elect to recover Start-Up and Minimum Load Costs through a cost-based option based on heat rate and fuel costs. Fuel costs are adjustable by the CAISO on a daily basis for gas fired resources, or are registered non-adjustable costs for other resources. Alternatively, a COG may elect to register in the Master File a six-month value of its own choosing that does not need to be cost-based and will not be adjusted for fuel cost changes.
27.7.1.2 Energy Bids Calculated from Start-Up and Minimum Load Costs. Under both options for specifying Start-Up and Minimum Load costs described in Section 27.7.1.1, a COG’s Energy Bid will be determined by dividing its Minimum Load Cost by the MW quantity of its PMin. Based on the assumption that its PMin equals its PMax it will be eligible to set the LMP in the IFM and the RTD based on this Energy Bid.

27.7.1.3 Flexible COG Dispatch Option. For the purposes of specifying an Energy Bid that is not based on its Minimum Load Cost, a COG may elect to be modeled with different PMin and PMax values if the physical characteristics of the resource support such differences. Under this option the resource is capable of being Dispatched at an operating point other than zero or its PMax, the resource does not meet the definition of COG and the resource is treated in the CAISO Markets Processes like any other resource. Such a resource may submit a market Energy Bid for the MW difference between its PMin and PMax, and if scheduled or issued a CAISO Schedule or Dispatch Instruction in this range it would be subject to Local Market Power Mitigation, eligible to set the LMP and would receive any appropriate BCR like any other resource.

27.7.2 Constrained Output Generators in the IFM.

In the IFM, COGs that elect the option described in Section 27.7.1.2 are modeled as though they are not constrained and can operate flexibly between zero and their PMax, which equals their PMin. Such a COG is eligible to set IFM LMPs in any Settlement Period in which a portion of its output is needed as a flexible resource to serve Demand. Such a COG is not eligible for recovery of Minimum Load Costs or BCR in the IFM due to the conversion of its Minimum Load Cost to an Energy Bid and its treatment by the IFM as a flexible resource. Such a COG is eligible for Start-Up cost recovery based on its Commitment Period as determined in the RUC, HASP, STUC or RTUC. COGs that elect the option described in Section 27.7.1.3 are treated in the IFM like other resources having Energy Bids for a flexible dispatch range above their Minimum Load.

27.7.3 Constrained Output Generators in RUC.

In RUC, any COG that elects the option described in Section 27.7.1.2 and is offered in the IFM but not scheduled in the IFM is treated as constrained, so that the entire capacity of the COG is scheduled in RUC and not a portion thereof. Because PMin and PMax are equal for such a COG, and RUC Awards
apply to scheduled capacity in RUC in excess of the higher of: (a) the relevant Day-Ahead Schedule; or (b) the relevant Minimum Load, such a COG is not eligible to receive a RUC Award. COGs that elect the option described in Section 27.7.1.3 are treated in the RUC like other resources having Energy Bids for a flexible dispatch range above their Minimum Load and may be eligible to receive a RUC Award in accordance with Section 31.5.

27.7.4 Constrained Output Generators in the Real-Time Market.

A COG that can be started up and complete its Minimum Run Time within a five-hour period can be committed by the STUC. A COG that can be started up within the Time Horizon of a RTUC run, which varies from 60 to 105 minutes, can be committed by the RTUC. If the resource elects the method described in Section 27.7.1.2 for determining its Energy Bid, no Energy Bid Curve can be submitted for the resource. In this case, in the RTD the CAISO will dispatch a COG up to its PMax or down to zero to ensure a feasible Real-Time Dispatch. The COG is eligible to set the RTM LMP in any Dispatch Interval in which a portion of its output is needed to serve Demand, not taking into consideration its minimum run constraint. For the purpose of making this determination and setting the RTM LMP, the CAISO treats a COG as if it were flexible with an infinite Ramp Rate between zero and its PMax, and uses the COG’s Energy Bid as determined in Section 27.7.1.2. In any Dispatch Interval where none of the output of a COG is needed as a flexible resource to serve Demand, the CAISO shall not dispatch the unit. In circumstances in which the output of the COG is not needed as a flexible resource to serve Demand, but the unit nonetheless is online as a result of a previous commitment or Dispatch Instruction by the CAISO, the COG is eligible for Minimum Load Cost compensation. If the resource elects the method described in Section 27.7.1.3 for determining its Energy bid, the RTM will treat it like any other resource that is flexible over a non-zero operating range.

27.1 Congestion Management.

27.1.1 Zonal Congestion Management.
27.1.1.1 The ISO Will Perform Congestion Management.

27.1.1.1.1 Transmission Congestion.

Congestion occurs when there is insufficient transfer capacity to simultaneously implement all of the Preferred Schedules that Scheduling Coordinators submit to the ISO.

27.1.1.1.1.1 Transmission Capacity Reserved under Existing Contracts will not be Subject to the ISO's Congestion Management Procedures.

27.1.1.1.2 Zone-Based Approach.

The ISO will use a Zone-based approach to manage Congestion. A Zone is a portion of the ISO Controlled Grid within which Congestion is expected to occur infrequently or have relatively low Congestion Management costs. Inter-Zonal Interfaces consist of transmission facilities that are expected to have relatively high Congestion Management costs. For these interfaces, allocation of usage based on the value placed on these interfaces by the Scheduling Coordinators will increase efficient use of the ISO Controlled Grid.

27.1.1.1.3 Types of Congestion.

Congestion that occurs on Inter-Zonal Interfaces is referred to as “Inter-Zonal Congestion.” Congestion that occurs due to transmission system Constraints within a Zone is referred to as “Intra-Zonal Congestion.” Inter-Zonal Congestion Management will ignore Intra-Zonal Congestion. Intra-Zonal Congestion will be managed in accordance with Tariff Section 27.1.1.6.

27.1.1.1.4 Elimination of Potential Transmission Congestion.

The ISO’s Day-Ahead and Hour-Ahead scheduling procedures will eliminate potential Inter-Zonal Congestion by:

27.1.1.1.4.1 scheduling the use of Inter-Zonal Interfaces by the Scheduling Coordinators who place the highest value on those rights, based on the Adjustment Bids that are submitted by Scheduling Coordinators; and

27.1.1.1.4.2 rescheduling Scheduling Coordinators’ resources (but so that Intra-Zonal transmission
limits are not violated) using the Adjustment Bids that are submitted by Scheduling Coordinators.

**27.1.1.1.5 Elimination of Real-Time Inter-Zonal Congestion.**

In its management of Inter-Zonal Congestion in real-time, the ISO will issue Dispatch Instructions as necessary to relieve Inter-Zonal Congestion by Dispatching Generation or Demand, as necessary, based on the Energy Bids in accordance with Section 34.3.2. The ISO will use the RTD Software to alleviate Inter-Zonal Congestion as described in Section 34.3.2.

**27.1.1.2 General Requirements for the ISO’s Congestion Management**

The ISO’s Congestion Management in the Day-Ahead Market and Hour-Ahead Market shall:

- **27.1.1.2.1** only operate if the Scheduling Coordinators do not eliminate Congestion voluntarily;
- **27.1.1.2.2** adjust the Schedules submitted by Scheduling Coordinators only as necessary to alleviate Congestion;
- **27.1.1.2.3** maintain separation between the resource portfolios of different Scheduling Coordinators, by not arranging any trades between Scheduling Coordinators as part of the Inter-Zonal Congestion Management process;
- **27.1.1.2.4** for Inter-Zonal Congestion Management, suggest, but not require, rescheduling within Scheduling Coordinators’ portfolios of Schedules to produce a feasible Schedule by the conclusion of the scheduling procedure;
- **27.1.1.2.5** publish information and, if requested by Scheduling Coordinators will provide a mechanism to facilitate voluntary trades among Scheduling Coordinators;
- **27.1.1.2.6** adjust the Schedules submitted by Scheduling Coordinators on the basis of any price information voluntarily submitted through their Adjustment Bids; and
- **27.1.1.2.7** for the hours when the ISO applies its Inter-Zonal Congestion Management apply the same Usage Charge to all Scheduling Coordinators for their allocated share of the Inter-Zonal Interface capacity.
27.1.1.3 Use of Computational Algorithms for Congestion Management and Pricing.

