CAISO TARIFF APPENDIX A

Master Definitions Supplement

Appendix A Master Definition Supplement

ACA	Adjacent Control Area
Access Charge	A charge paid by all Utility Distribution Companies, Small Utility Distribution Companies, and MSS Operators with Gross Load in a Participating TO Service Territory, as set forth in Article II. The Access Charge includes the High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge. The Access Charge will recover the Participating TO's Transmission Revenue Requirement in accordance with Appendix F, Schedule 3.
ACE	Area Control Error
ACR	All Constraints Run
Adjacent Control Area (ACA)	A Control Area that is tightly interconnected with the CAISO Control Area, but also has direct interconnections with other Control Areas, possibly including other ACAs, such that power flows in one Control Area significantly affect power flows in the other Control Area.
Adjusted Load Metric	A Load Serving Entity's Load Metric minus the megawatts of Load served using Existing Transmission Contracts, Converted Rights, and Transmission Ownership Rights.
Adjusted Verified CRR Source Quantity	The MW amount eligible for nomination by an LSE or Qualified OCALSE in a verified tier of the CRR Allocation process, determined by reducing a Verified CRR Source Quantity to account for circumstances where the ownership or contract right to a generating resource is effective only for a portion of a particular season or month for which CRRs are being nominated.
Administrative Price	The price set by the CAISO in place of a Locational Marginal Price when, by reason of a System Emergency, the CAISO determines that it no longer has the ability to maintain reliable operation of the CAISO Controlled Grid relying solely on the economic Dispatch of Generation. This price will remain in effect until the CAISO considers that the System Emergency has been contained and corrected.

ADR	Alternative Dispute Resolution
ADS	Automated Dispatch System
Adverse System Impact	The negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.
Affected System	An electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TOs' electric systems that are not part of the CAISO Controlled Grid.
Affected System Operator	The entity that operates an Affected System.
Affiliate	An entity, company or person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with the subject entity, company, or person.
AGC	Automatic Generation Control
Aggregated Participating Load	An aggregation of two or more Participating Load Locations, created by the CAISO in consultation with the relevant Participating Load, for the purposes of enabling participating of the Participating Load in the CAISO Markets like Generation by submitting Supply Bids when offering Curtailable Demand and as non-Participating Load by submitting Demand Bids to consume in the Day-Ahead Market only.
Aggregated Pricing Node (Aggregated PNode)	A Load Aggregation Point, Trading Hub or any group of Pricing Nodes as defined by the CAISO.
Alert, Warning or Emergency (AWE) Notice	A CAISO operations communication issued to Market Participants and the public, under circumstances and in a form specified in CAISO Operating Procedures, when the operating requirements of the CAISO Controlled Grid are marginal because of Demand exceeding forecast, loss of major Generation sources, or loss of transmission capacity that has curtailed imports into the CAISO Control Area, or if

	insufficient Bids for the Supply of Energy and Ancillary Services have been submitted in the HASP for the CAISO Control Area.
All Constraints Run (ACR)	The second optimization run of the MPM-RRD process through which all known transmission Constraints are enforced.
Ancillary Service Award or AS Award	The notification by the CAISO indicating that a Bid to supply an Ancillary Service has been selected to provide such service in the DAM, HASP, or RTM.
Ancillary Service Bid or AS Bid	The Bid component that indicates the quantity in MW and a price in dollars per MW for a specific Ancillary Service, including Regulation Up, Regulation Down, Spinning Reserve and Non-Spinning Reserve, that a Scheduling Coordinator is offering to supply in a CAISO Market from a Generating Unit or System Resource, and only for Non-Spinning Reserve from the Load of a Participating Load.
Ancillary Service Bid Cost or AS Bid Cost	An amount equal to the product of the AS Award from each accepted AS Bid, reduced by any applicable No Pay capacity, and the relevant AS Bid price.
Ancillary Service Marginal Price (ASMP)	The marginal cost of providing an Ancillary Service in the relevant resource Location ($/MW).

Ancillary Service Obligation or AS Obligation	A Scheduling Coordinator's hourly obligation for Regulation Down, Regulation Up, Spinning Reserves, and Non-Spinning Reserves calculated pursuant to Section 11.10.2.1.3, 11.10.2.2.2, 11.10.3.2, and 11.10.4.2, respectively.
Ancillary Service Provider	A Participating Generator or Participating Load that is certified to provide an Ancillary Service.
Ancillary Service Regional Limit	A maximum or a minimum, or both a maximum and a minimum, amount of (or boundary of) Ancillary Services to be obtained within an AS Region. Limits can be expressed as either megawatt amounts or percentages.
Ancillary Service Region or AS Region	The System Region, the Expanded System Region, or any Sub-Region identified by the CAISO for procurement of Ancillary Services.
Ancillary Services (AS)	Regulation, Spinning Reserve, Non-Spinning Reserve, Voltage Support and Black Start together with such other interconnected operation services as the CAISO may develop in cooperation with Market Participants to support the transmission of Energy from Generation resources to Loads while maintaining reliable operation of the CAISO Controlled Grid in accordance with WECC standards and Good Utility Practice.
Ancillary Service Schedule or AS Schedule	The notification by the CAISO indicating that a Submission to Self-Provide an Ancillary Service has been selected to provide such service in the DAM, HASP, or RTM.
Annual Peak Demand Forecast	A Demand Forecast of the highest Hourly Demand in a calendar year, in MW.

Applicable Reliability Criteria The Reliability Standards and reliability criteria established by NERC and WECC and Local Reliability Criteria, as amended from time to time, including any requirements of the NRC.

Approved Credit Rating With respect to whether security must be posted for payment of the Grid Management Charge:

(a) A short-term taxable commercial paper debt rating of not less than any one of the following: (i) A1 by Standard and Poor's Corporation; (ii) F1 by Fitch Ratings; or (iii) P1 by Moody's Investors Service. This rating shall be an issuer, or counterpart rating, without the benefit of credit enhancement.

(b) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A1 by Standard and Poor's Corporation; (ii) V1 by Fitch Ratings; or (iii) VMIG1 by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement.

With respect to whether security must be posted for payment of all charges other than the Grid Management Charge:

(c) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A2 by Standard and Poor's Corporation; (ii) F2 by Fitch Ratings; or (iii) P2 by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement.

(d) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A2 by Standard and Poor's Corporation; (ii) V2 by Fitch Ratings; or (iii) VMIG2 by Moody's Investors Service. This rating shall be an issuer, or counterparty

	rating, without the benefit of credit enhancement. (e) A long-term debt rating of not less than any one of the following: (i) A- by Standard and Poor's Corporation; (ii) A- by Fitch Ratings; or (iii) A3 by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement. With respect to whether security must be posted for payment of all charges: (f) A federal agency shall be deemed to have an Approved Credit Rating if its financial obligations under the CAISO Tariff are backed by the full faith and credit of the United States. (g) A California state agency shall be deemed to have an Approved Credit Rating if its financial obligations under the CAISO Tariff are backed by the full faith and credit of the State of California. (h) Another credit rating approved by the CAISO Governing Board.
Approved Load Profile	Local Regulatory Authority approved Load profiles applied to cumulative End-Use Meter Data in order to allocate consumption of Energy to Settlement Periods.
Approved Maintenance Outage	A Maintenance Outage which has been approved by the CAISO through the CAISO Outage Coordination Office.
Area Control Error (ACE)	The sum of the instantaneous difference between the actual net Interchange and the scheduled net Interchange between the CAISO Control Area and all interconnected Control Areas, taking into account the effects of the CAISO Control Area's frequency bias, correction of meter error, and time error correction obligations.
AS	Ancillary Services
ASMP	Ancillary Service Marginal Price

ATC	Available Transfer Capacity
Automated Dispatch System (ADS)	The CAISO systems application to communicate Dispatch Instructions to Scheduling Coordinators.
Automatic Generation Control (AGC)	Generation equipment that automatically responds to signals from the CAISO's EMS control in Real-Time to control the Power output of Generating Units within a prescribed area in response to a change in system frequency, tie-line loading, or the relation of these to each other, so as to maintain the target system frequency and the established Interchange with other Control Areas within the predetermined limits.
Available Import Capability	The Maximum Import Capability of an Intertie into the CAISO Control Area in MW deliverable to the CAISO Control Area based on CAISO study criteria minus the sum in MW of all Existing Contracts and Transmission Ownership Rights over that Intertie held by load serving entities that do not serve Load within the CAISO Control Area.
Available Transfer Capacity (ATC)	The available capacity of a given transmission path, in MW after allocation of rights associated with Existing Contracts and

	Transmission Ownership Rights, to that path's Operating Transfer Capability established consistent with CAISO and WECC transmission capacity rating guidelines.
AWE Notice	Alert, Warning or Emergency Notice
Backup CAISO Control Center	The CAISO Control Center located in Alhambra, California.
Backup Meter	A redundant revenue quality meter which is identical to and of equal accuracy to the primary revenue quality meter connected at the same metering point which must be certified in accordance with the CAISO Tariff.
BAID	Business Associate Identification
Balancing Account	An account set up to allow periodic balancing of financial transactions that, in the normal course of business, do not result in a zero balance of cash inflows and outflows.
Base Case	The base case power flow, short circuit, and stability data bases used for the Interconnection Studies.
Base Load	The maximum consumption of a Participating Load as bid in the CAISO Markets by Scheduling Coordinators.
BCR	Bid Cost Recovery
Bid	An offer for the Supply or Demand of Energy or Ancillary Services, including Self-Schedules, submitted by Scheduling Coordinators for specific resources, conveyed through several components that apply differently to the different types of service offered to or demanded from any of the CAISO Markets.
Bid Adder	A dollar amount added to the Bid of a Frequently Mitigated Unit.
Bid Cost Recovery (BCR)	The CAISO settlements process through which eligible resources recover their Bid Costs.
Bid Cost Recovery Eligible Resources (BCR Eligible Resources)	Those resources eligible to participate in the Bid Cost Recovery as specified in Section 11.8, which include Generating Units, System Units, System Resources, and Participating Loads.

Bid Costs	The costs for resources manifested in the Bid components submitted, which include the Start-Up Cost, Minimum Load Cost, Energy Bid Cost, Pump Shut-Down Cost, Pumping Cost, Ancillary Services Bid Cost and RUC Availability Payment.
Black Start	The procedure by which a Generating Unit self-starts without an external source of electricity thereby restoring a source of power to the CAISO Control Area following system or local area blackouts.
Black Start Generator	A Participating Generator in its capacity as party to an Interim Black Start Agreement with the CAISO for the provision of Black Start services, but shall exclude Participating Generators in their capacity as providers of Black Start services under their Reliability Must-Run Contracts.
BPM	Business Practice Manual
BPM PRR	Business Practice Manual Proposed Revision Request
Bulk Supply Point	A Utility Distribution Company or Small Utility Distribution Company metering point.
Business Associate	Any entity with whom the CAISO interacts related to the CAISO

	Markets.
Business Associate Identification (BAID)	Identification characters assigned to each Business Associate by the CAISO.
Business Day	Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.
Business Practice Manual Proposed Revision Request (BPM PRR)	A request to make any change to a BPM, including any attachments thereto, as described in Section 22.11.1.
Business Practice Manuals (BPMs)	A collection of documents made available by the CAISO on the CAISO Website that contain the rules, polices, procedures and guidelines established by the CAISO for operational, planning, accounting and settlement requirements of CAISO Market activities, consistent with the CAISO Tariff.
CAISO	The California Independent System Operator Corporation, a state chartered, California non-profit public benefit corporation that operates the transmission facilities of all Participating TOs and dispatches certain Generating Units and Loads.
CAISO Account	The CAISO Clearing Account, the CAISO Reserve Account or such other trust accounts as the CAISO deems necessary or convenient for the purpose of efficiently implementing the funds transfer system under the CAISO Tariff.
CAISO ADR Procedures	The procedures for resolution of disputes or differences set out in Section 13.
CAISO Alternative Dispute Resolution Committee (CAISO ADR Committee)	The Committee appointed by the CAISO ADR Committee pursuant to Article IV, Section 3 of the CAISO bylaws to perform functions assigned to the CAISO ADR Committee in the ADR process in Section 13.
CAISO Audit Committee	A committee of the CAISO Governing Board appointed pursuant to Article IV, Section 5 of the CAISO bylaws to (1) review the CAISO's annual independent audit (2) report to the CAISO Governing Board on such audit, and (3) monitor compliance with the CAISO Code of Conduct.

CAISO Authorized Inspector	A person authorized by the CAISO to certify, test, inspect and audit meters and Metering Facilities in accordance with the procedures established by the CAISO pursuant to Section 10.
CAISO Bank	The bank appointed by the CAISO from time to time for the purposes of operating the Settlement process.
CAISO Clearing Account	The account in the name of the CAISO with the CAISO Bank to which payments are required to be transferred for allocation to CAISO Creditors in accordance with their respective entitlements.

CAISO Code of Conduct	For employees, the code of conduct for officers, employees and substantially full-time consultants and contractors of the CAISO as set out in exhibit A to the CAISO bylaws; for Governors, the code of conduct for governors of the CAISO as set out in exhibit B to the CAISO bylaws.
CAISO Commitment Period	The portion of a Commitment Period that is not a Self-Commitment Period.
CAISO Control Center	The control center established by the CAISO pursuant to Section 7.1.
CAISO Controlled Grid	The system of transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's Operational Control.
CAISO Creditor	A Business Associate to which amounts are payable under the terms of the CAISO Tariff and agreements with the CAISO.
CAISO Debtor	A Business Associate that is required to make a payment to the CAISO under the CAISO Tariff and agreements with the CAISO.
CAISO Demand	Power delivered to Load internal to CAISO Control Area.
CAISO Documents	The CAISO Tariff, CAISO bylaws, and any agreement entered into between the CAISO and a Scheduling Coordinator, a Participating TO or any other Market Participant pursuant to the CAISO Tariff.
CAISO Emissions Cost Trust Account	The CAISO Account established pursuant to Section 11.18.2.
CAISO Forecast of CAISO Demand	The forecast of CAISO Demand made by the CAISO for use in the CAISO Markets.
CAISO Governing Board	The Board of Governors established to govern the affairs of the CAISO.
CAISO IFM Commitment Period	The portion of a Commitment Period in the IFM that is not a Self-Commitment Period.
CAISO Invoice	The invoices issued by the CAISO to the Responsible Utilities or Reliability Must Run Owners based on the Revised Estimated Reliability Must Run Invoice and the Revised Adjusted RMR Invoice.

CAISO Markets	Any of the markets administered by the CAISO under the CAISO Tariff, including, without limitation, the DAM, HASP, RTM, Transmission, and Congestion Revenue Rights.
CAISO Markets Processes	The MPM-RRD, IFM, RUC, STUC, RTUC, and RTD. HASP is an hourly run of the RTUC.
CAISO Memorandum Account	The memorandum account established by each California IOU pursuant to California Public Utilities Commission Order D. 96-08-038 date August 2, 1996 which records all CAISO startup and development costs incurred by that California IOU.
CAISO Metered Entity	(a) any one of the following entities that is directly connected to the CAISO Controlled Grid: i. a Generator other than a Generator that sells all of its Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the Utility Distribution Company or Small Utility Distribution Company in whose Service Area it is located; ii. MSS Operator; or iii. Utility Distribution Company or Small Utility Distribution Company; and (b) any one of the following entities: i. a Participating Generator; ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas; iii. a Participating Load; iv. a Participating Intermittent Resource; or v. a utility that requests that Unaccounted for Energy for its Service Area be calculated separately, in relation to its meters at points of connection of its Service Area with the systems of other utilities.
CAISO Operations Date	March 31, 1998.
CAISO Outage Coordination Office	The office established by the CAISO to coordinate Maintenance Outages in accordance with Section 9.3.

CAISO Payments Calendar	A calendar published by the CAISO showing the dates on which Settlement Statements will be published by the CAISO and the Payment Dates by which Invoices issued under the CAISO Tariff must be paid.
CAISO Protocols	The rules, protocols, procedures and standards promulgated by the CAISO (as amended from time to time) to be complied with by the CAISO, Scheduling Coordinators, Participating TOs and all other Market Participants in relation to the operation of the CAISO Controlled Grid and the participation in the markets for Energy and Ancillary Services in accordance with the CAISO Tariff.
CAISO Register	The register of all the transmission lines, associated facilities and other necessary components that are at the relevant time being subject to the CAISO's Operational Control.
CAISO Reserve Account	The account established for the purpose of holding cash deposits which may be used in or towards clearing the CAISO Clearing Account.
CAISO Protocols	The rules, protocols, procedures and standards promulgated by the CAISO (as amended from time to time) to be complied with by the CAISO, the CAISO Scheduling Coordinators, Participating TOs and all other Market Participants in relation to the operation of the CAISO Controlled Grid and the participation in the markets for Energy and Ancillary Services in accordance with the CAISO Tariff.
CAISO Security Amount	The level of security provided in accordance with Section 12. by a Scheduling Coordinator Applicant who does not have an Approved Credit Rating. The CAISO Security Amount may be separated into two components: (i) the level of security required to secure payment of the Grid Management Charge; and (ii) the level of security required to secure payment of all charges other than the Grid Management Charge.
CAISO Surplus Account	The account established by the CAISO pursuant to Section 11.29.9.6.3.
CAISO Tariff	The California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.
CAISO Website	The CAISO internet home page at http://www.caiso.com or such other internet address as the CAISO shall publish from time to time.
Candidate CRR Holder	An entity that is registered and qualified by the CAISO to participate in the CRR Allocation, the CRR Auction, or

	the Secondary Registration System to become a CRR Holder and is a party to a fully executed CRR Entity Agreement, and therefore must comply with the requirements for Candidate CRR Holders under the CAISO Tariff.
CCR	Competitive Constraints Run
Certificate of Compliance	A certificate issued by the CAISO which states that the Metering Facilities referred to in the certificate satisfy the certification criteria for Metering Facilities contained in the CAISO Tariff.
C.F.R.	Code of Federal Regulations.
Charge Code	A numeric identifier used to specify Settlement calculations in the Business Practice Manual.
Clean Bid	A valid Bid submitted by a Scheduling Coordinator that requires no modification, a Default Modified Bid, or a Generated Bid deemed to be acceptable for submission to the CAISO Market applications.
Clustering	The process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.
COG	Constrained Output Generator
Commercial Operation	The status of a Generating Unit at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.
Commercial Operation Date	The date on which a Generating Unit at a Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO and the Interconnection Customer pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.
Commitment Interval	The fifteen minute period of time for which the CAISO commits units through the Real-Time Unit Commitment process.
Commitment Period	The consecutive Time Periods within a Trading Day with an “On” Commitment Status.
Commitment Status	The “On” or “Off” state for each unit in each Time Period.

