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Congestion Revenue Rights

Congestion Revenue Rights (CRRs) are financial instruments that result in a charge or a payment to the owner when the ERCOT transmission grid is congested in the Day Ahead Market (DAM). CRRs may be used as either a financial hedge or a financial investment. When used as a hedge, a CRR locks in the price of congestion at the purchase price of the CRR. When purchased as an investment, it may be used as a financial tool to speculate whether the congestion rent will be greater than the purchase price.

The main purposes of the ERCOT Congestion Revenue Rights (CRR) market are to:

- Support a liquid energy market by providing tradable financial instruments for the hedging of transmission congestion charges
- Allow market participants to eliminate or greatly reduce the cost uncertainties resulting from transmission congestion charges
- Encourage competitive energy trading, where the costs of congestion might otherwise be an impediment


Day-Ahead Market

The Day-Ahead Market (DAM) is a voluntary, financially-binding forward energy market. The DAM matches willing buyers and sellers, subject to network security and other constraints, whereby energy is co-optimized with Ancillary Services and certain Congestion Revenue Rights. It provides a platform to hedge congestion costs in the day-ahead of the Operating Day, and instruments to mitigate the risk of price volatility in Real-Time.

Real-Time Market

During real-time, ERCOT dispatches resources based on economics and reliability to meet the system demand while observing resource and transmission constraints. Security Constrained Economic Dispatch (SCED) is the real-time market evaluation of offers to produce a least-cost dispatch of online resources. SCED calculates Locational Marginal Prices (LMPs) using a two-step methodology that applies mitigation to resolve non-competitive constraints.

Energy and Ancillary Services

 Find information on ancillary services (AS) including balancing energy services (BES), replacement reserve service (RPRS) and non-spinning reserve services (NSRS); market clearing price for energy (MCPE) results and ERCOT trading hub prices; aggregated bid curves for the day-ahead market; and energy schedules. Also view systemwide pricing offer caps.

Market Prices

ERCOT monitors DAM, SCED, and SASM prices for errors. Price corrections are performed by ERCOT without the ERCOT Board's approval if done before the market prices are final; After the market prices are final, if ERCOT determines that prices are in need of correction, it shall notify Market Participants and describe the need for such correction. Market prices cannot be changed unless the ERCOT Board finds that the prices are significantly affected by a software or data error.

Retail

Find retail market transaction data, including transmission/distribution service provider (TDSP) electronic service identifier (ESI) ID reports; 867_03 activity (monthly meter reading transactions by TDSPs) customer move-ins; and customer switches.

Load Profiling

View profiles of electricity usage across the ERCOT control area. Find daily versions of the forecasted and backcasted load profiles as well as supporting information related to load profiling in ERCOT.

Backcasted (Actual) Load Profiles - Historical

Find 15-minute kWh values for backcasted load profiles for all profile types and weather zones, grouped by year.

UFE Analysis Reports

Unaccounted-For-Energy (UFE) is calculated for each settlement interval as the difference between the total generation supplied to the ERCOT system and the total system load plus losses. UFE for each settlement interval is then allocated to the loads.

The annual UFE analysis report contains both ERCOT-wide and UFE allocation category quantities as follows:

1. Total UFE MWhs;
2. Total UFE cost;
3. Percent of total UFE to ERCOT Load;
4. Percent of total UFE cost; and
5. Notice of any factors that may be contributing to UFE.

UFE analysis reports are prepared annually by Load Profiling after true-up settlements are completed. In this section, you will find the UFE analysis reports beginning with 2002.

Metering

Transmission/distribution service providers are responsible for most meter reading activities, but ERCOT will directly poll the meters of generators and non-opt-in cooperatives or municipalities that request the service for use in financial settlements. In addition, some commercial and industrial customers in areas open to retail competition are eligible to choose a competitive metering service.

This section contains requirements for both ERCOT-pollled settlement (EPS) meters and competitive metering.

Data Aggregation

This section contains daily data aggregation reports, including unaccounted for energy (UFE) reporting.

Also find transmission/distribution service provider (TDSP) distribution and transmission loss factors; and reports on peak demand for June, July, August and September (four coincident peaks).

Interval data recorder (IDR) and non-IDR load estimation and reports on compliance for IDR consumption data loading are also available.

Settlements

Term/Acronym	Definition
AAA	American Arbitration Association
ACE	Area Control Error
ACH	Automated Clearing House
ACL	Available Credit Limit
ADR	Alternative Dispute Resolution

ADU	Adjusted Daily Usage
AEIC	Association of Edison Illuminating Companies
AGC	Automatic Generation Control
AIL	Aggregate Incremental Liability
ALA	Applicable Legal Authority
AML	Adjusted Metered Load
AMR	Adjusted Metered Resource
AMS	Advanced Metering System
ANSI ASC X12	American National Standards Institute Accredited Standards Committee X12
AP	Adjustment Period
API	Automated Programmatic Interface
AREP	Affiliated Retail Electric Provider
ARR	Adjusted RPS Requirement
AS	Ancillary Services
ATC	Area Transmission Constraints
AVR	Automatic Voltage Regulator
Adjusted Metered Load (AML)	Retail Load usage data that has been adjusted for Unaccounted for Energy (UFE), Transmission Losses, Distribution Losses, and Direct Current Tie (DC Tie) exports (except for the Oklaunion Exemption).
Adjusted Static Models	Load Profiles that are generated from statistical models that are based on static historical Load data, and adjusted for conditions of the day (e.g., weather, Season, etc.).
Adjustment Period	For each Operating Hour, the time between 1800 in the Day-Ahead up to the start of the hour before that Operating Hour.
Advanced Meter	Any new or appropriately retrofitted meter that functions as part of a system that includes such meters and the associated hardware, software, and communications devices, that collects time-differentiated energy usage, and that is deployed pursuant to P.U.C. SUBST. R. 25.130, Advanced Metering.
Advanced Metering System (AMS)	A system, including Advanced Meters and the associated hardware, software, and communications devices, that collects time-differentiated energy usage and is deployed pursuant to P.U.C. SUBST. R. 25.130, Advanced Metering.
Advisory	The second of four possible levels of communication issued by ERCOT in anticipation of a possible Emergency Condition, detailed in Section 6.5.9, Emergency Operations.
Affiliate	<ul style="list-style-type: none"> a. An Entity that directly or indirectly owns or holds at least 5% of the voting securities of another Entity; or b. An Entity in a chain of successive ownership of at least 5% of the voting securities of another Entity; or c. An Entity that has at least 5% of its voting securities owned or controlled, directly or indirectly, by another Entity; or

	<ul style="list-style-type: none"> d. An Entity that has at least 5% of its voting securities owned or controlled, directly or indirectly, by an Entity who directly or indirectly owns or controls at least 5% of the voting securities of another Entity or an Entity in a chain of successive ownership of at least 5% of the voting securities of another Entity; or e. A person who is an officer or director of another Entity or of a corporation in a chain of successive ownership of at least 5% of the voting securities of an Entity; or f. Any other Entity determined by the Public Utility Commission of Texas (PUCT) to be an Affiliate.
Aggregated Retail Load Data	Adjusted Metered Load that has been aggregated as defined in Section 11.5.1, Aggregate Retail Load Data.
Aggregated Unit	A single plant or facility containing two or more individual generation units that require tandem operation for optimal performance (e.g. a combined cycle plant) which ERCOT has agreed to treat as a single unit for settlement purposes only as set forth in Protocols Section 6.8.2.4, Aggregating Units.
Agreement	A signed written agreement between ERCOT and a Market Participant using one of the standard form agreements in Section 22, Attachments, including those agreements containing changes to the standard form, which changes have been approved by the ERCOT Board.
All-Inclusive Generation Resource	See Resource
All-Inclusive Resource	See Resource
Alternative Dispute Resolution (ADR)	Procedures, outlined in Section 20, Alternative Dispute Resolution Procedure, for settling disputes by means other than litigation.
Ancillary Service	A service necessary to support the transmission of energy to Loads while maintaining reliable operation of the Transmission Service Provider's (TSP's) transmission system using Good Utility Practice.
Ancillary Service Capacity Monitor	A set of processes described in Section 8.1.1.3, Ancillary Service Capacity Compliance Criteria, to determine the Real-Time capability of Resources to provide Ancillary Service.
Ancillary Service Obligations	For each Ancillary Service, a Qualified Scheduling Entity's (QSE's) ERCOT-allocated share of total ERCOT System needs for that Ancillary Service.
Ancillary Service Offer	An offer to supply Ancillary Service capacity in the Day-Ahead Market (DAM) or a Supplemental Ancillary Service Market (SASM).
Ancillary Service Resource Responsibility	The MW of an Ancillary Service that each Resource is obligated to provide in Real-Time rounded to the nearest MW.
Ancillary Service Schedule	The MW of each Ancillary Service that each Resource is providing in Real-Time and the MW of each Ancillary Service for each Resource for each hour in the Current Operating Plan (COP).
Ancillary Service Supply	See Supply
Ancillary Service Supply Responsibility	The net amount of Ancillary Service capacity that a QSE is obligated to deliver to ERCOT, by hour and service type, from Resources represented by the QSE.

Ancillary Service Trade	A QSE-to-QSE transaction that transfers an obligation to provide Ancillary Service capacity between a buyer and a seller.
Ancillary Services Plan	A plan produced by ERCOT, as described in Section 4.2.1, Ancillary Service Plan and Ancillary Service Obligation, which identifies the types and amount of Ancillary Service necessary for each hour of the Operating Day.
Annual Transmission Planning Report	A report prepared at least annually by ERCOT, as required by the PUCT rules, regarding the status of the ERCOT System including identification of ERCOT System existing and potential Congestion, which includes identification of current and recommended construction of Transmission Facilities.
Applicable Legal Authority (ALA)	A Texas or federal law, rule, regulation, or applicable ruling of the PUCT or any other regulatory authority having jurisdiction, an order of a court of competent jurisdiction, or a rule, regulation, applicable ruling, procedure, protocol, guide or guideline of the Independent Organization, or any Entity authorized by the Independent Organization to perform registration or settlement functions.
Area Control Error (ACE)	A calculation of the MW correction needed to control the actual system frequency to the scheduled system frequency.
Authorized Representative	The person(s) designated by an Entity during the registration process in Section 16, Registration and Qualification of Market Participants, who is responsible for authorizing all registration information required by ERCOT Protocols and ERCOT business processes, including any changes in the future, and will be the contact person(s) between the registered Entity and ERCOT for all business matters requiring authorization by ERCOT.
Automatic Voltage Regulator (AVR)	A device on a Generation Resource used to automatically control the Generation Resource's voltage to an established set point.
Availability Plan	An hourly representation of availability of Reliability Must-Run (RMR) Units, Synchronous Condenser Units, or Black Start Resources submitted to ERCOT by 0600 in the Day-Ahead by QSEs representing RMR Units or Black Start Resources.
Average Daily Usage	The ratio of the total consumption divided by the number of days the consumption covered. (ADU = Monthly kWh/# of days).
BLT	Block Load Transfer
BSS	Black Start Service
Balanced Schedule	An Energy and Ancillary Service schedule submitted to ERCOT by a Qualified Scheduling Entity that consists of projected interval Obligations and projected interval Supply, and that includes Qualified Scheduling Entity Obligations for Transmission and Distribution Losses. A Balanced Schedule must have aggregate Supply equal to aggregate Obligations, by Settlement Interval.
Balancing Energy	Balancing Energy represents the change in zonal energy output or demand determined by ERCOT to be needed to ensure secure operation of ERCOT Transmission Grid, and supplied by the ERCOT through deployment of bid Resources to meet Load variations not covered by Regulation Service.
Bank Business Day	See Business Day
Bankrupt	The condition of an Entity that:

	<ul style="list-style-type: none"> a. Files a petition or otherwise commences a proceeding under any bankruptcy, insolvency, reorganization or similar law, or has any such petition filed or commenced against it; b. Makes an assignment or any general arrangement for the benefit of creditors; c. Has a liquidator, administrator, receiver, trustee, conservator, or similar official appointed with respect to it or any substantial portion of its property or assets; or d. Is generally unable to pay its debts as they fall due.
Base Point	The MW output level for a Resource produced by the Security-Constrained Economic Dispatch (SCED) process.
BES-Capable Off-line Non-Spinning Reserve Service (Off-line BECSNRS)	A service that is provided through utilization of generation capacity capable of being synchronized and ramped to a specific output level within fifteen (15) minutes that is also capable of providing Balancing Energy Service or Load that is capable of providing Balancing Energy Service, and that is not participating in any other activity, including ERCOT markets, self-generation and other energy transactions. Resources will be allowed to provide this service as determined by ERCOT. Any Resource desiring to provide this service must be approved by ERCOT before such service can be offered.
BES-Capable On-line Non-Spinning Reserve Service (On-line BECSNRS)	A service that is provided through utilization of On-line generation capacity capable of being ramped to a specific output level within fifteen (15) minutes that is also capable of providing Balancing Energy Service. Resources will be allowed to provide this service as determined by ERCOT. Any Resource desiring to provide this service must be approved by ERCOT before such service can be offered.
Bid Stack	Bids received for Ancillary Services organized from lowest price to highest price bid for the same service and time interval.
Black Start Resource	See Resource
Black Start Service (BSS)	An Ancillary Service provided by a Resource able to start without support of the ERCOT Transmission Grid.
Block Load Transfer (BLT)	A transfer system that isolates a group of Loads from the Control Area in which they normally are served and then connects them to another Control Area. Such transfer systems involve either transferring Loads normally in the ERCOT Control Area to a non-ERCOT Control Area or transferring Loads normally in non-ERCOT Control Areas to the ERCOT Control Area.
Boundary Geration Resources	Those Resources, identified prior to ERCOT's annual TCR auction, on a unit-specific basis, that are related to a combination of CSC and CRE, and whose impacts on the CRE are opposite to those on the related CSC.
Bus Load Forecast	A set of processes used by ERCOT to determine a forecast of the Load at each Electrical Bus in the ERCOT Transmission Grid.
Business Day	Monday through Friday, excluding observed holidays listed below: <ul style="list-style-type: none"> a. New Year's Day b. Memorial Day c. Independence Day d. Labor Day e. Thanksgiving Thursday and Friday f. Two (2) days at Christmas, as designated by the ERCOT CEO Bank Business Day