The ISO will use computer optimization algorithms to implement its Congestion Management process.

27.1.1.4 Adjustment Bids Will be Used by the ISO to Manage Congestion.

27.1.1.4.1 Uses of Adjustment Bids by the ISO.

27.1.1.4.1.1 The ISO shall use the Adjustment Bids, in both the Day-Ahead Market and the Hour-Ahead Market, to schedule Inter-Zonal Interface capacity to those Scheduling Coordinators which value it the most to reflect the Scheduling Coordinators' implicit values for Inter-Zonal Interface capacity and to determine the prices for the use of Congested Inter-Zonal Interfaces.

27.1.1.4.1.2 The Adjustment Bids will be used by the ISO to determine the marginal value associated with each Congested Inter-Zonal Interface.

27.1.1.4.1.3 The ISO shall use Energy Bids from Generating Units and from other resources in the ISO's real-time system operation, for increasing resources' output for Intra-Zonal Congestion Management to decrement Generation in order to accommodate Overgeneration conditions, including Reliability Must-Run Generation which the ISO requests under Reliability Must-Run Contracts.

27.1.1.4.1.4 To facilitate trades amongst Scheduling Coordinators, the ISO will develop procedures to publish Adjustment Bids of those Scheduling Coordinators who authorize the publication of their identity and/or Adjustment Bids. Scheduling Coordinators will then be able to utilize this information to conduct trades to aid Congestion Management.

27.1.1.4.2 Submission of Adjustment Bids.

27.1.1.4.2.1 Each Scheduling Coordinator is required to submit a preferred operating point for each of its resources. However, a Scheduling Coordinator is not required to submit an Adjustment Bid for a resource.

27.1.1.4.2.2 The minimum MW output level specified for a resource, which may be zero MW, and the maximum MW output level specified for a resource must be physically realizable by the resource.

27.1.1.4.2.3 The Scheduling Coordinator's preferred operating point for each resource must be within
the range of the Adjustment Bids.

27.1.1.4.2.4 Adjustment Bids can be revised by Scheduling Coordinators after the Day-Ahead Market has closed for consideration in the Hour-Ahead Market and, after the Hour-Ahead Market has closed, for consideration in the Real-Time Market provided that, if the ISO has accepted all, or a portion of, an offered Adjustment Bid, the Scheduling Coordinator is obligated to provide the relevant capacity increase or decrease to the ISO at the price of the accepted Adjustment Bid.

27.1.1.4.2.5 During the ISO's Day-Ahead scheduling process, the MW range of the Adjustment Bid, but not the price values, may be changed.

27.1.1.4.2.6 The Adjustment Bids that the Scheduling Coordinators submit constitute implicit bids for transmission between Zones on either side of a Congested Inter-Zonal Interface. An Adjustment Bid shall constitute a standing offer to the ISO until it is withdrawn.

27.1.1.4.2.7 The ISO may impose additional restrictions and bidding activity rules on the form of Adjustment Bids, the updating of Adjustment Bids, and the Scheduling Coordinator that may submit Adjustment Bids in connection with inter-Scheduling-Coordinator trades, as needed, to ensure that the ISO's computational algorithms can operate reliably and produce efficient outcomes.

27.1.1.5 Inter-Zonal Congestion Management.

27.1.1.5.0 Inter-Zonal Congestion Management will use a DC optimal power flow (OPF) program that uses linear optimization techniques with active-power (MW) controls only.

27.1.1.5.0.1 Inter-Zonal Congestion Management will involve adjusting Schedules to remove potential violations of Inter-Zonal Interface Constraints, minimizing the Redispatch cost, as determined by the submitted Adjustment Bids that accompany the submitted Schedules.

27.1.1.5.1 The scheduling procedures in the Day-Ahead Market and Hour-Ahead Market will first ascertain, through power flow calculations, whether or not Inter-Zonal Congestion would exist if all of the Preferred and Revised Schedules submitted by the Scheduling Coordinators were accepted by the ISO. If no Inter-Zonal Congestion would exist, then all Inter-Zonal Interface uses will be accepted and the Usage Charges will be zero.
27.1.1.5.2 The purpose of Inter-Zonal Congestion Management is to allocate the use of, and determine the marginal value of, active Inter-Zonal Interfaces. The ISO's Inter-Zonal Congestion Management process will allocate Congested transmission to those users who value it the most and will charge all Scheduling Coordinators for their allocated usage of Congested Inter-Zonal Interfaces on a comparable basis. All Scheduling Coordinators within a Zone will see the same price for transmitting Energy across a Congested Inter-Zonal Interface, irrespective of the particular locations of their Generators, Demands and external imports/exports. Inter-Zonal Congestion Management will comply with the requirements stated in Sections 27.1.1.2, 27.1.1.4 and 27.1.1.5.

27.1.1.5.2.1 Inter-Zonal Congestion Management will keep each Scheduling Coordinator's portfolio of Generation and Demand (i.e., the Scheduling Coordinator's Preferred Schedule) separate from the portfolios of the other Scheduling Coordinators, as the ISO adjusts the Schedules to alleviate Inter-Zonal Congestion. Inter-Zonal Congestion Management will not involve arranging or modifying trades between Scheduling Coordinators. Each Scheduling Coordinator's portfolio will be kept in balance (i.e., its Generation plus external imports, as adjusted for Transmission Losses, and Inter-Scheduling Coordinator Energy Trades (whether purchases or sales) will still match its Demand plus external exports) after the adjustments. Market Participants will have the opportunity to trade with one another and to revise their Schedules during the first Congestion Management iteration in the Day-Ahead Market, and between the Day-Ahead Market and Hour-Ahead Market. Inter-Zonal Congestion Management will also not involve the optimization of Scheduling Coordinator portfolios within Zones (where such apparently non-optimal Schedules are submitted by Scheduling Coordinators). Adjustments to individual Scheduling Coordinator portfolios within a Zone will be either incremental (i.e., an increase in Generation and external imports and a decrease in Demand and external exports) or decremental (i.e., a decrease in Generation and external imports and an increase in Demand and external exports), but not both.

27.1.1.5.2.2 If Congestion would exist on one or more active Inter-Zonal Interfaces, then the ISO shall execute its Inter-Zonal Congestion Management algorithms to determine a set of tentative (in the Day-Ahead procedure) allocations of Inter-Zonal Interface rights and tentative (in the Day-Ahead procedure) Usage Charges, where the Usage Charges will be calculated as the marginal values of the Congested Inter-Zonal Interfaces. The marginal value of a Congested Inter-Zonal Interface is calculated by the
ISO’s computer optimization algorithm to equal the total change in Redispatch costs (based on the Adjustment Bids) that would result if the interface's scheduling limit was increased by a small increment.

27.1.1.5.2.3 As part of the Day-Ahead scheduling procedure, but not the Hour-Ahead scheduling procedure, Scheduling Coordinators will be given the opportunity to adjust their Preferred Schedules (including the opportunity to make trades amongst one another) and to submit Revised Schedules to the ISO, in response to the ISO’s Suggested Adjusted Schedules and prices for Inter-Zonal Interfaces.

27.1.1.5.2.4 If the ISO receives any Revised Schedules it will execute its Inter-Zonal Congestion Management algorithms using revised Preferred Schedules, to produce a new set of allocations and prices.

27.1.1.5.2.5 All of the ISO’s calculations will treat each Settlement Period independently of the other Settlement Periods in the Trading Day.

27.1.1.5.2.6 If inadequate Adjustment Bids have been submitted to schedule Inter-Zonal Interface capacity on an economic basis and to the extent that scheduling decisions cannot be made on the basis of economic value, the ISO will allocate the available Inter-Zonal Interface capacity to Scheduling Coordinators in proportion to their respective proposed use of that capacity as indicated in their Schedules and shall curtail scheduled Generation and Demand to the extent necessary to ensure that each Scheduling Coordinator’s Schedule remains balanced, except for those uses of transmission service under Existing Contracts, which are curtailed in accordance with Sections 16.2.5 and 16.2.6.