Competitive Constraints Run (CCR)	The first optimization run of the MPM-RRD process through which all pre-designated competitive constraints are enforced.
Condition 1 RMR Unit	A resource operating pursuant to Condition 1 of its RMR Contract.
Condition 2 RMR Unit	A resource operating pursuant to Condition 2 of its RMR Contract.
Congestion	A characteristic of the transmission system produced by a binding constraint to the optimum economic dispatch to meet Demand such that the LMP, exclusive of Marginal Cost of Losses, at different Locations of the transmission system is not equal.
Congestion Charge	A charge attributable to the Marginal Cost of Congestion at a given pricing PNode.
Congestion Management	The alleviation of Congestion in accordance with applicable CAISO procedures, the CAISO Tariff, and Good Utility Practice.
Congestion Management Charge	The component of the Grid Management Charge that provides for the recovery of the CAISO's costs of operating the Congestion Management process including, but not limited to, the management and operation of Congestion markets, taking Congestion Revenue Rights, Transmission Ownership Rights, and Existing Contracts into account, and determining the price for mitigating Congestion for flows on Congested paths.
Congestion Revenue Right (CRR)	A CRR Obligation or CRR Option.
Connected Entity	A Participating TO or any party that owns or operates facilities that are electrically interconnected with the CAISO Controlled Grid.
Constrained Output Generator (COG)	A Generating Unit that, due to operational characteristics, can only be dispatched in one of two states: either turned completely Off, or turned On and run at a fixed capacity level.
Constraints	Physical and operational limitations on the transfer of electrical power through transmission facilities.
Contingency	A potential Outage that is unplanned, viewed as possible or eventually probable, which is taken into account when considering approval of other requested Outages or while operating the CAISO Control Area.
Contingency Flag	The daily Bid component that indicates that the Spinning Reserves and Non-Spinning Reserves being offered in the CAISO Market are

	Contingency Only reserves.
Contingency Only	A resource providing Operating Reserve capacity that may be Dispatched by the CAISO only in the event of a Contingency or System Emergency.
Contract Reference Number (CRN)	The Bid component that indicates the specific contract identification number issued by the CAISO to Scheduling Coordinators transactions under Existing Contracts or TORs.
Control Area	An electric power system (or combination of electric power systems) to which a common AGC scheme is applied in order to: i) match, at all times, the power output of the Generating Units within the electric power system(s), plus the Energy purchased from entities outside the electric power system(s), minus Energy sold to entities outside the electric power system, with the Demand within the electric power system(s); ii) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice; iii) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and iv) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.
Control Area Gross Load	For the purpose of calculating and billing Minimum Load Costs, Emission Costs, and Start-Up Costs, Control Area Gross Load is all Demand for Energy within the CAISO Control Area. Control Area Gross Load shall <u>not</u> include Energy consumed by: (a) generator auxiliary Load equipment that is dedicated to the production of Energy and is electrically connected at the same point as the Generating Unit (e.g., auxiliary Load equipment that is served via a distribution line that is separate from the switchyard to which the Generating Unit is connected will not be considered to be electrically connected at the same point); and (b) Load that is isolated electrically from the CAISO Control Area (*i.e.*, Load that is not synchronized with the CAISO Control Area).
Control Area Operator	The person responsible for managing the Real-Time operations of a Control Area.

Converted Rights	Those transmission service rights as defined in Section 4.3.1.6.
Core Reliability Services - Demand Charge	A component of the Grid Management Charge that provides for the recovery of the CAISO's costs of providing a basic, non-scalable level of reliable operation for the CAISO Control Area and meeting regional and national reliability requirements. The formula for determining the Core Reliability Services – Demand Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
Core Reliability Services – Energy Export Charge	A component of the Grid Management Charge that provides for the recovery of the CAISO's costs of providing a basic, non-scalable level of reliable operation for the CAISO Control Area and meeting regional and national reliability requirements. The formula for determining the Core Reliability Services – Energy Exports Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
CPUC	The California Public Utilities Commission, or its successor.
CPUC Load Serving Entity	Any entity serving retail Load in the CAISO Control Area under the jurisdiction of the CPUC, including an electrical corporation under section 218 of the California Public Utilities Code, an electric service provider under section 218.3 of the California Public Utilities Code, and a community choice aggregator under section 331.1 of the California Public Utilities Code.
Critical Protective System	Facilities and sites with protective relay systems and Remedial Action Schemes that the CAISO determines may have a direct impact on the ability of the CAISO to maintain system security and over which the CAISO exercises Operational Control.
CRN	Contract Reference Number
CRR	Congestion Revenue Rights
CRR Allocation	The process of nominations and awards held monthly and annually through which the CAISO will distribute CRRs to Candidate CRR Holders.
CRR Annual Cycle	Time period covered by all the CRRs released in an annual CRR Allocation and Auction process.

CRR Auction	The annual and monthly market process that will follow CRR Allocation through which the CAISO makes CRRs available to Candidate CRR Holders that submit offers to purchase CRRs.
CRR Balancing Account	The financial account held by the CAISO for CRRs that is administered in accordance with Section 11.2.4.
CRR Charge	The charge assessed by the CAISO on the holder of a CRR Obligation when Congestion is in the opposite direction of the CRR Source to CRR Sink specification as described in Section 11.2.4.
CRR Entity Agreement	An agreement between the CAISO and a Candidate CRR Holder or CRR Holder that must be fully executed in order for such an entity to participate in the CRR Allocation, CRR Auction, or Secondary Registration System, a *pro forma* version of which is set forth in Appendix B.11.

CRR Holder	A Candidate CRR Holder that has acquired CRR(s) either through the CRR Allocation, the CRR Auction, or through a transaction registered in the Secondary Registration System.
CRR Load Metric	The Seasonal CRR Load Metric or Monthly CRR Load Metric.
CRR Obligation	A financial instrument that entitles the holder to a CRR Payment when Congestion is in the direction of the CRR Source to CRR Sink specification and imposes on its holder a CRR Charge when Congestion is in the opposite direction of the CRR Source to CRR Sink specification as described in Section 11.2.4.
CRR Option	A financial instrument that entitles its holder to a CRR Payment when Congestion is in the direction of the CRR Source to CRR Sink specification.
CRR Payment	A payment from the CAISO to a CRR Holder as specified in Section 11.2.4.
CRR Sink	A PNode or a Trading Hub specified as the point of withdrawal for a Congestion Revenue Right.
CRR Source	A PNode or a Trading Hub specified as the point of receipt for a Congestion Revenue Right.
CRR Term	Set of hours for which a given CRR is effective, based on the CRR specifications in Section 36.3, which is either the season multiplied by the time-of-use specifications or the month multiplied by the time-of-use specifications.
CRR Year Four	The fourth period of time for which the CAISO conducts an annual CRR Allocation, as defined in the Business Practice Manual.
CRR Year One	The first period of time for which the CAISO conducts an annual CRR Allocation, as defined in the Business Practice Manuals.
CRR Year Three	The third period of time for which the CAISO conducts an annual CRR Allocation, as defined in the Business Practice Manual.
CRR Year Two	The second period of time for which the CAISO conducts an annual CRR Allocation, as defined in the Business Practice Manual.

Curtailable Demand	Demand from a Participating Load or Aggregated Participating Load that can be curtailed at the direction of the CAISO in the Real-Time Dispatch of the CAISO Controlled Grid. Scheduling Coordinators with Curtailable Demand may offer it to the CAISO to meet Non-Spinning Reserve or Imbalance Energy.
Custom Load Aggregation Point (Custom LAP)	An aggregation of Load PNodes created by the CAISO based on a set of custom LDFs submitted by a Scheduling Coordinator, at which such Scheduling Coordinator may submit a single Bid and settle Demand consistent with the CAISO Tariff rules, and for which the Scheduling Coordinator is required to submit to the CAISO Meter Data for the nodal Load represented in such aggregation.
DAM	Day-Ahead Market
Day 0	The Trading Day to which the Settlement Statement or Settlement calculation refers. For example “Day 41” shall mean the 41st day

	after that Trading Day and similar expressions shall be construed accordingly.
Day-Ahead	The twenty-four hour time period prior to the Trading Day.
Day-Ahead Inter-SC Trade Period	The period commencing seven (7) days prior to the applicable Trading Day and ending at 12:00 p.m. noon on the day prior to that Trading Day, during which time the CAISO will accept Inter-SC Trades of Energy for the DAM from Scheduling Coordinators.
Day-Ahead Market (DAM)	A series of processes conducted in the Day-Ahead that includes the Market Power Mitigation-Reliability Requirement Determination, the Integrated Forward Market and the Residual Unit Commitment.
Day-Ahead Schedule	A Schedule issued by the CAISO one day prior to the target Trading Day indicating the levels of Supply and Demand for Energy cleared through the IFM and scheduled for each Settlement Period, for each PNode or Aggregated Pricing Node, including Scheduling Points of that Trading Day.
Default Energy Bid	The Energy Bid Curve used in Local Market Power Mitigation pursuant to Section 39.
Default LAP	The LAP defined for the TAC Area at which all Bids for Demand shall be submitted and settled, except as provided in Sections 27.2.1 and 30.5.3.2.
Default Modified Bid	A Bid that is submitted by a Scheduling Coordinator and is deemed valid and qualifies for modification under the provisions of Section 40.

Deliverability Assessment	An evaluation by the Participating TO, CAISO or a third party consultant for the Interconnection Customer to determine a list of facilities, the cost of those facilities, and the time required to construct these facilities, that would ensure a Large Generating Facility could provide Energy to the CAISO Controlled Grid at peak load, under a variety of severely stressed conditions, such that the aggregate of Generation in the local area can be delivered to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's reliability criteria and procedures.
Delivery Network Upgrades	Transmission facilities at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies to relieve constraints on the CAISO Controlled Grid.
Delivery Point	The point where a transaction between Scheduling Coordinators is

	deemed to take place. It can be either the Generation input point, a Demand Take-Out Point, or a transmission bus at some intermediate location.
Demand	The instantaneous amount of Power that is delivered to Loads and Scheduling Points by Generation, transmission or distribution facilities. It is the product of voltage and the in-phase component of alternating current measured in units of watts or standard multiples thereof, e.g., 1,000W=1kW, 1,000kW=1MW, etc.
Demand Bid	The Bid component in a Bid submitted in the DAM that indicates the MWh of Energy the Scheduling Coordinator is willing to purchase, the price at which it is willing to purchase the specified Energy and the applicable Trading Hours for the next day.
Demand Forecast	An estimate of Demand over a designated period of time.
Department of Market Monitoring	The department of the CAISO established under Appendix P.1.
Direct Access End-User	An Eligible Customer located within the Service Area of a Utility Distribution Company who purchases Energy and Ancillary Services through a Scheduling Coordinator.
Dispatch	The activity of controlling an integrated electric system to: i) assign specific Generating Units and other sources of supply to effect the supply to meet the relevant area Demand taken as Load rises or falls; ii) control operations and maintenance of high voltage lines, substations, and equipment, including administration of safety procedures; iii) operate interconnections; iv) manage Energy transactions with other interconnected Control Areas; and v) curtail Demand.
Dispatch Instruction	An instruction by the CAISO for an action with respect to specific

	equipment, or to a resource for increasing or decreasing its Energy Supply or Demand from the Day-Ahead Schedule, RUC Schedule, and Day-Ahead AS Award to a specified Dispatch Operating Point pertaining to Real-Time operations.
Dispatch Interval	The Time Period, which may range between five (5) and thirty (30) minutes, over which the Real-Time Dispatch measures deviations in Generation and Demand, and selects Ancillary Service and supplemental energy resources to provide balancing Energy in response to such deviations. The Dispatch Interval shall be five (5) minutes. Following a decision by the CAISO Governing Board, the CAISO may, by seven (7) days' notice published on the CAISO Website, increase or decrease the Dispatch Interval within the range of five (5) to thirty (30) minutes.
Dispatch Interval LMP	The price of Imbalance Energy determined at each Dispatch Interval in accordance with Section 11.5.4.
Dispatch Operating Point	The expected operating point of a resource that has received a Dispatch Instruction. The resource is expected to operate at the Dispatch Operating Point after completing the Dispatch Instruction, taking into account any relevant Ramp Rate and time delays. Energy expected to be produced or consumed above or below the Day-Ahead Schedule in response to a Dispatch Instruction constitutes Instructed Imbalance Energy. For resources that have not received a Dispatch Instruction, the Dispatch Operating Point defaults to the corresponding Day-Ahead Schedule.
Distribution System	The distribution assets of an IOU or Local Publicly Owned Electric Utility.
Distribution Upgrades	The additions, modifications, and upgrades to the Participating TO's electric systems that are not part of the CAISO Controlled Grid. Distribution Upgrades do not include Interconnection Facilities.
Dynamic Resource-	A Dynamic System Resource that is

Specific System Resource	a specific generation resource outside the CAISO Control Area.
Dynamic Schedule	A telemetered reading or value which is updated in Real-Time and which is used as a schedule in the CAISO Energy Management System calculation of Area Control Error and the integrated value of which is treated as a schedule for Interchange accounting purposes.
Dynamic System Resource	A System Resource that has satisfied the CAISO's contractual and operational requirements for submitting a Dynamic Schedule, and for which a Dynamic Schedule has been submitted, including a Dynamic Resource-Specific System Resource.
E&P Agreement	Engineering & Procurement Agreement
ECA	Embedded Control Area
Economic Bid	A Bid that includes quantity (MWh) and price ($) for specified Trading Hours.
EDI	Electronic Data Interchange
EEP	Electrical Emergency Plan
ELC Process	Extremely Long-Start Commitment Process
Electrical Emergency Plan (EEP)	A plan to be developed by the CAISO in consultation with Utility Distribution Companies to address situations when Energy reserve margins are forecast to be below established levels.

Electric Facility	An electric resource, including a Generating Unit, System Unit, or a Participating Load.
Electronic Data Interchange (EDI)	The routine exchange of business documented on electronic media such as purchase orders, invoices and remittance. The format of the data is based on an industry-approved format such as those published by the ANSI ASC X12 committee.
Eligible Customer	(i) any utility (including Participating TOs, Market Participants and any power marketer), Federal power marketing agency, or any person generating Energy for sale or resale; Energy sold or produced by such entity may be Energy produced in the United States, Canada or Mexico; however, such entity is not eligible for transmission service that would be prohibited by Section 212(h)(2) of the Federal Power Act; and (ii) any retail customer taking unbundled transmission service pursuant to a state retail access program or pursuant to a voluntary offer of unbundled retail transmission service by the Participating TO.
Eligible Intermittent Resource	A Generating Unit that is powered solely by 1) wind, 2) solar energy, or 3) hydroelectric potential derived from small conduit water distribution facilities that do not have storage capability.
ELS Resource	Extremely Long-Start Resource
Embedded Control Area (ECA)	A Control Area that has direct interconnections exclusively with the CAISO Control Area, and no other Control Area.
Emissions Costs	The mitigation fees, excluding capital costs, assessed against a Generating Unit by a state or federal agency, including air quality districts, for exceeding applicable NOx emission limitations.
Emissions Eligible Generator	A Generator with a Generating Unit that is a BCR Eligible Resource.
EMS	Energy Management System

Encumbrance	A legal restriction or covenant binding on a Participating TO that affects the operation of any transmission lines or associated facilities and which the CAISO needs to take into account in exercising Operational Control over such transmission lines or associated facilities if the Participating TO is not to risk incurring significant liability. Encumbrances shall include Existing Contracts and may include: (1) other legal restrictions or covenants meeting the definition of Encumbrance and arising under other arrangements entered into before the CAISO Operations Date, if any; and (2) legal restrictions or covenants meeting the definition of Encumbrance and arising under a contract or other arrangement entered into after the CAISO Operations Date.
End-Use Customer or End-User	A consumer of electric power who consumes such power to satisfy a Load directly connected to the CAISO Controlled Grid or to a Distribution System and who does not resell the power.
End-Use Meter	A metering device collecting Meter Data with respect to the Energy consumption of an End-User.

End-Use Meter Data	Meter Data that measures the Energy consumption in respect of End-Users gathered, edited and validated by Scheduling Coordinators and submitted to the CAISO in Settlement quality form.
Energy	The electrical energy produced, flowing or supplied by generation, transmission or distribution facilities, being the integral with respect to time of the instantaneous power, measured in units of watt-hours or standard multiples thereof, e.g., 1,000 Wh=1kWh, 1,000 kWh=1MWh, etc.
Energy Bid	A Demand Bid or an Energy Supply Bid.
Energy Bid Cost	An amount equal to the integral of the Energy Bid for resources that have been selected through the IFM or RTM, above PMin.
Energy Bid Curve	The Bid component that indicates the prices and related quantity at which a resource offers Energy in a monotonically increasing (decreasing for Participating Load) staircase function, consisting of no more than 10 segments defined by 11 pairs of MW operating points and $/MWh, which may be different for each Trading Hour of the applicable Bid time period. If the resource has Forbidden Operating Regions, each Forbidden Operating Region must be reflected as a single, separate Energy Bid Curve segment.
Energy Export	For purposes of calculating the Grid Management Charge, Energy included in an interchange Schedule submitted to the CAISO, or dispatched by the CAISO, to serve a Load located outside the CAISO's Control Area, whether the Energy is produced by a Generator in the CAISO Control Area or a resource located outside the CAISO's Control Area.
Energy Limit	The Bid component that indicates the maximum and minimum daily Energy limits for the Generating Unit.
Energy Management System (EMS)	A computer control system used by electric utility dispatchers to monitor the real-time performance of the various elements of an electric system and to control Generation and transmission facilities.
Energy Supply Bid	The quantity (MWh) and a price ($) at or above which a resource has agreed to sell the next increment of Energy for a specified interval of time.
Energy Transmission	The component of the Grid Management Charge that provides, in

Services Net Energy Charge	conjunction with the Energy Transmission Services Uninstructed Deviations Charge, for the recovery of the CAISO's costs of providing reliability on a scalable basis, i.e., a function of the intensity of the use of the transmission system within the Control Area and the occurrence of system outages and disruptions. The formula for determining the Energy Transmission Services Net Energy Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
Energy Transmission Services Uninstructed Deviations Charge	The component of the Grid Management Charge that provides, in conjunction with the Energy Transmission Services Net Energy Charge, for the recovery of the CAISO's costs of providing reliability on a scalable basis, in particular for the costs associated with balancing transmission flows that result from uninstructed deviations. The formula for determining the Energy Transmission Services Uninstructed Deviations Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
Engineering & Procurement (E&P) Agreement	An agreement that authorizes the Participating TO to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.
Entitlements	The right of a Participating TO obtained through contract or other means to use another entity's transmission facilities for the transmission of Energy.
Environmental Dispatch	Dispatch designed to meet the requirements of air quality and other environmental legislation and environmental agencies having authority or jurisdiction over the CAISO.
E-Tag	An electronic tag associated with an Interchange schedule in accordance with the requirements of WECC.
ETC	Existing Transmission Contracts
ETC Self-Schedule	Self-Schedules submitted by Scheduling Coordinators pursuant to Existing Rights as reflected in the TRTC Instructions.
Exceptional Dispatch	A Dispatch Instruction issued to avoid a Market Interruption for the purposes specified in Section 34.9. Energy from Exceptional Dispatches shall not set any Dispatch Interval LMP.

Excess Cost Payments	The payments made by the CAISO for costs associated with Exceptional Dispatches for 1) emergency conditions, to avoid Market Interruption and avoid an imminent System Emergency as provided in Section 11.5.6.1.1; 2) transmission-related modeling limitations as provided in Section 11.5.6.2.3; 3) Condition 2 RMR Units as provided in Section 11.5.6.3.2; and 4) emergency Energy as provided in Section 11.5.8.1.1.
Existing Contract Import Capability	The quantity of Available Import Capability reserved for Existing Contracts and Transmission Ownership Rights held by Load Serving Entities that serve Load within the CAISO Control Area under Step 3 of Section 40.4.6.2.