	<p>Any day during which the United States Federal Reserve Bank of New York is open for normal business activity.</p> <p>Retail Business Day Same as a Business Day, except in the case of retail transactions processed by a TSP or Distribution Service Provider (DSP), Competitive Retailers (CRs) shall substitute the TSP or DSP holidays for ERCOT holidays when determining the time available to the TSP or DSP to process the transaction. For additional important information related to Retail Business Days, please refer to the Retail Market Guide.</p>
CAO	Control Area Operator
CARD	CRR Auction Revenue Distribution
CCD+	Cash Concentration and Disbursement Plus
CCF	Capacity Conversion Factor
CCN	Certificate of Convenience and Necessity
CEII	Critical Energy Infrastructure Information
CEO	Chief Executive Officer
CFE	Comision Federal de Electricidad
CIM	Common Information Model
CMLTD	Current Maturities of Long-Term Debt
CMZ	Congestion Management Zone
COP	Current Operating Plan
COPS	Commercial Operations Subcommittee
CPS	Control Performance Standard
CPT	Central Prevailing Time
CR	Competitive Retailer
CRE	Closely Related Elements
CRR	Congestion Revenue Right
CSA	Continuous Service Agreement
CSC	Commercially Significant Constraint
CSV	Comma Separated Value
CTX	Corporate Trade Exchange
Capacity Trade	A QSE-to-QSE financial transaction that transfers responsibility to supply capacity between a buyer and a seller at a Settlement Point.
Capital Asset	An asset expected to have a useful life of at least twelve (12) months that is not bought or sold in the normal course of business.
Capital Expenditure	An outlay of money to acquire a Capital Asset or extend the useful life of an existing Capital Asset for at least twelve (12) months.
Central Prevailing Time (CPT)	Either Central Standard Time or Central Daylight Time, in effect in Austin, Texas.

Certificate of Compliance	A certificate issued by ERCOT stating that the Metering Facilities referred to in the certificate satisfy the certification criteria for Metering Facilities contained in these Protocols.
Check Meter	A redundant revenue quality meter, which produces equal or better accuracy than the primary revenue quality meter, connected at the same metering point, which must be certified in accordance with the ERCOT Protocols.
Closely Related Elements (CREs)	Those transmission facilities that have shift factor impacts similar to those associated with a particular Commercially Significant Constraint (CSC), and for which there exists a limited amount of Boundary Generation Resources between it and the particular CSC, so that the zonal deployment of Balancing Energy Service is effective in mitigating Zonal Congestion.
Comision Federal de Electricidad (CFE)	The government agency in Mexico charged with the responsibility of operating the Mexican national electricity grid.
Commercial Model	Transmission model developed by ERCOT that arranges groups of Generation Resource and Load busses into Congestion Zones that have similar impacts on Commercially Significant Constraints.
Commercially Significant Constraint (CSC)	A constraint in the ERCOT Transmission Grid that is found, through the process described in Section 7, to result in Congestion which limits the free flow of energy within the ERCOT market to a commercially significant degree.
Commercially Significant Constraint (CSC) Limit	The maximum power flow across a CSC allowed to maintain reliable operation.
Common Information Model (CIM)	A standard way to communicate information about a transmission system. The CIM is used to describe the ERCOT transmission system topology consisting of Transmission Elements, including all the parameters needed to describe the Transmission Elements and how they interrelate to one another. The CIM that ERCOT and the TSP use must conform to the North American Electric Reliability Corporation (NERC) and Electric Power Research Institute (EPRI) standards for CIMs.
Competitive Constraint	A contingency and limiting Transmission Element pair that is determined to be competitive by an appropriate TAC subcommittee.
Competitive Retailer (CR)	A Municipally Owned Utility (MOU) or an Electric Cooperative (EC) that offers Customer Choice and sells electric energy at retail in the restructured electric power market in Texas, or a Retail Electric Provider (REP).
Competitive Retailer (CR) of Record	The CR assigned to the Electric Service Identifier (ESI ID) in ERCOT's database. There can be no more than one CR of Record assigned to an ESI ID for any given time period.
Compliance Period	A calendar year beginning January 1 and ending December 31 in which Renewable Energy Credits (RECs) are required of a Retail Entity.
Compliance Premium	A payment awarded by the Program Administrator in conjunction with a REC that is generated by a renewable energy source that is not powered by wind and meets the criteria of subsection (l) of P.U.C. SUBST. R. 25.173, Goal for Renewable Energy. For the purpose of the Renewable Portfolio Standard (RPS) requirements, one Compliance Premium is equal to one REC.

Congestion	The situation that exists when requests for power transfers across a Transmission Facility element or set of elements, when netted, exceed the transfer capability of such elements.
Congestion Revenue Right (CRR)	<p>A financial instrument that entitles the holder to be charged or to receive compensation (i.e., congestion rent), depending on the instrument, when the ERCOT Transmission Grid is congested in the DAM or in Real-Time.</p> <p>Flowgate Right (FGR) A type of CRR that entitles the holder to receive compensation and is evaluated in each CRR Auction and DAM as the positive power flows represented by the quantity of the CRR bid or offer (MW) on a flowgate (i.e., predefined directional network element or a predefined bundle of directional network elements).</p> <p>Point-to-Point (PTP) Obligation A type of CRR that entitles the holder to be charged or to receive compensation and is evaluated in each CRR Auction and DAM as the positive and negative power flows on all directional network elements created by the injection and withdrawal at the specified source and sink points of the quantity represented by the CRR bid or offer (MW).</p> <p>Point-to-Point (PTP) Option A type of CRR that is evaluated in each CRR Auction and DAM as the positive power flows on all directional network elements created by the injection and withdrawal at the specified source and sink points in the quantity represented by the CRR bid or offer (MW), excluding all negative flows on all directional network elements. A PTP Option entitles the holder to receive compensation equal to the positive energy price difference between the sink and the source Settlement Point Prices. A PTP Option with Refund is evaluated in the same manner and compensated as described in Section 7.4.2, PCRR Allocation Terms and Conditions.</p>
Congestion Revenue Right (CRR) Account Holder	An Entity that is qualified to become the owner of record of CRRs and is registered as a CRR Account Holder with ERCOT.
Congestion Revenue Right (CRR) Auction	A periodic auction by ERCOT that allows eligible CRR Account Holders to buy and sell CRRs.
Congestion Revenue Right (CRR) Network Model	A model of ERCOT network topology to be used in conducting a CRR Auction. It must be based on, but is not the same as, the Updated Network Model, as detailed in Section 3.10.3, CRR Network Model.
Congestion Revenue Right (CRR) Owner	A CRR Account Holder that owns one or more CRRs.
Congestion Zone	A grouping of busses that create a similar Shift Factor on CSCs.
Continuous Service Agreement (CSA)	An arrangement between the owner or controller of a leased Premise and a CR wherein the CR provides service to the leased Premise between tenants so that the Premise does not experience discontinuation of electric service during vacancy.
Control Area	An electrical system, bound by interconnect (tie line) metering and telemetry, that continuously regulates, through automatic Resource control, its Resource(s) and interchange schedules to match its system Load and frequency schedule.
Control Area Operator (CAO)	An individual or set of individuals responsible for monitoring and controlling operation of a Control Area.
Controllable Load	See Resource

Resource	
Controllable Load Resource Desired Load	The MW consumption for a Controllable Load Resource produced by summing its Scheduled Power Consumption and Ancillary Service deployments.
Cost Allocation Zone	One of the four zones in effect during the 2003 ERCOT market as they are changed pursuant to Section 3.4.2, Load Zone Modifications. A Cost Allocation Zone may be used by ERCOT to uplift certain costs to a QSE's Load regardless of Non-Opt-In Entity (NOIE) Load Zone.
Counter-Party	A single Entity that is a QSE and/or a CRR Account Holder. A Counter-Party includes all registrations as a QSE, all subordinate QSEs, and all CRR Account Holders by the same Entity.
CR of Record	See Competitive Retailer
Critical Energy Infrastructure Information (CEII)	Information concerning proposed or existing critical infrastructure (physical or virtual) that: <ul style="list-style-type: none"> a. Relates to the production, generation, transmission or distribution of energy; b. Could be useful to a person planning an attack on critical infrastructure; c. Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. § 552; and d. Gives strategic information beyond the location of the critical infrastructure.
Current Operating Plan	See Ancillary Services Plan
Current Operating Plan (COP)	A plan by a QSE reflecting anticipated operating conditions for each of the Resources that it represents for each hour in the next seven Operating Days, including Resource operational data, Resource Status, and Ancillary Service Schedule.
Current Operating Plan (COP) and Trades Snapshot	A record of a QSE's Capacity Trades, Energy Trades, and most recent COP.
Current System Conditions	The Real-Time status of the ERCOT System, which may affect ERCOT's operational decisions.
Customer	An Entity that purchases electricity for its own consumption.
Customer Choice	The freedom of a retail Customer to purchase electric services, either individually or on an aggregated basis with other retail Customers, from the provider or providers of the Customer's choice and to choose among various fuel types, energy efficiency programs, and renewable power suppliers.
Customer Choice Pilot	A project used to allow the PUCT to evaluate the implementation of Customer Choice as provided in PURA 39.104.
Customer Premise	See Premise.
Customer Registration Database	The database maintained by the registration agent containing information identifying each Premise, including current and previous CRs serving the Premise.
DA	Day Ahead
DAM	Day-Ahead Market
DAS	Data Aggregation System

DASPP	Day-Ahead Settlement Point Price
DC	Direct current
DC Tie	Direct Current Tie
DG	Distributed Generation
DLC	Direct Load Control
DLF	Distribution Loss Factor
DRG	Distributed Renewable Generation
DRUC	Day-Ahead Reliability Unit Commitment
DSC	Debt Service Coverage
DSG	Dynamically Scheduled Generation
DSL	Dynamically Scheduled Load
DSP	Distribution Service Provider
DSR	Dynamically Scheduled Resource
DUNS	Data Universal Numbering System
DUNS #	DUNS Number
Data Aggregation	The process of netting, grouping, and summing Load consumption data, applying appropriate profiles, Transmission Loss Factors (TLFs), and Distribution Loss Factors (DLFs) and calculating and allocating UFE to determine each QSE and/or Load Serving Entity's (LSE's) responsibility by Settlement Interval by Load Zone and by other prescribed aggregation determinants.
Data Aggregation System (DAS)	The database and communication system that collects meter data from TSPs, DSPs and ERCOT Polled Settlement (EPS) Meters. The system performs aggregation functions to Load data in order to satisfy certain objectives, such as providing TSPs with Load share data to use in billing CRs, assigning QSE Load responsibility, and assisting CRs and QSEs in their Settlement responsibilities. The data is also compiled along Load and Weather Zones.
Data Archive	An integrated normalized data structure of all the target source systems' transactions. The population of the Data Archive is an extraction of data from the transaction systems without altering the data. The Data Archive is used to populate the Data Warehouse.
Data Warehouse	De-normalized data stored in a schema, physically optimized to handle high volumes of data and concurrent user access, and is generally lightly indexed.
Day-Ahead	The 24-hour period before the start of the Operating Day.
Day-Ahead Market (DAM)	A daily, co-optimized market in the Day-Ahead for Ancillary Service capacity, certain CRRs, and forward financial energy transactions.
Day-Ahead Market (DAM) Energy Bid	A proposal to buy energy in the DAM at a Settlement Point at a monotonically decreasing price with increasing quantity.
Day-Ahead Market (DAM) Energy-Only Offer	A QSE's willingness to sell energy at or above a certain price and at a certain quantity at a specific Settlement Point in the DAM. A DAM Energy-Only Offer Curve may be offered only in the DAM. DAM Energy-Only Offer Curves are not Resource-specific.