27.1.1.5.2.7 The ISO will publish information prior to the Day-Ahead Market, between the iterations of the Day-Ahead Market, and prior to the Hour-Ahead Market, to assist the Scheduling Coordinators to construct their Adjustment Bids so as to actively participate in the management of Congestion and the valuation of Inter-Zonal Interfaces. This information may include the ISO’s most-current information regarding: potentially Congested paths, projected transmission uses, projected hourly Loop Flows across Inter-Zonal Interfaces, scheduled line Outages, forecasts of expected system-wide Load, the ISO’s Ancillary Services requirements, Generation Meter Multipliers, and power flow outputs.

27.1.1.5.2.8 The ISO will also publish information, once it is available, regarding tentative prices for
the use of Inter-Zonal Interfaces, and Generation shift factors for the use of Inter-Zonal Interfaces, which indicate the relative effectiveness of Generation shifts in alleviating Congestion.

27.1.1.6 ——— Intra-Zonal Congestion Management.

(a) In the hour prior to the beginning of the Settlement Period the ISO may adjust Scheduling Coordinators’ Final Schedules to alleviate Intra-Zonal Congestion. Except in those instances where the ISO calls Reliability Must-Run Units as provided in Section 30.6.1 of the ISO Tariff, the ISO will adjust resources in accordance with subsections (b) and (c) of this Section 27.1.1.6.

(b) Except as provided in Section 30.6.1 of the ISO Tariff, in the event of Intra-Zonal Congestion, the ISO shall adjust Generating Units and Curtailable Demands (or Interconnection schedules of System Resources in the Control Areas) to alleviate the Constraints as described in subsection (d) below.

(c) Additional Congestion Relief. In the event that there are insufficient resources which provide financial bids to mitigate Inter-Zonal and Intra-Zonal Congestion, Final Schedules which do not rely on Existing Contracts will be adjusted in real time by allocating transmission capacity on a pro-rata basis. Final Schedules which rely on Existing Contracts will be adjusted in real time by allocating transmission capacity in accordance with the operating instructions submitted under Section 16.2.4. With respect to facilities financed with Local Furnishing Bonds the ISO shall adjust Final Schedules in real time in a fashion consistent with Sections 3 and 26.4 of the ISO Tariff, Appendix B of the TCA, and Operating Procedures governing the use of such facilities.

(d) Any Generating Unit dispatched to manage Intra-Zonal Congestion shall: (1) if dispatched to increase its output, be paid the greater of its bid price (or mitigated bid if applicable) or the relevant Market Clearing Price; (2) if dispatched to decrease its output, be charged the lesser of its decremental reference price of the relevant Market Clearing Price. The ISO shall not re-dispatch MSS resources to manage Intra-Zonal congestion as set forth in this Section 27.1.1.6, as provided for in the MSS Agreement. The ISO shall treat hydroelectric resources the same as MSS resources for purposes of managing Intra-Zonal congestion under this Section 27.1.1.6.

27.1.1.6.1 ——— Decremental Bids.
With regard to decremental bids, if Final Hour-Ahead Schedules cause Congestion on the Intra-Zonal interface, the ISO shall, after Dispatching available and effective Reliability Must-Run Units to manage the Congestion, apply the decremental reference prices determined by the independent entity that determines the reference prices for the Automatic Mitigation Procedure (AMP) as described in Appendix P, Attachment A. The ISO shall Dispatch Generating Units according to the decremental reference prices thus established, the resource’s effectiveness on the Congestion, and other relevant factors such as Energy limitations, existing contractual restrictions, and Regulatory Must-Run or Regulatory Must-Take status, to alleviate the Congestion after Final Hour-Ahead Schedules are issued. Where the ISO must reduce a Generating Unit’s output, the ISO shall Dispatch Generating Units according to the decremental reference prices and not according to Adjustment Bids or Supplemental Energy Bids to alleviate Intra-Zonal Congestion. No Generating Unit shall be Dispatched below its minimum operating level or above its maximum operating level. No Reliability Must-Run Unit shall be Dispatched below the operating level determined by the ISO as necessary to maintain reliability. If Congestion still exists after all Generating Units are Dispatched to their minimum operating levels, the ISO shall instruct Generating Units to shut off in merit order based on their total shut-down costs, beginning with the most expensive unit, where such shut-down costs include the lesser of the cost to start up the Generating Unit or to keep the Generating Unit warm for each Generating Unit with a non-zero Final Day-Ahead Schedule for Energy for the next day. Units shut-off due to Congestion as set forth in this Section 27.1.1.6.1 shall be charged the lesser of the decremental reference price for the operating range between zero MW output and the unit’s minimum operating level or the relevant Market Clearing Price.

If a Generating Unit shut down according to this Section 27.1.1.6.1 cannot start up in time to meet its next day’s Energy Schedules, the ISO shall charge the Scheduling Coordinator for that Generating Unit the lesser of the decremental reference price or the Market Clearing Price at the operating level set forth in the relevant Energy Schedule for any deviation from the next day’s Final Day-Ahead Schedules for Energy caused by such shut-down. Charges set forth in this Section 27.1.1.6.1 shall not apply to (1) Reliability Must-Run Units operating solely under their Reliability Must-Run Contracts or (2) units operating during a Waiver Denial Period in accordance with the must-offer obligation.

The ISO shall apply the decremental reference prices to thermal Generating Units and to non-thermal
Generating Units. If a Generating Unit is instructed by the ISO to shut down to manage Intra-Zonal Congestion, and is subsequently re-started, the Owner of that Generating Unit may invoice the ISO for the lesser of (1) the Start-Up Costs incurred and (2) the costs of keeping the Generating Unit warm to meet its Energy Schedules as set forth in Section 40.1.10.6. If the ISO Dispatches System Resources or Dispatchable Loads to alleviate Intra-Zonal Congestion, the ISO shall Dispatch those resources in merit order according to the resource’s Day-Ahead or Hour-Ahead Adjustment Bid or Imbalance Energy bid.

The ISO shall only Redispatch Regulatory Must-Take or Regulatory Must-Run Generation, Intermittent Resources, or Qualifying Facilities to manage Intra-Zonal Congestion after Redispatching all other available and effective generating resources, including Reliability Must-Run Units.

27.1.1.6.1.1 Decremental Bid Reference Levels. Decremental bid reference levels shall be determined for use in managing Intra-Zonal Congestion as set forth above in Section 27.1.1.6.1.

(a) Determination. Decremental bid reference levels shall be determined by applying the following steps in order as needed:

1. Excluding proxy bids, mitigated bids, and bids used out of merit order for managing Intra-Zonal Congestion, the accepted decremental bid, or the lower of the mean or the median of a resource’s accepted decremental bids if such a resource has more than one accepted decremental bid in competitive periods over the previous 90 days for peak and off-peak periods, adjusted for daily changes in fuel prices using gas price determined by Equation C1-8 (Gas) of the Schedules to the Reliability Must-Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Edison Company, or Pacific Gas and Electric Company), or, if the resource is not served from one of those three Service Areas, from the nearest of those three Service Areas. There will be a six-day time lag between when the gas price used in the daily gas index is determined and when the daily gas index based on that gas price can be calculated. For the purposes of this Section 27.1.1.6.1, to determine whether accepted decremental bids over the previous 90 days were accepted during competitive periods, the independent entity responsible for determining reference prices will apply a test to the prior 90-day period. The test will require that the ratio of a unit’s accepted out-of-sequence decremental bids (MWh) for the prior 90 days to its total accepted decremental bids (MWh) for the prior 90 days be less than 50
percent. If this ratio is greater or equal to 50%, accepted decremental bids will be determined to have been accepted in non-competitive periods and cannot be used to determine the decremental reference price. This test would be applied each day on a rolling 90-day basis. One ratio would be calculated for each unit with no differentiation for various output segments on the unit. Accepted and justified decremental bids below the applicable soft cap, as set forth in Section 39.3 of this Tariff, will be included in the calculation of reference prices;