Existing High Voltage Facility	A High Voltage Transmission Facility of a Participating TO that was placed in service on or before the TAC Transition Date described in Section 4.2 of Schedule 3 of Appendix F.
Existing QF Contract	An agreement for the sale of capacity, Energy, and/or Ancillary Services by a Participating Generator to an electric utility from a Qualifying Facility that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996.
Existing Rights	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.
Existing Transmission Contracts (ETC) or Existing Contracts	The contracts which grant transmission service rights in existence on the CAISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time.
Existing Zone	A region formerly referred to as NP15, SP15, or ZP26 prior to implementation of the CAISO LMP market design.
Existing Zone Generation Trading Hub	Trading Hubs specifically developed to represent the average price paid to generation resources within Existing Zones.
Expanded System Region	The System Region and Inter-tie Scheduling Points with interconnected Control Areas.
Expected Energy	Integrated Energy in a Settlement Interval that includes scheduled Energy and Dispatch Instructions for Imbalance Energy as determined by RTM applications.
Export Bid	A Demand Bid submitted to a CAISO Market at a Scheduling Point.
Extremely Long-Start Commitment Process (ELC Process)	The CAISO process for Unit Commitment for Extremely Long-Start Resources, as set forth in Section 31.7.

Extremely Long-Start Resource (ELS Resource)	A Generating Unit that has a Start-Up Time greater than 18 hours or a System Resource that is either: 1) a non-Resource-Specific System Resource with contractual limitations that require the Energy be transacted (i.e., committed) prior to the publishing time of the Day-Ahead Market results (1300 hours on the day before the Trading Day) or 2) a Resource-Specific System Resource that has a Start-Up Time greater than 18 hours.
Facility Study	An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such modifications that will be required to provide needed services.
Facility Study Agreement	An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.

Fast Start Unit	A Generating Unit that has a Start-Up Time less than two hours and can be committed in the RTUC and STUC.
Feasibility Index	A test used to evaluate whether a supplier or set of suppliers is pivotal in relieving congestion on a transmission path for the

	purposes of determining if a path is deemed to be competitive.
Fed-Wire	The Federal Reserve Transfer System for electronic funds transfer.
FERC	The Federal Energy Regulatory Commission or its successor.
FERC Annual Charge Recovery Rate	The rate to be paid by Scheduling Coordinators for recovery of FERC Annual Charges assessed against the CAISO for transactions on the CAISO Controlled Grid.
FERC Annual Charges	Those charges assessed against a public utility by the FERC pursuant to 18 C.F.R. § 382.201 and any related statutes or regulations, as they may be amended from time to time.
FERC Annual Charge Trust Account	An account to be established by the CAISO for the purpose of maintaining funds collected from Scheduling Coordinators for FERC Annual Charges and disbursing such funds to the FERC.
Final Approval	A statement of consent by the CAISO Control Center to initiate a scheduled Outage.
Final Invoice	The invoice due from a Reliability Must Run Owner to the CAISO at termination of the Reliability Must Run Contract.
Final Settlement Statement	The restatement or recalculation of the Preliminary Settlement Statement by the CAISO following the issue of that Preliminary Settlement Statement.
Financial Security	Any of the types of financial instruments listed in Section 12 that are posted by a Market Participant, CRR Holder or Candidate CRR Holder.
Financial Security Amount	The level of Financial Security posted in accordance with Section 12 by a Market Participant, Candidate CRR Holder or CRR Holder.
Firm Liquidated Damages Contract	A contract utilizing or consistent with Service Schedule C of the Western Systems Power Pool Agreement or the Firm Liquidated Damages product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area.

Fixed CRRs	Congestion Revenue Rights that are used in the running of an SFT to represent known encumbrances on the transmission system and which may include some or all of the following: previously allocated or awarded Monthly, Seasonal, Long Term, and Merchant Transmission CRRs, Existing Transmission Contracts, and Converted Rights.
FNM	Full Network Model
Forbidden Operating Region	A pair of lower and higher operating levels between which a resource cannot operate stably. The Forbidden Operating Regions lie between a resource's minimum operating limit and maximum operating limit and cannot overlap.
Forced Outage	An Outage for which sufficient notice cannot be given to allow the Outage to be factored into the Day-Ahead Market, HASP or RTM bidding processes.
Forecast Fee	The charge imposed on a Participating Intermittent Resource pursuant to the terms of Appendix F, Schedule 4.
Forward Scheduling Charge	The component of the Grid Management Charge that provides for the recovery of the CAISO's costs, including, but not limited to the costs of providing the ability to Scheduling Coordinators to submit a Bid for Energy and Ancillary Services and the cost of processing accepted Ancillary Services Bids. For purposes of the Forward

	Scheduling Charge, a schedule is represented by each final HASP Schedule with a value other than 0 MW submitted to the scheduling infrastructure/scheduling application system (Import, Export, Load, Generation, Inter-SC Trades, and Ancillary Services, including self-provided Ancillary Services) submitted to the CAISO's Markets. The formula for determining the Forward Scheduling Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
FPA	Parts II and III of the Federal Power Act, 16 U.S.C. § 824 et seq., as they may be amended from time to time.
Frequently Mitigated Unit	A Generating Unit that is eligible for a Bid Adder pursuant to Section 39.8.
Full Network Model (FNM)	A computer-based model that includes all CAISO Control Area transmission network (Load and Generating Unit) busses, transmission constraints, and Intertie busses between the CAISO Control Area and interconnected Control Areas. The FNM models the transmission facilities internal to the CAISO Control Area as elements of a looped network and models the CAISO Control Area Interties with interconnected Control Areas in a radial fashion.
GADS	Generating Availability Data System
GDF	Generation Distribution Factor
Generated Bid	A post-market Clean Bid generated by the CAISO in accordance with the provisions of Section 40 or other applicable provisions of the CAISO Tariff when a Bid is not submitted by the Scheduling Coordinator and is required for a resource adequacy requirement, an Ancillary Services Award, a RUC Award or a Day-Ahead Schedule.
Generation	Energy delivered from a Generating Unit.

Generation Distribution Factor (GDF)	The Bid template component that indicates the proportions of how the Bid is distributed for the resources participating in Physical Scheduling Plants or System Units,
Generating Facility	An Interconnection Customer's Generating Unit(s) used for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.
Generating Facility Capacity	The net capacity of the Generating Facility and the aggregate capacity of the Generating Facility where it includes multiple energy production devices.
Generating Unit	An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either

	case, is: (a) located within the CAISO Control Area; (b) connected to the CAISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities; and (c) that is capable of producing and delivering net Energy (Energy in excess of a generating station's internal power requirements).
Generator	The seller of Energy or Ancillary Services produced by a Generating Unit.
GMC	Grid Management Charge
Good Utility Practice	Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region
Grid Management Charge (GMC)	The CAISO monthly charge on all Scheduling Coordinators that provides for the recovery of the CAISO's costs listed in Section 11.22.2 through the eight service charges described in Section 11.22.2.5 calculated in accordance with the formula rate set forth in Appendix F, Schedule 1, Part A of this Tariff. The eight charges that comprise the Grid Management Charge consist of: 1) the Core Reliability Services - Demand Charge, 2) the Core Reliability Services – Energy Exports Charge, 3) the Energy Transmission Services Net Energy Charge, 4) the Energy Transmission Services Uninstructed Deviations Charge, 5) the Forward Scheduling Charge, 6) the Congestion Management Charge, 7) the Market Usage Charge, and 8) the Settlements, Metering, and Client Relations Charge.
Gross Load	For the purposes of calculating the transmission Access Charge

	Gross Load is all Energy (adjusted for distribution losses) delivered transmission facilities or directly connected to the Distribution System of a Utility Distribution Company or Metered Subsystem Operator located in a Participating TO Service Territory. Gross Load shall exclude Load with respect to which the Wheeling Access Charge is payable and the portion of the Load of an individual retail customer of a Utility Distribution Company, Small Utility Distribution Company or Metered Subsystem Operator that is served by a Generating Unit that: (a) is located on the customer's site or provides service to the customers site through arrangements as authorized by Section 218 of the California Public Utilities Code; (b) is a qualifying small power production facility or qualifying cogeneration facility, as those terms are defined in the FERC's regulations implementing Section 201 of the Public Utility Regulatory Policies Act of 1978; and (c) secures Standby Service from a Participating TO under terms approved by a Local Regulatory Authority or FERC, as applicable, or can be curtailed concurrently with an outage of the Generating Unit serving the Load. Gross Load forecasts consistent with filed Transmission Revenue Requirements will be provided by each Participating TO to the CAISO.
HASP	Hour-Ahead Scheduling Process
HASP Advisory Schedule	The non-binding output of the HASP as it pertains to the Real-Time Market.
HASP and RTM Congestion Credit	A credit provided to Scheduling Coordinators to offset any HASP and RTM Congestions Charges that would otherwise be applied to the valid and balanced portions of any ETC or TOR Self-Schedules in the HASP and the Real-Time Market as provided in Section 11.5.7.
HASP AS Award	Awards for Imports of Ancillary Services established through the HASP.

HASP Bid	A Bid received in HASP that can be used in the MPM-RRD conducted in HASP, the RTUC, STUC, or the RTD.
HASP Inter-SC Trade Period	The period commencing at midnight (0000 hours) on the applicable Trading Day and ending at forty-five (45) minutes prior to the start of the applicable Operating Hour, during which time the CAISO will accept from Scheduling Coordinators Inter-SC Trades of Energy for the HASP, Inter-SC Trades of Ancillary Services, and Inter-SC Trades of IFM Load Uplift Obligations.
HASP Intertie LMP	The average of four (4) 15-minute interval LMPs over a Trading Hour.
HASP Intertie Schedule	The binding output of the HASP including accepted Bids for imported Energy or Ancillary Services and associated LMPs and ASMPs.
High Voltage Access Charge (HVAC)	The Access Charge applicable under Section 26.1 to recover the High Voltage Transmission Revenue Requirements of each Participating TO in a Transmission Access Charge Area.
High Voltage Transmission Facility	A transmission facility that is owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a

	Converted Right, that is under the CAISO Operational Control, and that operates at a voltage at or above 200 kilovolts, and supporting facilities, and the costs of which are not directly assigned to one or more specific customers.
High Voltage Transmission Revenue Requirement (HVTRR)	The portion of a Participating TO's Transmission Revenue Requirement associated with and allocable to the Participating TO's High Voltage Transmission Facilities and Converted Rights associated with High Voltage Transmission Facilities that are under the CAISO Operational Control.
High Voltage Utility Specific Rate	A Participating TO's High Voltage Transmission Revenue Requirement divided by such Participating TO's forecasted Gross Load.
High Voltage Wheeling Access Charge	The Wheeling Access Charge associated with the recovery of a Participating TO's High Voltage Transmission Revenue Requirements in accordance with Section 26.1.
Host Control Area	The Control Area in which a System Resource subject to this CAISO Tariff is connected to the electric grid. The Host Control Area may, or may not, be directly interconnected with the CAISO Control Area.
Hour-Ahead Scheduling Process (HASP)	The process conducted by the CAISO beginning at seventy-five minutes prior to the Trading Hour through which the CAISO conducts the following activities: 1) accepts Bids for Supply of Energy, including imports, exports and Ancillary Services imports to be supplied during the next Trading Hour that apply to the MPM-RRD, RTUC, STUC, and RTD; 2) conducts the MPM-RRD on the Bids that apply to the RTUC, STUC, and RTD; and 3) conducts the RTUC for the hourly pre-dispatch of Energy and Ancillary Services.
Hourly Demand	The average of the instantaneous Demand integrated over a single clock hour, in MWh.
Hourly Real Time LAP Price	The load deviation weighted average of the hourly average of the Dispatch Interval LMPs for the LAP in the relevant Trade Hour used for the settlement of UIE.

HVAC	High Voltage Access Charge
HVTRR	High Voltage Transmission Revenue Requirement
Hydro Spill Generation	Hydro-electric Generation in existence prior to the CAISO Operations Date that: i) has no storage capacity and that, if backed down, would spill; ii) has exceeded its storage capacity and is spilling even though the generators are at full output; iii) has inadequate storage capacity to prevent loss of hydro-electric Energy either immediately or during the forecast period, if hydro-electric Generation is reduced; or iv) has increased regulated water output to avoid an impending spill.
ICAOA	Interconnected Control Area Operating Agreement
Identification Code	An identification number assigned to each Scheduling Coordinator by the CAISO.
IFM	Integrated Forward Market
IFM Bid Cost	The sum of a BCR Eligible Resource's IFM Start-Up Cost, IFM Minimum Load Cost , IFM Pump Shut-Down Cost, IFM Pumping Cost, IFM Energy Bid Cost, and IFM AS Bid Cost.
IFM Bid Cost Shortfall	For each Settlement Interval, for any BCR Eligible Resource, the positive amount resulting from the difference between the IFM Bid Cost and the IFM Market Revenue.
IFM Bid Cost Surplus	For each Settlement Interval, for any BCR Eligible Resource, the negative amount resulting from the difference between the IFM Bid Cost and the IFM Market Revenue.
IFM Bid Cost Uplift	The system-wide net of the IFM Bid Cost Shortfalls and IFM Bid Cost Surpluses for a Settlement Interval of all BCR Eligible Resources with Unrecovered Bid Cost Uplift Payments. This

	amount will be netted according to Section 11.8.6.2 to calculate the Net IFM Bid Cost Uplift before allocation to Scheduling Coordinators.
IFM Commitment Period	A Commitment Period determined by the IFM.
IFM Congestion Charge	The Congestion Charge calculated by the CAISO for each Settlement Period of the IFM as the IFM MCC for Demand minus the IFM MCC for Supply.
IFM Congestion Credit	A credit provided to Scheduling Coordinators to offset any IFM Congestions Charges that would otherwise be applied to the valid and balanced portions of any ETC, TOR or Converted Rights Self-Schedule in the IFM as provided in Section 11.2.1.5.
IFM Congestion Fund	The funds the CAISO shall have available in each Settlement Period from which the CAISO will pay CRR Holders for the CRR(s) they hold in any Settlement Period, which shall determined as provided in Section 11.2.4.1.2.
IFM Load Uplift Obligation	The obligation of a Scheduling Coordinator to pay its share of unrecovered IFM Bid Costs paid to resources through Bid Cost Recovery.
IFM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules	A credit provided to Scheduling Coordinators pursuant to Section 17.3.3 to offset any IFM Marginal Cost of Losses that would otherwise be applied to the valid and balanced portions of any TOR Self-Schedule in the IFM as provided in Section 11.2.1.5.
IFM Marginal Losses Surplus	For each Settlement Period of the IFM the CAISO, the IFM Marginal Losses Surplus is the difference between: (1) the Net Hourly Energy Charge; and (2) the total IFM Congestion Charges which do not include Congestion Charges Credits collected by the CAISO as specified in Section 11.2.1.5.
IFM Marginal Losses Surplus Credit	The amount of money distributed to Scheduling Coordinators in the allocation of IFM Marginal Losses Surplus in proportion to Scheduling Coordinator's Measured Demand in accordance with Section 11.2.1.6.

IFM Market Revenue	The amount received by BCR Eligible Resource from Energy scheduled and Ancillary Services awarded in the IFM for the purposes of Bid Cost Recovery, as calculated pursuant to Section 11.8.2.2.
IFM MSS Price	Either (1) The IFM LAP price for the MSS when the MSS scheduled internal Demand exceeds the MSS scheduled internal Supply; or (2) the weighted average of the IFM LMPs for all applicable PNodes within the relevant MSS when MSS scheduled internal Supply exceeds MSS scheduled internal Demand where weighting factors for computing the weighted average are based on the scheduled Supply at the corresponding PNodes.
IFM Pumping Bid Cost	For the applicable Settlement Interval, the Pumping Cost submitted to the CAISO in the IFM divided by the number of Settlement Intervals in a Trading Hour as further provided in Section 11.8.2.1.4.
IFM Self-Commitment Period	A Time Period determined by the CAISO pursuant to the rules in Section 11.8.1.1 for the purposes of deriving any Bid Cost Recovery amounts, related to the IFM.
IIE	Instructed Imbalance Energy
IIE Settlement Amount	The payment due a Scheduling Coordinator for positive Instructed Imbalance Energy or the charge assessed on a Scheduling Coordinator for negative Instructed Imbalance Energy, as calculated pursuant to Section 11.5.1.
Imbalance Energy	The deviation of Supply or Demand from Day-Ahead Schedule, positive or negative, as measured by metered Generation, metered Load, or Real-Time Interchange schedules.
Import Bid	A Supply Bid submitted to a CAISO Market at a Scheduling Point.
Import Capability Load Share	A Load Serving Entity's proportionate share of the forecasted Resource Adequacy Compliance Year coincident peak Demand for the CAISO Control Area relative to the total coincident peak Demand for the CAISO Control Area as determined by the California Energy Commission.

Import Capability Load Share Ratio	A Load Serving Entity's Import Capability Load Share divided by the sum of the Import Capability Load Shares of all Load Serving Entities with unfulfilled requests for Available Import Capability on a particular Intertie.
Import Capability Transfer Registration Process	The electronic means by which Load Serving Entities and Market Participants must register with the CAISO any bilateral transfers of Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability.
Incremental Change	The change in dollar value of a specific charge type from the Preliminary Settlement Statement to the Final Settlement Statement including any new charge types or Trading Day charges appearing for the first time on the Final Settlement Statement.
Independent Entity	The entity, not affiliated with the CAISO or any Market Participant, that assists the CAISO in the determination of reference prices.
Independent System Operator (ISO)	See California Independent System Operator Corporation
Initial Settlement Statement Reissue	The reissue of an Initial Settlement Statement T+38BD by the CAISO on the fifty-first (51st) Business Day from the relevant Trading Day (T+51BD) if T+51BD falls on a calendar day that is on or before the day the Invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.
Initial Settlement Statement T+38BD	A Settlement Statement generated by the CAISO for the calculation of Settlements for a given Trading Day, which is published on the thirty-eight Business Day from the relevant Trading Day (T+38BD) and is prior to the Invoice or Payment Advice published for the relevant bill period.

In-Service Date	The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO Interconnection Facilities to obtain back feed power.
Instructed Imbalance Energy (IIE)	The portion of Imbalance Energy resulting from Dispatch Instructions and HASP Intertie Schedules.
Integrated Forward Market (IFM)	The pricing run conducted by the CAISO using SCUC in the Day-Ahead Market, after the MPM-RRD process, which includes Unit Commitment, Ancillary Service procurement, Congestion Management and Energy procurement based on Supply and Demand Bids.
Interchange	Imports and exports between the CAISO Control Area and other Control Areas.