Day-Ahead Market (DAM) Resettlement Statement	See Settlement Statement
Day-Ahead Market (DAM) Statement	See Settlement Statement
Day-Ahead Market (DAM)-Committed Interval	A Settlement Interval for which the Resource has been committed due to a DAM award.
Day-Ahead Operations	The Day-Ahead process consisting of the DAM and Day-Ahead Reliability Unit Commitment (DRUC).
Day-Ahead Reliability Unit Commitment (DRUC)	A Reliability Unit Commitment (RUC) process performed for the next Operating Day.
Decommissioned Generation Resource	A Generation Resource for which a Generation Entity has submitted a Notification of Suspension of Operations, for which ERCOT has declined to execute an RMR Agreement, and for which the Generation Entity has announced decommissioning and retirement of the Generation Resource.
Delivery Plan	A plan by ERCOT containing the hours and levels of operation that an RMR Unit, including a Synchronous Condenser Unit, is instructed to operate.
Demand	The amount of instantaneous electric power in MW delivered at any specified point or points on a system.
Designated Representative	A responsible natural person authorized by the owners or operators of a renewable Resource to register that Resource with ERCOT.
Direct Current Tie (DC Tie)	Any non-synchronous transmission interconnections between ERCOT and non-ERCOT electric power systems.
Direct Current Tie (DC Tie) Load	A Load used to represent the withdrawal of power from the ERCOT System to a DC Tie.
Direct Current Tie (DC Tie) Resource	A Resource used to represent the injection of power into the ERCOT System from a DC Tie.
Direct Current Tie (DC Tie) Schedule	An energy schedule between ERCOT and a non-ERCOT Control Area and is represented by a corresponding Electronic Tag (e-Tag) that contains the physical transaction information such as the Settlement Point energy amount (MW), the associated DC Tie, and the buyer and seller.
Direct Load Control (DLC)	The control of end-use equipment (e.g., air conditioning equipment, water heaters) to reduce or increase energy consumption during select periods.
Dispatch	The act of issuing Dispatch Instructions.
Dispatch Instruction	A specific command issued by ERCOT to a QSE, TDSP or DSP in the operation of the ERCOT System.
Dispute Contact	The individual associated with a Market Participant who is the primary contact with ERCOT regarding the pursuit of an Alternative Dispute Resolution (ADR) request.
Distributed Generation (DG)	An electrical generating facility located at a Customer's point of delivery (point of common coupling) ten megawatts (MW) or less and

	connected at a voltage less than or equal to 60 kilovolts (kV) which may be connected in parallel operation to the utility system.
Distributed Renewable Generation (DRG)	Electric generation with a capacity of not more than 2,000 kW provided by a renewable energy technology that is installed on a retail electric Customer's side of the meter.
Distribution Loss Factor (DLF)	The ratio of a DSP's estimated Distribution Losses to the total amount of energy deemed consumed (Interval Data Recorder (IDR) plus profiled consumption) on the DSP's system.
Distribution Losses	The difference between the energy delivered to the Distribution System and the energy consumed by Customers connected to the Distribution System.
Distribution Service Provider (DSP)	An Entity that owns or operates a Distribution System for the delivery of energy from the ERCOT Transmission Grid to Customers.
Distribution System	An Entity that owns or operates a Distribution System for the delivery of energy from the ERCOT Transmission Grid to Customers.
DUNS Number	A unique nine-digit common company identifier used in electronic commerce transactions, supplied by the Data Universal Numbering System (DUNS).
Dynamic Rating	The current-carrying capability of a Transmission Element adjusted to take into account the effect of ambient weather conditions.
Dynamic Rating Processor	A process used to establish ERCOT Transmission Element limits based upon factors such as ambient temperature and wind speed.
Dynamic Schedule	A Real Time telemetered signal to ERCOT derived from an actual metered Load that represents an energy Obligation and Resource in a QSE schedule, as further described in Section 4, Scheduling.
Dynamically Scheduled Resource (DSR)	See Resource
Dynamically Scheduled Resource (DSR) Load	A Load that a QSE designates to be followed by a Dynamically Scheduled Resource (DSR).
EAF	Equivalent Availability Factor
EAL	Estimated Aggregate Liability
EC	Electric Cooperative
ECI	Element Competitiveness Index
EDI	Electronic Data Interchange
EEA	Energy Emergency Alert
EFT	Electronic Funds Transfer
EILS	Emergency Interruptible Load Service
EMMS	Energy and Market Management System
EMS	Energy Management System
EPRI	Electric Power Research Institute
EPS	ERCOT Polled Settlement
ERCOT	Electric Reliability Council of Texas

ERO	Electric Reliability Organization
ESI ID	Electric Service Identifier
EILS Contract Period	A time frame during which ERCOT may procure EILS in an amount no greater than 1000 MW. Unless otherwise announced by ERCOT at least ninety (90) days prior to the start of an EILS Contract Period, the standing EILS Contract Periods are February through May, June through September, and October through January.
EILS Resource	A Load that is contracted to provide EILS.
EILS Self-Provision	The act by a QSE to meet its Load Ratio Share (LRS) of the total EILS procurement by designating Load to act as an EILS Resource. The EILS Resource self-providing EILS bids its Load at a price of zero (0) dollars.
Electric Cooperative (EC)	<ol style="list-style-type: none"> a. A corporation organized under the Electric Cooperative Corporation Act, TEX. UTIL. CODE ANN. ch 161 (Vernon 1998 & Supp. 2007); b. A corporation organized as an electric cooperative in a state other than Texas that has obtained a certificate of authority to conduct business in Texas; or c. A successor to an electric cooperative created before June 1, 1999 under a conversion plan approved by a vote of the members of the electric cooperative, regardless of whether the successor later purchases, acquires, merges with, or consolidates with other electric cooperatives.
Electric Reliability Council of Texas, Inc. (ERCOT)	The organization approved by the Federal Energy Regulatory Commission (FERC) to perform the electric reliability organization functions described in the Electricity Modernization Act of 2005, 16 U.S.C. § 824o (2005).
Electric Reliability Organization	The organization approved by the Federal Energy Regulatory Commission (FERC) to perform the electric reliability organization functions described in the Electricity Modernization Act of 2005, 16 U.S.C. § 824o (2005).
Electric Service Identifier (ESI ID)	The basic identifier assigned to each Service Delivery Point used in the registration and settlement systems managed by ERCOT or another Independent Organization.
Electrical Bus	<ol style="list-style-type: none"> 1. A physical transmission element defined in the Network Operations Model that connects, using breakers and switches, one or more: <ol style="list-style-type: none"> a. Loads; b. Lines; c. Transformers; d. Generators; e. Capacitors; f. Reactors; g. Phase shifters; or h. Other reactive control devices to the ERCOT Transmission Grid where there is negligible impedance between the connected Transmission Elements. 2. All Electrical Buses are designated by ERCOT and TSPs for

	modeling the electrical topology of the ERCOT Transmission Grid.
Eligible Transmission Service Customer	A Transmission and/or Distribution Service Provider (TDSP) (for all uses of its transmission system), or any electric utility, MOU, EC, power generation company, CR, REP, federal power marketing agency, exempt wholesale generator, Qualifying Facility (QF), Independent Power Marketer, or other Entity that the PUCT has determined to be an Eligible Transmission Service Customer.
Emergency Base Point	The target MW output level for a Resource that is selected by ERCOT during an Emergency Condition.
Emergency Condition	An operating condition in which the safety or reliability of the ERCOT System is compromised or threatened, as determined by ERCOT, or that is the result of a failure of the SCED process.
Emergency Interruptible Load Service (EILS)	A special emergency service consistent with subsection (a) of P.U.C. SUBST. R. 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Interruptible Load Service (EILS), used during an Energy Emergency Alert (EEA) Level 2B to reduce Load and assist in maintaining or restoring ERCOT System frequency. EILS is not an Ancillary Service.
Emergency Interruptible Load Service (EILS) Contract Period	A time frame during which ERCOT may procure EILS in an amount no greater than 1,000 MW.
Emergency Interruptible Load Service (EILS) Load	A Load or aggregation of Loads that is contracted to provide EILS.
Emergency Interruptible Load Service (EILS) Self-Provision	The act by a QSE to meet its Load Ratio Share (LRS) of the total EILS procurement by designating Load to act as an EILS Load. A QSE self-providing EILS shall submit EILS offers at a price of zero dollars.
Emergency Interruptible Load Service (EILS) Time Period	Blocks of hours in an EILS Contract Period in which EILS Loads are contractually committed to provide EILS. EILS Time Periods are specific to an EILS Contract Period and shall be defined by ERCOT in the Request for Proposal for that EILS Contract Period.
Emergency Notice	The fourth of four possible levels of communication issued by ERCOT in anticipation of a possible Emergency Condition, detailed in Section 6.5.9, Emergency Operations.
Emergency Ramp Rate	The maximum rate of change in MW per minute of a Resource to provide Responsive Reserve that is deployed by ERCOT and that is provided to ERCOT in up to ten segments, each represented by a single MW per minute value (across the capacity of the Resource), which describes the available rate of change in output for the given range (between High Sustained Limit (HSL) and Low Sustained Limit (LSL)) of the output of a Resource.
Emergency Rating	See Rating
Emergency Short Supply	The condition wherein ERCOT experiences an insufficient amount of bids in any Ancillary Services market, as described in Section 6.
Energy Emergency Alert (EEA)	An orderly, predetermined procedure for maximizing use of available Resources and, only if necessary, curtailing load during an Emergency Condition while providing for the maximum possible continuity of service and maintaining the integrity of the ERCOT System.

Energy Imbalance Service	An Ancillary Service that is provided when a difference occurs between the scheduled and the actual delivery of energy in Real-Time.
Energy Obligations	See Obligations
Energy Offer Curve	A proposal to sell energy at a Settlement Point at a monotonically increasing price with increasing quantity.
Energy Ratio Share	A QSE's ratio of Adjusted Metered Load plus Settlement Meter energy output from Uncontrollable Renewable Resources electing to utilize Renewable Production Potential for URC and OOME to total ERCOT Adjusted Metered Load plus Settlement Meter energy output from Uncontrollable Renewable Resources electing to utilize Renewable Production Potential for URC and OOME related to the appropriate interval.
Energy Supply	See Supply
Energy Trade	A QSE-to-QSE financial transaction that transfers responsibility for energy between a buyer and a seller at a Settlement Point.
Engineering Studies	Studies performed by ERCOT for the purpose of studying, evaluating, or planning of the ERCOT System.
Entity	Any natural person, partnership, municipal corporation, cooperative corporation, association, governmental subdivision, or public or private organization.
ERCOT Board	The Board of Directors of the Electric Reliability Council of Texas.
ERCOT CEO	ERCOT Chief Executive Officer
ERCOT Member	Any member of ERCOT that is a member in good standing in accordance with the ERCOT Bylaws.
ERCOT Metered Entity	Any one of the following entities that meets the requirements of Section 10.2.3, ERCOT Polled Settlement Meters: <ol style="list-style-type: none"> 1. Any Generation connected directly to the transmission system; 2. Any Generation equal to or over 10MW; 3. Any Generation participating in any ancillary service market; 4. Non-opt-in Cooperatives and Municipality points of delivery over 10MW; or 5. Direct-Current ties (or interchanges with other control areas outside of ERCOT). Additionally ERCOT will directly poll any generator or non-opt-in utility metering point at the request of the entity if the entity meets all requirements and certifications associated with EPS metering.
ERCOT Polled Settlement (EPS) Meter	Any meter polled directly by ERCOT for use in the Settlement of the market.
ERCOT Region	The power region, as defined in P.U.C. SUBST. R. 25.5, Definitions, represented by the ERCOT Control Area.
ERCOT Service Fee Schedule	Schedule of fees charged by ERCOT for various services provided to designated Entities, in accordance with these Protocols and/or as approved by the ERCOT Board, and as posted on the MIS.
ERCOT System	The interconnected power system that is under the jurisdiction of the PUCT and that is not synchronously interconnected with either the Eastern Interconnection or the Western Electricity Coordinating

	Council.
ERCOT System Demand	The sum of all power flows, in MW, on the DC Ties and from Generation Resources metered at the points of their interconnections with the ERCOT System at any given time.
ERCOT System Load	The sum of all HVDC interconnections and Generation Resources metered at the point of its interconnection with the ERCOT System at any given point in time.
ERCOT Transmission Grid	All Transmission Facilities that are part of the ERCOT System.
F&A	Finance and Audit
FASD	First Available Switch Date
FCE	Future Credit Exposure
Fed	Federal
FERC	Federal Energy Regulatory Commission
FGR	Flowgate Right
FIP	Fuel Index Price
FOP	Fuel Oil Price
FPA	Federal Power Act
FRR	Final RPS Requirement
FTP	FTP File Transfer Protocol
Facilities	Equipment situated for the purpose of conducting service and/or business through use of the ERCOT System.
Facility Identification Number	A number assigned to a renewable Resource facility by ERCOT.
Final Day-Ahead Schedule	Those schedules ERCOT deems valid following the close of the Day Ahead period.
Final Statement	See Settlement Statement
Financing Person	The lender, security holder, investor, partner, multilateral institution, or other Entity providing financing or refinancing for the business of another Entity, including development, construction, ownership, operation and/or maintenance of a facility or any portion thereof, or any trustee or agent acting on behalf of any of the foregoing.
Flowgate Right (FGR)	See Congestion Revenue Right (CRR)
Force Majeur Event	Any event beyond the reasonable control of, and that occurs without the fault or negligence of, an Entity whose performance is prevented by the occurrence of such event. Examples of such a Force Majeure Event may include the following, subject to the limitations of the above sentence: an act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, or a curtailment, order, regulation or restriction imposed by governmental, military, or lawfully established civilian authorities.
Forced Derate	The portion of the Resource removed from service must exceed 2% of its prior High Sustained Limit (HSL) for Generation Resources