2. A level determined in consultation with the Market Participant submitting the bid or bids at issue, provided such consultation has occurred prior to the occurrence of the conduct being examined, and provided the Market Participant has provided sufficient data in accordance with specifications provided by the independent entity responsible for determining reference prices;

3. 90 percent of the unit’s default Energy Bid determined monthly as set forth in Section 40.1.5 (based on the incremental heat rate submitted to the independent entity responsible for determining reference prices, adjusted for gas prices, determined according to paragraph (a)(1) above, and the variable O&M cost on file with the independent entity responsible for determining reference prices, or the default O&M cost of $6/MWh);

4. 90 percent of the mean of the economic Market Clearing Prices for the units’ relevant location during the lowest-priced 25 percent of the hours that the unit was dispatched or scheduled over the previous 90 days for peak and off-peak periods, adjusted for changes in fuel prices determined according to paragraph (a)(1) above; or

5. If sufficient data do not exist to calculate a reference level on the basis of the first, second, or fourth methods and the third method is not applicable or an attempt to determine a reference level in consultation with a Market Participant has not been successful, the independent entity responsible for determining reference prices shall determine a reference level on the basis of:

i. the independent entity’s estimated costs of an electric facility, taking into account available operating costs data, opportunity cost, and appropriate input from the Market Participant, and the best information available to the independent entity; or
ii. an appropriate average of competitive bids of one or more similar electric Facilities.

(b) Monotonicity. The decremental bid reference levels ($/MWh bid price) for the different bid segments of each resource shall be made monotonically non-decreasing by the independent entity responsible for determining reference prices by proceeding from the highest MW bid segment moving through each lower MW bid segment. The reference level of each succeeding bid segment, moving from right to left in order of decreasing operating level, shall be the lower of the reference level of the preceding bid segment or the reference level determined according to paragraph (a) above.

27.1.1.6.2 Incremental Bids.

With regard to incremental bids, except as provided in Sections 30.6, 27.1.1.6.1 and 11.2.4.2, the ISO will perform Intra-Zonal Congestion Management in real time using available Imbalance Energy bids, based on their effectiveness and in merit order, to minimize the cost of alleviating Congestion. In the event no Imbalance Energy bids are available, the ISO will exercise its authority to direct the Redispatch of resources as allowed under the Tariff, including Section 16.2.

27.1.1.6.3 Cost of Intra-Zonal Congestion Management.

The net of the amounts paid by the ISO to the Scheduling Coordinators and the amounts charged to the Scheduling Coordinators will be calculated and charged to all Scheduling Coordinators through a Grid Operations Charge, as described in Section 27.1.3.

27.1.1.6.4 [Deletion pending FERC approval]

27.1.1.7 Creation, Modification and Elimination of Zones.

27.1.1.7.1 Active Zones.

The Active Zones are as set forth in Appendix I to this ISO Tariff.

27.1.1.7.2 Modifying Zones.

The ISO shall monitor usage of the ISO-Controlled Grid to determine whether new Zones should be created, or whether existing Zones should be eliminated, in accordance with the following procedures.
27.1.1.7.2.1 If over a 12-month period, the ISO finds that within a Zone the cost to alleviate the Congestion on a path is equivalent to at least 5 percent of the product of the rated capacity of the path and the weighted average High Voltage Access Charge and Low Voltage Access Charge, as applicable, of the Participating TOs, the ISO may announce its intention to create a new Zone. In making this calculation, the ISO will only consider periods of normal operations. A new Zone will become effective 90 days after the ISO Governing Board has determined that a new Zone is necessary.

27.1.1.7.2.2 The ISO may, at its own discretion, shorten the 12-month and 90-day periods for creating new Zones if the ISO Governing Board determines that the planned addition of new Generation or Load would result in Congestion that would meet the criterion specified in Section 27.1.1.7.2.1.

27.1.1.7.2.3 If a new transmission project or other factors will eliminate Congestion between existing Zones, the ISO may modify or eliminate those Zones at its discretion.

27.1.1.7.2.4 The ISO may change the criteria for establishing or modifying Zone boundaries, subject to regulatory approval by the FERC.

27.1.1.7.3 Active and Inactive Zones.

27.1.1.7.3.1 An Active Zone is one for which a workably-competitive Generation market exists on both sides of the relevant Inter-Zonal Interface for a substantial portion of the year so that Congestion Management can be effectively used to manage Congestion on the relevant Inter-Zonal Interface. Pending the ISO's determination of the criteria for defining “workable competitive generation markets”, the Inactive Zones will, as an interim measure, be those specified in Section 27.1.1.7.3.3.

27.1.1.7.3.2 The Congestion Management described in this Section 27.1.1, and the Usage Charges stemming from the application of these procedures, shall not apply to Inter-Zonal Interfaces with Inactive Zones.

27.1.1.7.3.3 The initial inactive Inter-Zonal Interfaces are the interface between the San Francisco Zone and the remainder of the ISO-Controlled Grid, and the interface between the Humboldt Zone and the remainder of the ISO-Controlled Grid. The initial Inactive Zones are the San Francisco Zone and the Humboldt Zone.
The determination of whether a new Zone or an existing Inactive Zone should become an Active Zone and the determination of whether a workably-competitive Generation market exists for a substantial portion of the year, shall be made by the ISO Governing Board, using the same approval criteria as are used for the creation or modification of Zones. The ISO Governing Board shall adopt criteria that defines a “workably competitive Generation” market. The ISO Governing Board will review the methodology used for the creation or modification of Zones (including Active Zones and Inactive Zones) on an annual basis and make such changes as it considers appropriate.

**27.1.2 Usage Charges and Grid Operations Charges.**

**27.1.2.0.1** The ISO will collect Usage Charges from Scheduling Coordinators for their Scheduled use of Congested Inter-Zonal Interfaces. If Adjustment Bids are exhausted and Schedules are adjusted pro rata, the ISO will apply a default Usage Charge calculated in accordance with Section 27.1.2.1.3.1

**27.1.2.1 Usage Charges for Inter-Zonal Congestion.**

The Usage Charge is used by the ISO to charge Scheduling Coordinators for the use of Congested Inter-Zonal Interfaces. Subject to Section 16.2.3.4.1, the Usage Charge shall be paid by all Scheduling Coordinators that use a Congested Inter-Zonal Interface. If a Scheduling Coordinator uses more than one Congested Inter-Zonal Interface, it will pay a Usage Charge for each Congested Inter-Zonal Interface that it uses.

**27.1.2.1.1 Calculation and Allocation of Usage Charge.**

Those Scheduling Coordinators who are permitted by the ISO to use a Congested Inter-Zonal Interface will pay a Usage Charge. The Usage Charge is determined using Inter-Zonal Congestion Management described in Section 27.1.1.5, and is calculated as the hourly marginal value of an incremental kW of Inter-Zonal Interface capacity (in cents per kWh). The same Usage Charge will be used to compensate Scheduling Coordinators who, in effect, create transmission capacity through counter Schedules on Congested Inter-Zonal Interfaces.

**27.1.2.1.2 Calculation of Marginal Value of an Inter-Zonal Interface.**
The marginal value of an Inter-Zonal Interface is the basis for the Usage Charge associated with the scheduled use of the Inter-Zonal Interface. This price is calculated from the Adjustment Bids of the Scheduling Coordinators and the ISO's computer optimization algorithms, using the procedures described in Section 27.1.1.

27.1.2.1.2.1 The price used to determine the Usage Charge will be the Day-Ahead price for those scheduling in the Day-Ahead Market, or the Hour-Ahead price for those Schedules submitted after the Day-Ahead Market closed.

27.1.2.1.2.2 The Day-Ahead prices are calculated based on the Adjustment Bids of the Scheduling Coordinators who participate in the Day-Ahead Market. These Day-Ahead prices are used to calculate Usage Charges for Schedules accepted in the Day-Ahead Market.