Interconnected Control Area Operating Agreement (ICAOA)	An agreement entered into between the CAISO and a Control Area Operator of a Control Area interconnected to the CAISO Control Area to govern operation of their interconnected electric systems, a *pro forma* version of which has been accepted by FERC as a CAISO rate schedule in 87 FERC ¶ 61,231 (1999).
Interconnection	Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the CAISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the CAISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the CAISO's Operational Control of the Participating TO's portion of the CAISO Controlled Grid.
Interconnection Agreement	A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.
Interconnection Customer	Any entity, including a Participating TO or any of its Affiliates or subsidiaries, that proposes to interconnect its Generating Facility with the CAISO Controlled Grid.
Interconnection Customer's Interconnection Facilities	All facilities and equipment, as identified in Part A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Customer's Interconnection Facilities are sole use facilities.
Interconnection Facilities	The Participating TO's Interconnection Facilities and the

	Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.
Interconnection Facilities Study	A study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the CAISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.
Interconnection Facilities Study Agreement	The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Interconnection Facilities Study.
Interconnection Feasibility Study	A preliminary evaluation conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer of the system impact and cost of interconnecting the Generating Facility to the CAISO Controlled Grid, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.
Interconnection Feasibility Study Agreement	The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Interconnection Feasibility Study.
Interconnection Handbook	A handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable

	Reliability Criteria. In the event of a conflict between the terms of the LGIP and the terms of the Participating TO's Interconnection Handbook, the terms in the LGIP shall apply.
Interconnection Request	An Interconnection Customer's request, in the form of Part 1 to the Standard Large Generator Interconnection Procedures, in accordance with Section 25.1.
Interconnection Service	The service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the CAISO Controlled Grid and enabling it to receive electric Energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement, the Participating TO's TO Tariff, and the CAISO Tariff.
Interconnection Study	Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures.
Interconnection System Impact Study	An engineering study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.
Interconnection System Impact Study Agreement	The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Interconnection System Impact Study.
Interest	Interest shall be calculated in accordance with the methodology specified for interest on refunds in the regulations of FERC at 18 C.F.R. §35.19(a)(2)(iii) (1996). Interest on delinquent amounts shall be

	calculated from the due date of the bill to the date of payment, except as provided in Section 11.29.13.1. When payments are made by mail, bills shall be considered as having been paid on the date of receipt.
Interim Black Start Agreement	An agreement entered into between the CAISO and a Participating Generator (other than a Reliability Must-Run Agreement) for the provision by the Participating Generator of Black Start capability and Black Start Energy on an interim basis until the introduction by the CAISO of its Black Start auction (or until terminated earlier by either party in accordance with its terms).
Intermediary Control Area	Any Control Area between a Host Control Area and the CAISO Control Area. An Intermediary Control Area may, or may not, be directly interconnected with the CAISO Control Area.
Interruptible Imports	Non-firm Energy sold by a Generator or resource located outside the CAISO Controlled Grid which by contract can be interrupted or reduced at the discretion of the seller. Interruptible Imports must be submitted through Self-Schedules in the Day-Ahead Market.
Inter-SC Trade	A trade between Scheduling Coordinators of Energy, Ancillary Services, or IFM Load Uplift Obligation in accordance with the CAISO Tariff.
Intertie	A Scheduling Point at a point of interconnection between the CAISO Control Area and an interconnected Control Area.
Intertie Block Bid	A Bid from a System Resource in the DAM that offers the same quantity of Energy, RUC Availability, or Ancillary Services across multiple, contiguous hours of the Trading Day.
Invoice	A document published as a result of an invoicing run pursuant to the CAISO Payments Calendar in which a Business Associate's current net financial obligation is a positive Settlement amount.
IOU	An investor owned electric utility.
ISO	Independent System Operator

LAP	Load Aggregation Point
LAP Price	The marginal price for a particular LAP, calculated as a weighted average of the nodal LMPs at the associated PNodes pursuant to Section 27.2.2.
Large Generating Facility	A Generating Facility having a Generating Facility Capacity of more than 20 MW.
LDF	Load Distribution Factor
LFDP	Load Following Deviation Penalty
LGIA	Standard Large Generator Interconnection Agreement
LGIP	Standard Large Generator Interconnection Procedures
Line Loss Correction Factor	The line loss correction factor as set forth in the Technical Specifications.
LMP	Locational Marginal Price
LMPM	Local Market Power Mitigation
LMP Option	A method of calculating Default Energy Bids based on Locational Marginal Prices.
Load	An end-use device of an End-Use Customer that consumes Power. Load should not be confused with Demand, which is the measure of Power that a Load receives or requires.
Load Aggregation Point (LAP)	A set of Pricing Nodes as specified in Section 27.2 that are used for the submission of Bids and Settlement of Demand.

Load Distribution Factor (LDF)	A number that reflects the relative amount of Load at each PNode within a Load Aggregation Point. Load Distribution Factors determine how the aggregated Load at a given LAP is distributed to the associated power system Nodes. The sum of all Load Distribution Factors for a single Load Aggregation Point equals one.
Load Following Deviation Penalty (LFDP)	The penalty assignable to an MSS Operator for deviations from Expected Energy outside the MSS Deviation Band.
Load Metric	A Load Serving Entity's level of Load in megawatts for a defined time period that is exceeded in only 0.5% of the hours of that time period based on historical or forecast Load data.
Load Migration	The transfer of the responsibility to serve Load from one Load Serving Entity to another.
Load Serving Entity (LSE)	Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer, that (a) (i) serves End Users within the CAISO Control Area and (ii) has been granted authority or has an obligation pursuant to California state or local law, regulation, or franchise to sell electric energy to End Users located within the CAISO Control Area; (b) is a federal power marketing authority that serves End Users; or (c) is the State Water Resources Development System commonly known as the State Water Project of the California Department of Water Resources.
Load Share Quantity	The product of Total Import Capability and Import Capability Load Share.

Load Shedding	The systematic reduction of system Demand by temporarily decreasing the Supply of Energy to Loads in response to transmission system or area capacity shortages, system instability, or voltage control considerations.
Local Capacity Area	Transmission constrained area as defined in the study referenced in Section 40.3.1.
Local Capacity Area Resources	Resource Adequacy Capacity from a Generating Unit listed in the technical study or Participating Load that is located within a Local Capacity Area capable of contributing toward the amount of capacity required in a particular Local Capacity Area.
Local Capacity Technical Study	The study performed by the CAISO pursuant to Section 40.3.
Local Furnishing Bond	Tax-exempt bonds utilized to finance facilities for the local furnishing of electric energy, as described in section 142(f) of the Internal Revenue Code, 26 U.S.C. § 142(f).
Local Furnishing Participating TO	Any Tax-Exempt Participating TO that owns facilities financed by Local Furnishing Bonds.

Local Market Power Mitigation (LMPM)	The mitigation of market power that could be exercised by an entity when it is needed for local reliability services due to its location on the grid and a lack of competitive supply at that location pursuant to Section 39.7.
Local Publicly Owned	A municipality or municipal corporation operating as a public utility

Electric Utilities	furnishing electric services, a municipal utility district furnishing electric services, a public utility district furnishing electric services, an irrigation district furnishing electric services, a state agency or subdivision furnishing electric services, a rural cooperative furnishing electric services, or a joint powers authority that includes one or more of these agencies and that owns Generation or transmission facilities, or furnishes electric services over its own or its members' electric Distribution System.
Local Regulatory Authority (LRA)	The state or local governmental authority, or the board of directors of an electric cooperative, responsible for the regulation or oversight of a utility.
Local Reliability Criteria	Reliability Criteria unique to the transmission systems of each of the Participating TOs established at the later of: (1) CAISO Operations Date, or (2) the date upon which a New Participating TO places its facilities under the control of the CAISO.
Location	A reference to either a PNode or an Aggregated Pricing Node.
Location Code	The code assigned by the CAISO to Generation input points, and Demand Take-Out Points from the CAISO Controlled Grid, and transaction points from trades between Scheduling Coordinators. This will be the information used by the CAISO Controlled Grid, and transaction points for trades between Scheduling Coordinators. This will be the information used by the CAISO to determine the location of the input, output, and trade points of Energy Schedules. Each Generation input and Demand Take-Out Point will have a designated Location Code identification.
Locational Marginal Price (LMP)	The marginal cost ($/MWh) of serving the next increment of Demand at that PNode consistent with existing transmission facility constraints and the performance characteristics of resources.
Long Start Unit	A Generating Unit that requires between five and 18 hours to Start-Up and synchronize to the grid.
Long Term Congestion Revenue Right (Long Term CRR)	A Congestion Revenue Right differentiated by season and time-of-use period (on-peak and off-peak) with a term of ten years.

Low Voltage Access Charge (LVAC)	The Access Charge applicable under Section 26.1 to recover the Low Voltage Transmission Revenue Requirement of a Participating TO.
Low Voltage Transmission Facility	A transmission facility owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a Converted Right, which is not a High Voltage Transmission Facility, that is under the CAISO Operational Control.
Low Voltage Transmission Revenue Requirement (LVTRR)	The portion of a Participating TO's TRR associated with and allocable to the Participating TO's Low Voltage Transmission Facilities and Converted Rights associated with Low Voltage Transmission Facilities that are under the CAISO Operational Control.
Low Voltage Wheeling Access Charge	The Wheeling Access Charge associated with the recovery of a Participating TO's Low Voltage Transmission Revenue Requirement in accordance with Section 26.1.
LRA	Local Regulatory Authority
LSE	Load-Serving Entity
LVAC	Low Voltage Access Charge
LVTRR	Low Voltage Transmission Revenue Requirement
Maintenance Outage	A period of time during which an Operator (i) takes its transmission facilities out of service for the purposes of carrying out routine planned maintenance, or for the purposes of new construction work or for work on de-energized and live transmission facilities (e.g., relay maintenance or insulator washing) and associated equipment; or (ii) limits the capability of or takes its Generating Unit or System Unit out of service for the purposes of carrying out routine planned maintenance, or for the purposes of new construction work.
Marginal Cost of Congestion (MCC)	The component of LMP at a PNode that accounts for the cost of congestion, as measured between that Node and a Reference Bus.

Marginal Cost of Losses (MCL)	The component of LMP at a PNode that accounts for the marginal real power losses, as measured between that Node and a Reference Bus.
Marginal Losses	The transmission system marginal real power losses that arise from changes in demand at a Node which are served by changes in generation at a Reference Bus.
Market Behavior Rules	Those rules established by FERC under Docket No. EL01-118.
Market Clearing	The act of conducting any of the process used by the CAISO to

	determine LMPs, Day-Ahead Schedules, RUC or AS Awards, HASP Intertie Schedules and Dispatch Instructions based on Supply Bids and Demand Bids or CAISO Demand Forecast.
Market Clearing Price	The price in a market at which supply equals demand. All demand prepared to pay at least this price has been satisfied and all supply prepared to operate at or below this price has been purchased.
Market Close	The time after which the CAISO is no longer accepting Bids for its CAISO Markets which: 1) for the DAM is 10:00 A.M. Pacific Time of the Day-Ahead; and 2) for the HASP and the RTM is approximately seventy-five minutes prior to the Operating Hour.
Market Interruption	The disruption of the normal operations of a CAISO Market.
Market Intervention	An action taken by the CAISO to override or augment the operation of a CAISO Market.
Market Manipulation	Has the meaning set forth in Section 37.7.
Market Monitoring Unit	The component of the CAISO organization (currently the “Department of Market Monitoring”) that is assigned responsibility in the first instance for the functions of a Market Monitoring Unit, as that term is used in Docket No. EL01-118.
Market Notice	An electronic notice issued by the CAISO that the CAISO posts on the CAISO Website and provides by e-mail to those registered with the CAISO to receive CAISO e-mail notices.
Market Participant	An entity, including a Scheduling Coordinator, who either: (1) participates in the CAISO Markets through the buying, selling, transmission, or distribution of Energy, Capacity, or Ancillary Services into, out of, or through the CAISO Controlled Grid; or (2) is a CRR Holder or Candidate CRR Holder.

Market Power Mitigation - Reliability Requirement Determination (MPM-RRD)	The two-optimization run process conducted in both the Day-Ahead Market and the HASP that determines the need for the CAISO to employ market power mitigation measures or Dispatch RMR Units.
Market Surveillance Committee (MSC)	The committee established under Appendix P.2.
Market Usage Charge	The component of the Grid Management Charge that provides for the recovery of the CAISO's costs, including, but not limited to the costs for processing Bids, maintaining the Open Access Same-Time Information System, monitoring market performance, ensuring generator compliance with market rules as defined in the CAISO Tariff and the Business Practice

	Manuals, and determining LMPs. The formula for determining the Market Usage Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
Master File	A file containing information regarding Generating Units, Loads and other resources, or its successor.
Material Modification	A modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.
Maximum Daily Start-Ups	The maximum number of times a Generating Unit can be started up within one day, due to environmental or physical operating constraints.
Maximum Import Capability	A quantity in MW determined by the CAISO for each Intertie into the CAISO Control Area to be deliverable to the CAISO Control Area based on CAISO study criteria.
Maximum Net Dependable Capacity (MNDC)	A term defined in and used in association with an RMR Contract.
Maximum Operating Limit (MOL_{max})	The lower of the maximum allowable output when the resource is operating or the upper bound of the Regulating Range if the resource is providing Regulation service.
MCC	Marginal Cost of Congestion
MCL	Marginal Cost of Losses
MDT	Minimum Down Time
Measured Demand	The metered CAISO Demand plus Real-Time Interchange Export Schedules.
Medium Start Unit	A Generating Unit that requires between two and five hours to Start-Up and synchronize to the grid.
Merchant Transmission CRRs	Incremental CRRs that are created by the addition of a Merchant Transmission Facility. Merchant Transmission CRRs are effective for thirty (30) years or for the pre-specified intended life of the facility, whichever is less.

Merchant Transmission Facility	A transmission facility or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.
Meter Data	Energy usage data collected by a metering device or as may be otherwise derived by the use of Approved Load Profiles.
Meter Data Exchange Format	The formats for submitting Meter Data to the CAISO which will be published by the CAISO on the CAISO Website or available on request.
Metered Control Area Load	For purposes of calculating and billing the Grid Management Charge, Metered Control Area Load is: (a) all metered Demand for Energy of Scheduling Coordinators for the supply of Loads in the CAISO's Control Area, plus (b) all Energy for exports by Scheduling Coordinators from the CAISO Control Area; less (c) Energy associated with the Load of a retail

	customer of a Scheduling Coordinator, Utility Distribution Company, Small Utility Distribution Company or Metered Subsystem that is served by a Generating Unit that: (i) is located on the same site as the customer's Load or provides service to the customer's Load through arrangements as authorized by Section 218 of the California Public Utilities Code; (ii) is a qualifying small power production facility or qualifying cogeneration facility, as those terms are defined in FERC's regulations implementing Section 201 of the Public Utility Regulatory Policies Act of 1978; and (iii) the customer secures Standby Service from a Participating TO under terms approved by a Local Regulatory Authority or FERC, as applicable, or the customer's Load can be curtailed concurrently with an outage of the Generating Unit.
Metered Quantities	For each Direct Access End-User, the actual metered amount of MWh and MW; for each Participating Generator the actual metered amounts of MWh, MW, MVAr and MVArh.
Metered Subsystem Agreement (MSS Agreement)	A negotiated agreement between the CAISO and an MSS Operator regarding the operation of an MSS in relation to the CAISO entered into pursuant to Section 4.9, which MSS Agreement will incorporate the provision of Section 4.9, unless otherwise agreed.

Metered Subsystem (MSS)	A geographically contiguous system located within a single zone which has been operating as an electric utility for a number of years prior to the CAISO Operations Date as a municipal utility, water district, irrigation district, state agency or federal power marketing authority subsumed within the CAISO Control Area and encompassed by CAISO certified revenue quality meters at each interface point with the CAISO Controlled Grid and CAISO certified revenue quality meters on all Generating Units or, if aggregated, each individual resource and Participating Load internal to the system, which is operated in accordance with a MSS Agreement described in Section 4.9.1.
Metering Facilities	Revenue quality meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication facilities and other related local equipment.
Meter Points	Locations on the CAISO Controlled Grid at which the CAISO requires the collection of Meter Data by a metering device.
Meter Service Agreement for CAISO Metered Entities (MSA CAISOME)	An agreement entered into between the CAISO and a CAISO Metered Entity consistent with the provisions of Section 10, a *pro forma* version of which is set forth in Appendix B.6.
Meter Service Agreement for Scheduling Coordinators (MSA SC)	An agreement entered into between the CAISO and a Scheduling Coordinator consistent with the provisions of Section 10, a *pro forma* version of which is set forth in Appendix B.7.

Minimum Down Time (MDT)	The minimum amount of time that a Generating Unit must stay off-line after being shut down, due to physical operating constraints.
Minimum Load	The minimum sustained operating level of a resource at which it can operate at a continuous sustained level.
Minimum Load Bid	The Bid component that indicates the Minimum Load Cost for the Generating Unit or Participating Load, specified by a non-negative number in dollars per hour, which applies for the entire Trading Day for which it is submitted.
Minimum Load Costs	The costs a Generating Unit or a Participating Load incurs operating at Minimum Load.
Minimum Load Energy	The product of the relevant Minimum Load and the duration of the Settlement Interval.
Minimum Operating Limit (MOL_{min})	The greater of the Minimum Load or the lower bound of the Regulating Range if the resource offers Regulation service.
Minimum Run Time	The minimum amount of time that a Generating Unit must stay on-line after being started-up prior to being shut down, due to physical operating constraints.
Mitigation Frequency	The percent of the Generating Unit's run hours where the unit had one or more Bid segments mitigated under the CAISO Local Market Power Mitigation.
Mitigation Measures	The CAISO market power mitigation measures under the CAISO Tariff.
MNDC	Maximum Net Dependable Capacity
Modified Reserve Sharing LSE	A Load Serving Entity whose Scheduling Coordinator has informed the CAISO in accordance with Section 40.1 of its election to be a Modified Reserve Sharing LSE.
MOL_{max}	Maximum Operating Limit
MOL_{min}	Minimum Operating Limit

Monthly Available CRR Capacity	The upper limit of network capacity that will be used in the monthly CRR Allocation and monthly CRR Auctions calculated by using OTC adjusted for Outages, derates, and Transmission Ownership Rights for the relevant month in accordance with Section 36.4.
Monthly CRR	A Congestion Revenue Right whose term is one calendar month in length and distributed in the monthly CRR Allocation and monthly CRR Auction.

Monthly CRR Eligible Quantity	The MW quantity of CRRs a CRR Holder or Candidate CRR Holder is eligible to nominate for the relevant month in a monthly CRR Allocation.
Monthly CRR Load Metric	The MW level of Load on a Load Serving Entity's load duration curve that is exceeded only 0.5% of the time in the relevant month based on Demand Forecast data.
MORC	Minimum Operating Reliability Criteria
MPM-RRD	Market Power Mitigation-Reliability Requirement Determination
MSA CAISOME	Metered Service Agreement for CAISO Metered Entities
MSA SC	Metered Service Agreement for Scheduling Coordinators
MSC	Market Surveillance Committee
MSS	Metered Subsystem
MSS Aggregation	Either (1) a Metered Subsystem or (2) a collection of Metered Subsystems represented by a single MSS Aggregator.
MSS Aggregation Net Measured Demand	The sum of the net metered CAISO Demand from all the Net-Load MSSs in the MSS Aggregation plus any exports out of the CAISO Control Area from the MSS Aggregation. Net metered CAISO Demand of a MSS is defined as the algebraic difference between the CAISO Demand and Generation internal to the MSS.
MSS Aggregation Net Non-ETC/TOR Measured Demand	The sum of the net metered non-ETC/TOR CAISO Demand from all of the non-ETC/TOR Net-Load MSSs in the MSS Aggregation plus any non-ETC/TOR exports out of the CAISO Control Area from the MSS Aggregation. Net metered non-ETC/TOR CAISO Demand of an MSS is defined as the algebraic difference between the non-ETC/TOR CAISO Demand and the non-ETC/TOR Generation within the MSS.
MSS Aggregator	An entity that has executed an agreement with the CAISO that enables it to represent individual MSS Operators in the CAISO Markets on an aggregated basis, which agreement has been accepted by FERC.