	larger than 500 MW and 10% of its prior HSL for Generation Resources smaller than 500 MW. For Qualified Scheduling Entities (QSEs) representing Wind-powered Generation Resources (WGRs), the loss of a portion of the capacity shall be due to the unavailability of a portion of the equipment and shall not include capacity changes due to changes in wind speed at the WGR facility. For QSEs representing WGRs, the percentage calculation will be determined using the seasonal net maximum sustainable rating of the WGR.
Forced Outage	See Outage
Frequency Bias of Portfolio	A positive (+) value, in megawatts per 0.1Hz, to represent response of a QSE's Resources to a deviation in frequency from scheduled frequency.
Fuel Index	An electronically-published index that reflects the price of fuel as determined by a fuel industry organization using available market information.
Fuel Index Price (FIP)	The midpoint price expressed in dollars per million British thermal units (\$/MMBtu), published in Gas Daily, in the Daily Price Survey, under the heading "East-Houston-Katy, Houston Ship Channel." The Gas Daily indicates which flow dates the prices are effective. For Saturdays, Sundays, holidays, and other days for which Gas Daily does not publish an effective price, the effective price shall be the effective price for the Operating Day following the holiday or day without a published price. If, at the time of calculation of peaking operating cost of System-Wide Offer Cap, or at the time of settlement or calculation of generic costs, the described midpoint price for a particular Operating Day is not available, the effective price for the most recent preceding Operating Day shall be used.
Fuel Oil Price (FOP)	The sum of five cents per gallon plus the average of the Platts Oilgram Price Report for U.S. Gulf Coast, pipeline No. 2 oil, converted to dollars per million British thermal units (\$/MMBtu). The conversion is 0.1385 MMBtu per gallon. The Platts Oilgram Price Report indicates which Operating Days the prices are effective. In the event, at the time of settlement or calculation of generic costs, that the effective price for a particular Operating Day is not available, the effective price for the most recent preceding Operating Day shall be used.
GADS	Generation Availability Data System
GREDP	Generation Resource Energy Deployment Performance
GSU	Generator Step-Up
GTL	Generic Transmission Limit
Generation Entity	The owner of an All-Inclusive Generation Resource.
Generation Resource	See Resource
Generic Transmission Limit (GTL)	A transmission flow limit more constraining than a Transmission Element's normal limit established to constrain flow between geographic areas of the ERCOT Transmission System that is used to enforce stability and voltage constraints that cannot be modeled directly in ERCOT's transmission security analysis applications.
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 that, 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 limited to the optimum practice, method, or act, to the exclusion of all others, but rather is intended to include acceptable practices, methods, and acts generally accepted in the region.
Governmental Authority	Any federal, state, local, or municipal body having jurisdiction over a Market Participant or ERCOT. A Governmental Authority that is also a Market Participant may not exercise its jurisdiction in any matter that involves the interests of that Market Participant where that matter also involves the interests or responsibilities of any other Market Participant or ERCOT, unless the matter is one in which the Market Participant has exclusive jurisdiction.
Governor	The electronic, digital, or mechanical device that implements Primary Frequency Response of a Resource.
Governor Dead-Band	The range of deviations of system frequency (+/-) that produces no Primary Frequency Response.
Gross Generation	The generated output power at the terminals of the generator.
HASL	High Ancillary Service Limit
HDL	High Dispatch Limit
HE	Hour Ending
HEL	High Emergency Limit
HRL	High Reasonability Limit
HRUC	Hourly Reliability Unit Commitment
HSL	High Sustainable Limit
HVDC	High Voltage Direct Current
HWR	High Winter Ratio
Hz	Hertz
High Ancillary Service Limit (HASL)	A dynamically calculated MW upper limit on a Resource to reserve the part of the Resource's capacity committed for Ancillary Service, calculated as described in Section 6.5.7.2, Resource Limit Calculator.
High Emergency Limit (HEL)	The limit established by the QSE describing the maximum temporary unsustainable energy production capability of a Resource. This limit must be achievable for a time stated by the QSE, but not less than 30 minutes.
High Operating Limit (HOL)	The maximum net dependable capability of a Resource that may be delivered for a period of up to one hour.
High Sustained Limit (HSL)	High Sustained Limit (HSL) for a Generation Resource The limit established by the QSE, continuously updated in Real-Time, that describes the maximum sustained energy production capability of the Resource. High Sustained Limit (HSL) for a Load Resource The limit calculated by ERCOT, using the QSE-established Maximum Power Consumption (MPC).
Hourly Reliability Unit	Any RUC executed after the DRUC.

Commitment (HRUC)	
Hub	A designated Settlement Point consisting of a Hub Bus or group of Hub Buses and the associated Settlement price calculation methodology prescribed in the definition of the Hub in Section 3.5.2, Hub Definitions. Hubs may only be created by an amendment to Section 3.5.2. The list of Hub Buses and the Settlement price calculation methodology that define a Hub can never be modified, and a Hub, once defined, exists in perpetuity.
Hub Bus	An energized Electrical Bus or group of energized Electrical Buses defined as a single element in the Hub definition. The Locational Marginal Price (LMP) of the Hub Bus is the simple average of the LMPs assigned to each energized Electrical Bus in the Hub Bus. If all Electrical Buses within a Hub Bus are de-energized, the LMP of the Hub does not include the de-energized Hub Bus. This is used solely for calculating the prices of existing Hub Buses defined in Section 3.5.2, Hub Definitions.
Hub LMP	See Locational Marginal Price
ICCP	Inter-Control Center Communications Protocol
IDR	Interval Data Recorder
IEL	Initial Estimated Liability
IMM	Independent Market Monitor
IOU	Investor Owned Utilities
IPM	Independent Power Marketer
IPP	Independent Power Producers
IRR	Intermittent Renewable Resources
Inadvertent Energy Account	An account maintained by ERCOT to track any differences between deemed meter readings at the DC Ties, based on schedules, and the actual metered values at the DC Tie meters.
Independent Market Monitor (IMM)	The Entity selected to monitor the wholesale electric market pursuant to the Public Utility Regulatory Act (PURA), TEX. UTIL. CODE ANN. § 39.1515 (Vernon 1998 & Supp. 2007) and P.U.C SUBST. R. 25.365, Independent Market Monitor.
Independent Organization	An independent organization as defined in the Public Utility Regulatory Act (PURA), TEX. UTIL. CODE ANN. § 39.151 (Vernon 1998 & Supp. 2007)
Initial Settlement	See Settlement Statement
Inter-QSE Trade	Any Energy and Ancillary Services scheduled to or from other QSEs or ERCOT.
Interconnection Agreement	An agreement that sets forth requirements for physical connection between an Eligible Transmission Service Customer and Transmission and/or Distribution Service Providers.
Intermittent Renewable Resource (IRR)	See Resource
Interval Data Recorder (IDR)	A metering device that is capable of recording energy in each Settlement Interval under Section 9, Settlement and Billing, and Section 10, Metering.

Interval Data Recorder (IDR) Meter	IDR where the ESI ID is required to be assigned a BUSIDRRQ Load Profile Type code and data is submitted in accordance with Section 10.3.3.3, Submission of Settlement Quality Meter Data to ERCOT.
Interval Data Recorder (IDR) Meter	An IDR where the ESI ID is required to be assigned a BUSIDRRQ Load Profile Type code and data is submitted in accordance with Section 10.3.3.3, Submission of Settlement Quality Meter Data to ERCOT.
Interval Data Recorder (IDR) Meter Data Threshold	The percentage of IDR Meter data, by Meter Reading Entity (MRE), that must be available before ERCOT will perform a True-Up Settlement as set forth in Section 9.5.8, RTM True-Up Statement.
Interval Data Recorder (IDR) Meter Data Threshold	The percentage of IDR Meter data by Meter Reading Entity (MRE), that must be available before ERCOT will perform a True-Up Settlement as set forth in Section 9.2.6, True-Up Statement.
Interval Data Recorder (IDR) Meter Mandatory Installation Requirements	The kW (kVA) level at which the installation of an IDR Meter is required for Settlement purposes as set forth in Section 18.6.1, Interval Data Recorder Meter Mandatory Installation Requirements.
Interval Data Recorder (IDR) Meter Optional Removal Threshold	The kW (kVA) level at which an IDR may be removed as set forth in Section 18.6.6, Interval Data Recorder Meter Optional Removal.
Invoice	A notice for payment or credit due rendered by ERCOT.
Invoice Recipient	A Market Participant that receives an Invoice from ERCOT.
KWH	Kilowatt Hour
LASL	Low Ancillary Service Limit
LDL	Low Dispatch Limit
LEL	Low Emergency Limit
LFC	Load Frequency Control
LMP	Locational Marginal Price
LPC	Low Power Consumption
LRL	Low Reasonability Limit
LRS	Load Ratio Share
LSE	Load Serving Entity
LSL	Low Sustained Limit
Late Payment	Payments due to ERCOT by Invoice Recipients that are not received by the due date and time.
Level I Maintenance Outage	See Outage
Level II Maintenance Outage	See Outage
Level III Maintenance Outage	See Outage
Load	The amount of energy in MWh delivered at any specified point or points on a system.

Load Frequency Control (LFC)	The deployment of those Generation Resources that are providing Regulation Service to ensure that system frequency is maintained within predetermined limits and the deployment of those Generation Resources that are providing Responsive Reserve Service when necessary as backup regulation. LFC does not include the deployment of Responsive Reserve by Load Resources when deployed as a block under EEA procedures.
Load Profile	A representation of the energy usage of a group of Customers, showing the Demand variation on an hourly or sub-hourly basis.
Load Profile ID	The Load Profile designation string that contains, the Load Profile Type Code, the Weather Zone Code, the Meter Data Type Code, the Weather Sensitivity Code, and the Time-Of-Use Schedule Code. An example of all Load Profile IDs are located in the Load Profiling Guide, Appendix D, Profile Decision Tree.
Load Profile Models	Processes that use analytical modeling techniques to create Load Profiles.
Load Profile Segment	A sub-classification of a Load Profile Group. High Winter Ratio (HWR) is an example. Together, the Load Profile Group and the Load Profile Segment form the Load Profile Type.
Load Profile Type	A classification of a group of Customers having similar energy usage patterns and that are assigned the same Load Profile.
Load Profiling	The set of processes used to develop and create Load Profiles.
Load Profiling Methodology	The fundamental basis on which Load Profiles are created. The implementation of a Load Profiling Methodology may require statistical Sampling, engineering methods, econometric modeling, or other approaches.
Load Ratio Share	The ratio of an Entity's AML to total ERCOT AML for an interval.
Load Resource	See Resource
Load Serving Entity (LSE)	An Entity that sells energy to Customers or Wholesale Customers and that has registered as an LSE with ERCOT. LSEs include Competitive Retailers (which includes REPs) and NOIEs that serve Load.
Load Zone	A group of Electrical Buses assigned to the same zone under Section 3.4, Load Zones. Every Electrical Bus in ERCOT with a Load must be assigned to a Load Zone for Settlement purposes. A NOIE Load Zone is a type of Load Zone.
Load Zone LMP	See Locational Marginal Price
Local Congestion	Any Congestion that cannot be resolved by deployment of Balancing Energy Service by Congestion Zone. Local Congestion will include those actions, and related costs, associated with mitigating overloads on CSCs or CREs beyond that which can be accomplished by the zonal deployment of BES.
Location Code	The code representing the physical location of a Premise.
Locational Marginal Price (LMP)	The offer-based marginal cost of serving the next increment of Load at an Electrical Bus, which marginal cost is produced by the DAM process or by the SCED process. Hub LMP The price calculated for a Hub for each SCED interval according to the formula in Section 6.6.1.5, Hub LMPs, using LMPs at the Electrical

	Buses included in the Hub. Load Zone LMP The price calculated for a Load Zone for each SCED interval according to the formula in Section 6.6.1.4, Load Zone LMPs, using State Estimator (SE) Load data and LMPs at the Electrical Buses included in the Load Zone.
Low Ancillary Service Limit (LASL)	A dynamically calculated MW lower limit on a Resource to maintain the ability of the Resource to provide committed Ancillary Service.
Low Emergency Limit (LEL)	The limit established by the QSE describing the minimum temporary unsustainable energy production capability of a Resource. This limit must be achievable for a period of time indicated by the QSE but not less than 30 minutes.
Low Operating Limit (LOL)	The minimum net capability of a Resource that may be delivered for a period of up to one hour.
Low Power Consumption (LPC)	For a Load Resource, the limit established by the QSE, continuously updated in Real-Time, that describes the minimum sustained power consumption of a Load Resource. The LPC shall be a positive number in MW.
Low Sustained Limit (LSL)	Low Sustained Limit (LSL) for a Generation Resource The limit established by the QSE, continuously updatable in Real-Time, that describes the minimum sustained energy production capability of a Resource. Low Sustained Limit (LSL) for a Load Resource The limit calculated by ERCOT, using the QSE-established LPC.
MAP	Mitigation Action Plan
MCP	Market Clearing Price
MCPC	Market Clearing Price for Capacity
MCPE	Market Clearing Price for Energy
MDAS	Meter Data Acquisition System
MIS	Market Information System
MMBtu	Million British Thermal Units
MOU	Municipally Owned Utility
MP	Market Participant
MPC	Maximum Power Consumption
MRA	Must-Run Alternative
MRE	Meter Reading Entity
MTLF	Mid-Term Load Forecast
MVA	Megavolt Ampere
MVAr	Mega Volt-Amperes reactive
MVAR	Megavolt Ampere Reactive
MW	Megawatt
MWh	Megawatt Hour
Maintenance Outage	See Outage