27.1.2.1.2.3 The Hour-Ahead prices are calculated based on Adjustment Bids submitted or otherwise still in effect after the Day-Ahead procedures have concluded. These prices are applied to all Schedules for the use of the Congested Inter-Zonal Interfaces that have been submitted and accepted after the ISO's Day-Ahead scheduling and Congestion Management have concluded.

27.1.2.1.3 Default Usage Charge.

If inadequate or unusable Adjustment Bids have been submitted to the ISO to enable the ISO's Congestion Management to schedule Inter-Zonal Interface capacity on an economic basis, then the ISO will calculate and impose a default Usage Charge, in accordance with Sections 27.1.2.1.3.1 through 27.1.2.1.3.4.

27.1.2.1.3.1 The default Usage Charge will be calculated within a range having an absolute floor of $0/MWh and an absolute ceiling of $500/MWh; provided that the ISO may vary the floor within the absolute limits, with day-prior notice (e.g., applicable to next day's Day-Ahead Market) to Scheduling Coordinators, and vary the ceiling within the absolute limits, with at least seven (7) days notice to Scheduling Coordinators.

27.1.2.1.3.2 The default Usage Charge will be calculated, in accordance with this Section 27.1.2.1.3, by applying a pre-set adder, ranging from $0/MWh to $99/MWh, to the highest incremental Adjustment
Bid used, less the applicable decremental Adjustment Bid used; provided that in all cases where there are insufficient decremental Adjustment Bids or no decremental Adjustment Bids available, in the exercise of mitigating Congestion, the applicable decremental price will be set equal to $0/MWh; provided, further, that the ISO may vary the pre-set adder with day-prior notice to Scheduling Coordinators (e.g., applicable to next day’s Day-Ahead Market).

27.1.2.1.3.3 Upon the ISO Operations Date, and until such time as the ISO determines otherwise, the ceiling price for the default Usage Charge will be set at $250/MWh; the floor price for the default Usage Charge will be set at $30/MWh; and the pre-set adder that is to be applied in accordance with Section 27.1.2.1.3.2 will be set at $0/MWh.

27.1.2.1.3.4 The ISO will develop and implement a procedure for posting default Usage Charges on the WEnet or ISO Home Page.

27.1.2.1.3.5 If the Congestion Management software is not capable of calculating the default Usage Charge upon the ISO Operations Date in accordance with Sections 27.1.2.1.3.1 through 27.1.2.1.3.4, the ISO will establish a fixed default Usage Charge within the absolute limits of $0/MWh and $500/MWh, which may be changed by the ISO with day-prior notice. Initially, the default Usage Charge would be capped at $100/MWh. As soon as tested and available, the ISO will implement the Congestion Management software to calculate the default Usage Charge in accordance with Sections 27.1.2.1.3.1 through 27.1.2.1.3.4 after giving at least seven (7) days notice to Scheduling Coordinators, by way of a notice posted on the ISO Internet “Home Page” at http://www.ISO.com or such other Internet address as the ISO may publish from time to time.

27.1.2.1.4 Determination of Usage Charges to be Paid by Scheduling Coordinator.

All Scheduling Coordinators whose Schedules requiring use of a Congested Inter-Zonal Interface have been accepted by the ISO, shall pay a Usage Charge for each hour for which they have been scheduled to use the Inter-Zonal Interface. The amount payable shall be the product of the Usage Charge referred to in Section 27.1.2.1.2 for the particular hour, multiplied by the Scheduling Coordinator’s scheduled flows (in kW) and capacity, if any, reserved for Ancillary Services over the Inter-Zonal Interface for that particular hour.
27.1.2.1.5 Determination of Usage Charges to be Paid to Scheduling Coordinators Who Counter-Schedule.

Scheduling Coordinators who in effect create additional Inter-Zonal Interface transmission capacity on Congested Inter-Zonal Interfaces will receive from the ISO a Usage Charge for each hour they have counter-scheduled on the Congested Inter-Zonal Interfaces. The amount payable shall be the product of the Usage Charge referred to in Section 27.1.2.1.2 for that particular hour, multiplied by the Scheduling Coordinator's scheduled flows.

27.1.2.1.5.2 If a Scheduling Coordinator fails to provide the scheduled flows in a counter direction, it must reimburse the ISO for the ISO’s costs of buying or selling Imbalance Energy in each of the Zones affected by the non-provided scheduled flows in a counter direction, at the ISO’s Zonal Imbalance Energy prices. That is, for any Scheduling Coordinator that does not produce, in real time, the amount of Energy scheduled in the Day-Ahead Market or Hour-Ahead Market will be deemed to have purchased/sold the amount of Energy under/over produced in the real-time imbalance market at the real-time price.

27.1.2.1.6 ISO Disbursement of Net Usage Charge Revenues.

The ISO will determine the net Usage Charges on an interface-by-interface basis by subtracting the Usage Charge fees paid to Scheduling Coordinators from the Usage Charge fees paid by Scheduling Coordinators. The net Usage Charge revenues collected by the ISO for each Inter-Zonal Interface shall be, subject to the provisions of Section 27.1.2.1.7 of the ISO Tariff, paid to: (i) FTR Holders, in accordance with Section 36.6; and (ii) to the extent not paid to FTR Holders, to Participating TOs who own the Inter-Zonal Interfaces and Project Sponsors as provided in Section 24.7.3 (in proportion to their respective ownership rights). If a New Participating TO has received FTRs, pursuant to Section 36.4.3, over an Inter-Zonal Interface, the MW of FTRs received shall not be eligible for the disbursement of Usage Charge revenues under part (ii) of this section. Participating TOs will credit in turn the Usage Charge revenue to their Transmission Revenue Balancing Accounts, or, for those Participating TOs that do not have such accounts, to their Transmission Revenue Requirements.

27.1.2.1.7 ISO Debit of Net Usage Charge Revenues.
If, after the issuance of Final Day-Ahead Schedules by the ISO, (a) Participating TOs instruct the ISO to reduce interface limits based on operating conditions or (b) an unscheduled transmission Outage occurs and as a result of either of those events, Congestion is increased and Available Transfer Capacity is decreased in the Inter-Zonal Interface in the Hour-Ahead Market, the ISO shall: (1) charge each Participating TO and Project Sponsor(s) as provided in Section 24.7.3, and FTR Holder with an amount equal to its proportionate share, based on its financial entitlement to Usage Charges in the Day-Ahead Market in accordance with Section 27.1.2.1.6, of the product of (i) the Usage Charge in the Day-Ahead Market and (ii) the reduction in Available Transfer Capacity across the Inter-Zonal Interface in the direction of the Congestion (such amount due to the Participating TOs to be debited by them in turn from their Transmission Revenue Balancing Accounts or, for those Participating TOs that do not have such accounts, to their Transmission Revenue Requirements); (2) charge each Scheduling Coordinator with its proportionate share, based on Schedules in the Day-Ahead Market across the Inter-Zonal Interface in the direction of the Congestion, of the difference between the amount charged to Participating TOs and Project Sponsors as provided in Section 24.7.3, and FTR Holders under clause (1) and the Usage Charges in the Hour-Ahead Market associated with the reduced Available Transfer Capacity across the Congested Inter-Zonal Interface; and (3) credit each Scheduling Coordinator whose Schedule in the Hour-Ahead Market for the transfer of Energy across the Congested Inter-Zonal Interface was adjusted due to the reduction in Available Transfer Capacity an amount equal to the product of the adjustment (in MW) and the Usage Charge in the Hour-Ahead Market (in$/MW).

The ISO will issue a notice to Scheduling Coordinators of the operating hour, and extent, for which the derate will apply in the relevant Hour-Ahead Markets. The timing and form of such notices shall be set forth in ISO procedures.

