

A

Above-Market Generation:

Electricity produced at costs higher than prevailing market prices.

Actual Peak Load Reductions:

The actual reduction in annual peak load (measured in kilowatts) achieved by consumers that participate in a utility Demand Side Management (DSM) program. It reflects the real changes in the demand for electricity resulting from a utility DSM program that is in effect at the same time the utility experiences its annual peak load, as opposed to the installed peak load reduction capability (i.e., Potential Peak Load Reduction). It should account for the regular cycling of energy efficient units during the period of annual peak load.

Advanced Metering:

Device for recording or communicating actual electric use during minutes, hours, days or weeks useful for time-of-day, on-peak/off peak or other billing rates.

Affiliated Retail Electric Provider:

A Retail Electric Provider (REP) that is owned, but separately operated, by a former monopoly electric utility.

Ancillary Services:

Those services necessary to support the transmission of energy from resources to loads while maintaining reliable operation. They include reactive power supply, voltage support, regulation, and frequency control, among other things.

Avoided Cost:

The cost to the utility if it had generated or otherwise purchased the power. It is a benchmark price for energy services, used to compare resource alternatives. Avoided cost is the marginal long-term or short-term production cost that could be avoided by an alternative supply-side or demand-side resource. In many states, avoided cost rates have been used as the power purchase price offered to independent suppliers (co-generators).

B

Base Bill:

A charge calculated through multiplication of the rate from the appropriate electric rate schedule by the level of consumption.

Base Load:

The minimum energy level an electric plant must provide you on a constant basis.

Base Load Capacity:

The generating equipment normally operated to serve loads on an around-the-clock basis.

Basic Services:

Services that are necessary for the physical delivery of service, including generation, transmission and distribution.

BCF:

The abbreviation for 1 billion cubic feet.

Bilateral Agreement:

Written statement signed by a pair of communicating parties that specifies what data may be exchanged between them.

Bilateral Contract:

A contract agreement between two willing parties. In a competitive electric market, bilateral contracts would be agreements between suppliers and customers that specify the terms and conditions for pricing and delivery of electric service. A contractual system between buyer and a seller to obtain generation and/or ancillary services of a given type, duration, timing and reliability over a contractual term.

British Thermal Unit (BTU):

A measure of energy in the English system measurement, roughly the amount of heat required to raise one pound of water one degree Fahrenheit at or near 39.2F. This unit of measuring heat will be replaced by the "joule."

Broker:

A firm that acts as an agent or "middle man" in the sale and purchases of electricity, but never owns the electricity and typically does not own generating facilities.

Bulk Power Market:

A market where wholesale purchases and sales of electricity are made.

Bundled:

Prior to restructuring, electric utilities offered their services in a "bundled" form. A single utility provided the generation, transmission and distribution to customers.

Bundled Utility Service:

All generation, transmission, and distribution services provided by one entity for a single charge. This would include ancillary services and retail services.

C**Capability:**

The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given of time without exceeding approved limits of temperature and stress.

Capacity:

The amount of electric power delivered or required for which a generator, turbine, transformer, transmission circuit, station, or system is rated by the manufacturer.

Capacity (Purchased):

The amount of power available for purchase from outside the system to supply energy or capacity.

Capacity Charge:

An element in a two-part pricing method used in capacity transactions (energy charge is the other element). The capacity charge, sometimes called Demand Charge, is assessed on the amount of capacity being purchased and expressed in \$/kW-month or \$/MW-day.

Cogeneration:

The production of electricity and another form of useful energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes. The use of waste heat from an electrical generating plant for other purposes, such as heating. Also, the use of waste heat from a high-temperature industrial process to generate electricity.

Coincidental Demand:

The sum of two or more demands that occur in the same time interval.

Coincidental Peak Load:

The sum of two or more peak loads that occur in the same time interval.

Combined Cycle:

An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The exiting heat is routed to a conventional boiler or to a heat recovery steam generator for utilization by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit.

Combined Cycle Unit:

An electric generating unit that consists of one or more combustion turbines and one or more boilers with a portion of the required energy input to the boiler(s) provided by the exhaust gas of the combustion turbine(s).

Combined Pumped-Storage Plant:

A pumped-storage hydroelectric power plant that uses both pumped water and natural stream flow to produce electricity.

Competitive Transition Charge (CTC):

A non-by passable charge levied on each customer of a distribution utility, including those who are served under contracts with nonutility suppliers, for recovery of a utility's transition costs.

Congestion:

A condition that occurs when insufficient transfer capacity is available to implement all of the preferred schedules for electricity transmission simultaneously.

Consumption (Fuel):

The amount of fuel used for gross generation, providing standby service, start-up and/or flame stabilization.

Contract for Differences:

A financial instrument used to hedge against the daily or hourly fluctuating prices that would be offered by an ISO or a "power exchange." A customer would be able to purchase a financial hedge from another party who may or may not have contractual rights to any specific generation.

Contract Price:

Price of fuels marketed on a contract basis covering a period of 1 or more years. Contract prices reflect market conditions at the time the contract was negotiated and therefore remain constant throughout the life of the contract or are adjusted through escalation clauses. Generally, contract prices do not fluctuate widely.

Contract Receipts:

A purchase based on a negotiated agreement that generally covers a period of 1 or more years.

Cooperative Electric Utility:

An electric utility legally established to be owned by and operated for the benefit of those using its service. The utility company will generate, transmit, and/or distribute supplies of electric energy to a specified area not being serviced by another utility. Such ventures are generally exempt from Federal income tax laws. The Rural Electrification Administration, U.S. Department of Agriculture, has initially financed most electric cooperatives.

Cost-of-Service Regulation:

Traditional electric utility regulation under which a utility is allowed to set rates based on the cost of providing service to customers and the right to earn a limited profit.

Current (Electric):

A flow of electrons in an electrical conductor. The strength or rate of movement of the electricity is measured in amperes.

Customer Charge:

Part of the monthly basic distribution charge to partially cover costs for billing, meter reading equipment, service line maintenance and equipment. This charge is the same no matter how much electricity you use.

Customer Choice:

The freedom of a retail customer to purchase electric services, either individually or through voluntary aggregation with other retail customers, from the provider(s) of the customer's choice and to choose among various fuel types, energy efficiency programs, and renewable power suppliers.