Make-Whole Charge	A charge made by ERCOT to a QSE for a Resource to recapture all or part of the revenues received by a QSE that exceed the Make-Whole Payment for a Resource.
Make-Whole Payment	A payment made by ERCOT to a QSE for a Resource to reimburse a QSE for allowable startup and minimum energy costs of a Resource not recovered in energy revenue when a Resource is committed by the DAM or by a RUC.
Mandatory Installation Threshold	A peak demand greater than 700 kW (or 700 kVA).
Market Clearing Price for Capacity (MCPC)	The hourly price for Ancillary Service capacity awarded in the DAM or a SASM.
Market Clearing Price for Energy	The highest price associated with a Congestion Zone for a Settlement Interval for Balancing Energy deployed during the Settlement Interval.
Market Implementation Plan	Plan developed by ERCOT that addresses training, testing, qualification, and registration of Market Participants for participation in the Customer Choice Pilot, as well as the conversion to single Control Area operations.
Market Information System (MIS)	An electronic communications interface established and maintained by ERCOT that provides a communications link to the public and to Market Participants, as a group or individually. Market Information System (MIS) Public Area The portion of the MIS that is available to the public. Market Information System (MIS) Secure Area The portion of the MIS that is available only to registered users. Market Information System (MIS) Certified Area The portion of the MIS that is available only to a specific Market Participant.
Market Participant	An Entity, other than ERCOT, that engages in any activity that is in whole or in part the subject of these Protocols, regardless of whether that Entity has signed an Agreement with ERCOT. Examples of such an Entity include but are not limited to the following: LSE, QSE, TDSP, CRR Account Holder, Resource Entity, and REC Account Holder.
Market Segment	The segments defined in Article 2 of the ERCOT Bylaws.
Mass Drop	The immediate cessation of service by a CR to all ESI IDs served by the CR.
Mass Transition	The transition of ESI IDs from one CR to a Provider of Last Resort (POLR) or designated CR, or from one TDSP to another TDSP, in a quantity or within a timeframe identified by Applicable Legal Authority.
Maximum Power Consumption (MPC)	For a Load Resource, the limit established by the QSE, continuously updated in Real-Time, that describes the maximum sustained power consumption of a Load Resource. The MPC shall be a positive number in MW.
Measurable Event	A Measurable Event for performance analysis is a sudden change in frequency that has either: <ul style="list-style-type: none"> a. A frequency B Point between 59.700 Hz and 59.900 Hz or between 60.100 Hz and 60.300 Hz; or b. A difference between the B Point and the A Point greater than or equal to +/- 0.100 Hz; or

	c. Sudden generation or Load loss greater than 420 MW.
Merit Order	The ranking of Resources as a direct function of the monetary bid from those resources.
Messaging System	The ERCOT-to-QSE communications system used to send Real-Time notices and Dispatch Instructions to the QSEs.
Meter Data Acquisition System (MDAS)	The system used to obtain revenue quality meter data from EPS meters and Settlement Quality Meter Data from TSPs and DSPs for Settlement and to populate the DAS and Data Archive.
Meter Data Exchange Format	The format for submitting meter data to, or receiving data from, ERCOT Settlement Agent.
Meter Data Request Format	The format for requesting Settlement Quality Meter Data from the ERCOT Settlement Agent.
Meter Reading Entity (MRE)	A TSP or DSP that is responsible for providing ERCOT with ESI ID level consumption data as defined in Section 19, Texas Standard Electronic Transaction. In the case of an EPS Meter or ERCOT-populated ESI ID data (such as Generation Resource site Load), ERCOT will be identified as the MRE in ERCOT systems.
Metering Facilities	Revenue Quality Meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication Facilities and other related local equipment intended to supply ERCOT settlement quality data.
Metering Facilities	Revenue Quality Meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication Facilities and other related local equipment intended to supply ERCOT settlement quality data.
Minimum Reservation Price	The lowest price that a seller is willing to accept.
Minimum-Energy Offer	An offer for the costs incurred by a Resource in producing energy at the Resource's LSL expressed in \$/MWh.
Mismatched Schedule Processing Fee	The fee charged to a QSE that fails to correct a mismatched schedule in a timely manner.
Mitigated Offer Cap	An upper limit on the price of an offer as detailed in Section 4.4.9.4.1, Mitigated Offer Cap.
Mitigated Offer Floor	A lower limit on the price of an offer as detailed in Section 4.4.9.4.2, Mitigated Offer Floor.
Mothballed Generation Resource	A Generation Resource for which a Generation Entity has submitted a Notification of Suspension of Operations, for which ERCOT has declined to execute an RMR Agreement, and for which the Generation Entity has announced decommissioning and retirement of the Generation Resource.
Move-In Request	A request submitted by a CR on behalf of a Customer to initiate service at a Premise with the requesting CR.
Move-Out Request	A request submitted by a CR on behalf of a Customer to terminate service at a Premise with the requesting CR.
Municipally Owned Utility (MOU)	A utility owned, operated, and controlled by a nonprofit corporation, the directors of which are appointed by one or more municipalities, or a utility owned, operated, or controlled by a municipality.

Must-Run Alternative (MRA) Agreement	The contractual arrangement between ERCOT and a MRA Resource.
Must-Run Alternative (MRA) Resource	A Resource that was selected through the planning process pursuant to Section 6.5.9.2, Exit Strategy from an RMR Agreement to provide steady-state or dynamic voltage support, stability or management of localized transmission constraints under first contingency criteria, as described in the Operating Guides, at a lower cost than an RMR Agreement.
NCI	Notice of Change of Information
NERC	North American Electric Reliability Corporation
NIS	Nodal Implementation Surcharge
NIST	National Institute of Standards and Technology
NOIE	Non Opt-In Entity
NOMCR	Network Operations Model Change Request
NSA	Network Security Analysis
NSR	Non-Spinning Reserve
NSRS	Non-Spinning Reserve Service
NWSIDR	Non-Weather Sensitive IDR
Net Dependable Capability	The maximum sustained capability of a Resource as demonstrated by performance testing.
Net Generation	Gross generation less station auxiliary Load or other internal unit power requirements metered at or adjusted to the point of interconnection with the ERCOT Transmission Grid at the common switchyard.
Network Operations Model	A representation of the ERCOT System providing the complete physical network definition, characteristics, ratings, and operational limits of all elements of the ERCOT Transmission Grid and other information from TSPs, Resource Entities, and QSEs.
Network Security Analysis	A processor used by ERCOT to monitor Transmission Elements in the ERCOT Transmission Grid for limit violations and to verify Electrical Bus voltage limits to be within a percentage tolerance as outlined in the Operating Guides.
New Renewable Facilities	Renewable energy generators placed in service on or after September 1, 1999. A New Facility includes the incremental capacity and associated energy from an existing Renewable Facility through repowering activities undertaken on or after September 1, 1999.
Non-Competitive Constraint	A Transmission Element that is not a Competitive Constraint.
Non-Metered Load	Load that is not required to be metered by applicable distribution or transmission tariff.
Non-Modeled Generator	See Resource
Non-Opt In Entity (NOIE)	An EC or MOU that does not offer Customer Choice.
Non-Opt-In Entity (NOIE) Load Zone	A Load Zone established by a NOIE or a group of NOIEs using a one-time NOIE election.

Non-Spinning Reserve (Non-Spin)	An Ancillary Service that is provided through use of the part of Off-Line Generation Resources that can be synchronized and ramped to a specified output level within 30 minutes (or Load Resources that can be interrupted within 30 minutes) and that can operate (or Load Resources that can be interrupted) at a specified output level for at least one hour. Non-Spin may also be provided from unloaded On-Line capacity that meets the 30-minute response requirements and that is reserved exclusively for use for this service.
Non-Spinning Reserve Service (NSRS)	A service that is comprised of 30-Minute Non-Spinning Reserve Service (30MNSRS) and BES-Capable Non-Spinning Reserve Service (BESCNSRS). 30-Minute Non-Spinning Reserve Service (30MNSRS) A service that is provided through utilization of the portion of Off-line generation capacity capable of being synchronized and ramped to a specified output level within thirty (30) minutes (or Load that is capable of being interrupted within thirty (30) minutes) and that is capable of running (or being interrupted) at a specified output level for at least one (1) hour. 30MNSRS is not capable of participating in the Balancing Energy Services market because it does not meet all of the qualifications of providing Balancing Energy Service Up within fifteen (15) minutes.
Normal Ramp Rate	The rate of change in MW per minute of a Resource, which is specified by the QSE to ERCOT by up to ten segments; each segment represents a single MW per minute value (across the capacity of the Resource) that describe the available rate of change in output for the given range (between HSL and LSL) of output of a Resource.
Normal Rating	See Rating
North American Electric Reliability Corporation	The national organization that is responsible for establishing standards and policies for reliable electric system operations and planning, or its successor.
Notice or Notification	Sending of information by an Entity to Market Participants, ERCOT, or others, as called for in these Protocols. Notice or notification may be sent by electronic mail, facsimile transmission, or U.S. mail.
Notice or Notification	The sending of information by an Entity to Market Participants, ERCOT, or others, as called for in these Protocols. Notice or Notification may be sent by electronic mail, facsimile transmission, or U.S. mail.
NOx Emissions Allowance Index Price (NOxEAIP)	The average of the bid/ask price for Nitrogen Oxide (NOx) emissions allowances in dollars per allowance, published for each Operating Day. The NOxEAIP will be obtained by ERCOT and will be based on daily index prices selected by ERCOT that are generally accepted in the industry and regularly published. ERCOT will disclose to Market Participants the source of its selected NOxEAIP, along with descriptions of the nature and derivation of the index as available from the publisher of the index. In the event that an ERCOT-selected index becomes unavailable or unsuitable for the intended purpose, ERCOT will select a substitute index source. ERCOT will notify Market Participants of any change in the index, along with a description of the nature and derivation of the substitute index and a summary of the reasons for the change, at least thirty (30) days prior to the beginning of its use. However, in the event that thirty (30) days' notice cannot be given for any reason, ERCOT will notify Market Participants as far prior to use as practical. The NOxEAIP for Saturdays, Sundays, holidays and other days for

	which there is no index published shall be based on the next published index after the Operating Day. In the event that the index is not published for more than two (2) days, the previous day published index will be used for the next applicable settlement and the next day published index will be used for true-up of the Final Statement.
O&M	Operations and Maintenance
OCN	Operating Condition Notice
OOM	Out of Merit Order
OOMC	Out of Merit Capacity
OOME	Out of Merit Energy
Obligation	Total Obligations scheduled by a QSE that are comprised of energy Obligations and Ancillary Services Obligations where: Energy Obligations = Load + losses + energy sales + energy exports; and Ancillary Services Obligations = ERCOT allocated Ancillary Services Obligations (which may be self-arranged) + Ancillary Services sales (to ERCOT or to other QSEs)
Off-line	The status of Resources that are not synchronously interconnected to the ERCOT System.
Oklahoma Exemption	The export schedules from the Public Service Company of Oklahoma, the Oklahoma Municipal Power Authority, and the AEP Texas North Company for their share of the Oklahoma Resource over the North DC Tie that are not treated as Load connected at transmission voltage, are not subject to any of the fees described in Section 4.4.4, DC Tie Schedules, and are limited to the actual net output of the Oklahoma Resource.
On-line	The status of a Resource that is synchronously interconnected to the ERCOT System.
On-Peak Hours	Hours ending in 0700 to 2200 CPT from Monday through Friday excluding NERC holidays.
Operating Condition Notice	The first of four possible levels of communication issued by ERCOT in anticipation of a possible emergency condition detailed in Section 5.6, Emergency and Short Supply Operation.
Operating Condition Notice (OCN)	The first of four possible levels of communication issued by ERCOT in anticipation of a possible emergency condition detailed in Section 6.5.9.1 Emergency and Short Supply Operation.
Operating Day	The day, including hours ending 0100 to 2400, during which energy flows.
Operating Guides	Guidelines approved by the ERCOT Board describing the reliability standards for ERCOT.
Operating Hour	A full clock hour during which energy flows.
Operating Period	A two-hour period comprised of the Operating Hour and the hour preceding the Operating Hour.
Operating Plan	A plan developed by ERCOT to operate the ERCOT System in Real Time.