27.1.3 Grid Operations Charge for Intra-Zonal Congestion.

Scheduling Coordinators whose resources are Redispatched by the ISO, in accordance with Intra-Zonal Congestion Management as set forth in Section 27.1.1.6, will be paid or charged as set forth in Appendix N, Part B. The net Redispatch cost will be recovered for each Settlement Period through the Grid Operations Charge, which shall be paid to the ISO by all Scheduling Coordinators in proportion to their
metered Demands within the Zone with Intra-Zonal Congestion, and scheduled exports from the Zone with Intra-Zonal Congestion to a neighboring Control Area, provided that, with respect to Demands within an MSS in the Zone and scheduled exports from the MSS to a neighboring Control Area, a Scheduling Coordinator shall be required to pay Grid Operations Charges only with respect to Intra-Zonal Congestion, if any, that occurs on an interconnection between the MSS and the ISO-Controlled Grid, and with respect to Intra-Zonal Congestion that occurs within the MSS, to the extent the Congestion is not relieved by the MSS Operator.

27.2.1 Transmission Losses.

27.2.1.1 Obligation to Provide for Transmission Losses.

Each Scheduling Coordinator shall ensure that it schedules sufficient Generation to meet both its Demand and Transmission Losses responsibilities as determined in accordance with this Section 27.2.1. Scheduling Coordinators for Generators, System Units and System Resources are responsible for their respective proportion of Transmission Losses as determined in accordance with Section 27.2.1.2. For each Final Hour-Ahead Schedule, each Scheduling Coordinator representing Generators, dynamically scheduled System Resources or System Units shall elect through the flag described in Section 30.2.2 to either: 1) generate sufficient additional energy to meet its respective Transmission Losses or 2) be financially responsible for its respective transmission loss obligation based on the Imbalance Energy procured on its behalf by the ISO. Scheduling Coordinators for non-dynamically scheduled System Resources may self-provide transmission losses by scheduling an additional balanced quantity of Energy, both Supply and Demand, equal to their expected transmission loss obligation above their committed delivery quantities in their Hour-Ahead Schedules. In the ISO Imbalance Energy market, all Scheduling Coordinators for Generators, System Units, and System Resources must be financially responsible for all respective Transmission Losses associated with their respective Imbalance Energy Dispatch Instructions in real time, based on the Imbalance Energy procured on their behalf by the ISO. A Scheduling Coordinator for an MSS Operator that has elected to follow Load will be responsible for its transmission loss obligation pursuant to Sections 4.9.9.1 and 4.9.16.4.

27.2.1.1.1 Settlement of Transmission Loss Obligations.
For a Scheduling Coordinator that elects to not or may not, self-provide for its transmission loss obligation, the ISO will procure Imbalance Energy on the Scheduling Coordinator’s behalf for each relevant Dispatch Interval and explicitly settle its transmission loss obligation for each applicable Settlement Interval. For a resource under an ISO Dispatch Instruction for Imbalance Energy, transmission loss obligations shall be settled at the Resource-Specific Settlement Interval Ex Post Price. For a resource not under an ISO Dispatch Instruction for Imbalance Energy, transmission loss obligations shall be settled at the simple average of the two applicable Dispatch Interval Ex Post Prices as defined in Section 34.9.2.1. Allocation of transmission loss obligation settlement shall be treated consistent with Instructed Imbalance Energy pursuant to Section 11.2.4.2.1.

27.2.1.2 Determination of Transmission Losses.

The ISO will specify GMMs for each Energy supply source (Generating Units and external imports at Scheduling Points) to account for the Energy lost in transmitting power from Generating Units and/or Scheduling Points to Load. The total Demand that may be served by a Generating Unit, in a given hour, taking account of Transmission Losses, is equal to the product of the total Metered Quantity of that Generating Unit in that hour and the Ex Post Generation Meter Multiplier calculated by the ISO in the hour for that Generator location except in accordance with Section 27.2.1.2.3. The Ex Post Generation Meter Multiplier shall be greater than one (1) where the Generating Unit’s contribution to the ISO Controlled Grid reduces Transmission Losses and shall be less than one (1) where the Generating Unit’s contribution to the system increases Transmission Losses. All Generating Units supplying Energy to the ISO Controlled Grid at the same electrical bus shall be assigned the same Ex Post Generation Meter Multiplier. Inter-Scheduling Coordinator Energy Trades will not be subject to such adjustments, beyond the impact of GMMs on the respective Scheduling Coordinator’s Generation and external imports.

27.2.1.2.1 Procedures for Calculating Generation Meter Multiplier.

27.2.1.2.1.1 At all times, the ISO will make available Generating Meter Multipliers for the seven Trading Days starting with the Trading Day after the next Trading Day before Scheduling Coordinators submit Day-Ahead Preferred Schedules. By 6:00 p.m. two days preceding a Trading Day, the ISO will calculate, and post on WEnet, an estimated Generation Meter Multiplier for each electrical bus at which
one or more Generating Units may supply Energy to the ISO Controlled Grid. In other words, if the current Trading Day is day 0, the ISO will publish at 6:00 pm today, via WEnet, the GMMs for Trading Days 2 through 8. On Trading Day 1, at 6:00 pm, the ISO will drop the GMMs for Trading Day 1 and add the newly calculated GMMs for Trading Day 9, with the GMMs for Trading Days 3 through 8 remaining the same.

27.2.1.2.1.1.1—The Generation Meter Multipliers shall be determined utilizing the Power Flow Model based upon the ISO’s forecasts of total Demand for the ISO Controlled Grid and Demand and Generation patterns throughout the ISO Controlled Grid. The ISO will calculate and publish GMMs for each Settlement Period to reflect different expected Generation and Demand patterns and expected operations and maintenance requirements, such as line Outages, which could affect Transmission Loss determination and allocation. The ISO shall continuously update the data to be used in calculating the Generation Meter Multipliers to reflect changes in system conditions on the ISO Controlled Grid, and the ISO shall provide all Scheduling Coordinators with access to such data. The ISO shall not be required to determine new Generation Meter Multipliers for each hour; the ISO will determine the appropriate period for which each set of Generation Meter Multipliers will apply, which period may vary based upon the expected frequency and magnitude of changes in system conditions on the ISO Controlled Grid.

27.2.1.2.1.2—The ISO will calculate the Ex Post Generation Meter Multiplier for each electrical bus at which one or more Generating Units may supply Energy to the ISO Controlled Grid. The Ex Post Generation Meter Multipliers shall be determined utilizing the real-time Power Flow Model based upon the ISO's total Demand for the ISO Controlled Grid and Demand and Generation patterns throughout the ISO Controlled Grid. The ISO’s total Demand shall be determined using real-time power flow data based on a state-estimation result. Any difference between scheduled and Ex Post Transmission Losses will be considered as an Imbalance Energy deviation and will be purchased or sold in the Real Time Market at the Settlement Interval Ex Post Price.

27.2.1.2.2—Methodology for Calculating Generation Meter Multiplier.

The ISO shall calculate the Generation Meter Multiplier for each Generating Unit location in a given hour by subtracting the Scaled Marginal Loss Rate from 1.0.
27.2.1.2.1 The Scaled Marginal Loss Rate for a given Generating Unit location in a given hour shall equal the product of (i) the Full Marginal Loss Rate for each Generating Unit location and hour, and (ii) the Loss Scale Factor for such hour.

27.2.1.2.2 The ISO shall calculate the Full Marginal Loss Rate for each Generating Unit location for an hour by utilizing the Power Flow Model to calculate the effect on total Transmission Losses for the ISO Controlled Grid of injecting an increment of Generation at each such Generating Unit location to serve an equivalent incremental MW of Demand distributed on a pro-rata basis throughout the ISO Controlled Grid.

27.2.1.2.3 The ISO shall determine the Loss Scale Factor for an hour by determining the ratio of forecast Transmission Losses to the total Transmission Losses which would be collected if Full Marginal Loss Rates were applied to each Generating Unit in that hour.

27.2.1.2.3 In the event that the Power Flow Model fails to determine Ex Post GMMs, for example if GMMs are outside the range of reasonability (typically 0.8 to 1.1), the ISO will use Default GMMs in their place.

27.2.2 Generation Meter Multipliers

27.2.2.1 Temporary Simplification Relating to GMM Loss Factors Application

Notwithstanding any other provision in the ISO Tariff, including the ISO Protocols, in determining whether a Schedule is a Balanced Schedule, no allowance shall be made for Transmission Losses (i.e., the Generation Meter Multiplier shall be set at 1.0) for all Scheduling Coordinators.