MSS Aggregator CRR Entity Agent Agreement	An agreement between the CAISO and an MSS Aggregator by which the MSS Aggregator commits to act as agent for aggregation of MSS Operators in the CRR Allocation, CRR Auction, and Secondary Registration System process, a *pro forma* version of which is set forth in Appendix B.12.
MSS Demand	CAISO Demand specified in an MSS Agreement as being within the MSS.
MSS Deviation Band	The amount by which a Load following MSS Operator can deviate from Expected Energy without incurring a Load Following Deviation Penalty, equal to three percent (3%) of an MSS Operator's metered Demand in the MSS and exports from the MSS, adjusted for Forced Outages and any CAISO directed firm Load Shedding for the MSS's portfolio as a whole.
MSS Operator	An entity that owns an MSS and has executed a MSS Agreement.
MSS Supply	Supply specified in an MSS Agreement as supplying an MSS.
Multi-Point CRR	A CRR Obligation specified according to one or more CRR Sources and one or more CRR Sinks and a flow from the CRR Source(s) to the CRR Sink(s), provided that at least the CRR Sink or the CRR Source identifies more than one point.
Municipal Tax Exempt Debt	An obligation the interest on which is excluded from gross income for federal tax purposes pursuant to Section 103(a) of the Internal Revenue Code of 1986 or the corresponding provisions of prior law without regard to the identity of the holder thereof. Municipal Tax Exempt Debt does not include Local Furnishing Bonds.
Must-Take/Must-Run Generation	The Bid component that identifies Generating Units that are Regulatory Must-Take Generation or Regulatory Must-Run Generation.

Native Load	Load required to be served by a utility within its Service Area pursuant to applicable law, franchise, or statute.
Negative Operating Reserve Obligation Credit Adjustment Factor (NOROCAF)	The adjustment factor specified in Section 11.10.5.
Negotiated Rate Option	A method of calculating Default Energy Bids based on a negotiation with the CAISO or the Independent Entity.
NERC	The North American Electric Reliability Corporation or its successor.
NERC Generating Availability Data System (GADS)	The NERC standard for determination of generation resource net dependable capacity.

Net Hourly Energy Charge	Total Charges to all Demand minus total Payments to all Supply both based on the product of MWh amounts specified in all Day-Ahead Schedules and the relevant LMPs at the applicable PNodes or Aggregated Pricing Node.
Net IFM Bid Cost Uplift	The amount of IFM-related Bid Costs resulting from the sequential netting in Section 11.8.6.2 and allocated to Scheduling Coordinators in accordance with Section 11.8.6.4.
Net-Load MSS	An MSS with positive net metered CAISO Demand of the MSS within the MSS Aggregation.
Net Negative CAISO Demand Deviation	The difference between metered CAISO Demand and the total CAISO Demand scheduled in the Day-Ahead Schedule, if positive.
Net Negative Uninstructed Deviation	The real-time change in Generation or Demand associated with underscheduled Demand (i.e., Demand that appears unscheduled in Real-Time) and overscheduled Generation (i.e., Generation that is scheduled in the DAM and does not appear in Real-Time), which are netted for each Settlement Interval, apply to a Scheduling Coordinator's entire portfolio, and include Demand, Generation, imports and exports.
Net Procurement	The awarded amount (MWs) of a given Ancillary Service in the Day-Ahead, HASP, and Real-Time Markets, minus, (ii) the amount of that Ancillary Service associated with payments rescinded pursuant to any of the provisions of Section 8.10.2.
Net Qualifying Capacity	Qualifying Capacity reduced, as applicable, based on: (1) testing and verification; (2) application of performance criteria; and (3) deliverability restrictions. The Net Qualifying Capacity determination shall be made by the CAISO pursuant to the provisions of this CAISO Tariff and the applicable Business Practice Manual.
Net RTM Bid Cost Uplift	The amount of RTM-related Bid Costs resulting from the sequential netting in Section 11.8.6.2 and allocated to Scheduling Coordinators in accordance with Section 11.8.6.6.
Net RUC Bid Cost Uplift	The amount of RUC-related Bid Costs resulting from the sequential netting in Section 11.8.6.2 and allocated to

	Scheduling Coordinators in accordance with Section 11.8.6.5.
Net Scheduled QF	A Qualifying Facility identified in a QF PGA operated as a single unit such that the Energy scheduled with the CAISO is the net value of the aggregate electrical net output of the Qualifying Facility and the Self-provided Load.
Network Upgrades	The additions, modifications, and upgrades to the CAISO Controlled Grid required at or beyond the Point of Interconnection to accommodate the interconnection of the Large Generating Facility to the CAISO Controlled Grid. Network Upgrades shall consist of Delivery Network Upgrades and Reliability Network Upgrades.
New High Voltage Facility	A High Voltage Transmission Facility of a Participating TO that is placed in service after the beginning of the TAC Transition Period described in Section 4 of Schedule 3 of Appendix F, or a capital addition made and placed in service after the beginning of the TAC Transition Period described in Section 4.2 of Schedule 3 of Appendix F to an Existing High Voltage Facility.
New Participating TO	A Participating TO that is not an Original Participating TO.
New Responsible Utility	A Responsible Utility that executes a TCA after April 1, 1998.
Node	A point in the Full Network Model representing a physical location within the CAISO Control Area or the CAISO Controlled Grid, which includes the Load and Generating Unit busses in the CAISO Control Area and at the Intertie busses between the CAISO Control Area and interconnected Control Areas.
Nomogram	A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WECC Reliability Standards and operating criteria.

Non-CPUC Load Serving Entity	Any entity serving retail Demand in the CAISO Control Area not within the jurisdiction of the CPUC, including (i) a local publicly owned electric utility under section 9604 of the California Public Utilities Code and (ii) any federal entities, including but not limited to federal power marketing authorities, that serve retail Load.
Non-Dispatchable Use Limited Resource	A Use-Limited Resource that cannot be increased or curtailed at the direction of the CAISO in the Real-Time Dispatch of the CAISO Control Area to Supply or consume Energy, such as certain Qualifying Facilities.
Non-Dynamic Resource-Specific System Resource	A Non-Dynamic System Resource that is a specific generation resource outside the CAISO Control Area.

Non-Dynamic System Recourse	A System Resource that is not capable of submitting a Dynamic Schedule, or for which a Dynamic Schedule has not be submitted, which may be a Non-Dynamic Resource-Specific System Resource.
Non-Participating TO	A TO that is not a party to the Transmission Control Agreement or, for the purposes of Section 16.1, Tariff the holder of transmission service rights under an Existing Contract that is not a Participating TO.
Non-Spinning Reserve	The portion of generating capacity that is capable of being synchronized and Ramping to a specified load in ten minutes (or Load that is capable of being interrupted in ten minutes) and that is capable of running (or being interrupted).
Non-Spinning Reserve Cost	The revenues paid to the suppliers of the total awarded Non-Spinning Reserve capacity in the Day-Ahead Market, HASP, and Real-Time Market, minus, (ii) the payments rescinded due to either the failure to conform to CAISO Dispatch Instructions or the unavailability of the Non-Spinning Reserves under Section.
Non-Spinning Reserve Obligation	The obligation of a Scheduling Coordinator to pay its share of costs incurred by the CAISO in procuring Non-Spinning Reserve.
No Pay	The rescission of a payment made for provision of Spinning Reserve and/or Non-Spinning Reserve when, subsequent to the AS Award for such Ancillary Service and payment, the Ancillary Service becomes Undispatchable Capacity, Unavailable Capacity, Undelivered Capacity, or, in certain circumstances, unsynchronized capacity.
NOROCAF	Negative Operating Reserve Obligation Credit Adjustment Factor
NRC	The Nuclear Regulatory Commission or its successor.
NRC Standards	The reliability standards published by the NRC from time to time.
OASIS	Open Access Same-Time Information System

OCALSE	Out-of-Control Area Load Serving Entity
Off	A unit is Off when it is offline or in the process of starting up or shutting down.
Offsetting CRR	One of the pair of new equal and opposite CRRs created and allocated by the CAISO to reflect Load Migration between two LSEs pursuant to the provisions in Section 36.8.5 of this Appendix, which is allocated to the Load losing LSE and is opposite in direction to the corresponding CRR previously allocated to that LSE and is denominated in a MW quantity that reflects the net amount of Load Migration between the two LSEs.
On	A unit is On when it is online, synchronized with the grid, and available for Dispatch.
Open Access Same-Time Information System (OASIS)	The electronic posting system for transmission access data that the CAISO maintains on the CAISO Website that allows all Market Participants to view the data simultaneously.
Information System (OASIS)	CAISO maintains on the CAISO Website that allows all transmission customers to view the data simultaneously.
Operating Day	The day when the Real-Time Market runs and Energy is supplied to Load.
Operating Hour	The hour during the day when the Real-Time Market runs and Energy is supplied to Load.
Operating Procedures	Procedures governing the operation of the CAISO Controlled Grid as the CAISO may from time to time develop, and/or

	procedures that Participating TOs currently employ which the CAISO adopts for use.
Operating Reserve	The combination of Spinning and Non-Spinning Reserve required to meet WECC and NERC Reliability Standards and requirements for reliable operation of the CAISO Control Area.
Operating Reserve Obligation	The obligation of a Scheduling Coordinator to pay its share of costs incurred by the CAISO in procuring Operating Reserves.
Operating Reserve Ramp Rate	A single number included in Ancillary Service Bids and Submissions to Self-Provide Ancillary Services for Spinning Reserve and Non-Spinning Reserve that represent the Ramp Rate of a resource used in the procurement of Operating Reserve capacity.
Operating Transfer Capability	The maximum capability of a transmission path to transmit real power, expressed in MW, at a given point in time.
Operational Adjustment	The difference between the Energy scheduled in the Control Area check-out process for Non-Dynamic System Resources and the sum of Dispatch Interval IIE.
Operational Control	The rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct Participating TOs how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting Applicable Reliability Criteria.
Operational Ramp Rates	A staircase function of up to 4 segments (in addition to Ramp Rate segments needed for modeling Forbidden Operating Regions). Operational Ramp Rates are submitted with Energy Bid data.
Operator	The operator of facilities that comprise the CAISO Controlled Grid or a Participating Generator.

Optional Interconnection Study	A sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.
Optional Interconnection Study Agreement	The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Optional Interconnection Study.
Order No. 888	The final rule issued by FERC entitled "Promoting Wholesale Competition through Open Access Non- discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities," 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶ 31,036 (1996), Order on Rehearing, Order No. 888-A, 78 FERC ¶ 61,220 (1997), as it may be amended from time to time
Order No. 889	The final rule issued by FERC entitled "Open Access Same-Time Information System (formerly Real Time Information Networks) and Standards of Conduct," 61 Fed. Reg. 21,737 (May 10, 1996), FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶ 31,035 (1996), Order on Rehearing, Order No. 889-A, 78 FERC ¶ 61,221 (1997), as it may be amended from time to time.
Original Participating TO	A Participating TO that was a Participating TO as of January 1, 2000.
Outage	Disconnection, separation or reduction in capacity, planned or forced, of one or more elements of an electric system.
Out-of-Control Area Load Serving Entity (OCALSE)	An entity serving end-users located outside the CAISO Control Area and that has been granted authority or has an obligation pursuant to Federal, State or local law, or under contracts to provide electric service to such end-users located outside the CAISO Control Area.
Overgeneration	A condition that occurs when total Supply exceeds total Demand in the CAISO Control Area.
Partial Resource Adequacy Resource	A Resource Adequacy Resource that has capacity that is designated by its Scheduling Coordinator as Resource Adequacy Capacity in its monthly or annual Resource Adequacy Plan and has a related availability obligation to the CAISO, but

	also has capacity that is not committed to meet a resource adequacy obligation in the CAISO Control Area.
Participating Generator	A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid from a Generating Unit with a rated capacity of 1 MW or greater, or from a Generating Unit providing Ancillary Services and/or submitting Energy Bids through an aggregation arrangement approved by the CAISO, which has undertaken to be bound by the terms of the CAISO Tariff, in the case of a Generator through a Participating Generator Agreement.
Participating Generator Agreement (PGA)	An agreement between the CAISO and a Participating Generator, a *pro forma* version of which is set forth in Appendix B.2.
Participating Intermittent Resource	One or more Eligible Intermittent Resources that meets the requirements of the technical standards for Participating Intermittent Resources adopted by the CAISO and published on the CAISO Website.
Participating Load	An entity, including an entity with Pumping Load, providing Curtailable Demand, which has undertaken in writing by execution of a Participating Load Agreement to comply with all applicable provisions of the CAISO Tariff, as they may be amended from time to time.
Participating Load Agreement (PLA)	An agreement between the CAISO and a Participating Load, a *pro forma* version of which is set forth in Appendix B.4.

Participating TO (PTO)	A party to the Transmission Control Agreement whose application under Section 2.2 of the Transmission Control Agreement has been accepted and who has placed its transmission assets and Entitlements under the CAISO's Operational Control in accordance with the Transmission Control Agreement. A Participating TO may be an Original Participating TO or a New Participating TO.
Participating TO Service Territory	The area in which an IOU, a Local Public Owned Electric Utility, or federal power marketing authority that has turned over its transmission facilities and/or Entitlements to CAISO Operational Control is obligated to provide electric service to Load. A PTO Service Territory may be comprised of the Service Areas of more than one Local Publicly Owned Electric Utility, if they are operating under an agreement with the CAISO for

	aggregation of their MSS and their MSS Operator is designated as the Participating TO.
Participating TO's Interconnection Facilities	All facilities and equipment owned, controlled, or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Part A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.
Path 15 Upgrade	The upgraded transmission facilities on Path 15 that have been turned over to CAISO Operational Control.
Payment Advice	A document published as a result of an invoicing run pursuant to the CAISO Payments Calendar in which a Business Associate's current net financial obligation is a negative Settlement Amount.
Payment Date	The date by which invoiced amounts are to be paid under the terms of the CAISO Tariff.
PGA	Participating Generator Agreement
Physical Scheduling Plant	A group of two or more related Generating Units, each of which is individually capable of producing Energy, but which either by physical necessity or operational design must be operated as if they were a single Generating Unit and any Generating Unit or Units containing related multiple generating components which meet one or more of the following criteria: i) multiple generating components are related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; ii) the Energy production from one component necessarily causes Energy production from other components; iii) the operational arrangement of related multiple generating components determines the overall physical efficiency of the combined output of all components; iv) the level of coordination required to schedule individual generating components would cause the CAISO to incur scheduling costs far in excess of the benefits of having scheduled such individual components separately; or v) metered output is available only for the combined output of related multiple generating

	components and separate generating component metering is either impractical or economically inefficient.
Physical Trade	An Inter-SC Trade of Energy at an individual PNode of Generating Units that is submitted to the CAISO for Settlement through the CAISO Market and is subject to physical validation.
PLA	Participating Load Agreement
PMax	The maximum normal capability of the Generating Unit. PMax should not be confused as an emergency rating of the Generating Unit.
PMS	Power Management System
PNode	Pricing Node
PNP	Priority Nomination Process
PNP Eligible Quantity	The maximum MW quantity of CRRs an LSE is eligible to nominate in the Priority Nomination Process of the CRR Allocation.
POD	Point(s) of Delivery
Point of Change of Ownership	The point, as set forth in Part A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.
Point of Demarcation	For a Net Scheduled QF, the point (1) where the electrical conductors from the Net Scheduled QF contact an electric utility system or the CAISO Controlled Grid; or (2) if dedicated utility distribution facilities are employed, where the dedicated facilities contact the electric utility system or the CAISO Controlled Grid.
Point of Interconnection	The point, as set forth in Part A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the CAISO Controlled Grid.
Point(s) of Delivery or Withdrawal (POD or Point(s) of Withdrawal)	Point(s) within the CAISO Control Area where Energy and Ancillary Services are made available to a receiving party under this CAISO Tariff.

Point(s) of Receipt or Injection (POR or Point(s) or Injection)	Point(s) within the CAISO Control Area where Energy and Ancillary Services are made available by a delivering party under this CAISO Tariff.
Point-to-Point CRR	A CRR Option or CRR Obligation with a single CRR Source to a single CRR Sink.
POR	Point(s) of Receipt
Power	The electrical work produced by a Generating Unit that is absorbed by the resistive components of Load or other network components, measured in units of watts or standard multiples thereof, e.g., 1,000 Watt = 1 kW; 1,000 kW = 1 MW, etc.
Power Flow Model	A network model used by the CAISO to model the voltages, power injections and power flows on the CAISO Controlled Grid and adjacent Control Areas.
Power Management System (PMS)	The CAISO computer control system used to monitor the real-time performance of the various elements of the CAISO

	Controlled Grid, control Generation, and perform operational power flow studies.
Power System Stabilizers (PSS)	An electronic control system applied on a Generating Unit that helps to damp out dynamic oscillations on a power system. The Power System Stablizers senses Generator variables, such as voltage, current and shaft speed, processes this information and sends control signals to the Generator voltage regulator.
Power Transfer Distribution Factor (PTDF)	The percentage of a power transfer that flows on a transmission facility as a result of the injection of power at a specific bus and the withdrawal of power at another bus or a Reference Bus.
Preliminary Settlement Statement	The initial statement issued by the CAISO of the calculation of the Settlements and allocation of the charges in respect of all Settlement Periods covered by the period to which it relates.
Pre-RA Import Commitment	Any power purchase agreement, ownership interest, or other commercial arrangement entered into on or before March 10, 2006, by a Load Serving Entity serving Load in the CAISO Control Area for the procurement of Energy or capacity from a resource or resources located outside the CAISO Control Area. The Pre-RA Import Commitment shall be deemed to terminate upon the expiration of the initial term of the Pre-RA Import Commitment, notwithstanding any "evergreen" or other renewal provision exercisable at the option of the Load Serving Entity.
Pre-RA Import Commitment Capability	The quantity in MW assigned to a particular Intertie into the CAISO Control Area based on a Pre-RA Import Commitment.
Price Taker	A quantity only Energy Bid with no associated price.
Pricing Node (PNode)	A single network Node or subset of network Nodes where a physical injection or withdrawal is modeled and for which a Locational Marginal Price is calculated and used for financial settlements.
Primary CAISO Control Center	The CAISO Control Center located in Folsom, California.