D

Daily Peak:

The greatest amount of electricity used during a certain period in a day, such as an hour, half-hour or quarter hour.

Day-Ahead Market:

The forward market for energy and ancillary services to be supplied during the settlement period of a particular trading day that is conducted by the Independent System Operator, the power exchange, and other Scheduling Coordinators. This market closes with the Independent System Operator's acceptance of the final day-ahead schedule.

Day-Ahead Schedule:

A schedule prepared by a Scheduling Coordinator or the Independent System Operator before the beginning of a trading day. This schedule indicates the levels of generation and demand scheduled for each settlement period that trading day.

Delivering Party:

The entity supplying the capacity and/or energy to be transmitted at Point(s) of Receipt.

Demand:

The amount of electricity that a customer uses at any given moment or averaged over period of time. Demand is usually expressed in kilowatts or Megawatts. The primary source of demand is the power-consuming equipment of customers.

Demand Side Management (DSM):

Processes and investments in equipment made by power companies and commercial customers to reduce the customers' "demand" for electricity or to shift the customers use away from periods of high electrical demand.

Deregulation:

Removal or relaxation of regulations or controls governing a business or service operation such as utilities. Designated Agent Any entity that performs actions or functions on behalf of the Transmission Provider, an eligible Customer or the Transmission Customer required under the Tariff.

Direct Access:

An arrangement that gives customers the choice of buying electricity from any supplier in the competitive market. Under direct access, customers could buy power from any generator and use the transmission and distribution network to transport the electricity.

Distribution:

The flow of electricity generally at lower voltages from transmission facilities to the ultimate customer — usually businesses and homes. The local wires, transformers, substations and other equipment used to deliver electricity for the electric distribution company to your home or business. The distribution charge is regulated by the PUC. This charge will vary based on how much electricity is used. The facilities of the electric system that deliver electricity from substations to customers. The distribution system "steps down" power from high-voltage transmission lines to a level that can be used in homes and businesses.

Distribution System:

The portion of an electric system that is dedicated to delivering electric energy to an end user.

Distribution Line:

The local part of an electric system that delivers electricity to retail customers.

E**Electric Distribution Company (EDC):**

The company that owns the power lines and equipment necessary to deliver purchased electricity to the customer.

Electric Power Plant:

A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Service Provider:

n entity that provides electric service to a retail or end-use customer.

Electric Utility:

A corporation, agency, or authority that owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public and files forms listed in the Code of Federal Regulations.

Electricity:

A property of matter created by the movement of electrons. This "movement" is initiated usually by a generator fueled by any number of energy resources such as coal, uranium, water (hydropower), or directly converted from solar radiation in photovoltaic cells. Electricity is not energy per se, but the "carrier" of energy that originates in fossil fuel and renewable energy sources.

Electricity Generation:

The process of producing electric energy or transforming other forms of energy into electric energy. Also, the amount of electric energy produced or expressed in watt-hours (Wh).

Energy:

Energy is the capacity for doing work. Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatt-hours, while heat energy is usually measured in British thermal units.

Energy Charge:

That portion of the charge for electric service based upon the electric energy that was consumed or billed. The energy charge is usually measured in kilowatt-hours (kWh).

Energy Conservation:

Actions that are taken to reduce or manage energy consumption in a cost-effective and efficient manner. Methods of reducing energy include using insulation, increasing energy efficiency and changing patterns of use.

Energy Consumption:

The use of energy as a source of heat or power or as an input in the manufacturing process. Energy consumption determined by multiplying the demand by the time period over which the energy was used. The kilowatt-hour is the typical unit of measure for energy consumption.

Energy Efficiency Programs:

Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatt or kilowatt hours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

Energy Services Company (ESCO):

A company offering electricity, specialized or customized energy services by providing advice and products to customers.

Energy Source:

The primary source that provides the power that is converted to electricity through chemical, mechanical, or other means. Energy sources include coal, petroleum and petroleum products, gas, water, uranium, wind, sunlight, geothermal, and other sources.

EPACT:

The Energy Policy Act of 1992 addresses a wide variety of energy issues. The legislation creates a new class of power generators, exempt wholesale generators, that are exempt from the provisions of the Public Holding Company Act of 1935 and grants the authority to the Federal Energy Regulatory Commission to order and condition access by eligible parties to the interconnected transmission grid.

Escape Provision:

A contract clause allowing one to break a contract, usually with a penalty.

F**Federal Energy Regulatory Commission (FERC):**

The Federal Energy Regulatory Commission regulates the price, terms, and conditions of power sold in interstate commerce and regulate the price, terms and conditions of all transmission services. FERC is the federal counterpart to state utility regulatory commissions. For example, FERC sets and enforces the wholesale electric rates that investor-owned utilities charge rural electric cooperatives and other wholesale customers; also licenses hydroelectric projects.

FERC order 888:

The FERC's open transmission access rule. Order No. 888 opens wholesale power sales to competition. It requires public utilities owning, controlling, or operating transmission lines to file nondiscriminatory open access tariffs that offer others the same transmission service they provide.

Federal Power Act:

Enacted in 1920, and amended in 1935, the Act consists of three parts. The first part incorporated the Federal Water Power Act administered by the former Federal Power Commission, whose activities were confined almost entirely to licensing non-Federal hydroelectric projects. Parts II and III were added with the passage of the Public Utility Act. These parts extended the Act's jurisdiction to include regulating the interstate transmission of electrical energy and rates for its sale as wholesale in interstate commerce. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Firm Gas:

Gas sold on a continuous and generally long-term contract.

Firm Power:

Power or power-producing capacity intended to be available at all times during the period covered by a guaranteed commitment to deliver, even under adverse conditions.

Firm Transmission Service:

Point-to-point transmission service that is reserved and/or scheduled for a term of one year or more and that is of the same priority as that of the Transmission Provider's firm use of the transmission system. Firm Transmission service that is

reserved and/or scheduled for a term of less than one year shall be considered Short-Term Firm Transmission Service for the purposes of service liability.

Fixed Price:

A price, usually per kilowatt-hour, that remains the same over the term of the contract.

Flat Rate:

A fixed charge for goods and services that does not vary with changes in the amount used, volume consumed or units purchased.

Forced Outage:

The shutdown of a generating unit, transmission line or other facility, for emergency reasons or a condition in which the generating equipment is unavailable for load due to unanticipated breakdown.