27.2.2.2 Application.

Notwithstanding any other provision in this Tariff, including the ISO Protocols, the temporary simplification measure specified in this Section 27.2.2 shall have effect until discontinued by a Notice of Full-Scale Operations issued by the Chief Executive Officer of the ISO.

27.2.2.2.1 Pursuant to Subsections 27.2.2.3.1 and 27.2.2.3.2, the Chief Executive Officer of the ISO shall give notice to all Scheduling Coordinators that such Scheduling Coordinators shall use forecasted Generation Meter Multipliers, as published by the ISO, in their Schedules. Such notice shall be given
only after the Chief Executive Officer determines that the ISO is capable of accepting Schedules using the forecasted Generation Meter Multipliers without adversely affecting operations or reliability.

27.2.3 Notices of Full-Scale Operations.

27.2.3.1 When the Chief Executive Officer of the ISO determines that the ISO is capable of implementing this Tariff, including the ISO Protocols, without modification in accordance with a temporary simplification measure specified in this Section 27.2.2, he shall issue a notice (“Notice of Full-Scale Operations”) and shall specify the relevant temporary simplification measure and the date on which it will permanently cease to apply, which date shall be not less than seven (7) days after the Notice of Full-Scale Operations is issued.

27.2.3.2 A Notice of Full-Scale Operations shall be issued when it is posted on the ISO Internet “Home Page,” at http://www.ISO.com or such other Internet address as the ISO may publish from time to time.

28 TRADES BETWEEN SCHEDULING COORDINATORS.

Billing and settling an Inter-Scheduling Coordinator Energy or Ancillary Service Trade shall be done in accordance with the agreements between the parties to the trade. The parties to an Inter-Scheduling Coordinator Energy or Ancillary Service Trade shall notify the ISO, in accordance with the ISO Protocols, of the Zone in which the transaction is deemed to occur, which, for Inter-Scheduling Coordinator Energy Trades, shall be used for the purpose of identifying which Scheduling Coordinator will be responsible for payment of applicable Usage Charges;
28.1.1 Purpose.

Scheduling Coordinators submit Inter-SC Trades of Energy consistent with the provisions in this Section 28.

28.1.2 Availability of Inter-SC Trades of Energy.

The CAISO allows Inter-SC Trades of Energy at individual PNodes of Generating Units within the CAISO Control Area and at Aggregated Pricing Nodes. The CAISO does not allow Inter-SC Trades of Energy at Scheduling Points. The CAISO allows submission of Inter-SC Trades of Energy in the DAM and the HASP. Inter-SC Trades of Energy submitted for the DAM are settled at the applicable Aggregated Pricing Nodes or PNodes for Generating Units. Inter-SC Trades of Energy submitted in the HASP are settled hourly based on the simple average of the Dispatch Interval LMPs at the applicable Aggregated Pricing Nodes or PNodes of Generating Units in those hours.

28.1.3 Submission of Inter-SC Trades of Energy.

A Scheduling Coordinator may submit Inter-SC Trades of Energy that it intends to have settled based on DAM LMPs at any time during the Day-Ahead Inter-SC Trade Period and may submit Inter-SC Trades of Energy for a particular hour that it intends to have settled based on the simple average of the Dispatch Interval LMPs during that hour at any time during the HASP Inter-SC Trade period.

28.1.4 Information Requirements.

An Inter-SC Trade of Energy must consist of trades from both Scheduling Coordinators and contain the following information: (i) the Scheduling Coordinator identification from whom the Energy is traded; (ii) the Scheduling Coordinator to whom the Energy is traded; (iii) the location of the Energy trade; (iv) the CAISO Market the trade is to be settled in; (v) the time period over which the bilateral Energy trade will take place, including the start-date and Trading Hour and the end-date and Trading Hour; and (vi) the quantity (MWh) of the Energy traded.

28.1.5 General Validation Rules for Inter-SC Trades.

For all Inter-SC Trades of Energy the CAISO shall verify that the Scheduling Coordinators for the Inter-SC Trade of Energy mutually agree on the quantity, location, time period, and CAISO Market LMPs (DAM
LMP or Dispatch Interval LMP) for settling the Inter-SC Trade of Energy. Any individual Inter-SC Trade of Energy that is deemed invalid by the CAISO due to inconsistencies between the trading Scheduling Coordinators on these terms will be rejected. The CAISO will notify trading Scheduling Coordinators within a reasonable time if their Inter-SC Trades of Energy fail these general validation rules as described in the Business Practice Manuals.

28.1.6 Validation Procedures for Physical Trades.

All Inter-SC Trades at PNodes will be subject to validation procedures as specified in this Section. Physical Trades can occur at any individual Generating Unit’s PNode provided the Physical Trade satisfies the CAISO’s Physical Trades validation procedures described herein. The Scheduling Coordinators must demonstrate that the trade is supported (directly or through an Inter-SC Trade of Energy with another Scheduling Coordinator) by a Day-Ahead Schedule for a Generating Unit at the same location for the Inter-SC Trade of Energy at a level greater than or equal to the amount of the Inter-SC Trade of Energy. The CAISO’s validation procedures for Physical Trades include three components: (1) Physical Trade submittal screening, (2) Physical Trade pre-market validation, and (3) Physical Trade post-market confirmation.

28.1.6.1 Physical Trade Submittal Screening.

The CAISO’s Physical Trade validation procedures begin upon initial submission of a Physical Trade to the CAISO. The first stage of that process, Physical Trade submittal screening, validates that the submitted Physical Trade does not exceed the PMax of the identified Generating Unit. The CAISO will reject Physical Trades that exceed the PMax and notify the responsible Scheduling Coordinators.

28.1.6.2 Physical Trade Pre-Market Validation.

The purpose of the pre-market validation is to determine whether the total MWh quantity of all submitted Physical Trades at a PNode of an individual Generating Unit exceeds the Generating Unit’s Energy Bid MWh. Pre-market validation is performed on all Physical Trades that pass the submittal screening set forth in Section 28.1.6.1. Scheduling Coordinators are notified within a reasonable time of their Physical Trades status as the CAISO conducts the pre-market validation to indicate, at a minimum, whether the Physical Trade is currently “valid” or “invalid.” These Physical Trade notices are preliminary and subject to change until the final pre-market validation at the close of the Inter-SC Trade Period. A Physical Trade
with a “valid” status may be rendered “invalid” due to the actions of the Scheduling Coordinators to that
Physical Trade or by other trading activities that are linked to the Generating Unit identified for the
relevant Physical Trade whenever the quantities specified in the relevant Inter-SC Trades cannot be
supported by the underlying Generating Unit’s Bid. Scheduling Coordinators can use these status notices
to make modifications to complete or correct invalid Physical Trades. The CAISO performs a final pre-
market validation at the close of the Inter-SC Trade Period. Physical Trades that are individually valid are
concatenated (daisy chained) with other supporting Physical Trades at the same PNode of the
Generating Unit. Once that concatenation is complete, the CAISO will determine whether the
concatenated Physical Trades are physically supported by either another Inter-SC Trade of Energy at that
same location or the Bid submitted in the relevant CAISO Market for the Generating Unit identified for that
Physical Trade, individually and in the aggregate. If a Physical Trade is not adequately physically
supported, the quantities in the Physical Trades of that Scheduling Coordinator and its downstream
trading counter-parties are reduced on a pro-rata basis until those Physical Trades are valid. In
performing physical pre-market validation of Inter-SC Trades of Energy in HASP, the CAISO also
considers final Day-Ahead Inter-SC Trades of Energy in determining whether the HASP Physical Trades
are physically supported individually or in the aggregate. Specifically, the CAISO determines whether the
Generating Unit’s submitted Bid in HASP is greater than or equal to the sum of: (1) final Day-Ahead Inter-
SC Trades of Energy at that location and (2) the additional Inter-SC Trades of Energy submitted in the
HASP at that location. If the amounts are greater than the Generating Unit’s submitted Bids in HASP, the
CAISO will adjust down on a prorated basis the HASP Physical Trades. Final Day-Ahead Physical
Trades are not adjusted in the HASP pre-market validation. The CAISO does not perform any Settlement
on Physical Trade quantities (MWh) that are curtailed during Physical Trade pre-market validation.

