



THE ELECTRIC INDUSTRY: GLOSSARY OF TERMS AND ACRONYMS

GENERAL TERMS

Advanced Metering System (AMS): An enhancement to the electric grid that allows residential customers to use more technologically advanced electric meters that will provide greater detail and increased control over their electric usage. The system also creates new efficiencies and capabilities for transmission and distribution utilities, such as remote meter-reading, improved storm response

Baseload Generation: Generation that operates over 90 percent of the time throughout the year, to meet customer demand. Coal-fired and nuclear generation comprise the majority of baseload generation in Texas, though some natural gas-fired generation also operates nearly continuously.

Capacity: See Generation Capacity.

Consumption: The amount of electricity used by residents, industrial and business customers, etc., over time. Typically measured in kilowatt-hours.

Demand: See Load.

Distribution Lines: Local wires, transformers, substations and other equipment used to deliver electricity to homes and most businesses.

Fuel Mix/Generation Mix: The percentage of power generated listed by the power source used.

Generation Capacity: The maximum demand that a given generator or group of generators can meet at a given time. For example, a 1,000 megawatt power plant could meet the demand of 1,000 homes using 1 kW of power simultaneously.

Gigawatt (GW): 1,000 Megawatts or 1 million kilowatts.

kilowatt (kW): A kilowatt is equal to one thousand watts. As a point of comparison, a kilowatt is equal to about 1.34 horsepower. The number of kilowatts a household requires is a snapshot of the amount of electricity that household is using at exactly that moment.

kilowatt- hour (kWh): This is the most common measure of household electricity consumption, measured as the number of hours-worth of kilowatts used. If a home used 1,000 kWh in a month, this means it averaged about 1400 Watts (1.4 kW) of demand for the month.

Load: A snapshot of the amount of electric power required to meet customers' demand at a given time, expressed in kilowatts (kW) or Megawatts (MW).

Load- growth: The increase of load over time.

Megawatt (MW): 1,000 kilowatts. In the hottest areas of the state, where demand is highest in the summer, 1 MW of generation can provide power for about 200 homes.

Peak Demand (Peak Load): The maximum expected load for a given period of time.

Peaking Generation: Generation that only operates at times of high demand, and is not needed at times of low demand. All peaking generation is fueled by natural gas.

Reserve Margin: The amount of capacity above the maximum expected usage expressed as a percentage of peak demand. For example, a 15 percent ERCOT reserve margin means that on the hottest day of the year, ERCOT would still have a 15 percent surplus of generation available, assuming its forecast is accurate.

Smart Grid: See Advanced Metering System

Transmission Lines: Lines that are used to deliver power from electric generating plants at high voltage to facilities that distribute the power at lower voltage to homes and most businesses.

ENTITIES THAT PROVIDE REGULATION, MANAGEMENT AND OVERSIGHT OF THE ELECTRIC INDUSTRY

Electric Reliability Council of Texas (ERCOT): The Independent System Operator (ISO) located entirely within Texas. ERCOT oversees the grid that covers about 75 percent of the land area and 85 percent of the electric load in Texas. The competitive electric market is located in ERCOT.

Federal Energy Regulatory Commission (FERC): The Federal agency charged with regulating interstate energy transactions. Because ERCOT is contained fully within Texas, it is not under FERC's jurisdiction. The other transmission grids (MISO, SPP and WECC) are regulated by FERC.

Independent Market Monitor (IMM): Created by the 79th Texas Legislature, the Independent Market Monitor is an outside contractor employed by ERCOT and reporting to the PUC that monitors wholesale market activity.

Independent System Operator (ISO): An ISO manages a transmission grid. Its responsibilities include providing non-discriminatory access to the grid, managing congestion, maintaining the reliability and security of the grid, and providing billing and settlement services. ERCOT, SERC, SPP and WECC are ISOs.

Midcontinent Independent Transmission System Operator (MISO): MISO monitors the grid that covers the Midwest and most of the southern United States, including parts of southeast Texas, including the Beaumont, Port Arthur and The Woodlands areas.

North American Electric Reliability Council (NERC): The organization consisting of all electric grids in North America. ERCOT, SERC, SPP and WECC are all part of NERC.

Office of Public Utility Counsel (OPUC): OPUC is an agency created to represent the interests of residential and small commercial customers in state utility matters before the PUC, courts, and other utility regulatory agencies.

Regional Transmission Organization (RTO): A form of ISO.

Southwest Power Pool (SPP): The SPP grid covers Oklahoma, Kansas, portions of Arkansas, Louisiana and the Texas Panhandle and parts of northeast Texas, including the cities of Amarillo, Lubbock, Texarkana, Longview and Marshall.

Western Electricity Coordinating Council (WECC): Covering all or part of 14 states, two Canadian provinces and northern Baja California, Mexico, WECC is the largest grid in North America, though it does not have the same centralized oversight as an ISO/RTO. El Paso and its suburbs are located in the WECC service area.

ELECTRIC ENTITIES OPERATING IN TEXAS

Affiliated Retail Electric Provider (Affiliated REP or AREP): A retail electric provider affiliated with or successor in interest to an electric utility certified to serve in its traditional service area. This term was used when the price-to-beat was in effect for residential and small-commercial customers, through December 31, 2006, but today all providers are on equal footing. See Retail Electric Provider (REP).

Aggregator: A buying group that signs up customers to bargain on their behalf for electricity and related services.