Operational Constraint	Anticipated or actual security violation or overload of a transmission element, based on actual network topology.
Operational Model	The transmission model based on actual network topology of the ERCOT System.
Opportunity Outage	See Outage
Other Binding Documents List	List of Other Binding Documents as managed in paragraph (3) of Section 1.1, Summary of the ERCOT Protocols Document.
Out of Merit Capacity	Capacity provided by a Resource selected by ERCOT outside the bidding process to resolve a reliability or security event.
Out of Merit Energy	Energy provided by a Resource selected by ERCOT outside the bidding process to resolve a reliability or security event.
Out of Merit Order (OOM)	The selection of Resources for Ancillary Services that would otherwise not be selected to operate because of their place (or absence) in the bidding process for that service.
Outage	<p>The condition of a Transmission Facility or a portion of a Facility, or Generation Resource that is part of the ERCOT Transmission Grid and defined in the Network Operations Model that has been removed from its normal service, excluding the operations of Transmission Facilities associated with the start-up and shutdown of Generation Resources.</p> <p>Forced Outage An Outage initiated by protective relay, or manually in response to an observation by personnel that the condition of equipment could lead to an event, or potential event, that poses a threat to people, equipment, or public safety.</p> <p>For a Generation Resource, an Outage that requires immediate removal, either through controlled or uncontrolled actions, of all or a portion of the capacity of the Resource from service through automated or manual means. This type of Outage usually results from immediate mechanical/electrical/hydraulic control system trips and operator-initiated actions in response to a Resource's condition.</p> <p>Maintenance Outage An Outage initiated manually to remove equipment from service to perform work on components that could be postponed briefly but that is required to prevent a potential Forced Outage and that cannot be postponed until the next Planned Outage. Maintenance Outages are classified as follows:</p> <ol style="list-style-type: none"> 1. Level 1 Maintenance Outage – Equipment that must be removed from service within 24 hours to prevent a potential Forced Outage; 2. Level II Maintenance Outage – Equipment that must be removed from service within seven days to prevent a potential Forced Outage; and 3. Level III Maintenance Outage – Equipment that must be removed from service within 30 days to prevent a potential Forced Outage. <p>Opportunity Outage An Outage that may be accepted by ERCOT when a specific Resource is Off-Line due to an Outage.</p> <p>Planned Outage</p>

	<p>An Outage that is planned and scheduled in advance with ERCOT, other than a Maintenance Outage or Opportunity Outage.</p> <p>Simple Transmission Outage A Planned Outage or Maintenance Outage of any Transmission Element in the Network Operations Model such that when the Transmission Element is removed from its normal service, absent a Forced Outage of other Transmission Elements, the Outage does not cause a topology change in the LMP calculation and thus cannot cause any LMPs to change with or without the Transmission Element that is suffering the Outage.</p>
Outage Scheduler	The application that TSPs or QSEs use to submit Notification of Outages or requests for Outages to ERCOT for approval, acceptance, or rejection.
Output Schedule	The self-scheduled output for every five-minute interval of a Resource provided by a QSE before the execution of SCED.
PCRR	Pre-Assigned Congestion Revenue Right
PM	Power Marketer
PNM	Peaker Net Margin
POC	Peaking Operating Cost
POI	Point of Interconnection
POLR	Provider of Last Resort
POS	Power Operating System
PRC	Physical Responsive Capability
PRR	Protocol Revision Request
PRS	Protocol Revision Subcommittee
PSS	Power System Stabilizer
PTB	Price-to-Beat
PTP	Point-to-Point
PUCT	Public Utility Commission of Texas
PURA	Public Utility Regulatory Act, Title II, Texas Utility Code
PURPA	Public Utility Regulatory Policy Act
PV	PhotoVoltaic
PWG	Profiling Working Group
PhotoVoltaic (PV)	Of or pertaining to a material or device in which electricity is generated as a result of exposure to light.
Physical Responsive Capability (PRC)	A representation of the total amount of system wide On-Line capability that has a high probability of being able to quickly respond to system disturbances.
Planned Outage	See Outage
Point of Interconnection (POI)	The location(s) where a Generation Entity's interconnection Facilities connect to the Transmission Facilities as reflected in the Standard Generation Interconnection Agreement (SGIA) between a Generation

	Entity and a Transmission Service Provider (TSP) or the location(s) where Load interconnects to the TSP Facilities.
Point-to-Point (PTP) Obligation	See Congestion Revenue Right (CRR)
Point-to-Point (PTP) Option	See Congestion Revenue Right (CRR)
Postage Stamp Allocation	The pro rata allocation of charges (or payments), which spreads to designated, Entities based on a pro rata share (of actual or estimated consumption).
Power Generation Company	An Entity registered by the PUCT that: (1) generates electricity that is intended to be sold at wholesale; (2) does not own a transmission or distribution Facility in this state other than an essential interconnecting Facility, a Facility not dedicated to public use, or a Facility otherwise excluded from the PURA definition of "electric utility;" and (3) does not have a certificated service area, although its affiliated electric utility or transmission and distribution utility may have a certificated service area.
Power Marketer	An Entity that: <ol style="list-style-type: none"> 1. Becomes an owner or controller of electric energy in this state for the purpose of buying and selling the electric energy at wholesale; 2. Does not own generation, transmission, or distribution Facilities in this state; 3. Does not have a certificated service area; and 4. Has been granted authority by the Federal Energy Regulatory Commission to sell electric energy at market-based rates or has registered as a power marketer.
Power System Stabilizer (PSS)	A device that is installed on Generation Resources to maintain synchronous operation of the ERCOT System under transient conditions.
Pre-assigned Congestion Rights (PCRs)	Congestion Rights allocated prior to the annual TCR auctions to MOUs and ECs which own or have a long-term (greater than five years) contractual commitments, entered into prior to September 1, 1999, for annual capacity and energy from a specific remote Generation Resource.
Premise	A Service Delivery Point or combination of Service Delivery Points that is assigned a single ESI ID for Settlement and registration.
Price-to-Beat	The bundled rate a Retail Electric Provider that is affiliated with an Entity required to unbundle its electric services, and offer Customer Choice, must charge to residential and small commercial Customers upon initiation of Customer Choice, as further described in Section 39.202 of PURA and PUCT rules.
Primary Frequency Response	The instantaneous proportional increase or decrease in real power output provided by a Resource and the natural real power dampening response provided by Load in response to system frequency deviations. This response is in the direction that stabilizes frequency.
Primary Meter	The ERCOT approved, revenue-quality meter connected at an ERCOT approved interconnection point.
Prior Agreement	Any previous agreement between an Entity, its Affiliate(s) or its predecessor(s) in interest and ERCOT regarding performance under

	the ERCOT Protocols.
Private Use Network	An electric network connected to the ERCOT Transmission Grid that contains load that is not directly metered by ERCOT (i.e., load that is typically netted with internal generation).
Profile Type	See Load Profile Class
Program Administrator	The Entity approved by the PUCT that is responsible for carrying out the administrative responsibilities for the Renewable Energy Credit Program as set forth in P.U.C. SUBST. R. 25.173.
Proposal for Installation	A written proposal submitted by an Entity to ERCOT describing a proposal for the installation of additional Metering Facilities.
Proprietary Customer Information	Any information compiled by a Market Participant on a Customer in the normal course of Market Participant's business that makes possible the identification of any individual Customer by matching such information with the Customer's name, address, account number, type of classification service, historical electricity usage, expected patterns of use, types of Facilities used in providing service, individual contract terms and conditions, price, current charges, billing records, or any other information that a Customer has expressly requested not be disclosed. Information that is redacted or organized in such a way as to make it impossible to identify the Customer to whom the information relates does not constitute Proprietary Customer Information.
Protected Information	That information protected from disclosure as described in Section 1, Overview.
Protocol Implementation Plan	Plan developed by ERCOT that identifies any known differences between the ERCOT market operations system, power operations system, and settlement systems and these Protocols, and specifies a plan to conform such systems to these Protocols.
Provider of Last Resort (POLR)	The designated CR as defined in the P.U.C. SUBST. R. 25.43, Provider of Last Resort (POLR), for default Customer service, and as further described in Section 15.1, Customer Switch of Competitive Retailer.
QF	Qualifying Facility
QSE	Qualified Scheduling Entity
QSE Operator	The person designated by the QSE to communicate with ERCOT on a 24-hour basis.
Qualified Scheduling Entity (QSE)	A Market Participant that is qualified by ERCOT in accordance with Section 16, Registration and Qualification of Market Participants, for communication with ERCOT for Resource Entities and LSEs and for settling payments and charges with ERCOT.
Qualified Scheduling Entity (QSE) Clawback Interval	Any QSE-Committed Interval that is part of a contiguous block that includes at least one RUC-Committed Hour unless it is: <ul style="list-style-type: none"> a. QSE-committed before the first RUC instruction for any RUC-Committed Hour in that contiguous block; or b. Part of a contiguous block of a QSE-Committed Intervals, at least one of which was committed by the QSE before the RUC instruction described in paragraph (a) above.
Qualified Scheduling Entity (QSE)-Committed Interval	A Settlement Interval for which the QSE for a Resource has committed the Resource without a RUC instruction to commit it.

Qualifying Facility (QF)	A qualifying small power production facility or qualifying cogeneration facility under regulatory qualification criteria as defined in 16 U.S.C.A. § 796(17)(C) and (18)(B).
Quick Start Unit	Generation units that are not On-line, but are capable of producing energy within the next Settlement Interval.
RAP	Remedial Action Plan
RDF	Reserve Discount Factor
REC	Renewable Energy Credit
Reg-Down	Regulation Down
Reg-Up	Regulation Up
REP	Retail Electric Provider
RGS	Regulation Service
RID	Resource ID
RIDR	Representative IDR
RMR	Reliability Must-Run
RMS	Retail Market Subcommittee
ROS	Reliability and Operations Subcommittee
RPG	Regional Planning Group
RPP	Renewable Production Potential
RPRS	Replacement Reserve Service
RPS	Renewable Portfolio Standard
RRO	Responsive Reserve Obligation
RRS	Responsive Reserve Service
RT	Real Time
RTEP	Real-Time Energy Price
RTM	Real-Time Market
RTPP	Real Time Production Potential
RUC	Reliability Unit Commitment
Rating	Emergency Rating Two-hour MVA rating of a Transmission Element. 15-Minute Rating The 15-Minute MVA rating of a Transmission Element. Normal Rating The rating at which a Transmission Element can operate without reducing its normal life expectancy.
Reactive Power	The product of voltage and the out-of-phase component of alternating current. Reactive Power, usually measured in MVAR, is produced by capacitors, overexcited generators and other capacitive devices and is absorbed by reactors, under-excited generators and other inductive devices.
Reactive Power Profile	See Voltage Profile

Reactive Reserve	That reactive capability required to meet sudden loss of generation, Load or transmission capacity and maintain voltage within desired limits.
Real Time Production Potential	A Real Time signal sent to ERCOT by each Wind-powered Generation Resource (WGR) providing the WGR's reasonable efforts estimate of the net production available in MW from the WGR given the existing wind conditions at the time and given all available individual wind generation turbines not on Planned or Forced Outage. The RTPP shall not be the actual meter reading of the WGR; it is an estimate using the same process when the WGR is curtailed as when it is not curtailed. The RTPP is a calculated value based on Real Time data averaged for not more than ten (10) seconds. RTPP is the product of wind speed, the turbine manufacturer's power curve, turbine availability and loss factors. Other factors may be applied with the approval of ERCOT.
Real-Time	The current instant in time.
Real-Time Market (RTM) Final Statement	See Settlement Statement
Real-Time Market (RTM) Initial Statement	See Settlement Statement
Real-Time Market (RTM) Resettlement Statement	See Settlement Statement
Real-Time Market (RTM) True-Up Statement	See Settlement Statement
Redacted Network Operations Model	A version of the Network Operations Model, redacted to exclude Private Use Network Load data and the following defined Resource Parameters as applicable: Normal Ramp Rate curve; Emergency Ramp Rate curve; Minimum On-Line time; Minimum Off-Line time; Hot start time; Intermediate start time; Cold start time; Maximum weekly starts; Maximum On-Line time; Maximum daily starts; Maximum weekly energy; Hot-to-intermediate time; Intermediate-to-cold time; Minimum interruption time; Minimum restoration time; Maximum weekly deployments; Maximum interruption time; Maximum daily deployments; Minimum notice time; and Maximum deployment time.
Registered Market Participant	Entity that is registered with ERCOT to participate in the competitive market administered by ERCOT within the ERCOT Region. Registered Market Participants include those using statewide systems administered by ERCOT and may be non-ERCOT participants.

Registration Processing Period	Minimum amount of time the ERCOT registration system requires to process transactions. This period begins when ERCOT receives a registration transaction request and continues until the completion of the transaction.
Regulation Service	<p>An Ancillary Service that consists of either Regulation Down Service (Reg-Down) or Regulation Up Service (Reg-Up)</p> <p>Regulation Down Service (Reg-Down)</p> <p>An Ancillary Service that provides capacity that can respond to signals from ERCOT within three to five seconds to respond to changes in system frequency. Such capacity is the amount available below any Base Point but above the LSL of a Generation Resource and may be called on to change output as necessary throughout the range of capacity available to maintain proper system frequency. A Load Resource providing Reg-Down must be able to increase and decrease Load as deployed within its Ancillary Service Schedule for Reg-Down below the Load Resource's MPC limit.</p> <p>Regulation Up Service (Reg-Up)</p> <p>An Ancillary Service that provides capacity that can respond to signals from ERCOT within three to five seconds to respond to changes in system frequency. Such capacity is the amount available above any Base Point but below the HSL of a Generation Resource and may be called on to change output as necessary throughout the range of capacity available to maintain proper system frequency. A Load Resource providing Reg-Up must be able to increase and decrease Load as deployed within its Ancillary Service Schedule for Reg-Up above the Load Resource's LPC limit.</p>
Regulation Up Service (Reg-Up)	See Regulation Service
Reliability Must Run (RMR) Service	An Ancillary Service provided from an RMR Unit under an Agreement with ERCOT.
Reliability Must Run (RMR) Unit	A Generation Resource operated under the terms of an Agreement with ERCOT that would not otherwise be operated except that it is necessary to provide voltage support, stability or management of localized transmission constraints under first contingency criteria where market solutions do not exist.
Reliability Unit Commitment (RUC)	A process to ensure that there is adequate Resource capacity and Ancillary Service capacity committed in the proper locations to serve ERCOT forecasted Load.
Reliability Unit Commitment (RUC) Cancellation	An ERCOT instruction, prior to breaker close, to cancel a previously issued RUC instruction.
Reliability Unit Commitment (RUC) Study Period	As defined under Section 5.1, Introduction.
Reliability Unit Commitment (RUC)-Committed Hour	An Operating Hour for which a RUC has committed a Resource to be On-Line.
Reliability Unit Commitment (RUC)-Committed Interval	A Settlement Interval for which there is a RUC instruction to commit a Resource.
Remedial Action Plan (RAP)	A set of pre-defined actions to be taken to relieve transmission security violations (normally post-contingency overloads or voltage