28.1.6.3 Physical Trade Post-Market Confirmation.

The CAISO conducts post-market confirmation of Physical Trades that pass pre-market validation in
Section 28.1.6.2 after the Market Clearing and the market results are posted to ensure that the
Generating Unit has a Schedule that can support all of the Physical Trades. During the post-market
confirmation process, the MWh quantity of Physical Trades that passed the CAISO’s pre-market
validation process may be reduced if the Generating Unit supporting the Physical Trades has a Schedule
that is below the quantity of Physical Trades at that Location. The MWh quantities of Physical Trades that are reduced during the post-market confirmation process are settled at the Existing Zone Generation Trading Hub price for the Existing Zone associated with the Generating Unit identified in the Inter-SC Trade of Energy. The portion of Physical Trades that remains intact will be settled at the LMP for the identified PNode for the Generating Unit.

28.1.6.4 Inter-SC Trades of Energy at Aggregated Pricing Nodes.

Inter-SC Trades of Energy at Aggregated Pricing Nodes are subject to the general validation procedures in Section 28.1.5 but are not subject to the three-stage physical validation procedures for Physical Trades described in Section 28.1.6 above.

28.2 INTER-SC TRADES OF ANCILLARY SERVICES.

Scheduling Coordinators may submit Inter-SC Trades of Ancillary Services no later than the Market Close for the HASP. Inter-SC Trades of Ancillary Services enable a Scheduling Coordinator to transfer any fixed quantity of Ancillary Services (MW) to another Scheduling Coordinator. An Inter-SC Trade of AS shall consist of a quantity in MWs traded between two Scheduling Coordinators for a specific hour and for a specific Ancillary Service type. The Inter-SC Trade of AS is a financial trade. The CAISO shall charge and pay the two parties of the trade based on the quantity (MW) of the Ancillary Service Obligation traded times the user rate for the Ancillary Service trades for the Trading Hour. Scheduling Coordinators may submit Inter-SC Trades of Ancillary Services for Regulation Up, Regulation Down, Spinning and Non-Spinning Reserves.

28.2.1 Information Requirements.

An Inter-SC Trade of Ancillary Services shall contain the following information: (i) the Scheduling Coordinator identification for the Scheduling Coordinator from whom the MW amounts of Ancillary Service is traded; (ii) the Scheduling Coordinator identification for the Scheduling Coordinator to whom the MW amounts of AS is traded; (iii) the type of AS being traded; (iv) the time period over which the trade will take place, including the start-date and time and the end-date and time; and the (v) quantity (MW) of the AS to be traded.

28.2.2 Validation.
The CAISO’s validation of Inter-SC Trades of AS will begin upon submission of an Inter-SC Trade of AS. The CAISO shall conduct a final validation for Inter-SC Trades of AS at the end of the HASP Inter-SC Trade Period. The CAISO will validate each submitted Inter-SC Trade of AS to verify that the contents of the submission match the submittal by the counter-party Scheduling Coordinator by type (Regulation-Up, Regulation-Down, Spinning Reserve and Non-Spinning Reserve), quantity (MW), and time period. The CAISO will inform the submitting Scheduling Coordinators regarding the validity of a submitted trade of an AS and will allow the Scheduling Coordinator resubmit the entire Inter-SC Trade of AS if it is not accepted. If only one of the two Scheduling Coordinators successfully submits an Inter-SC Trade of AS, the CAISO will notify both Scheduling Coordinators that the Inter-SC Trade of AS for the specific hour does not match the corresponding Inter-SC Trade of AS. If both Scheduling Coordinators successfully submit the Inter-SC Trade of AS, the CAISO will notify the Scheduling Coordinators that their Inter-SC Trade of AS for the specific hour has been accepted. An Inter-SC Trade of Ancillary Services submitted at a later time, but before the deadline for the submission of the trade for the Trading Hour, renders a previously submitted Inter-SC Trade of AS invalid if it applies to the same hour, same type of AS, and the same Scheduling Coordinators to whom and from whom the AS is traded.

### 28.2.3 Submission of Inter-SC Trades of Ancillary Services.

Scheduling Coordinators may submit Inter-SC Trade of Ancillary Services at any time prior to the time that the CAISO conducts its final validation run as specified in Section 28.2.2.

### 28.3 INTER-SC TRADES OF IFM LOAD UPLIFT OBLIGATION

Scheduling Coordinators may submit system-wide Inter-SC Trades of IFM Uplift Load Obligations from within the CAISO Control Area. Inter-SC Trades of IFM Uplift Load Obligation enable a Scheduling Coordinator to transfer any amount of Net IFM Load Obligation (MW) to another Scheduling Coordinator. An Inter-SC Trade of IFM Uplift Load Obligation shall consist of a quantity in MWs traded between two Scheduling Coordinators for a specific Trading Hour of the IFM.

#### 28.3.1 Information Requirements.

An Inter-SC Trade of IFM Uplift Load Obligation shall contain the following information: (i) the Scheduling Coordinator identification for the Scheduling Coordinator from whom the MW amounts of IFM Uplift Load Obligation were transferred; (ii) the quantity of MWs transferred; (iii) the hour of the Trading Hour for which the Obligation was transferred; and (iv) the type of IFM Uplift Load Obligation transferred (e.g., Regulation-Up, Regulation-Down, Spinning Reserve, or Non-Spinning Reserve).
Obligation is traded; (ii) the Scheduling Coordinator identification for the Scheduling Coordinator to whom the MW amounts of IFM Uplift Load Obligation is traded; (iii) the applicable Location that the Inter-SC Trade of IFM Uplift Load Obligation; (iv) the time period over which the trade will take place, including the start-date and time and the end-date and time; and (v) the quantity (MW) of the IFM Uplift Load Obligation to be traded.

28.3.2 Validation.

The CAISO’s validation of Inter-SC Trades of IFM Uplift Load Obligations will begin upon submission of an Inter-SC Trade of IFM Load Obligation. The CAISO shall conduct a final validation for Inter-SC Trades of IFM Uplift Load Obligations at the end of the HASP Inter-SC Trade Period. The CAISO will validate each submitted Inter-SC Trade of IFM Uplift Load Obligation to verify that the contents of the submission match the submittal by the counter-party Scheduling Coordinator in terms of quantity (MW), and time period. The CAISO will inform the submitting Scheduling Coordinators regarding the validity of a submitted Inter-SC Trade of IFM Uplift Load Obligation and will allow the Scheduling Coordinator to resubmit the entire Inter-SC Trade of IFM Uplift Load Obligation if it is not accepted. If only one of the two Scheduling Coordinators successfully submits an Inter-SC Trade of IFM Uplift Load Obligation, the CAISO will notify both Scheduling Coordinators that the Inter-SC Trade of IFM Uplift Load Obligation for the specific hour does not match the corresponding Inter-SC Trade of IFM Uplift Load Obligation. If both Scheduling Coordinators successfully submit the Inter-SC Trade of IFM Uplift Load Obligation, the CAISO will notify the Scheduling Coordinators that their Inter-SC Trade of IFM Uplift Load Obligation is between different Scheduling Coordinators that are authorized to participate in the CAISO markets during the time period covered by the trade and that the Trading Hour and the quantity of the trade must be greater than or equal to zero. An Inter-SC Trade of IFM Uplift Load Obligation submitted at a later time renders a previously submitted Inter-SC Trade of IFM Uplift Load Obligation invalid if it applies to the same hour and the same Scheduling Coordinators to whom and from whom the net IFM Load Obligation is traded.

28.3.3 Submission of Inter-SC Trades of IFM Uplift Load Obligation.
Scheduling Coordinators may submit Inter-SC Trade of IFM Uplift Load Obligations at any time prior to the time that the CAISO conducts its final validation run as specified in Section 28.3.2.