Priority Nomination Process (PNP)	The step in an annual CRR Allocation in years beyond CRR Year One through which CRR Holders re-nominate (1) Seasonal CRRs they were allocated in the prior year, (2) Long Term CRRs that are expiring, and (3) Existing Transmission Contracts and Converted Rights that are expiring.
Priority Type	The Bid component that indicates if applicable the scheduling priority for the Settlement Period for Reliability Must-Run Generation, if applicable.
Project Sponsor	A Market Participant or group of Market Participants or a Participating TO that proposes the construction of a transmission addition or upgrade in accordance with Section 24.
Proposal for Installation	A written proposal submitted by a CAISO Metered Entity to the CAISO describing a proposal for the installation of additional Metering Facilities.
Proxy Cost	The cost basis of a generating resource for which the operating cost is calculated as an approximation of the actual operating cost pursuant to Section 30.4(1).
PSS	Power System Stabilizers
PTDF	Power Transfer Distribution Factor
PTO	Participating Transmission Owner
PTO Service Territory	The area in which an IOU, a Local Public Owned Electric Utility, or federal power marketing authority that has turned over

	its transmission facilities and/or Entitlements to CAISO Operational Control is obligated to provide electric service to Load. A PTO Service Territory may be comprised of the Service Areas of more than one Local Publicly Owned Electric Utility, if they are operating under an agreement with the CAISO for aggregation of their MSS and their MSS Operator is designated as the Participating TO.
Public Utility Regulatory Policies Act (PURPA)	The Public Utility Regulatory Policies Act of 1978, incorporated in relevant part into the Federal Power Act.
Pumped-Storage Hydro Unit	A hydroelectric dam with the capability to produce electricity and the ability to pump water between reservoirs at different elevations to store such water for the production of electricity.
Pumping Cost	The hourly cost of pumping, expressed in $/hour, submitted by a Participating Load.
Pumping Load	A hydro pumping resource that is capable of responding to Dispatch Instructions by ceasing to pump.
Pump Ramping Conversion Factor	A Master File entry submitted by Scheduling Coordinators that allows the Scheduling Coordinator to indicate the ratio of Energy expended to pump water into storage that can be used to produce Energy. A zero percent Pump Ramping Conversion Factor implies that no amount of Energy production capability is produced as a result of pumping water and the CAISO shall not use such unavailable Energy in its CAISO Markets optimization. A hundred percent Pump Ramping Conversion Factor indicates all the Energy expended to pump water is available for Generation and the CAISO shall use only the available portions in its CAISO Markets optimization. The Pump Ramping Conversion Factor submitted in the Master File need not be based on physical characteristics of the resource and is adjustable by the Scheduling Coordinator.

Pump Shut-Down Costs	A Bid Component submitted by Scheduling Coordinators for resources that are registered as a Participating Load that indicates the $/MWh that the Scheduling Coordinator is willing to be paid to not pump.
PURPA	Public Utility Regulatory Policies Act
QF	Qualifying Facility
QF PGA	Qualifying Facility Participating Generator Agreement
Qualified OCALSE	An OCALSE which the CAISO has certified has met all the requirements for eligibility for CRR Allocation in accordance with Section 39.
Qualifying Capacity	The maximum capacity of a Resource Adequacy Resource. The criteria for calculating Qualifying Capacity from Resource Adequacy Resources may be established by the CPUC or other applicable Local Regulatory Authority and provided to the CAISO.
Qualifying Facility (QF)	A qualifying co-generation facility or small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R § 292).
Qualifying Facility Participating Generator Agreement (QF PGA)	An agreement between the CAISO and a Generator with a QF Generating Unit, a *pro forma* version of which is set forth in Appendix B.3.

Queue Position	The order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the CAISO.
Ramping	Changing the loading level of a Generating Unit in a constant manner over a fixed time (e.g., Ramping up or Ramping down). Such changes may be directed by a computer or manual control.
Ramping Energy Deviation	The portion of Imbalance Energy delivered or consumed as the difference between the Standard Ramp trajectory and the Dispatch Operating Point that is contained between the Day-Ahead Schedules across consecutive hours and spreads across the hourly boundary.
Ramp Rate	The Bid component that indicates the operational Ramp Rate, Regulation Ramp Rate, and Operating Reserve Ramp Rate for a Generating Unit, and the Load drop rate and Load pick-up rate for Participating Loads, for which the Scheduling Coordinator is submitting Energy Bids or Ancillary Services Bids.
RAS	Remedial Action Schemes
Real-Time	The period of time during the Operating Hour. Any time period during the twenty-four Operating Hours of any given day.
Real-Time Congestion Fund	For each Settlement Period of the HASP and RTM, the CAISO shall calculate the Real-Time Congestion Fund as the difference of 1) the sum of the products of the RTM or HASP MCC for Demand and the Demand Imbalance Energy at the relevant Location; and 2) the sum of the products of RTM or HASP MCC for Supply and the Supply Imbalance Energy at the relevant Location; including also the sum of RTM and HASP Congestion Charges for Intertie Ancillary Services Awards.

Real-Time Congestion Offset	A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the non-assessment Marginal Cost of Congestion to Measured Demand for ETCs and TOR Self-Schedules in the Real-Time as provided in Section 11.5.7.
Real-Time Contingency Dispatch (RTCD)	The mode of the Real-Time Dispatch that will be invoked when a transmission or generation Contingency occurs and will include all Contingency Only Operating Reserves in the optimization.
Real-Time Dispatch (RTD)	The SCED and SCUC software used by the CAISO to determine which Ancillary Service and Imbalance Energy resources to Dispatch and to calculate LMPs.

Real-Time Economic Dispatch (RTED)	The mode of the Real-Time Dispatch that will optimally dispatch resources based on their Energy Bids, excluding Contingency Only Operating Reserves except when needed to avoid an imminent System Emergency.
Real-Time Interchange Export Schedule	A final agreed-upon schedule of Energy to be transferred from the CAISO Control Area to another Control Area based on agreed-upon size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and Energy between the source and sink Control Areas involved in the transaction.
Real-Time Manual Dispatch (RTMD)	The mode of the Real-Time Dispatch that will be invoked as a fall-back mechanism only when the RTED or RTCD fails to provide a feasible dispatch.
Real-Time Marginal Cost of Losses Offset	A component of the neutrality adjustments as provided in Section 11.5.4.2 to account for the non-assessment of Marginal Cost of Losses Charges to Measured Demand for TOR Self-Schedules eligible for the Real-Time Marginal Cost of Losses Credit as provided in Section 11.5.7.2.
Real-Time Market (RTM)	The spot market conducted by the CAISO using SCUC and SCED in the Real-Time, after the HASP is completed, which includes the RTUC, STUC and the RTD for the purpose of Unit Commitment, Ancillary Service procurement, Congestion Management and Energy procurement based on Supply Bids and CAISO Forecast of CAISO Demand.
Real-Time Market Pumping Bid Cost	For the applicable Settlement Interval, the Pumping Cost submitted to the CAISO in the HASP or RTM divided by the number of Settlement Intervals in a Trading Hour, as further provided in Section 11.8.4.1.4.
Real-Time Settlement Interval MSS Price	1) The Real-Time LAP price for the MSS when the MSS internal metered Demand exceeds the MSS internal measured Generation; or 2) the weighted average of the Real-Time LMPs for all applicable PNodes within the relevant MSS when MSS internal measured Generation exceeds MSS internal Measured Demand where weighting factors for computing the weighted average are based on the measured Energy of all Generation at the corresponding PNodes.

Real-Time Unit Commitment (RTUC)	An application of the RTM that runs every 15 minutes and commits Fast and Medium-Start Units using the SCUC to adjust from Day-Ahead Schedules and HASP Intertie Schedules.
Recalculation Settlement Statement	The reissue of an Initial Settlement Statement T+38BD by the CAISO on the fifty-first (51st) Business Day from the relevant Trading Day (T+51BD) if T+51BD falls on a calendar day that is after the day the Invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.
Recalculation Settlement Statement T+76BD	The reissue of an Initial Settlement Statement Reissue or the Recalculation Settlement Statement by the CAISO on the seventy-sixth (76th) Business Day from the relevant Trading Day (T+76BD).
Redispatch	The readjustment of scheduled Generation or Demand side management measures, to relieve Congestion or manage Energy imbalances.
Reference Bus	The Location(s) on the CAISO Controlled Grid relative to which mathematical quantities relating to powerflow solution will be calculated.
Registered Cost	The cost basis of a generating resource for which the operating cost is determined from registered values pursuant to Section 30.4(2).

Registered Data	Those items of technical data and operating characteristics relating to Generation, transmission or distribution facilities which are identified to the owners of such facilities as being information, supplied in accordance with the CAISO Tariff, to assist the CAISO to maintain reliability of the CAISO Controlled Grid and to carry out its functions.
Regulating Range	The operating level range within which a generating resource may provide Regulation.
Regulation	The service provided either by Generating Units certified by the CAISO as equipped and capable of responding to the CAISO's direct digital control (AGC) signals, or by System Resources that have been certified by the CAISO as capable of delivering such service to the CAISO Control Area, in an upward and downward

	direction to match, on a Real-Time basis, Demand and resources, consistent with established NERC and WECC Reliability Standards and operating criteria. Regulation is used to control the Power output of electric generators within a prescribed area in response to a change in system frequency, tie line loading, or the relation of these to each other so as to maintain the target system frequency and/or the established Interchange with other Control Areas within the predetermined Regulation Limits. Regulation includes both the increase of output by a Generating Unit or System Resource (Regulation Up) and the decrease in output by a Generating Unit or System Resource (Regulation Down). Regulation Up and Regulation Down are distinct capacity products, with separately stated requirements and ASMPs in each Settlement Period.
Regulation Down or Regulation Down Reserve	Regulation reserve provided by a resource that can decrease its actual operating level in response to a direct electronic (AGC) signal from the CAISO to maintain standard frequency in accordance with established Reliability Criteria.
Regulation Down Reserve Cost	The revenues paid to the suppliers of the total awarded Regulation Down Reserve capacity in the Day-Ahead, HASP, and Real-Time Markets for the Settlement Period, minus the payments rescinded in the Settlement Period due to the unavailability of the Regulation Down under any of the provisions of Section 8.10.8.
Regulation Limits	The MW limits, up and down, set by a Generator for a Generating Unit's operation on Automatic Generation Control.
Regulation Up or Regulation Up Reserve	Regulation provided by a resource that can increase its actual operating level in response to a direct electronic (AGC) signal from the CAISO to maintain standard frequency in accordance with established Reliability Criteria.
Regulation Up Reserve Obligation	The obligation of a Scheduling Coordinator to pay its share of costs incurred by the CAISO in procuring Regulation Up Reserves.
Regulatory Must-Run Generation	Hydro Spill Generation and Generation which is required to run by applicable federal or California laws, regulations, or other governing jurisdictional authority. Such requirements include

	but are not limited to hydrological flow requirements, environmental requirements, such as minimum fish releases, fish pulse releases and water quality requirements, irrigation and water supply requirements of solid waste Generation, or other Generation contracts specified or designated by the jurisdictional regulatory authority as it existed on December 20, 1995, or as revised by federal or California law or Local Regulatory Authority.
Regulatory Must-Take Generation	Those Generation resources identified by CPUC, or a Local Regulatory Authority, the operation of which is not subject to competition. These resources will be scheduled by the relevant Scheduling Coordinator directly with the CAISO on a must-take basis. Regulatory Must-Take Generation includes Generation from Qualifying Facility Generating Units subject to a mandatory purchase obligation as defined by federal law, nuclear units and pre-existing power purchase contracts with minimum energy take requirements.
Reliability Coordinator	The entity designated by WECC as responsible for reliability coordination in Real-Time for the area defined by WECC.
Reliability Criteria	Pre-established criteria that are to be followed in order to maintain desired performance of the CAISO Controlled Grid under contingency or steady state conditions.
Reliability Must-Run Charge (RMR Charge)	The sum payable by a Responsible Utility to the CAISO pursuant to Section 41 for the costs, net of all applicable credits, incurred under the Reliability Must-Run Contract.
Reliability Must-Run Contract (RMR Contract)	A Must-Run Service Agreement between the owner of a Reliability Must-Run Unit and the CAISO.
Reliability Must-Run Generation (RMR Generation)	Generation that the CAISO determines is required to be on line to meet Applicable Reliability Criteria requirements. This includes i) Generation constrained on line to meet NERC and WECC reliability criteria for interconnected systems operation; ii) Generation needed to meet Load demand in constrained areas; and iii) Generation needed to be operated to provide voltage or security support of the CAISO or a local area.

Reliability Must-Run Unit (RMR Unit)	A Participating Generator which is the subject of a Reliability Must-Run Contract.
Reliability Network Upgrades	The transmission facilities at or beyond the Point of Interconnection necessary to interconnect a Large Generating Facility safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of the Large Generating Facility, including Network Upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the CAISO Controlled Grid. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.
Reliability Requirement Determination (RRD)	The reliability process conducted by the CAISO during the DAM, prior to the IFM, and in the HASP, prior to the RTUC, to determine whether unit(s) subject to a contract with the CAISO

	to provide local reliability services, which includes Reliability Must-Run and any successor instrument determined are necessary to meet local reliability needs for the CAISO Control Area.
Reliability Services Costs	The costs associated with services provided by the CAISO: 1) that are deemed by the CAISO as necessary to maintain reliable electric service in the CAISO Control Area; and 2) whose costs are billed by the CAISO to the Participating TO pursuant to the CAISO Tariff. Reliability Services Costs include costs charged by the CAISO to a Participating TO associated with service provided under an Reliability Must Run Contract, Exceptional Dispatches and Minimum Load Costs associated with units committed under the must-offer obligation for local reliability requirements
Reliability Standard	A requirement approved by FERC under Section 215 of the Federal Power Act to provide for reliable operation of the bulk power system. The term includes requirements for the operation of existing bulk power system facilities, including cyber security protection, and the design of planned additions or modifications to such facilities to the extent necessary for reliable operation of the bulk power system; but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.
Remaining Import Capability	The quantity in MW of Total Import Capability assigned to a Load Serving Entity up to its Load Share Quantity after the assignment of Existing Contract Import Capability and Pre-RA Import Commitment. Capability.
Remedial Action Schemes (RAS)	Protective systems that typically utilize a combination of conventional protective relays, computer-based processors, and telecommunications to accomplish rapid, automated response to unplanned power system events. Also, details of RAS logic and any special requirements for arming of RAS schemes, or changes in RAS programming, that may be required.
Rerate Energy	Decremental IIE subsequent to a derate of a Generating Unit's PMax.

Reserve Margin	The amount of Resource Adequacy Capacity that a Scheduling Coordinator is required to maintain in accordance with Section 40.
Reserve Sharing LSE	A Load Serving Entity whose Scheduling Coordinator has informed the CAISO in accordance with Section 40.1 of its election to be a Reserve Sharing LSE.
Residual Imbalance Energy	The Instructed Imbalance Energy at the start or end of a Trading Hour and outside the Schedule-change band for that Trading Hour that is due to: 1) a Dispatch Instruction that is in the opposite direction of a previously issued Dispatch Instruction in the previous Trading Hour, or 2) a Dispatch Instruction in the next Trading Hour. Residual Imbalance Energy may cross hourly boundaries, in which case the portion that lies between hourly transactions is classified and settled as a Ramping Energy Deviation.

Residual Unit Commitment (RUC)	The process conducted by the CAISO in the Day-Ahead Market after the IFM has been executed to ensure sufficient Generating Units, System Units, System Resources and Participating Loads are committed to meet the CAISO Forecast of CAISO Demand.
Resource Adequacy Capacity or RA Capacity	The generation capacity of a Resource Adequacy Resource listed on a Resource Adequacy Plan and a Supply Plan.
Resource Adequacy Compliance Year	A calendar year from January 1 through December 31.
Resource Adequacy Plan	A submission by a Scheduling Coordinator for a Load Serving Entity in the form required by the Business Practice Manual to satisfy the requirements of Section 40.
Resource Adequacy Resource	A resource that is required to offer Resource Adequacy Capacity. The criteria for determining the types of resources that are eligible to provide Qualifying Capacity may be established by the CPUC or other applicable Local Regulatory and provided to the CAISO.
Resource ID	A resource that is required to offer Resource Adequacy Capacity. The criteria for determining the types of resources that are eligible to provide Qualifying Capacity may be established by the CPUC or other applicable Local Regulatory Authority and provided to the CAISO.
Resource Location	The Resource ID for a Generating Unit, Participating Load or System Resource.
Resource-Specific ASMP	The Ancillary Services Marginal Price as determined pursuant to Section 11.10.
Resource-Specific Settlement Interval LMP	The LMP at a PNode used for settlement of IIE, calculated as the IIE-weighted average, excluding the IIE weight for Residual Imbalance Energy, Energy from HASP Intertie Schedules, and Energy from Black Start and Voltage Support, of the individual LMPs for Dispatch Intervals within the given Settlement Interval for a resource, and if there is no Instructed Imbalance Energy, then it is calculated as the simple average of the individual LMPs for the Dispatch Intervals within the given Settlement Interval for a resource.
Resource-Specific System Resource	A Dynamic or Non-Dynamic Resource-Specific System Resource.

Resource-Specific Tier 1 UIE Settlement Interval Price	The price used to settle Tier 1 UIE as calculated pursuant to Section 11.5.2.1.
Responsible Participating Transmission Owner (or Responsible Participating TO or Responsible PTO)	The party providing transmission service under an Existing Contract listed in Appendix A of a Responsible Participating Transmission Owner Agreement and that is the Scheduling Coordinator for each Existing Right holder listed in Appendix A of that RPTOA, unless that Scheduling Coordinator responsibility is transferred pursuant to the provisions of the RPTOA.
Responsible Participating Transmission Owner Agreement (RPTOA)	An agreement between the CAISO and a Responsible Participating Transmission Owner, a *pro forma* version of which has been accepted by FERC as a CAISO rate schedule in 88 FERC ¶ 61,077.
Responsible Utility	The utility which is a party to the Transmission Control Agreement in whose Participating TO Service Territory the Reliability Must-Run Unit is located or whose Participating TO Service Territory is contiguous to the Participating TO Service Territory in which a Reliability Must-Run Unit owned by an entity outside of the CAISO

	Controlled Grid is located.
Revenue Meter Data Acquisition and Processing System (RMDAPS)	A collective name for the set of CAISO systems used to collect, validate, edit and report on Revenue Quality Meter Data.
Revenue Quality Meter Data	Meter data meeting the standards and requirements established and maintained by the CAISO.
Revenue Requirement	The revenue level required by a utility to cover expenses made on an investment, while earning a specified rate of return on the investment.
Revised Adjusted RMR Invoice	The monthly invoice issued by the Reliability Must-Run Owner to the CAISO pursuant to the Reliability Must-Run Contract reflecting any appropriate revisions to the Adjusted Reliability Must-Run Invoice based on the CAISO's validation and actual data for the billing month.
Revised Estimated RMR Invoice	The monthly invoice issued by the Reliability Must-Run Owner to the CAISO pursuant to the Reliability Must-Run Contract reflecting appropriate revisions to the Estimated Reliability Must-Run Invoice based on the CAISO's validation of the Estimated Reliability Must-Run Invoice.
RMDAPS	Revenue Meter Data Acquisition and Processing System
RMR	Reliability Must-Run
RMR Dispatch	The megawatt amount that is mandated by the CAISO to be scheduled in a given market for a resource under the RMR Contract.
RMR Dispatch Notice	Notice received by an RMR Unit from the CAISO containing an RMR Dispatch.