Fossil-Fuel Plant:

A plant using coal, petroleum, or gas as its source of energy.

Fuel:

Any substance that can be burned to produce heat; also, materials that can be fissioned in a chain reaction to produce heat.

Fuel Chain:

The chain of activities involved in transforming energy into forms more convenient for society. This chain may include some or all of the following: fuel exploration, extraction, preparation, transportation, conversion to electricity, distribution and waste disposal.

Fuel Expenses:

These costs include the fuel used in the production of steam or driving another prime mover for the generation of electricity. Other associated expenses include unloading the shipped fuel and all handling of the fuel up to the point where it enters the first bunker, hopper, bucket, tank, or holder in the boiler-house structure.

Full-Forced Outage:

The net capability of main generating units that is unavailable for load for emergency reasons.

Futures Market:

Arrangement through a contract for the delivery of a commodity at a future time and at a price specified at the time of purchase. The price is based on an auction or market basis. This is a standardized, exchange-traded, and government regulated hedging mechanism.

G

Gas:

A fuel burned under boilers and by internal combustion engines for electric generation. These include natural, manufactured and waste gas.

Gas-Turbine Electric Power Plant:

A plant in which the prime mover is a gas turbine. A gas turbine typically consists of an axial-flow air compressor and one or more combustion chambers where liquid or gaseous fuel is burned. The hot gases expand to drive the generator and then are used to run the compressor.

Generating Unit:

Any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.

Generation (Electricity):

Production of electricity. The process of producing electrical energy from other forms of energy; also, the amount of electric energy produced, usually expressed in kilowatt-hours (kWh) or megawatt-hours (MWh).

Generation Company:

A regulated or non-regulated entity (depending upon the industry structure) that operates and maintains existing generating plants. The generation company may own the generation plants or interact with the short-term market on behalf of plant owners. In the context of restructuring the market for electricity, the generation company is sometimes used to describe a specialized "marketer" for the generating plants formerly owned by a vertically integrated utility.

Generator:

A machine that converts mechanical energy into electrical energy.

Geothermal Energy:

Energy from the internal heat of the Earth, which may be residual heat, friction heat, or a result of radioactive decay. The heat is found in rocks and fluids at various depths and can be extracted by drilling or pumping.

Geothermal Plant:

A plant in which the prime mover is a steam turbine. The turbine is driven either by steam produced from hot water or by natural steam that derives its energy from heat found in rocks or fluids at various depths beneath the surface of the earth. Drilling and/or pumping extract the energy.

Geothermal Power:

The natural heat of the Earth that is conducted or convected to the Earth's surface through volcanoes and hot springs. By harnessing this energy and using it to power steam turbines, we can convert geothermal energy into electricity that we can use.

Gigawatt (GW):

One billion watts.

Gigawatt hour (GWh):

One billion watt hours.

Green Power:

Power that is generated from renewable energy sources. Specific definitions of green power vary in each state. Typically, wind, solar and bio-mass fuels are considered sources of green power.

Greenhouse Effect:

The increasing mean global surface temperature of the earth caused by gases in the atmosphere (including carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbon). The greenhouse effect allows solar radiation to penetrate but absorbs the infrared radiation returning to space.

Grid:

The transportation highway over which electricity travels from supplier to customer. A network for the transmission of electricity throughout the state, region or nation. The term is also used to refer to the layout of an electric distribution system.

Grid Operator:

The entity that oversees the delivery of electricity over the grid to the customer, while assuring consistently high levels of reliability, and public and worker safety. The grid operator potentially could be independent of the utilities and suppliers.

Gross Generation:

The total amount of electric energy produced by the generating units at a generating station or stations, measured at the generator terminals.

H**Hedging Contracts:**

Contracts, which establish future prices and quantities of electricity independent of the short-term market. Derivatives may be used for this purpose.

Hourly Non-Firm Transmission Service:

Point-to-point transmission that is scheduled and paid for on an as-available basis and is subject to interruption.

Hourly Metering or Time of Use Metering:

Tracking or recording your consumption during a specific time period.

Hydrocarbon:

An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, a constituent of natural gas) to the very heavy and very complex. Natural sources of hydrocarbons are the by-products of digestion and decomposition (e.g., rotting, spoiling, putrefying). Coal, natural gas, oil, sugar, starches, and plastics are all composed of hydrocarbons. The incomplete combustion of hydrocarbons from fossil fuels contributes to our pollution and global warming problems.

Hydroelectric Plant:

A plant in which the turbine generators are driven by falling water.

Hydroelectric Power (HEP):

Electricity generated by moving water. In a typical HEP scheme, water stored in a reservoir, often created by damming a river, gets piped into water turbines and coupled to electricity generators. In pumped storage plants, water flowing through the turbines is recycled.

Hydropower:

The production of electricity from the kinetic energy of falling water. Hydropower is the use of the potential energy contained in water behind dams. Release of water through dam spillways converts potential energy into kinetic energy, which then helps turn a turbine and create power that we can use.

I**Independent Power Producer (IPP):**

Wholesale electricity producers (other than qualifying facilities under the Public Utilities Regulatory Policies Act of 1978) that are unaffiliated with franchised utilities in the area in which the independent power producers are selling power and that lack significant marketing power. Unlike traditional electric utilities, independent power producers do not possess transmission facilities that are essential to their customers and do not sell power in any retail service territory where they have a franchise. An entity not regulated by the government as a

public utility that owns or operates an electricity generating facility and offers wholesale electric power for sale to utilities.

Independent System Operator (ISO):

An independent management team set up to run transmission systems owned by two or more entities. Under the arrangement, owners retain title to their assets and the ISO runs the systems as a joint operation. The ISO files a single transmission tariff for the region, plans and schedules transmission outages, takes a lead role in transmission system planning, collects transmission charges and makes payments to the actual providers. An independent entity that controls a power grid to coordinate the generation and transmission of electricity and ensure a reliable power supply. In current models, ISOs would be independent of states' utilities and would be regulated by the FERC.

Informal Complaint:

A dispute or disagreement about a utility problem filed by a consumer with the PUC's Customer Protection Division. A Customer Assistance investigator reviews the informal complaint and tries to resolve the dispute. Most responses are in the form of a decision that the customer or company can appeal. If an informal complaint is appealed, it becomes a formal complaint.