	violations) that are sufficiently dependable to assume they can be executed without loss of reliability to the interconnected network. These plans may be relied upon in allowing additional market use of the transmission system. RAPs may include controllable Load shedding by dispatcher or ERCOT action.
Renewable Energy Credit (REC)	A tradable instrument that represents all of the renewable attributes associated with one MWh of production from a certified renewable generator.
Renewable Energy Credit (REC) Account	An account maintained by ERCOT for the purpose of tracking the production, sale, transfer, purchase, and retirement of RECs or Compliance Premiums by a REC Account Holder.
Renewable Energy Credit (REC) Account Holder	An Entity registered with ERCOT to participate in the REC Trading Program.
Renewable Energy Credit (REC) Trading Program	The Renewable Energy Credit Trading program, as described in Section 14, State of Texas Renewable Energy Credit Trading Program, and P.U.C. SUBST. R. 25.173, Goal for Renewable Energy.
Renewable Portfolio Standard (RPS)	The amount of capacity required to meet the requirements of Public Utility Regulatory Act (PURA), TEX. UTIL. CODE ANN. § 39.904 (Vernon 1998 & Supp. 2007) and P.U.C. SUBST. R. 25.173(h).
Renewable Production Potential	The maximum generation in MWh per interval from an Intermittent Renewable Resource (IRR) that could be generated from all available units of that Resource. The RPP depends on the renewable energy that can be generated from the available units (wind, solar radiation, or run-of-river water supply), current environmental conditions and the energy conversion characteristics of each unit.
Replacement Reserve Service	A service that is procured from Generation Resource units planned to be off-line and Load acting as a Resource that are available for interruption during the period of requirement.
Repowered Facility	An existing facility that has been modernized or upgraded to use renewable energy technology to produce electricity consistent with P.U.C. SUBST. R. 25.173, Goal for Renewable Energy.
Representative Interval Data Recorder	The technique for profiling premises participating in special pricing programs which consists of implementing a statistically representative Load research sample on the program population. The sample data is then used to develop the representative IDR (RIDR) for profiling these premises.
Reserve Discount Factor (RDF)	A representation of the average amount of system-wide capability that, for whatever reason, is historically undeliverable during periods of high system demand. The RDF will be verified by ERCOT and then approved by the Reliability and Operations Subcommittee (ROS).
Resettlement Statement	See Settlement Statement
Resource	
Resource Category	The generation technology category designated for a Generation Resource in its Resource registration documentation.
Resource Category Generic Fuel Cost (RCGFC)	A standard \$/MWh cost for fuel specific to one of eight resource categories (Nuclear, Hydro, Coal and Lignite, Combined Cycle, Simple Cycle, Gas Steam, Diesel and Non-Hydro Renewable).

Resource Category Generic Operational Cost	A standard \$/MWh price for running a unit selected out of merit order to provide balancing energy. The RCGOC is defined by the generation unit category (Base-load, Gas Intermediate, Gas Cyclic, Gas Peaking and Renewable).
Resource Category Generic Startup Cost	A fixed price for starting a unit that is selected out of merit order to provide balancing energy. The RCGSC is defined by the generation unit category (Base-load, Gas Intermediate, Gas Cyclic, Gas Peaking and Renewable).
Resource Entity	An Entity that owns or controls an All-Inclusive Resource and is registered with ERCOT as a Resource Entity.
Resource ID	A unique identifier assigned to each Resource used in the registration and Settlements systems managed by ERCOT.
Resource Minimum Down Time	The minimum time from shutdown of a Resource required until that Resource can be restarted and available to the ERCOT market.
Resource Node	Either a logical construct that creates a virtual pricing point required to model a Combined-Cycle Configuration or an Electrical Bus defined in the Network Operations Model, at which a Generation Resource's Settlement Point Price is calculated and used in Settlement. All Resource Nodes shall be identified in accordance with the document titled "Procedure for Identifying Resource Nodes," which shall be approved by the appropriate TAC subcommittee and posted to the MIS Public Area. For a Generation Resource that is connected to the ERCOT Transmission Grid only by one or more radial transmission lines that all originate at the Generation Resource and terminate in a single substation switchyard, the Resource Node is an Electrical Bus in that substation. For all other Generation Resources, the Resource Node is the Generation Resource's side of the Electrical Bus at which the Generation Resource is connected to the ERCOT Transmission Grid.
Resource Parameter	A registered Resource-specific parameters required for use in ERCOT business processes.
Resource Plan	A plan provided by a QSE to ERCOT indicating the forecast state of Generation Resources or individual Loads each acting as a Resource, including information on availability, limits and forecast generation or Load of each Resource.
Resource Status	The operational state of a Resource as provided in Section 3.9, Current Operating Plan (COP).
Responsibility Transfer	The controlled and orderly transfer of eligible resources from one QSE to another in accordance with Section 4, Scheduling.
Responsive Reserve (RSS)	An Ancillary Service that provides operating reserves that is intended to: <ul style="list-style-type: none"> a. Arrest frequency decay within the first few seconds of a significant frequency deviation on the ERCOT Transmission Grid using Primary Frequency Response and interruptible Load; b. After the first few seconds of a significant frequency deviation, help restore frequency to its scheduled value to return the system to normal; c. Provide energy or continued Load interruption during the implementation of the EEA; and d. Provide backup regulation.

Retail Business Day	See Business Day
Retail Business Hour	Any hour within a Retail Business Day.
Retail Electric Provider (REP)	As defined in P.U.C. SUBST. R. 25.5, Definitions, an Entity that sells electric energy to retail Customers in Texas but does not own or operate generation assets and is not an MOU or EC.
Retail Entity	An MOU, generation and transmission cooperative or distribution cooperative that offers Customer Choice; REP; or IOU that has not unbundled pursuant to Public Utility Regulatory Act (PURA), TEX. UTIL. CODE ANN. § 39.051 (Vernon 1998 & Supp. 2007).
Revenue Quality Meter	For EPS Meters, a meter that complies with the Protocols and the Settlement Metering Operating Guide. For TSP- or DSP-metered Entities, a meter that complies with Governmental Authority-approved meter standards, or the Protocols and the Operating Guides.
SASM	Supplemental Ancillary Services Market
SCADA	Supervisory Control And Data Acquisition
SCE	Schedule Control Error
SCED	Security-Constrained Economic Dispatch
SCUC	Security-Constrained Unit Commitment
SDRAMP	SCED Down Ramp Rate
SE	State Estimator
SET	Standard Electronic Transaction
SFT	Simultaneous Feasibility Test
SGIA	Standard Generation Interconnection Agreement
SMOG	Settlement Metering Operating Guides
SPP	Southwest Power Pool
SPS	Special Protection Systems
SRR	Statewide RPS Requirement
STEC	South Texas Electric Cooperative
STLF	Short-Term Load Forecast
STWPF	Short-Term Wind Power Forecast
SURAMP	SCED Up Ramp Rate
SWCAP	System-Wide Offer Cap
Sample Design	The processes by which ERCOT determines the appropriate requirements for a sample of Customer Premises which requirements will be used to create a Load Profile.
Sample Size	The number of data points (i.e. Customer Premises) in a particular sample.
Sampling	The process of selecting a subset of a population of Customers that statistically represents the entire population.
Schedule Control Error	The difference in the QSE's actual Resource output and its base

	power schedule plus instructed Ancillary Services.
Scheduled Power Consumption	Expected Load, in MW, reported by a QSE for a Controllable Load Resource pursuant to Section 6.5.5.2, Operational Data Requirements.
Scheduled Power Consumption Snapshot	A snapshot, taken by ERCOT, of the Scheduled Power Consumption provided by the QSE for a Controllable Load Resource at the end of the adjustment period and used in determining the Controllable Load Resource Desired Load.
Scheduling Process	The process through which schedules for energy and Ancillary Services are submitted by QSEs to ERCOT as further described in Section 4, Scheduling.
Season	Winter months are December, January, and February; Spring months are March, April, and May; Summer months are June, July, and August; Fall months are September, October, and November.
Security-Constrained Economic Dispatch (SCED)	The determination of desirable Generation Resource output levels using Energy Offer Curves while considering State Estimator (SE) output for Load at transmission-level Electrical Buses, Generation Resource limits, and transmission limits to provide the least offer-based cost dispatch of the ERCOT System.
Segmentation	The process of dividing a population into a number of sub-sets, according to certain parameters, for the purpose of creating Load Profiles for sub-sets of the population.
Segmentation Parameter	The parameter chosen as the basis for Segmentation.
Self-Arranged Ancillary Service Quantity	The portion of its Ancillary Service Obligation that a QSE secures for itself using Resources represented by that QSE and Ancillary Service Trades.
Self-Schedule	Information for Real-Time Settlement purposes that specifies the amount of energy supply at a specified source Settlement Point used to meet an energy obligation at a specified sink Settlement Point for the QSE submitting the information.
Service Address	The street address associated with an ESI ID as recorded in the Customer Registration Database. This address shall conform to United States Postal Service Publication 28.
Service Delivery Point	The specific point on the system where electricity flows from the TSP or DSP to a Customer.
Service Fee Schedule	A listing of ERCOT fees and charges to Market Participants, posted on the Market Information System.
Service Filing	A filing by a QSE to ERCOT as part of the QSE's certification process, as defined in Section 16, Qualification of Qualified Scheduling Entities and Registration of Market Participants.
Settlement	The process used to resolve financial obligations between a Market Participant and ERCOT.
Settlement Calendar	A calendar that provides information on when Settlement Statements and Invoices shall be posted, payment due dates, and dispute deadlines. Additional information is provided in Section 9.1.2, Settlement Calendar.
Settlement Interval	The time period for which markets are settled.

Settlement Invoice	A notice for payment or credit due rendered by ERCOT based on data contained in Settlement Statements.
Settlement Meter	Generation and end-use consumption meters used for allocation of ERCOT charges and wholesale and retail Settlements.
Settlement Point	A Resource Node, Load Zone, or Hub.
Settlement Point Price	A price calculated for a Settlement Point for each Settlement Interval using LMP data and the formulas detailed in Section 4.6, DAM Settlement, and Section 6.6, Settlement Calculations for the Real-Time Energy Operations.
Settlement Quality Meter Data	Data that has been edited, validated, and is appropriate for the ERCOT Settlement agent to use for Settlement and billing purposes.
Settlement Statement	<p>A statement issued by ERCOT reflecting a breakdown of administrative, miscellaneous, and market charges for the applicable market services, as further described in Section 9.2, Settlement Statements for the Day-Ahead Market, and Section 9.5, Settlement Statements for Real-Time Market.</p> <p>Day-Ahead Market (DAM) Resettlement Statement The Settlement Statement issued for a particular DAM using corrected Settlement data, in accordance with Section 9.2.5, DAM Resettlement Statement.</p> <p>Day-Ahead Market (DAM) Statement The Settlement Statement issued for a particular DAM, as further described in Section 9.2.4, DAM Statement.</p> <p>Real-Time Market (RTM) Final Statement The RTM Settlement Statement issued at the end of the 59th calendar day following the Operating Day, as described in Section 9.5.5, RTM Final Statement.</p> <p>Real-Time Market (RTM) Initial Statement The first iteration of an RTM Settlement Statement issued for a particular Operating Day, as further described in Section 9.5.4, RTM Initial Statement.</p> <p>Real-Time Market (RTM) Resettlement Statement The RTM Settlement Statement using corrected Settlement data, in accordance with Section 9.5.6, RTM Resettlement Statement.</p> <p>Real-Time Market (RTM) True-Up Statement The RTM Settlement Statement issued 180 days following the Operating Day, as further described in Section 9.5.8, RTM True-Up Statement.</p>
Shadow Price	A price for a commodity that measures the marginal value of this commodity; that is, the rate at which system costs could be decreased or increased by slightly increasing or decreasing, respectively, the amount of the commodity being made available.
Shift Factor	A measure of the flow on a particular Transmission Element due to a unit injection of power from a particular Electrical Bus to a fixed reference Electrical Bus.
Short-Term Wind Power Forecast (STWPF)	An ERCOT produced hourly 50% probability of exceedance forecast of the generation in MWh per hour from each Wind-powered Generation

	Resource (WGR) that could be generated from all available units of that Resource.
Sign/Direction Terminology Conventions for Reactive Power	<p>Generator Lagging power factor operating condition is when volt-ampere reactive (VAR) flow is out of the Generation Resource unit (overexcited generator) and into the transmission system and is considered to be positive (+) flow, i.e., in the same direction as megawatt power flow. The generator is producing megavolt-amperes reactive. Leading power factor operating condition means that VAR flow is into the Generation Resource unit (underexcited generator) and out of the transmission system and is considered to be negative (-) flow, i.e., in the opposite direction as megawatt power flow. The generator is absorbing megavolt-amperes reactive.</p> <p>Transmission Line Terminal VAR flow out of the bus and into the line is considered to be positive (+) flow. VAR flow into the bus and out of the line is considered to be negative (-) flow.</p> <p>Capacitor Produces reactive power (VAR source) for voltage control and causes the system power factor to move towards a leading condition.</p> <p>Reactor Absorbs reactive power (VAR sink) for voltage control and causes the system power factor to move towards a lagging condition.</p>
Simple Transmission Outage	See Outage
Special Protection Systems (SPS)	A set of automatic actions to be taken to relieve transmission security violations (normally post-contingency overloads or voltage violations) that are sufficiently dependable to assume they can be executed without loss of reliability to the interconnected network.
Split Generation Resource	See Resource
Startup Cost	All costs incurred by a Generation Resource in starting up and reaching LSL, minus the average energy produced during the time period between breaker close and LSL multiplied by a heat rate proxy "H" multiplied by the appropriate FIP, FOP, or \$1.50 per MMBtu, as applicable and as described in the Verifiable Cost Manual. The Startup Cost is in dollars per start.
Startup Loading Failure	An event that results when a Generation Resource is unable to operate at Low Sustained Limit (LSL) at the time scheduled in the Current Operating Plan (COP) which occurs while the unit is ramping up to its scheduled MW output. A Startup Loading Failure ends when the Resource: <ul style="list-style-type: none"> a. Achieves its LSL; b. Is scheduled to go Off-Line; or c. Enters a Forced Outage.
Startup Offer	An offer for all costs incurred by a Generation Resource in starting up and reaching LSL, minus the average energy produced during the time period between breaker close and LSL multiplied by a heat rate proxy "H" multiplied by the appropriate FIP or FOP. The Startup Cost is in dollars per start.