Competitive Retail Electric Provider (Competitive REP, CREP or CR): A retail electric provider not affiliated with or successor in interest to the local electric utility. This distinction was made during the time when Affiliated Retail Electric Providers were required to offer the price-to-beat, but today all providers are on equal footing. See Retail Electric Provider (REP).

Electric Cooperative (Co-op): Co-ops are electric businesses owned by the customers they serve, with a governing board that regulates service.

Investor-Owned Utility (IOU): A regulated electric utility owned by a corporation or other private entity. Often IOU refers specifically to a vertically-integrated utility (see below), though it can also refer to a transmission and distribution utility.

Municipally- Owned Utility (Muni, MOU): An electric utility owned by a city or municipality. MOUs are governed entirely by the structure created by their city governments.

Provider of Last Resort (POLR): A company that serves as the interim provider for customers whose retail electric provider has left Texas' market.

Qualified Scheduling Entity (QSE): A Qualified Scheduling Entity submits balanced energy schedules for each 15-minute period for a portion of the electric grid. Each QSE is certified by ERCOT.

Retail electric provider (REP): An entity that sells electric energy to retail customers in this state. A retail electric provider may not own or operate generation assets.

Transmission and Distribution Utility (TDU), Transmission and Distribution Service Provider (TDSP): A company that provides transmission and distribution service. TDUs/TDSPs remain fully regulated by the PUC.

Vertically-Integrated Utility: An investor-owned utility that owns transmission and distribution, generation and provides retail services to its customers, and that is still regulated by the PUC.

TERMS RELATED TO MARKET OPERATION

Ancillary Service: A service in the wholesale market that is necessary to ensure the continuous balance of electricity and load on a minute-by-minute basis. These services are necessary to ensure reliability in the market. QSEs offer ancillary services into the market over multiple time horizons to facilitate power deployment.

Certificate of Convenience and Necessity (CCN): A certificate that must be issued by the PUC to utilities before the initial steps of gaining approval for construction of new power lines can proceed.

Congestion: Transmission congestion results when transmission system operators must limit or re-dispatch generation to maintain the voltage integrity of the grid to ensure reliability. The cost of transmission congestion, assuming that demand is fixed and must be met, is the net cost of the replacement power that must be supplied by other means (e.g., from generators located closer to the loads to be served) to make up for deliveries that cannot be executed as requested.

Cramming: Illegally adding charges to a customer's electric bill for services not requested or authorized by the customer.

Demand Response (DR): A program in which a consumer can reduce their load during times of high usage in exchange for a fee. For example, a large industrial customer can enter into an agreement to reduce operations during the hottest part of a summer day when the electric load is strained and receive compensation for providing that service to the grid.

Direct Assignment: In ERCOT's current, zonal market, direct assignment is the cost incurred by ERCOT to relieve congestion between zones. It is charged to those companies scheduling power between zones.

Distributed Generation (DG): Small-scale generation owned or operated by an end-use consumer to supplement energy needs. Rooftop solar is an example of distributed generation.

Economic Dispatch: The concept of using power from the lowest-cost plant to meet electric demand whenever possible.

Electric Service Identifier (ESID or ES-ID): An identification number for electric meters. Every meter within ERCOT has been assigned an ESID. The term is used by ERCOT and the PUC to count the number of households and businesses that have switched providers.

Grid: A network of transmission and distribution lines used to deliver electricity.

Locational Marginal Price (LMP): The price assessed for congestion costs to a node. See Nodal Market.

Nodal Market: A method of assessing congestion costs to nodes within zones. Currently, in the zonal market, costs within each zone are socialized based on the size of each generator's load. In a nodal market, these costs would be individually assessed based on a smaller node. See Uplift.

Nonbypassable Charge: A charge that is assessed to all retail electric providers by the TDU. These include transition charges and operational charges.

Operating Reserve Demand Curve (ORDC): A complex economic mechanism under discussion at ERCOT designed to provide additional assurance that wholesale power is priced more accurately based on its value, depending on electric demand.

Price-To-Beat (PTB): The price-to-beat was a transitional pricing mechanism approved by the PUC that was made available by the affiliated REP to residential and small-commercial customers through 2006.

Rate Case: A PUC project in which a regulated electric utility (including IOUs and TDUs) is assessed by the PUC to determine the rates the electric utility may charge for its service.

Reliability- Must- Run Status (RMR): When determining whether a power plant should be retired, a reliability council (such as ERCOT) may designate it as RMR, meaning the power plant must remain operational to ensure the grid operates reliably.

Resource Adequacy: The term used to refer to the need for generation to meet electric load. There are many initiatives under discussion at the PUC to address resource adequacy concerns.

Renewable Portfolio Standard (RPS): A legislative or regulatory mandate or goal for power generated from renewable sources.

Slamming: The unauthorized, illegal transfer of a customer's electric service by a retail electric provider.

System Benefit Fund (SBF): The System Benefit Fund was a charge assessed to customers in areas of the state open to electric competition to support an array of programs designed to help low-income Texans, as well as administrative costs of the PUC and the Office of Public Utility Counsel. The SBF was no longer assessed as of September 2014.

Transmission Congestion: See Congestion.

Unbundling: The separation of traditional electric utilities into three companies—retail, wires and generation—by either separating into affiliated companies owned by a common holding company, separating into nonaffiliated companies or selling assets to a third party. Unbundled utilities are governed by code of conduct rules to ensure a fair and competitive market.

Wholesale Market Oversight (WMO): The subset of the electric utility division of the PUC that monitors Texas' wholesale markets for market abuse. WMO is also performed by an Independent Market Monitor, employed by ERCOT and reporting to the PUC