Interruptible Gas:

Gas sold to customers with a provision that permits curtailment or cessation of service at the discretion of the distributing company under certain circumstances, as specified in the service contract.

Interruptible Load:

Refers to program activities that, in accordance with contractual arrangements, can interrupt consumer load at times of seasonal peak load by direct control of the utility system operator or by action of the consumer at the direct request of the system operator. It usually involves commercial and industrial consumers. In some instances the load reduction may be affected by direct action of the system operator (remote tripping) after notice to the consumer in accordance with contractual provisions. For example, loads that can be interrupted to fulfill planning or operation reserve requirements should be reported as Interruptible Load. Interruptible Load as defined here excludes Direct Load Control and Other Load Management. (Interruptible Load, as reported here, is synonymous with Interruptible Demand reported to the North American Electric Reliability Council on the voluntary Form EIA-411, "Coordinated Regional Bulk Power Supply Program Report," with the exception that annual peak load effects are reported on the Form EIA-861 and seasonal (i.e., summer and winter) peak load effects are reported on the EIA-411).

Interruptible Rate:

A special utility rate given to certain industrial customer who agrees to have their service reduced or temporarily stopped as part of an agreement with their electric provider.

Investor-Owned Utility (IOU):

A utility operated by a public corporation that generates, transmits, and distributes electric energy for a profit. An electric utility company owned and operated by private investors.

J

Joule:

Named in honor of British physicist James P. Joule (rhymes with pool) who proved in 1843 that a specific amount of work was converted into a specific amount of heat. A joule (j) is now a unit for all forms of energy. One joule of work occurs when the force of one NEWTON is exerted on an object moving in the direction of the force, a distance of one meter. It takes about one joule to lift an apple over your head. As the transition from the English system of energy measurement to the international system of units (SI) picks up momentum, we will soon become accustomed to hearing more frequently of kilojoules (Kj) and megajoules (Mj). One kilowatt-hour = 3.6×10^6 joules. One calorie = 4.187 joules.

K

Kilowatt (kW):

One thousand watts, measure of demand for power.

Kilowatt-hour (kWh):

The standard unit of measure for electricity. The total number of kilowatt-hours charged to your bill is determined by your electricity use. Specifically, a Kilowatt Hour is defined as the unit of energy that is expended in one hour by one kilowatt of power.

L

Load:

The electric power used by devices connected to an electrical generating system. The amount of electric power required to meet customers' use in a given time period. The amount of electric power delivered or required at any specific point or

points on a system. The requirement originates at the energy-consuming equipment of the consumers.

Load Management:

Shifting use of electricity from periods of high demand to periods of lower demand, when the cost of electricity usually is lower.

Load Profile:

Measurement of a customer's electricity usage over a period of time that shows how much and when a customer uses electricity. Load profiles can be used by REPs and transmission system operators to forecast electricity supply.

M

Market Clearing Price:

The price at which supply equals demand for the Day Ahead and/or Hour Ahead Markets.

Market Participants:

Any parties or agents who participate in the electrical energy marketplace through either the buying or selling of electrical energy or services.

Market Power:

When one company owns a sufficiently large percentage of generation, transmission, or distribution capabilities in a region to allow it to influence the price of electricity by forcing the purchase of its own power.

Maximum Demand:

The greatest of all demands of the load that has occurred within a specified period of time.

Mcf:

One thousand cubic feet.

Megawatt (MW):

One thousand kilowatts. This term is generally used to measure the generating capacity of power plants. The average size of U.S. power plants is approximately 200 MW. A unit of power equal to 1 million watts. Put another way, it's the amount of electric energy required to light 10,000 10-watt bulbs.

Megawatt-hour (mWh):

1 million watts used for one hour. If you purchased a megawatt-hour of energy for a nickel per kilowatt-hour, it would cost you 1,000 nickels, or \$50. Using a

kWh you could burn one 100-watt incandescent for 24 hours a day for about 14 months, or 3 hours a day for over 9 years.

MMcf:

One million cubic feet.

Monopoly:

One seller of electricity with control over market sales.

Municipal Utility:

Also known as a municipally owned electric system) A provider of utility services owned and operated by a municipal government. A municipal utility is owned and operated by a city. In most cases, municipal utility rates are set at the city level, either by the municipal administration or by a local utility board or commission. In some limited circumstances, state-level regulations apply. Municipal utilities often have access to low-cost power from federal hydroelectric projects and can obtain low interest loans, and they are exempt from income and other taxes at the federal and state levels. These factors contribute to lower financing costs for plant and equipment. Municipal utilities serve roughly 14 percent of the nation's electric customers.

Municipally Owned Utility (Muni):

A non-profit utility that is owned and operated by the municipality it serves.

N

Net Generation:

Gross generation less the electric energy consumed at the generating station for station use.

Native Load Customers:

The wholesale and retail customers on whose behalf the Transmission Provider, by statute, franchise, regulatory requirements, or contract, has undertaken an obligation to construct and operate the Transmission Provider's system to meet the reliable electric needs of such customers.

Natural Gas:

A gaseous mixture of hydrocarbon compounds, primarily methane, delivered via pipeline for consumption. It is used as a fuel for electricity generation, a variety of uses in buildings, and as raw material input and fuel for industrial processes.

Note: This product, also referred to as dry natural gas or consumer-grade natural gas, is the product that re-mains after wet natural gas has been processed at lease facilities and/or natural gas processing plants. This processing removes non hydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen

sulfide, and nitrogen) that would otherwise make the gas unmarketable and natural gas liquids.

Natural Gas, Wet:

A mixture of hydrocarbon compounds and small quantities of various non hydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentanes. Typical non-hydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen. Under reservoir conditions, natural gas and the liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with oil and are not distinguishable at the time as separate substances.

Natural Monopoly:

A natural monopoly arises when there are very large "economies of scale", so that the larger the quantity that a single factory produces, the cheaper the average costs per unit get. This might occur when production requires extremely large initial capital investments to enter the market but additional output requires only very modest additional outlays beyond the fixed initial investment. Under such circumstances, the firm with the largest share of the market is in a position to price its output at a level below its competitors' costs of production and still make a profit while driving them out of the business - and the larger its market share gets, the lower its unit costs become, until a monopoly position is finally obtained. (It is often argued that local telephone service, natural gas supply, and electrical power distribution fall into this category because of the heavy initial investments in networks of telephone lines, electrical lines and gas lines that are involved.) According to economic theory, a public monopoly governed by regulation is justified when an industry exhibits natural monopoly characteristics.