State Estimator (SE)	A computational algorithm that uses Real-Time inputs from the network's Supervisory Control and Data Acquisition (SCADA) system that measure the network's electrical parameters, including its topology, voltage, power flows, etc., to estimate electrical parameters (such as line flows and Electrical Bus voltages and Loads) in the ERCOT Transmission Grid. The SE's output is a description of the network and all of the values (topology, voltage, power flow, etc.) to describe each Electrical Bus and line included in the system model.
State Estimator (SE) Bus	An electrical node of common voltage at a substation that consists of one or more Electrical Buses tied together with closed breakers or switches.
Supply	Total supply scheduled by a QSE that is comprised of Energy Supply and Ancillary Services Supply where: Energy Supply = Resources + energy purchases + energy imports; and Ancillary Services Supply = Resources + Ancillary Services purchases (including purchases through ERCOT) + Ancillary Services imports
Sustained Response Period	The period of time beginning ten minutes after ERCOT's issuance of a Verbal Dispatch Instruction (VDI) requesting EILS deployment and ending with ERCOT's issuance of a VDI releasing the EILS Loads from the deployment.
Switch Request	A request submitted by a CR on behalf of a Customer to switch service from the Customer's current CR to the requesting CR.
Switchable Generation Resource	See Resource
Synchronous Condenser Unit	A unit operated under the terms of an annual Agreement with ERCOT that is only capable of supplying Volt-Amperes reactive (VARs) that would not otherwise be operated except that it is necessary to provide voltage support under first contingency criteria.
System Benefit Fund	The fund established by the PUCT to provide funding for Customer education programs, programs to assist low-income electric Customers; and the property tax replacement mechanism provided by Section 39.601 of PURA.
System Congestion Fund	ERCOT's accounting fund from which payments for resolving Congestion are disbursed and to which ERCOT credits Congestion-related receipts from QSE's representing Loads.
System Operator	An Entity that supervises the collective Transmission Facilities of a power region. This Entity is charged with coordination of market transactions, system-wide transmission planning, and network reliability.
System-Wide Offer Cap (SWCAP)	The system-wide offer cap defined in subsection (g) of P.U.C. SUBST. R. 25.505, Resource Adequacy in the Electric Reliability Council of Texas Power Region.
T&D Losses	Losses Transmission Losses & Distribution Losses
T&D	Transmission and Distribution
TAC	Technical Advisory Committee
TCOS	Transmission Cost of Service

TCR	Transmission Congestion Right
TDSP	Transmission and/or Distribution Service Provider
TDTWG	Texas Data Transport Working Group
TEWPF	Total ERCOT Wind Power Forecast
TIER	Times/Interest Earning Ratio
TLF	Transmission Loss Factor
TMOS	Transmission Market Operations Subcommittee
TMTP	Texas Market Test Plan
TOU	Time Of Use
TOUS	Time Of Use Schedule
TPE	Total Potential Exposure
TRE	Texas Regional Entity
TSP	Transmission Service Provider
TTC	Total Transmission Capacity
TTPT	Texas Test Plan Team
TUO	Total Usable Offset
TUOS	Transmission Use of Service
TWC	Texas Water Code
TX SET	Texas Standard Electronic Transaction
TX SET	Texas Standard Electronic Transaction
TCR Interface	The CSC for which Transmission Congestion Rights are auctioned and awarded.
TCR Invoice	See Invoice
TDSP Metered Entity	Any Entity that meets the requirements of Section 10.2.2, TDSP Metered Entities.
Technical Advisory Committee	A subcommittee in the ERCOT governance structure reporting to the Board of Directors as defined by the ERCOT bylaws.
Texas Nodal Market Implementation Date	The date on which ERCOT starts operation of the Texas Nodal Market in compliance with the rules and orders of the PUCT. Once this date is determined, ERCOT shall post it on the ERCOT website and maintain it on either the ERCOT website or the MIS Public Area.
Texas Regional Entity (TRE)	The organization approved by the Electric Reliability Organization and the FERC to perform the regional Entity functions for the ERCOT Region described in the Electricity Modernization Act of 2005 (16 U.S.C. §824 et seq.).
Texas SET	Texas Standard Electronic Transaction procedures, set forth in Section 19, Texas SET, used to transmit information pertaining to the Customer Registration Database. Record and Data Element Definitions are provided in the data dictionary in Protocols Section 19.
Texas Standard Electronic Transaction	The procedure used to transmit information pertaining to the Customer Registration Database, as set forth in Section 19, Texas

(TX SET)	Standard Electronic Transaction. Record and data element definitions are provided in the data dictionary in Section 19.
Three-Part Supply Offer	An offer made by a QSE for a Generation Resource that it represents containing three components: a Startup Offer, a Minimum-Energy Offer, and an Energy Offer Curve.
Time of Use (TOU) Meter	A programmable electronic device capable of measuring and recording electric energy in pre-specified time periods. For Load Profiling purposes TOU Metering does not include IDRs.
Time of Use Schedule (TOUS)	A schedule identifying the Time of Use period associated with each Settlement Interval. These schedules may include on-peak, off-peak, and shoulder periods.
Total Energy Obligation	The total energy Obligation for a Qualified Scheduling Entity during a Settlement Interval, including the energy from the Balanced Schedule and integrated energy of instructed Ancillary Services.
Total Transmission Capacity	The maximum power that may be transferred across a transmission corridor while maintaining reliability of the ERCOT System.
Transaction Clearinghouse	A batch, transactional interface intended to provide reliable exchange of high volume, standardized transactions between Market Participants and ERCOT using the Texas SET procedures in Section 19, Texas SET.
Translation Factor	The monthly ratio of the aggregate Competitive Retailer's four (4) coincident peak demand over the monthly aggregate Competitive Retailer's coincident peak demand, as further described in Section 9.8, Transmission Billing Determinant Calculation.
Transmission Access Service	The use of a TSP's Transmission Facilities for which the TSP is allowed to charge through tariff rates approved by the PUCT.
Transmission and/or Distribution Service Provider (TDSP)	An Entity that is a TSP, a DSP or both, or an Entity that has been selected to own and operate Transmission Facilities and has a PUCT approved code of conduct in accordance with P.U.C. SUBST. R. 25.272, Code of Conduct for Electric Utilities and Their Affiliates.
Transmission and/or Distribution Service Provider (TSP)	An Entity under the jurisdiction of the PUCT that owns or operates Transmission Facilities used for the transmission of electricity and provides Transmission Service in the ERCOT Transmission Grid.
Transmission Billing Determinants	Key parameters and formula components required by a TDSP in determining the billing charges for the use of its Transmission Facilities and/or distribution Facilities.
Transmission Congestion Right (TCR)	A financial hedge against the cost of 1 MW flowing across a particular Commercially Significant Constraint, in a single direction, for 1 hour.
Transmission Congestion Right Account Holder (TCR Account Holder)	A Registered Market Participant that is qualified to bid for and own TCRs in ERCOT's annual or monthly auctions, or that has acquired such rights in secondary markets for purposes of participating in ERCOT's financial settlements for Congestion Credits. [A TCR Account Holder is a Registered Market Participant whose record of ownership appears in ERCOT's databases of auction results or financial settlements for Zonal Congestion Credits].
Transmission Element	A physical Transmission Facility that is either an Electrical Bus, line, transformer, generator, Load, breaker, switch, capacitor, reactor, phase shifter, or other similar device that is part of the ERCOT Transmission Grid and defined in the ERCOT Network Operations

	Model.
Transmission Facilities	The following Facilities are deemed to be Transmission Facilities: <ol style="list-style-type: none"> 1. Power lines, substations, and associated facilities, operated at 60 kV or above, including radial lines operated at or above 60 kV; 2. Substation facilities on the high voltage side of the transformer, in a substation where power is transformed from a voltage higher than 60 kV to a voltage lower than 60 kV or is transformed from a voltage lower than 60 kV to a voltage higher than 60 kV; and 3. The direct current interconnections between ERCOT and the Southwest Power Pool or Comision Federal de Electricidad (CFE).
Transmission Loss Factor (TLF)	The fraction of ERCOT Load (forecast or actual) that is considered to constitute the ERCOT Transmission Grid losses in a Settlement Interval, based on a linear interpolation (or extrapolation) of the calculated losses in the off-peak and on-peak seasonal ERCOT base cases.
Transmission Losses	Difference between energy input into the ERCOT Transmission Grid and the energy taken out of the ERCOT Transmission Grid.
Transmission Service	The commercial use of Transmission Facilities.
Transmission Service Provider	An Entity under the jurisdiction of the PUCT that owns or operates Transmission Facilities used for the transmission of electricity and provides transmission service in the ERCOT Transmission Grid.
True-Up Statement	See Settlement Statement
TSP and DSP Metered Entity	An Entity that meets the requirements of Section 10.2.2, TSP and DSP Metered Entities.
Two-Day Ahead	The twenty-four (24) hour period beginning the instant after 2400 forty-eight (48) hours before the Operating Day.
UFE	Unaccounted For Energy
URL	Unit Reactive Limit
USA	User Security Administrator
USD	United States Dollar or U.S. Dollar
USTR	Uninitiated Service Termination Request
Unaccounted for Energy (UFE)	The difference between total metered Load each Settlement Period, adjusted for applicable Distribution Losses and Transmission Losses, and total ERCOT System net generation.
Uncontrollable Renewable Resources	Generators that can only produce an amount of energy directly related to their supply of variable energy from their respective renewable resources, such as wind or solar.
Uninstructed Deviation	A condition occurring whenever the total metered resources of a QSE for a Settlement Interval are different from the total of the scheduled resources plus any Resource deployments instructed by ERCOT.
Uninstructed Factor	A factor used to reduce the total payments made to a Resource for Uninstructed Deviations. The Uninstructed Factor could change by interval, in accordance with Section 6.8.1.14.2, Determining the Uninstructed Factor.

Unit Reactive Limit (URL)	The maximum quantity of Reactive Power that a Generation Resource is capable of providing at a 0.95 power factor at its maximum real power capability.
Unusual Event	Specifics events, as defined in these Protocols Section 4, Scheduling, that allow ERCOT to deploy Balancing Energy Service outside of the normal deployment notification.
Updated Desired Base Point	A calculated MW value representing the expected MW output of a Generation Resource ramping to a Base Point.
Updated Network Model	A computerized representation of the ERCOT physical network topology, including some Resource Parameters, all of which replicates the forecasted or current network topology of the ERCOT System needed by ERCOT to perform its functions.
Uplift	The process of allocating costs to QSEs based on Loads and exports within the ERCOT Region.
Usage Profile	See Load Profile
Va.m.M	Vector Absolute Megawatt-Mile
Va.m.O	Vector Absolute Megawatt Ohm
VAr	Volt-Ampere reactive
VDI	Verbal Dispatch Instruction
VEE	Validation, Editing and Estimation of meter data
VSA	Voltage Security Analysis
VSS	Voltage Support Service
VT	Voltage Transformer
Validation, Editing, Estimation of Meter Data	See Section 11, Metering
Verbal Dispatch Instruction (VDI)	A Dispatch Instruction issued orally.
Virtual QSE	An LSE whose QSE has provided notice of its intent to terminate its relationship with the LSE and who then fails to meet ERCOT's creditworthiness requirements to become an Emergency QSE, as set forth in Section 16.2.13.1, Designation as an Emergency QSE or Virtual QSE.
Voltage Profile	A predetermined distribution of desired nominal voltage set points across the ERCOT System.
Voltage Support Service (VSS)	An Ancillary Service that is required to maintain transmission and distribution voltages on the ERCOT Transmission Grid within acceptable limits.
WAN	Wide Area Network
WGR	Wind-powered Generation Resource
WGRPP	Wind-powered Generation Resource Production Potential
WMS	Wholesale Market Subcommittee
WSCC	Western System Coordinating Council
WSIDR	Weather-Sensitive Interval Data Recorder

Watch	The third of four possible levels of communication issued by ERCOT in anticipation of a possible Emergency Condition, detailed in Section 6.5.9, Emergency Operations.
Weather Zone	A geographic region in which climatological characteristics are similar for all areas within such region.
Wholesale Customer	A NOIE receiving service at wholesale points of delivery from an LSE other than itself.
Wind-powered Generation Resource (WGR)	See Resource
Wind-powered Generation Resource Production Potential (WGRPP)	The generation in MWh per hour from a WGR that could be generated from all available units of that Resource allocated from the 80% probability of exceedance of the Total ERCOT Wind Power Forecast (TEWPF).
XML	Extensible Markup Language
Zonal Congestion	Congestion on CSCs or CREs that can be resolved by zonal deployment of Balancing Energy Services and RPRS.
Zonal Congestion Credits	Payments equal to the directly assigned costs of BES and RPRS that were incurred in managing Zonal Congestion. Zonal Congestion Credits are paid to TCR Account Holders, appearing in ERCOT's database, as the owner of record for the hour of relevant Settlement Intervals.