RMR Owner	The provider of services under a Reliability Must-Run Contract.
RMR Owner Facility Trust Account	The commercial bank account held in trust by the CAISO for the benefit of the owner of an RMR Unit subject to an RMR Contract as required and specified in Section 9.2 of the pro forma RMR Contract.
RMR Proxy Bid	For RMR Condition 1 Units, an amount calculated based on the hourly variable costs as defined in Schedule C of the applicable RMR Contract in the form of a monotonically increasing function consistent

	with the bidding rules in Section 30, which is used in the MPM-RRD process described in Section 31.2. For RMR Condition 2 Units, the Energy Bid defined in Schedule M of the RMR Contract, which is used in the MPM-RRD process described in Section 31.2.
RPTOA	Responsible Participating Transmission Owner Agreement
RRD	Reliability Requirement Determination
RTCD	Real-Time Contingency Dispatch
RTD	Real-Time Dispatch
RTED	Real-Time Economic Dispatch
RTM	Real-Time Market
RTM AS Bid Cost	The Bid Cost of a BCR Eligible Resource for Ancillary Service capacity in the RTM.
RTM Bid Cost	The total of a resource's RTM Start–Up Cost, RTM Minimum Load Cost, RTM Pump Shut-Down Cost, RTM Pumping Cost, RTM Energy Bid Cost, and RTM AS Bid Cost.
RTM Bid Cost Shortfall	For each Settlement Interval, for any BCR Eligible Resource, the negative amount resulting from the difference between its RTM Bid Cost and its RTM Market Revenue.
RTM Bid Cost Surplus	For each Settlement Interval, for any BCR Eligible Resource, the positive amount, if any, resulting from the difference between its RTM Bid Cost and its RTM Market Revenue.
RTM Bid Cost Uplift	The system-wide net of the RTM Bid Cost Shortfalls and RTM Bid Cost Surpluses for a Settlement Interval of all BCR Eligible Resources with Unrecovered Bid Cost Uplift Payments. This amount will be netted according to Section 11.8.6.2 to calculate the Net RTM Bid Cost Uplift before allocation to Scheduling Coordinators.

RTM Commitment Period	A Commitment Period determined by the RTM; provided that if the RTM changes the Commitment Status of units scheduled in the IFM or committed in the RUC, an RTM Commitment Period may or may not partially overlap with IFM and RUC Commitment Periods.
RTMD	Real-Time Manual Dispatch
RTM Marginal Cost of Losses Credit for Eligible TOR Self-Schedules	A credit provided to Scheduling Coordinators pursuant to Section 17.3.3 to offset any HASP and RTM Marginal Cost of Losses that would otherwise be applied to the valid and balanced portions of any TOR Self-Schedule in the IFM as provided in Section 11.5.7.2.
RTM Market Revenue	The amount received by BCR Eligible Resource from Energy scheduled and Ancillary Services awarded in the RTM for the

	purposes of Bid Cost Recovery.
RTM Self-Commitment Period	A time period determined by the CAISO for the purposes of deriving any Bid Cost Recovery amounts, related to the RTM.
RTUC	Real-Time Unit Commitment
RUC	Residual Unit Commitment
RUC Availability Bid	The quantity (MW) and price ($/MW per hour) at or above which a Generating Unit, System Resource, System Unit or Participating Load has agreed to sell capacity for a specified interval of time to the CAISO to meet the Residual Unit Commitment requirement.
RUC Availability Bid Cost	As provided in Section 11.8.3.1.3, the product of the RUC Award and the relevant RUC Availability Bid price, divided by the number of Settlement Intervals in a Trading Hour.
RUC Availability Payment	The payment made for the RUC Availability Quantity as specified in Section 11.
RUC Availability Quantity	A RUC Award (MW) excluding any RUC Capacity that is actually unavailable due to a unit derate or Outage.
RUC Award	The portion of the RUC Capacity from resources eligible to receive RUC Availability Payments, exclusive of Minimum Load, capacity designated as RMR, and capacity under Resource Adequacy requirements as specified in Section 40.
RUC Bid Cost	The total Bid Costs associated with commitment by the CAISO through the RUC process used for determination of Unrecovered Bid Cost Uplift Payments and RUC Bid Cost Uplift allocation.
RUC Bid Cost Shortfall	For each Settlement Interval, for any BCR Eligible Resource, the negative amount, if any, resulting from the difference between its RUC Bid Cost and its RUC Market Revenue.
RUC Bid Cost Surplus	For each Settlement Interval, for any BCR Eligible Resource, the positive amount, if any, resulting from the difference between its RUC Bid Cost and its RUC Market Revenue.
RUC Bid Cost Uplift	The system-wide net of the RUC Bid Cost Shortfalls and RUC Bid Cost Surpluses for a Settlement Interval for all BCR Eligible Resources with Unrecovered Bid Cost Uplift Payments. This amount will be netted according to Section 11.8.6.2 to calculate the Net RUC Bid Cost Uplift before allocation to Scheduling Coordinators.

RUC Capacity	The positive difference between the RUC Schedule and the greater of the Day-Ahead Schedule and the Minimum Load level of a resource.
RUC Commitment Period	A Commitment Period determined by the RUC; provided that because the RUC may not decommit units scheduled in the IFM, if the unit is scheduled by the IFM within that Time Period an IFM Commitment Period is always within a RUC Commitment Period; and a RUC Commitment Period may start earlier and/or may end later than an IFM Commitment Period if RUC issues an earlier Start-Up

	and/or later Shut-Down Instruction than the IFM, respectively.
RUC Compensation	The Payment to Scheduling Coordinators with RUC Awards, calculated as the sum of RUC Availability Payment and RUC Unrecovered Bid Costs.
RUC Compensation Cost	As provided in Section 11.8.6.5, for each Trading Hour of the RUC, the sum of the RUC Availability Payment and the hourly Net RUC Bid Cost Uplift, which is allocated as provided in Section 11.8.6.5.3.
RUC Market Revenues	The sum of a resource's RUC Availability Payment for a Trading Hour divided by the number of Settlement Intervals in a Trading Hour or the purposes of calculating Bid Cost Recovery for RUC.
RUC Price	The price calculated by the RUC optimization for each Trading Hour of the next Trading Day which reflects the price ($/MW per hour) for the next increment of RUC Capacity at a specified PNode for each Trading Hour.
RUC Schedule	The total MW per hour amount of capacity committed by RUC including the MW per hour amounts committed in the Day-Ahead Schedule.
RUC Zone	A forecast region representing a UDC or MSS Service Area, Local Capacity Area, or other collection of Nodes for which the CAISO has developed sufficient historical CASIO Demand and relevant weather data to perform a Demand Forecast for such area, for which as further provided in Section 31.5.3.7 the CAISO may adjust the CAISO Forecast of CAISO Demand to ensure that the RUC process produces adequate local capacity procurement.
Rules of Conduct	The rules set forth in 37.2 through 37.7.
Sanction	A consequence specified in Section 37 for the violation of a Rule of Conduct, which may include a) a warning letter notifying the Market Participant of the violation and future consequences specified under Section 37 if the behavior is not corrected, or b) financial penalties. Neither referral to FERC nor rescission of payment for service not provided shall constitute a Sanction.
SC	Scheduling Coordinator
SCA	Scheduling Coordinator Agreement
SCADA	Supervisory Control and Data Acquisition
SCED	Security Constrained Economic Dispatch

Schedule	A Day-Ahead Schedule, a HASP Advisory Schedule, or a HASP Intertie Schedule.
Scheduled Demand	The MW of Energy of Demand cleared through the IFM and set in the Day-Ahead Schedule for the next Trading Day.
Scheduled Generation	The MW of Energy of Generation cleared through the IFM and set in the Day-Ahead Schedule for the next Trading Day.
Scheduling and Logging system for the CAISO (SLIC)	A logging application that allows Market Participants to notify the CAISO when a Generating Unit's properties change due to physical problems. Users can modify the maximum and minimum output of a unit, as well as the Ramping capability of the unit.
Scheduling Coordinator (SC)	An entity certified by the CAISO for the purposes of undertaking the functions specified in Section 4.5.3.
Scheduling Coordinator Agreement (SCA)	An agreement between a Scheduling Coordinator and the CAISO whereby the Scheduling Coordinator agrees to comply with all CAISO rules, protocols and instructions, as those rules, protocols and instructions may be amended from time to time, a *pro forma* version of which is set forth in Appendix B.1.
Scheduling Coordinator Applicant	An applicant for certification by the CAISO as a Scheduling Coordinator.
Scheduling Coordinator Application Form	The form specified by the CAISO from time to time in which a Scheduling Coordinator Applicant must apply to the CAISO for certification as a Scheduling Coordinator.
Scheduling Coordinator Customer	A customer of the Scheduling Coordinator Applicant or a Scheduling Coordinator for whom the Scheduling Coordinator provides services relevant to the CAISO Controlled Grid.
Scheduling Coordinator ID Code (SCID)	The Bid component that indicates the individual identification Code

	provided by the CAISO to the Scheduling Coordinator.
Scheduling Coordinator Metered Entity	A Generator, Eligible Customer or End-User that is not a CAISO Metered Entity.
Scheduling Point	A location at which the CAISO Controlled Grid is connected, by a group of transmission paths for which a physical, non-simultaneous transmission capacity rating has been established for Congestion Management, to transmission facilities that are outside the CAISO's Operational Control.
SCID	Scheduling Coordinator ID Code
Scoping Meeting	The meeting among representatives of the Interconnection Customer, the applicable Participating TO, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange

	information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.
SCUC	Security Constrained Unit Commitment
Seasonal Available CRR Capacity	The upper limit of network capacity that will be used in the annual CRR Allocation and annual CRR Auction calculated by effectively reducing OTC for Transmission Ownership Rights as if all lines will be in service for the relevant year in accordance with Section 36.4.
Seasonal CRR	A Congestion Revenue Right that is valid for one season and one time-of-use period in a given year.
Seasonal CRR Eligible Quantity	The MW quantity of CRRs a CRR Holder or Candidate CRR Holder is eligible to nominate for a specific season and time-of-use period in the annual CRR Allocation.
Seasonal CRR Load Metric	The MW level of Load that is exceeded only in .05 percent of the hours for each season and time of use period based on the LSE's historical Load.
Secondary Registration System	The computer interface through which CRR Holders and Candidate CRR Holders register any bilateral CRR transactions with the CAISO.
Security	The form of security provided by a Scheduling Coordinator pursuant to Section 12.1 (i.e., letter of credit, guarantee or cash deposit) to secure its trading obligations.
Security Constrained Economic Dispatch (SCED)	An algorithm performed by a computer program that simultaneously clears Energy Supply Bids, including Self-Schedules, against Demand Forecast to determine Dispatch Instructions.

Security Constrained Unit Commitment (SCUC)	An algorithm performed by a computer program over a multi-hour Time Horizon that determines the Commitment Status and Day-Ahead Schedules, AS Awards, RUC Awards, HASP Intertie Schedules and Dispatch Instructions for selected resources and minimizes production costs (Start-Up, Minimum Load and Energy Bid Costs in IFM, HASP and RTM; Start-Up, Minimum Load and RUC Availability Bid Costs) while respecting the physical operating characteristics of selected resources and transmission constraints.
Security Monitoring	The real-time assessment of the CAISO Controlled Grid that is conducted to ensure that the system is operating in a secure state, and in compliance with all Applicable Reliability Criteria.
Self-Commitment Period	The portion of a Commitment Period of a unit with an Energy Self-

	Schedule or a Submission to Self-Provide an Ancillary Services, except for Non-Spinning Reserve self-provision by a Fast-Start Unit. The Self-Commitment Period may include Time Periods without Energy Self-Schedules or AS self-provision if it is determined by inference that the unit must be on due to Minimum Run Time, Minimum Down Time, or Maximum Daily Start-Up constraints.
Self-Provided Ancillary Services	A Submission to Self-Provide Ancillary Services in the Day Ahead, HASP, or Real-Time Market that has been accepted by the CAISO. Acceptance will occur prior to Ancillary Service Bid evaluation in the relevant market and indicates that the CAISO has determined the submission is feasible with regard to resource operating characteristics and regional constraints and is qualified to provide the Ancillary Service in the market for which it was submitted. Self provided Ancillary Services consist of self provided Regulation Up reserves, self provided Regulation Down reserves, self provided Spinning Reserves, and self provided Non-Spinning Reserves.
Self-provided Load	The portion of Load that is served by a Net Scheduled QF listed in a QF PGA, consistent with Section 218(b) of the California Public Utilities Code.
Self-Schedule	The Bid component that indicates the quantities in MWhs with no specification of a price that the Scheduling Coordinator is submitting to the CAISO, which indicates that the Scheduling Coordinator is a Price Taker, Regulatory Must-Run Generation or Regulatory Must-Take Generation, which includes ETC and TOR Self-Schedules and Self-Schedules for Converted Rights.
Service Area	An area in which an IOU or a Local Publicly Owned Electric Utility is obligated to provide electric service to End-Use Customers.
Set Point	Scheduled operating level for each Generating Unit or other resource scheduled to run in the HASP Schedule and Awards.
Settlement	Process of financial settlement for products and services purchased and sold undertaken by the CAISO under Section 11. Each Settlement will involve a price and a quantity.
Settlement Account	An account held at a bank situated in California, designated by a Scheduling Coordinator, a CRR Holder or a Participating TO pursuant to the Scheduling Coordinator's Scheduling Coordinator Agreement,

	the CRR Holder's CRR Entity Agreement or in the case of a Participating TO, Section 2.2.1 of the Transmission Control Agreement, to which the CAISO shall pay amounts owing to the Scheduling Coordinator, the CRR Holder or the Participating TO under the CAISO Tariff.
Settlement Interval	The time period equal to or a multiple of the Dispatch Interval, over which the CAISO settles cost compensation amounts or deviations in Generation and Demand in CAISO Markets.
Settlement Interval Penalty Location Real-Time LMP	The optimal Instructed Imbalance Energy weighted average of the individual Dispatch Interval Real-Time LMPs for the resources in a UDP Aggregation established pursuant to Appendix R.
Settlement Period	For all CAISO transactions the period beginning at the start of the hour, and ending at the end of the hour. There are twenty-four Settlement Periods in each Trading Day, with the exception of a Trading Day in which there is a change to or from daylight savings time.
Settlement Quality Meter Data	Meter Data gathered, edited, validated, and stored in a settlement-ready format, for Settlement and auditing purposes.
Settlement Quality Meter Data Systems	A collective name for the set of CAISO systems used to accept, analyze and report on Settlement Quality Meter Data.
Settlements, Metering, and Client Relations Charge	The component of the Grid Management Charge that provides for the recovery of the CAISO's costs, including, but not limited to the costs of maintaining customer account data, providing account information to customers, responding to customer inquiries, calculating market charges, resolving customer disputes, and the costs associated with the CAISO's Settlement, billing, and metering activities. Because this is a fixed charge per Scheduling Coordinator ID, costs associated with activities listed above also are allocated to other charges under the Grid Management Charge according to formula set forth in Appendix F, Schedule 1, Part A of this Tariff.
Settlement Statement	Either or both of a Preliminary Settlement Statement or Final Settlement Statement.
Settlement Statement Re-run	The re-calculation of a Settlement Statement in accordance with the provisions of the CAISO Tariff.
SFT	Simultaneous Feasibility Test

Shadow Price	The marginal value of relieving a particular constraint.
Short Start Unit	A Generating Unit that has a cycle time less than five hours (Start-Up Time plus Minimum Run Time is less than five hours), has a Start-Up Time less than two hours, and can be fully optimized with respect to this cycle time.
Short-Term Unit Commitment (STUC)	The Unit Commitment procedure run at approximately T-52.5 minutes for a Time Horizon of approximately five (5) hours. The STUC determines whether some Medium Start Units need to be started early enough to meet the Demand within the STUC Time Horizon using the CAISO Forecast of CAISO Demand. The STUC produces a Unit Commitment solution for every 15-minute interval within the STUC Time Horizon and issues binding Start-Up instructions only as necessary.
Shut-Down	A Commitment Status transition from On to Off.
Shut-Down Cost	The Bid Component submitted by the Scheduling Coordinator indicating a single price at which the resource is willing to Shut-Down.
Shut-Down Instruction	An instruction issued by the CAISO to a resource to Shut-Down.
Simultaneous Feasibility Test (SFT)	The process that the CAISO will conduct to ensure that allocated and auction CRRs do not exceed relevant transmission system constraints as described in Section 36.4.2 and further described in the Business Practices Manuals.

Site Control	Documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.
SLIC	Scheduling and Logging system for the CAISO
Small Generating Facility	A Generating Facility that has a Generating Facility Capacity of no more than 20 MW.
SMEC	System Marginal Energy Cost
Spinning Reserve	The portion of unloaded synchronized generating capacity that is immediately responsive to system frequency and that is capable of being loaded in ten minutes, and that is capable of running for at least two hours.
Spinning Reserve Cost	The revenues paid to the suppliers of the total awarded Spinning Reserve capacity in the Day-Ahead Market, HASP, and Real-Time

	Market for the Settlement Period, minus the payments rescinded in the Settlement Period due to the unavailability of the Spinning Reserve under any of the provisions of Section 8.10.2.
Spinning Reserve Obligations	The obligation of a Scheduling Coordinator to pay its share of costs incurred by the CAISO in procuring Spinning Reserve.
Stand Alone Network Upgrades	Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement.
Standard Large Generator Interconnection Agreement (LGIA)	The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a *pro forma* version of which is set forth in Appendix V.
Standard Large Generator Interconnection Procedures (LGIP)	The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is set forth in Appendix U.
Standard Ramp (-ing)	A ramp calculated from two consecutive Day-Ahead Schedules that results in a straight trajectory between 10 minutes before the start of a Trading Hour to 10 minutes after the start of the Trading Hour.
Standard Ramping Energy	Imbalance Energy delivered or consumed as the difference between the Day-Ahead Schedules across consecutive hours and the Standard Ramp.
Standby Rate	A rate assessed a Standby Service Customer by the Participating TO that also provides retail electric service, as approved by the Local Regulatory Authority, or FERC, as applicable, for Standby Service which compensates the Participating TO, among other things, for costs of High Voltage Transmission Facilities.
Standby Service	Service provided by a Participating TO that also provides retail electric service, which allows a Standby Service Customer, among other things, access to High Voltage Transmission Facilities for the delivery of backup power on an instantaneous basis to ensure that Energy may

	be reliably delivered to the Standby Service Customer in the event of an Outage of a Generating Unit serving the customer's Load.
Standby Service Customer	A retail End-Use Customer of a Participating TO that also provides retail electric service that receives Standby Service and pays a Standby Rate.
Standby Transmission Revenue	The transmission revenues, with respect to cost of both High Voltage Transmission Facilities and Low Voltage Transmission Facilities, collected directly from Standby Service Customers through charges for Standby Service.
Start-Up	A Commitment Status transition from Off to On.
Start-Up Bid	The Bid component that indicates the Start-Up Time and Start-Up Cost curves for the Generating Unit, which applies for the entire Trading Day for which it is submitted. Start-Up Cost curves are strictly monotonically increasing non-negative staircase curves, up to three segments, which represent a function of Start-Up Cost versus down time.
Start-Up Cost	The cost incurred by a particular Generating Unit during Start-Up from the time of first fire, the time of receipt of a CAISO Dispatch Instruction, or the time the unit was last synchronized to the grid, whichever is later, until the time the Generating Unit reaches its minimum operating level.
Start-Up Instruction	An instruction issued by the CAISO to a resource to Start-Up.
Start-Up Time	The time period required for a resource to go from Off to its Minimum Load.
State Estimator	A computer software program that provides the CAISO with a near Real-Time assessment of system conditions within the CAISO Control Area, including portions of the CAISO Control Area where Real-Time information is unavailable.
STUC	Short-Term Unit Commitment
Submission to Self-Provide an Ancillary Service	A submission to the CAISO containing all of the bidding requirements for an Ancillary Service with the exception of price information.
Sub-Region	A region identified by the CAISO for procurement of Ancillary Services within the System Region.
Supervisory Control and Data Acquisition (SCADA)	A computer system that allows an electric system operator to remotely monitor and control elements of an electric system.