Net Generation:

Gross generation minus plant use from all electric utility owned plants. The energy required for pumping at a pumped-storage plant is regarded as plant use and must be deducted from the gross generation.

Non coincidental Peak Load:

The sum of two or more peak loads on individual systems that do not occur in the same time interval. Meaningful only when considering loads within a limited period of time, such as a day, week, month, a heating or cooling season, and usually for not more than 1 year.

Non-Firm Power: Power or power-producing capacity supplied or available under a commitment having limited or no assured availability.

Non-Firm Transmission Service:

Point-to-point transmission service that is reserved and/or scheduled on an as-available basis and is subject to interruption. Non-firm Transmission Service is available on a stand-alone basis as either Hourly Non-firm Transmission Service or Short-Term Non-firm Transmission Service.

Nonutility Power Producer:

A corporation, person, agency, authority, or other legal entity or instrumentality that owns electric generating capacity and is not an electric utility. Nonutility power producers include qualifying co generators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated franchised service area, and which do not file forms listed in the Code of Federal Regulations, Title 18, Part 141.

North American Electric Reliability Council (NERC):

The Northern American Electric Reliability Council. An association for regional councils, which provides coordination and planning. A non-profit organization formed by the electric utility industry to ensure a reliable, adequate power supply in North America. NERC plays an important role in establishing the standards, rules and forms of cooperation that contribute to system reliability. NERC was formed in 1969 and consists of 10 regional councils comprised of individual electric utilities in the United States, Canada and Mexico. The transmission systems of the members of these regional councils interconnect, creating flexible regional systems that allow the transfer of power among areas to maintain one of the world's most reliable electric systems. NERC Regions are: ASCC - Alaskan System Coordination Council ECAR - East Central Area Reliability Coordination Agreement ERCOT - Electric Reliability Council of Texas MAIN - Mid-America Interconnected Network MAAC - Mid-Atlantic Area Council MAPP - Mid-Continent Area Power Pool NPCC - Northeast Power Coordinating Council SERC - Southeastern Electric Reliability Council SPP - Southwest Power Pool WSCC - Western Systems Coordinating Council.

Nuclear Electric Power:

Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

Nuclear Energy:

Energy from the inner core or nucleus of the atom, as opposed to energy released in chemical processes, which derives from the electrons surrounding the nuclei. Nuclear fusion is the release of thermonuclear energy by the conversion of hydrogen nuclei to helium nuclei, in a continuing reaction in the sun and other stars. Nuclear fusion is the principle behind thermonuclear weapons. Attempts to harness fusion for commercial power production have so far not succeeded.

O

Obligation To Serve:

Under traditional regulation, it is the duty of a regulated utility to provide service to all customers in its service territory on a non-discriminatory basis.

Off-Peak/On-Peak:

Block of time when energy demand and price is low (off-peak) or high (on-peak).

Open Access:

Gives all customers equal opportunity to the grid.

Open Access Same-Time Information System (OASIS):

OASIS is a real-time information-sharing system that enables all buyers and sellers of electricity to access the transmission costs for all other buyers and sellers. This system is designed to ensure that transmission owners and their affiliates do not have an unfair advantage in using transmission to sell power.

Outage:

The period during which a generating unit, transmission line, or other facility is out of service.

P

Pancaking:

The effect of adding on charges as power moves through several transmission systems.

Peak Demand:

The maximum load during a specified period of time.

Peak Load Plant:

A plant usually housing old, low-efficiency steam units; gas turbines; diesels; or pumped-storage hydroelectric equipment normally used during the peak-load periods.

Peaking Capacity:

Capacity of generating equipment normally reserved for operation during the hours of highest daily, weekly, or seasonal loads. Some generating equipment may be operated at certain times as peaking capacity and at other times to serve loads on an around-the-clock basis.

Performance Based Ratemaking (PBR):

Under performance-based ratemaking, rates for utility service would no longer be based on cost-of-service, but instead on performance standards and market indices. PBR allows a utility greater flexibility to manage the costs of its electric system and to price its power at competitive levels by taking the market risk for recovering the revenues.

Photovoltaic Cells:

Used to directly convert solar radiation into electricity. Materials called semiconductors, usually made from pure silicon, transfer light energy (photons) into electrical energy in a process known as the photoelectric effect.

Photovoltaic Energy:

Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline, Natural Gas:

A continuous pipe conduit, complete with such equipment as valves, compressor stations, communications systems, and meters, for transporting natural gas and/or supplemental gaseous fuels from one point to another, usually from a point in or beyond the producing field or processing plant to another pipeline or to points of use. Also refers to a company operating such facilities.

Point(s) of Delivery:

Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and/or energy transmitted by the Transmission Provider will be made available to the Receiving Party. The Point(s) of Delivery shall be specified in the Service Agreement.

Point-to-Point Transmission Service:

The reservation and/or transmission of energy on either a firm basis and/or a non-firm basis from Point(s) of Receipt to Point(s) of Delivery, including any Ancillary Services that are provided by the Transmission Provider in conjunction with such service.

Point(s) of Receipt:

Point(s) of interconnection on the Transmission Provider's Transmission System where capacity and/or energy will be made available to the Transmission Provider by the Delivering Party. The Point(s) of Delivery shall be specified in the Service Agreement.

Potential Peak Load Reduction:

The amount of annual peak load reduction capability (measured in kilowatts) that can be deployed from Direct Load Control, Interruptible Load, Other Load

Management, and Other DSM Program activities. It represents the load that can be reduced either by the direct control of the utility system operator or by the consumer in response to a utility request to curtail load. It reflects the installed load reduction capability, as opposed to the Actual Peak Reduction achieved by participants, during the time of annual system peak load.

Power: The rate at which work is done or how much work is accomplished, divided by how long it took to do the work. The unit of power is the watt (W) or joule per second. If you lift a sandwich above your head in one second, you have used about one watt of power. The word power is derived from the Latin word "posse" meaning, "be able."

Power Exchange:

The entity that will establish a competitive spot market for electric power through day- and/or hour-ahead auction of generation and demand bids.

Power Exchange Generation:

Generation being scheduled by the power exchange.

Power Exchange Load:

Load that has been scheduled by the power exchange and which is received through the use of transmission or distribution facilities owned by participating transmission owners.

Power Generation Company:

A competitive company that operates and maintains existing generation plants. The company may own the generation plants or may interact with the short-term market for electric power on behalf of plant owners.

Power Marketer:

An entity, such as a supply coordinator or broker, that obtains energy from any source or combination of sources, including independent generators, utility system power or spot purchases, for delivery to a utility or end user.

Power Pool:

An arrangement between two or more interconnected electric utilities to coordinate the operation of their generating or transmission facilities, or both.

Price Cap:

A level above, which regulated prices, may not rise.

Price to Beat:

Retail Electric Providers affiliated with pre-existing investor-owned utilities are required to offer residential and small commercial customers in its former service

area a "price to beat." This is a price that is 6% lower than the rate charged by its affiliated electric utility on January 1, 1999. The Retail Electric Provider cannot adjust this price until either (a) 36 months after retail competition is introduced or (b) 40% of the customers in its affiliated Transmission and/or Distribution Service Provider area have switched to another retailer.

Price Transparency:

Market prices for generation and transmission service made available to the public so that customers know how much they will pay for power supply and transportation in a deregulated market.

Provider Of Last Resort:

The POLR will serve customers in areas open to competition on January 1, 2002, where the Retail Electric Provider (REP) of choice fails to continue service. The PUCT rules provide that POLR's must offer a firm, non-discountable, seasonally differentiated rate to any of three consumer classes: residential, small nonresidential, and large nonresidential. The POLR service is not supposed to be competitive, innovative or anything other than basic standard service.

Pumped-Storage Hydroelectric Plant:

A plant that usually generates electric energy during peak-load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Public Utility Regulatory Policies Act of 1978 (PURPA):

The federal act outlines requirements for state utility commissions, electric utilities, independent power producers and certain federal regulatory agencies to encourage the use of alternative energy sources in the generation of electric power. The act created a market for independent power producers called qualifying facilities (QFs), requiring utilities to buy power from certain power providers.

Public Utility Holding Company Act of 1935 (PUHCA):

Act approved by the U.S. federal government that imposed restrictions on the large interstate holding companies that controlled the nation's private utilities by limiting the activities of holding companies to utility operations in defined geographic areas. This led to vertically integrated monopolies that owned the generating facilities, transmission lines, and distribution systems in an exclusive service area.

Public Utilities Commission:

The state regulatory agency that governs retail utility rates and practices and, in many cases, issues approvals for the construction of new generation and

transmission facilities. On average, roughly 90 percent of a utility's operations are regulated by the state commission.

Purchased Power Adjustment:

A clause in a rate schedule that provides for adjustments to the bill when energy from another electric system is acquired and it varies from a specified unit base amount.

Q

Qualifying Facility (QF):

A small power producer or co generator that meets PURPA guidelines and qualifies to supply generating capacity to electric utilities, which must purchase this power at a price approved by state PUC's.

R

Rate Base:

The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash, working capital, materials and supplies, and deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.

Ratemaking Authority:

A utility commission's legal authority to fix, modify, approve, or disapprove rates, as determined by the powers given the commission by a State or Federal legislature.

Real-time Pricing:

Rates that reflect the actual moment-by-moment cost of providing electricity.

Receiving Party:

The entity receiving the capacity and/or energy transmitted by the Transmission Provider to the Point(s) of Delivery.

Reciprocity: Assurance that utilities, if and when their markets are no longer protected, are allowed to compete in the markets of their competitors.

Regional Transmission Group:

A group of voluntary organizations made up of transmission users and providers that simplify the use of existing transmission facilities, coordinate planning and expansion, and resolve disputes.

Regulation:

A rule or law established by the federal or state government that sets procedures that must be followed.

Reliability:

Electric system reliability has two components — adequacy and security. Adequacy is the ability of the electric system to supply the aggregate electrical demand and energy requirements of the customers at all times, taking into account scheduled and unscheduled outages of system facilities. Security is the ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system facilities.

Renewable Energy:

Energy obtained from sources that are essentially inexhaustible (un-like, for example, fossil fuels, of which there is a finite supply). Renewable sources of energy include conventional hydroelectric power, wood, waste, geothermal, wind, photovoltaic, and solar thermal energy.

Renewable Resources:

Naturally, but flow-limited resources that can be replenished. They are virtually inexhaustible in duration but limited in the amount of energy that is available per unit of time. Some (such as geothermal and biomass) may be stock-limited in that stocks are depleted by use, but on a time scale of decades, or perhaps centuries, they can probably be replenished. Renewable energy resources include: biomass, hydro, geothermal, solar and wind. In the future, they could also include the use of ocean thermal, wave, and tidal action technologies. Utility renewable resource applications include bulk electricity generation, on-site electricity generation, distributed electricity generation, non-grid-connected generation, and demand-reduction (energy efficiency) technologies.

Renewables:

Resources used to generate electricity that are capable of being replaced naturally. This includes fuels and technologies such as energy from waste, geothermal energy, landfill and mine-based methane gas, low head hydropower, solar photovoltaic energy, solar thermal energy, sustainable biomass energy, and wind power.

Reregulation:

The design and implementation of regulatory practices to be applied to the remaining regulated entities after restructuring of the vertically integrated electric utility. The remaining regulated entities would be those that continue to exhibit characteristics of a natural monopoly, where imperfections in the market prevent the realization of more competitive results, and where, in light of other policy considerations, competitive results are unsatisfactory in one or more respects. Regulation could employ the same or different regulatory practices as those used before restructuring.

Reserve Margin (Operating):

The amount of unused available capability of an electric power system at peak load for a utility system as a percentage of total capability.

Restructuring:

The reconfiguration of the vertically integrated electric utilities. Restructuring usually refers to separation of the various utility functions — transmission, distribution, generation, and services — into individually operated and owned entities and the resulting creation of a competitive market for electricity supply.

Retail:

Sales covering electrical energy supplied for residential, commercial, and industrial end-use purposes. Other small classes, such as agriculture and street lighting, also are included in this category.

Retail Competition:

The concept under which multiple sellers of electric power can sell directly to end-use customers and the process and responsibilities necessary to make it occur.