Supply	The Energy delivered from a Generating Unit, System Unit, Physical Scheduling Plant, System Resource or the Curtailable Demand provided by a Participating Load.
Supply Plan	A submission by a Scheduling Coordinator for a Resource Adequacy Resource in order to satisfy the requirements of Section 40.
System Emergency	Conditions beyond the normal control of the CAISO that affect the ability of the CAISO Control Area to function normally including any abnormal system condition which requires immediate manual or automatic action to prevent loss of Load, equipment damage, or tripping of system elements which might result in cascading Outages or to restore system operation to meet the minimum operating reliability criteria.
System Marginal Energy Cost (SMEC)	The component of the LMP that reflects the marginal cost of providing Energy from a designated reference Location.
System Planning Studies	Reports summarizing studies performed to assess the adequacy of the CAISO Controlled Grid as regards conformance to Reliability Criteria.
System Region	The CAISO Control Area.
System Reliability	A measure of an electric system's ability to deliver uninterrupted service at the proper voltage and frequency.
System Resource	A group of resources, single resource, or a portion of a resource located outside of the CAISO Control Area, or an allocated portion of a Control Area's portfolio of generating resources that are either a static Interchange schedule or directly responsive to that Control Area's Automatic Generation Control (AGC) capable of providing Energy and/or Ancillary Services to the CAISO Control Area, provided that if the System Resource is providing Regulation to the CAISO it is directly responsive to AGC.

System Unit	One or more individual Generating Units and/or Loads within a Metered Subsystem controlled so as to simulate a single resource with specified performance characteristics, as mutually determined and agreed to by the MSS Operator and the CAISO. The Generating Units and/or Loads making up a System Unit must be in close physical proximity to each other such that the operation of the resources comprising the System Unit does not result in significant differences in flows on the CAISO Controlled Grid.
TAC	Transmission Access Charge
TAC Benefit	The amount, if any, for each year by which the cost of Existing High Voltage Transmission Facilities associated with deliveries of Energy to Gross Loads in the PTO Service Territory is reduced by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F. The TAC Benefit of a New Participating TO shall not be less than zero.
TAC Transition Date	January 1, 2001, the date described in Section 4.2 of Appendix F, Schedule 3, when the first New Participating TO's execution of the Transmission Control Agreement took effect, which established the start of the TAC Transition Period for the calculation of the Access Charge.
TAC Transition Period	The 10-year transition period for the CAISO's Access Charge

	methodology commencing January 1, 2001 through December 31, 2010.
Take-Out Point	The metering points at which a Scheduling Coordinator Metered Entity or CAISO Metered Entity takes delivery of Energy.
Tax Exempt Debt	Municipal Tax Exempt Debt or Local Furnishing Bonds.
Tax Exempt Participating TO	A Participating TO that is the beneficiary of outstanding Tax Exempt Debt issued to finance any electric facilities, or rights associated therewith, which are part of an integrated system including transmission facilities the Operational Control of which is transferred to the CAISO pursuant to the Transmission Control Agreement.
TCA	Transmission Control Agreement
TEA	Transmission Exchange Agreement
Tie Point Meter	A revenue meter, which is capable of providing Settlement Quality Meter Data, at a Scheduling Point or at a boundary between Utility Distribution Companies within the CAISO Controlled Grid.
Tier 1 UIE	The quantity of Uninstructed Deviation from the resource's Instructed Imbalance Energy.
Tier 2 UIE	The quantity of Uninstructed Deviation from the resource's Day-Ahead Schedule.
Tier LT	The tier of the annual CRR Allocation process through which the CAISO allocates Long Term CRRs.
Time Horizon	The time period to which a given CAISO Market optimization process applies. For the IFM and RUC the Time Horizon consists of each Trading Hour of the next Trading Day. For the HASP, the Time Horizon is 1.75 Trading Hours in fifteen-minute increments. For STUC the Time Horizon is 4.25 Trading Hours in fifteen-minute increments. For RTUC the Time Horizon is a variable number of fifteen-minute intervals that runs every fifteen minutes and covers 4 to 7 intervals. For the RTD, the Time Horizon is seven five-minute intervals span over thirty-five minutes.
Time Period	The period of time for Scheduling or Dispatch activities, which is a Trading Hour in the DAM and a Dispatch Interval in the RTM.

TO	Transmission Owner
Tolerance Band	The permitted area of variation for performance requirements of resources used for various purposes as further provided in the CAISO Tariff. The Tolerance Band is expressed in terms of Energy (MWh) for Generating Units, System Units and imports from Dynamic System Resources for each Settlement Interval and equals the greater of the absolute value of: (1) five (5) MW divided by number of Settlement Intervals per Settlement Period or (2) three percent (3%) of the relevant Generating Unit's, Dynamic System Resource's or System Unit's maximum output (PMax), as registered in the Master File, divided by number of Settlement Intervals per Settlement Period. The maximum output (PMax) of a Dynamic System Resource will be established by agreement between the CAISO and the Scheduling Coordinator representing the Dynamic System Resource on an individual case basis, taking into account the number and size of the generating resources, or allocated portions of generating resources, that comprise the Dynamic System Resource. The Tolerance Band is expressed in terms of Energy (MWh) for Participating Loads for each Settlement Interval and equals the greater of the absolute value of: (1) five (5) MW divided by number of Settlement Intervals per Settlement Period or (2) three percent (3%) of the applicable HASP Intertie Schedule or CAISO Dispatch amount divided by number of Settlement Intervals per Settlement Period. The Tolerance Band shall not be applied to Non-Dynamic System Resources.
TOR	Transmission Ownership Right

Total CAISO Markets Uplift	The sum of the Net IFM Bid Cost Uplift, the Net RUC Bid Cost Uplift, and the Net RTM Bid Cost Uplift, for all Settlement Intervals in the IFM, RUC and RTM.
Total Import Capability	The aggregate Maximum Import Capability of all Interties into the CAISO Control Area in MW deliverable to the CAISO Control Area based on CAISO study criteria minus the aggregate sum in MW of all Existing Contracts and Transmission Ownership Rights held by load serving entities that do not serve Load within the CAISO Control Area.
Total Positive CAISO Markets Uplift	The sum of the positive IFM Bid Cost Uplift, positive RUC Bid Cost Uplift and positive RTM Bid Cost Uplift, for all Settlement Intervals in the IFM, RUC and RTM
Total Transfer Capability (TTC)	The amount of power that can be transferred over an interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre-contingency and post-contingency system conditions.
Trading Day	The twenty-four hour period beginning at the start of the hour ending 0100 and ending at the end of the hour ending 2400 daily, except where there is a change to and from daylight savings time.
Trading Hour	Any hour during which trades are conducted in a CAISO Market.
Trading Hub	An aggregation of network Pricing Nodes, such as Existing Zone Generation Trading Hubs, maintained and calculated by the CAISO for settlement and trading purposes posted by the

	CAISO on its CAISO Website.
Trading Interval	A Settlement Period.
Trading Month	The period beginning at the start of the hour ending 0100 and ending at the end of the hour ending 2400 for each calendar month, except where there is a change to and from daylight savings time on the first or last day of a month.
Transfer	An import and export from the CAISO Controlled Grid within the CAISO Control Area.
Transformer and Line Loss Correction Factor	The transformer and line loss correction factor as set forth in the applicable Business Practice Manual or Technical Specifications to be applied to revenue quality meters of CAISO Metered Entities which are installed on the low voltage side of step-up transformers.
Transition Charge	The component of the Access Charge collected by the CAISO with the High Voltage Access Charge in accordance with Section 5.7 of Appendix F, Schedule 3.
Transmission Access Charge (TAC)	Access Charge
Transmission Access Charge Area (TAC Area)	A portion of the CAISO Controlled Grid with respect to which Participating TOs' High Voltage Transmission Revenue Requirements are recovered through a High Voltage Access Charge. TAC Areas are listed in Appendix C.3.
Transmission Control Agreement (TCA)	The agreement between the CAISO and Participating TOs establishing the terms and conditions under which TOs will become Participating TOs and how the CAISO and each Participating TO will discharge their respective duties and responsibilities, as may be modified from time to time.
Transmission Exchange Agreement (TEA)	The agreement among the CAISO, Western Area Power Administration and Pacific Gas and Electric Company establishing the terms and conditions of the treatment of Western Area Power Administration’s interests in the Pacific AC Intertie, which agreement was originally accepted by FERC in Docket No. ER04-688.

Transmission Interface	A CAISO-defined set of transmission facilities that comprise an important transmission corridor for Energy or capacity.
Transmission Losses	Energy that is lost as a natural part of the process of transmitting Energy from Generation to Load delivered at the CAISO/Utility Distribution Company boundary or Control Area boundary.
Transmission Losses Charge	The charge for Transmission Losses based on the Marginal Cost of Losses at the Pricing Node.
Transmission Owner (TO)	An entity owning transmission facilities or having firm contractual rights to use transmission facilities.

Transmission Ownership Right (TOR)	The ownership or joint ownership right to transmission facilities within the CAISO Control Area of a Non-Participating TO that has not executed the Transmission Control Agreement, which transmission facilities are not incorporated into the CAISO Controlled Grid.
Transmission Owner Tariff (TO Tariff)	A tariff setting out a Participating TO's rates and charges for transmission access to the CAISO Controlled Grid and whose other terms and conditions are the same as those contained in the document referred to as the Transmission Owners Tariff approved by FERC as it may be amended from time to time.
Transmission Revenue Balancing Account (TRBA)	A mechanism to be established by each Participating TO which will ensure that all Transmission Revenue Credits and other credits specified in Sections 6 and 8 of Appendix F, Schedule 3, flow through to transmission customers.
Transmission Revenue Credit	For an Original Participating TO, the proceeds received from the CAISO for Wheeling service, CRR Auction revenue and Congestion Charges, plus the shortfall or surplus resulting from any cost differences between Transmission Losses and Ancillary Service requirements associated with Existing Rights and the CAISO's rules and protocols. For a New Participating TO during the 10-year TAC Transition Period described in Section 4 of Schedule 3 of Appendix F, the proceeds received from the CAISO for Wheeling service and net CRR revenue, plus the shortfall or surplus resulting from any cost differences between Transmission Losses and Ancillary Service requirements associated with Existing Rights and the CAISO's rules and protocols. After the 10-year TAC Transition Period, the New Participating TO Transmission Revenue Credit shall be calculated the same as the Transmission Revenue Credit for the Original Participating TO.

Transmission Revenue Requirement (TRR)	The Transmission Revenue Requirement is the total annual authorized revenue requirements associated with transmission facilities and Entitlements turned over to the Operational Control of the CAISO by a Participating TO. The costs of any transmission facility turned over to the Operational Control of the CAISO shall be fully included in the Participating TO's Transmission Revenue Requirement. The Transmission Revenue Requirement includes the costs of transmission facilities and Entitlements and deducts Transmission Revenue Credits and credits for Standby Transmission Revenue and the transmission revenue expected to be actually received by the Participating TO for Existing Rights and Converted Rights.
Transmission Rights and Transmission Curtailment (TRTC) Instructions	Operational directives developed between Existing Rights holders, TOR holders, and holders of Converted Rights and the Participating TO, submitted to the CAISO by the Participating TO, unless otherwise agreed to by the Participating TO and the Existing Rights holder to facilitate the accommodation of Existing Rights in the CAISO Markets.
TRBA	Transmission Revenue Balancing Account
Trial Operation	The period during which Interconnection Customer is engaged in on-site test operations and commissioning of a Generating Unit prior to Commercial Operation.
TRR	Transmission Revenue Requirement
TRTC Instructions	Transmission Rights and Transmission Curtailment Instructions
Trustee	The trustee of the California Independent System Operator trust established by order of the California Public Utilities Commission on August 2, 1996 Decision No. 96-08-038 relating to the Ex Parte Interim Approval of a Loan Guarantee and Trust Mechanism to Fund the Development of an Independent System Operator (ISO) and a Power Exchange (PX) pursuant to Decision 95-12-063 as modified.

TTC	Total Transfer Capability
UDC	Utility Distribution Company
UDCOA	Utility Distribution Company Operating Agreement
UDP	Uninstructed Deviation Penalty
UDP Aggregation	Two or more units scheduled by the same Scheduling Coordinator with the same Resource ID that are to be considered interchangeable for calculating the Uninstructed Deviation Penalty.
UFE	Unaccounted for Energy
UIE	Uninstructed Imbalance Energy
UIE Settlement Amount	The payment due a Scheduling Coordinator for positive Uninstructed Imbalance Energy or the charge assessed on a Scheduling Coordinator for negative Uninstructed Imbalance Energy, calculated pursuant to Section 11.5.2.
Unaccounted for Energy (UFE)	The difference in Energy, for each utility Service Area and Settlement Period, between the net Energy delivered into the utility Service Area,

	adjusted for utility Service Area Transmission Losses and the total Metered Demand within the utility Service Area adjusted for distribution losses using Distribution System loss factors approved by the Local Regulatory Authority. This difference is attributable to meter measurement errors, power flow modeling errors, energy theft, statistical Load profile errors, and distribution loss deviations.
Unavailable Capacity	Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity that was not dispatched by the CAISO but where all or a portion of the capacity was not available for Dispatch in Real-Time.
Uncontrollable Force	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 CAISO or Market Participant which could not be avoided through the exercise of Good Utility Practice.
Undelivered Capacity	Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity, or capacity committed in RUC, that was dispatched by the CAISO to provide Energy but where a certain percentage or more of the Expected Energy was not provided in Real-Time, which percentage is determined as specified in the applicable Business Practice Manual.
Undispatchable Capacity	Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity, or capacity committed in RUC, that is not available for use due to a derate or Outage of the resource. Undispatchable Capacity includes AS Awards for Spinning Reserve and Non-Spinning Reserve capacity that are not available for use due to Ramp Rate constraints (*e.g.*, operational Ramping ability is lower than Operating Reserve Ramp Rate).
Uninstructed Deviation	A deviation from the resources' Dispatch Operating Point.
Uninstructed Deviation Penalty (UDP)	The penalty as set forth in Section 11.23.
Uninstructed Imbalance Energy (UIE)	The portion of Imbalance Energy that is not Instructed Imbalance Energy.
Unit Commitment	The process of determining which Generating Units will be committed

	(started) to meet Demand and provide Ancillary Services in the near future (e.g., the next Trading Day).
Unrecovered Bid Cost Uplift Payment	A payment made to Scheduling Coordinators for any Bid Costs in the IFM, RUC, and RTM not recovered by IFM, RUC, or RTM Market Revenues as provided in Section 11.8.5.
Use-Limited Resource	A resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, is unable to operate continuously on a daily basis, but is able to operate for a minimum set of consecutive Trading Hours each Trading Day.
Utility Distribution Company (UDC)	An entity that owns a Distribution System for the delivery of Energy to and from the CAISO Controlled Grid, and that provides regulated retail electric service to Eligible Customers, as well as regulated procurement service to those End-Use Customers who are not yet eligible for direct access, or who choose not to arrange services through another retailer.
Utility Distribution Company Operating Agreement (UDCOA)	An agreement between the CAISO and a Utility Distribution Company, a *pro forma* version of which is set forth in Appendix B.8.
Validation, Estimation and Editing (VEE)	The procedures set forth in Section 10 that the CAISO applies to Revenue Quality Meter Data in order to develop Settlement Quality Meter Data.
Variable Cost	The cost associated with fuel cost and variable operations and maintenance costs.
Variable Cost Option	A method of calculation Default Energy Bids based on fuel costs and variable operations and maintenance costs.
VEE	Validation, Estimation and Editing
Voltage Limits	For all substation busses, the normal and post-contingency Voltage Limits (kV). The bandwidth for normal Voltage Limits must fall within the bandwidth of the post-contingency Voltage Limits. Special voltage limitations for abnormal operating conditions such as heavy or light Demand may be specified.

Voltage Support	Services provided by Generating Units or other equipment such as shunt capacitors, static var compensators, or synchronous condensers that are required to maintain established grid voltage criteria. This service is required under normal or System Emergency conditions.
WAC	Wheeling Access Charge
WECC	Western Electricity Coordinating Council
Weekly Peak Demand	Demand Forecast of the highest Hourly Demand in a

Forecast	period beginning at the start of the hour ending 0100 on Sunday and ending at the end of the hour ending 2400 the following Saturday, in MW.
Western Electricity Coordinating Council (WECC)	The Western Electricity Coordinating Council or its successor.
Western Interconnection	The network of transmission lines embodied within the WECC region.
Western Systems Coordinating Council (WSCC)	The Western Systems Coordinating Council or its successor, the WECC.
Western Systems Power Pool	An organization of participants in the electricity markets that have developed and maintain the Western Systems Power Pool Agreement.
Western Systems Power Pool Agreement	A standardized power sales agreement developed and maintained as a FERC rate schedule by the Western Systems Power Pool.
Western Path 15	The Western Area Power Administration, Sierra Nevada Region (or its successor) with respect solely to its rights and interests in the Path 15 Upgrade.
Wheeling	Wheeling Out or Wheeling Through.
Wheeling Access Charge (WAC)	The charge assessed by the CAISO that is paid by a Scheduling Coordinator for Wheeling in accordance with Section 26.1. Wheeling Access Charges shall not apply for Wheeling under a bundled non-economy Energy coordination agreement of a Participating TO executed prior to July 9, 1996. The Wheeling Access Charge may consist of a High Voltage Wheeling Access Charge and a Low Voltage Wheeling Access Charge.
Wheeling Out	Except for Existing Rights exercised under an Existing Contract in accordance with Section 16.1, the use of the CAISO Controlled Grid for the transmission of Energy from a Generating Unit located within the CAISO Controlled Grid to serve a Load located outside the transmission and Distribution System of a Participating TO.

Wheeling Through	Except for Existing Rights exercised under an Existing Contract in accordance with Section 16.1, the use of the CAISO Controlled Grid for the transmission of Energy from a resource located outside the CAISO Controlled Grid to serve a Load located outside the transmission and Distribution System of a Participating TO.
Wholesale Customer	A person wishing to purchase Energy and Ancillary Services at a Bulk Supply Point or a Scheduling Point for resale.
Wholesale Sales	The sale of Energy and Ancillary Services at a Bulk Supply Point or a Scheduling Point for resale.
WSCC	Western Systems Coordinating Council

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