Retail Electric Provider (REP):

An entity that sells electric energy to retail customers in Texas. A retail electric provider may not own or operate generation assets.

Retail Customers:

Customers, including residences and businesses, who themselves use the electricity they purchase; also referred to as end-use customers.

Retail Market:

A market in which electricity and other energy services are sold directly to the end-use customer.

Reliability:

The ability to deliver uninterrupted electricity to customers on demand and to withstand sudden disturbances such as short circuits or loss of major system components. This encompasses the reliability of the generation system and of the transmission and distribution system. Reliability may be evaluated by the frequency, duration and magnitude of any adverse effects on consumer service.

Renewable Energy:

Electricity generated from sources such as solar, wind, and geothermal power rather than from fossil fuels.

Retail Wheeling:

A transmission or distribution service by which utilities deliver electric power sold by a third party directly to retail customers. This would allow an individual retail customer to choose an electricity supplier but still receive electricity using the power lines of the local utility.

Rural Electric Cooperative (Co-op):

(also called a cooperatively owned electric utility) In the United States, a rural electric cooperative is a customer-owned utility created to transmit and distribute power in rural areas. Rural electric cooperatives benefit from below-market financing from the Rural Utilities Service (formerly the Rural Electrification Administration), as well as low-cost power from federal hydroelectric projects. In addition, most do not pay state or federal income taxes. Typically, a board of directors sets the rates for rural electric cooperatives elected from among the cooperative's members. Today, rural electric cooperatives serve about 11 percent of U.S. electric customers.

S

Scheduling Coordinators:

Entities certified by the Federal Energy Regulatory Commission that act as a go-between with the Independent System Operator on behalf of generators, supply aggregators (wholesale marketers), retailers, and customers to schedule the distribution of electricity.

Scheduled Outage:

The shutdown of a generating unit, transmission line, or other facility, for inspection or maintenance, in accordance with an advance schedule.

Service Agreement:

The initial agreement and any supplements thereto entered into by the Transmission Customer and the Transmission Provider for service.

Service Area:

The geographic territory served by a utility.

Service Obligation:

Refers to the duties a regulated public utility must perform for its customers. Service obligation includes the duty to serve all prospective customers, to provide adequate, reliable service and to render safe, efficient and nondiscriminatory service.

Shareholder-Owned Electric Utilities:

U.S. public utilities owned by shareholders, organized as corporations, and regulated by Federal Energy Regulatory Commission and state public utilities commissions. About three-quarters of all Americans receive electric service from shareholder-owned electric utilities.

Slamming: Switching a customer's electric provider without authorization.

Small Power Producer (SPP):

Under the Public Utility Regulatory Policies Act (PURPA), a small power production facility (or small power producer) generates electricity using waste, renewable (water, wind and solar), or geothermal energy as a primary energy source. Fossil fuels can be used, but renewable resource must provide at least 75 percent of the total energy input. (See Code of Federal Regulations, Title 18, Part 292.)

Solar Energy:

Energy derived from the sun's radiation. The amount of energy falling on just 0.3861 sq. mil/1 sq. km is about 4,000 megawatts, enough to heat and light a small town. In one second the sun gives off 13 million times more energy than all the electricity used in the United States in one year. Solar heaters have industrial or domestic uses. They usually consist of a black (heat-absorbing) panel containing pipes through which air or water, heated by the sun, is circulated, either by thermal convection or by a pump. Solar energy may also be harnessed indirectly using solar cells (photovoltaic cells) made of panels of semiconductor material (usually silicon), which generate electricity when illuminated by sunlight. Although it is difficult to generate a high output from solar energy compared to sources such as nuclear or fossil fuels, it is a major nonpolluting and renewable energy source used as far north as Scandinavia as well as in the southwest U.S. and in Mediterranean countries.

Spinning Reserve:

That reserve generating capacity running at a zero load and synchronized to the electric system.

Spot Purchases:

A single shipment of fuel or volumes of fuel, purchased for delivery within 1 year. Spot purchases are often made by a user to fulfill a certain portion of energy requirements, to meet unanticipated energy needs, or to take advantage of low-fuel prices.

Spot Market:

Short-term purchases of electricity from surpluses available for a short time.

Spot Price:

The price for a one-time open market transaction for immediate delivery of the specific quantity of product at a specific location where the commodity is purchased "on the spot" at current market rates.

Standard Industrial Classification (SIC):

A set of codes developed by the Office of Management and Budget, which categorizes business into groups with similar economic activities.

Standby Facility:

A facility that supports a utility system and is generally running under no-load. It is available to replace or supplement a facility normally in service.

Standby Service:

Support service that is available as needed to supplement a consumer, a utility system, or to another utility if a schedule or an agreement authorizes the transaction. The service is not regularly used.

Steam-Electric Plant (Conventional):

A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Stranded Costs:

A "stranded cost" occurs when customers of one utility are allowed to have power brought to them from some other supplier, thereby leaving the original utility with debts for plants and equipment it no longer needs and without the revenue from the ratepayers the plants were built to serve. All potentially stranded costs are the result of decisions that were reviewed and approved by government regulators and were made by utilities under the unique regulatory contract with their state and their customers.

Stranded Costs/Stranded Assets:

Costs incurred by a utility that may not be recoverable under market-based retail competition. Examples are under appreciated generating facilities, deferred costs, and long-term contract costs. They represent a utility's capital investments that are unrecoverable because of the transition to competition. The rationale for

allowing stranded cost recovery is that utilities have made large investments in facilities under a regulatory system that allowed cost recovery of all prudent investments.

Stranded Benefits:

Benefits associated with regulated retail electric service, which may be at risk under open market retail competition. Examples are conservation programs, fuel diversity, reliability of supply, and tax revenues based on utility revenues.

Stranded Investments or Stranded Costs:

The difference between the book value of generation facilities under a regulated system, and what those facilities would be worth on the open market. In a traditional regulated rate of return system, electric utilities could recover the costs of building generation facilities, over time, on customers' bills.

Substation:

Facility equipment that switches, changes, or regulates electric voltage.

T

Tariff:

A collection of public schedules detailing utility cost-of-service rates, rules, service territory and terms of service that a regulated utility files with its public utilities commission for official approval. Tariffs approved by a public utilities commission are binding legal documents and must be made available to the public. In effect, they constitute the contract between a utility and its customers.

Terms of Service: Content of the agreement between a customer and a REP.

Therm:

A unit of energy equivalent to 100,000 BTUs; usually used as a measure of the heat energy from burning natural gas (or methane).

Transition Costs:

Above-market utility costs that have not yet been recovered through rates. These costs would become "stranded" in the move to a competitive market. They include: utility-owned above-market generation costs, non-utility-owned above-market generation costs, such as power purchased from QFs; and costs known as regulatory assets, such as deferred taxes.

Transformer: An electrical device for changing the voltage of alternating current.

Transmission:

The flow of electricity over high voltage wires from power plants to local distribution lines. Interconnecting electric lines that move high voltage electricity from a generation facility to the distribution lines.

Transmission Charges: Part of the basic service charges on every customer's bill for transporting electricity from the generation facility over transmission lines.

Transmission and Distribution Company:

The regulated affiliate of a former monopoly electric utility that owns and may construct and maintain wires used to transmit wholesale electric power. It is regulated by the Public Utility Commission to provide nondiscriminatory connections, comparable service, and cost recovery. May also be referred to as the "wires company".

Transmission System (Electric):

An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers, or is delivered to other electric systems.

Transmitting Utility:

This is a regulated entity, which owns, and may construct and maintain, wires used to transmit wholesale power. It may or may not handle the power dispatch and coordination functions. It is regulated to provide non-discriminatory connections, comparable service, and cost recovery. According to EPACT, this includes any electric utility, qualifying cogeneration facility, qualifying small power production facility, or Federal power marketing agency, which owns or operates electric power transmission facilities which are used for the sale of electric energy at wholesale.

Turbine:

An engine in which steam, water, gas or air is made to spin a rotating shaft by pushing on angled blades, like a fan. Turbines are among the most powerful machines. Steam turbines drive generators in power stations and ships' propellers; water turbines spin the generators in hydroelectric power.

U**Unbundled Service:**

This is electric service broken down into its basic components. Each component is priced and sold separately. For example, generation, transmission and distribution could be unbundled.

Unbundling:

The separating of the total process of electric power service from generation to metering into its component parts for the purpose of separate pricing or service offerings that results in "unbundled service."

Utility Distribution Companies:

The entities that continue to provide regulated services for the distribution of electricity to customers and serve customers who do not choose direct access. Regardless of where a consumer chooses to purchase power, the customer's current utility, also known as the utility distribution company, will deliver the power to the consumer's home or business.

V**Variable Price:**

A price that can change by the hour, day or month.

Vertical Integration:

An arrangement whereby the same company owns all the different aspects of making, selling, and delivering a product or service. In the electric industry, it refers to the historically common arrangement whereby a utility would own its own generating plants, transmission system, and distribution lines to provide all aspects of electric service.

Volumetric Wires Charge:

A charge for using the transmission and/or distribution system that is based on the volume of electricity that is transmitted.

W**Watt:**

A unit of electric power equal to a current of one ampere flowing across an electrical circuit with a potential of one volt. A kilowatt is a unit of power equal to 1,000 watts.

Watt-hour (Wh):

An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.

Wheeling Service:

A service provided by a utility that owns transmission facilities. Under a wheeling service agreement, the utility wheels, or transfers, electric energy from a generating source to a purchaser, which then resells it to its own retail customers. Energy can be wheeled for short distances, across an entire system or across several systems.

Wellhead Price:

The price of oil or natural gas at the mouth of the well.

Wind Energy:

The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from a hub) that drive generators to produce electricity.

Wood Energy:

Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.

Wholesale Competition:

A market structure in which wholesale electricity suppliers compete to sell electricity to retail providers over regulated transmission and distribution systems. This system allows a distributor of power to have the option to buy its power from a variety of power producers, and the power producers would be able to compete to sell their power to a variety of distribution companies.

Wholesale Customer:

Any entity that purchases electricity at the wholesale level, including municipal utilities, private utilities, rural electric cooperatives or government-owned utility districts. Wholesale customers purchase electricity from other wholesale suppliers to resell to their own retail customers.

Wholesale Transmission Services:

The transmission of electric energy sold, or to be sold, at wholesale in interstate commerce (from EPACT).

Wholesale Power Market:

The purchase and sale of electricity from generators to resellers (who sell to retail customers), along with the ancillary services needed to maintain reliability and power quality at the transmission level.

Wholesale Wheeling:

The process of sending electricity from one utility to another wholesale purchaser over the transmission lines of an intermediate utility. Under the U.S. Energy Policy Act of 1992, utilities must provide wholesale transmission wheeling

services to any electric utility, federal power marketing agency, or other company generating electric energy for sale in the wholesale market.

Wind Turbine:

Windmill of advanced aerodynamic design connected to an electricity generator and used in wind power installations. Wind turbines can be either large propeller-type rotors mounted on a tall tower or flexible metal strips fixed to a vertical axle at top and bottom.

Wires Charge:

A charge that could be expressed in cents-per-kilowatt hour that is levied on consumers to use the transmission and distribution system. This is also referred to as a "transmission and distribution charge."

Acronyms

AS: Ancillary Service

CR: Competitive Retailer

DA: Day Ahead

ECAR: East Central Area Reliability Council

EDI: Electronic Data Interchange

EMS: Energy Management System

EP: Energy Provider

ERCOT: Electric Reliability Council of Texas

ESI: Electric Service Identifier

FERC: Federal Energy Regulatory Commission

FTP: File Transfer Protocol

IDR: Interval Data Recorder

IOU: Investor Owned Utilities

IPP: Independent Power Producers

LSE: Load Serving Entity

MAAC: Mid-Atlantic Interconnected Network

MAPP: Mid-Continent Area Power Pool

MCP: Market Clearing Price

MCPE: Market Clearing Price for Energy

MOU: Municipally Owned Utility

NERC: North American Electric Reliability Council

NPCC: Northeast Power Coordinating Committee

PGC: Power Generation Company

PM: Power Marketer

QSE: Qualified Scheduling Entity

REC: Renewable Energy Credit

REP: Retail Electric Provider

RT: Real Time

SCADA: Supervisory Control And Data Acquisition

T&D Losses: Transmission Losses & Distribution Losses

TDSP: Transmission and/or Distribution Service Provider

TLF: Transmission Loss Factor

TSP: Transmission Service Provider

UFE: Unaccounted For Energy