A New Glossary of Power Procurement Terms

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Ever go to an energy conference and wonder what the heck the speaker just said?

Have acronyms or jargon left you out of the conversation?

Are you afraid to admit that you don't know the difference between an ERCOT and an apricot?

Weep no more!

A new glossary of energy market terms is now available that includes many new concepts as well as the old standards, gleaned from the pages of the trade press and a variety of public sources. Readers are welcome to print out the text file (roughly 60 pages), or you can search it on-line through your browser. E-mail Mr. Audin at energywiz@aol.com for further data. Energywiz will be updating this tip whenever a new term/concept/acronym appears to be generally accepted in the industry.

WHAT'S SO IMPORTANT ABOUT KNOWING THIS LINGO?

Knowing how to describe or name a situation, agency, and/or action can be crucial when seeking information about it. Surfing the web becomes more efficient when one puts the right word(s) in the search box, and knowing what a regulator or marketer is actually saying to you may save big bucks later on.

Most of us hate to show our ignorance. When we do, that's a quick way for a shrewd marketer to pick out a potential sucker in the crowd. Some contracts contain references to types of indexes, markets, financial instruments, etc., that could either help you or transfer risk

to you. **Knowing which is which might save your job**.

Reviewing a good glossary can sometimes be the fastest way to learn about options and pitfalls you never dreamed existed. The Energywiz glossary describes some of the latest issues affecting energy pricing such as "seasonal gaming," "name give-up model," "refunctionalization," and "flowgate" pricing.

WE CAN ALWAYS USE YOUR HELP

Heard a new term? Stumbled across a new acronym? E-mail us at energywiz@aol.com and we'll consider adding it to the glossary. The language of this industry continues to evolve and we appreciate your input toward keeping this glossary up-to-date.

A SAMPLING OF TERMS– A (FOR "ABOVE-MARKET COST") THROUGH B (FOR "BYPASS")

There's not room enough in this article to reprint the entire glossary, but here's a sample:

Above-market Cost—The cost of a good or service that is in excess of the price of comparable goods and services in the market. Typically refers to the cost of a public good or stranded benefit that exceeds or would increase the short-term marginal cost of delivered electricity alone or lacking such public good characteristics.

Access—The contracted right to use an electrical system to transfer electrical energy, e.g., "retail access" is another term for attaining the right for retail customers to receive power directly from non-utility sources.

Access Charge—A charge levied on a power supplier, or its customer, for access to a utility's transmission or distribution system, ostensibly covering that system owner's costs (plus profits) to send someone else's electricity over his wires.

Adequacy—See ***Reliability***.

Adjacent System or Adjacent Control Area—Any system or Control Area either directly interconnected with or electrically close to (so as to be significantly affected by the existence of) another system or Control Area.

Affinity Group—Any organization of similar energy customers that have a pre-existing relationship that is used to foster aggregated purchasing of energy (e.g., BOMA chapter, Dry Cleaners Association, industrial development group, etc.)

Affordability Programs—Any of a number of utility programs to render utility bills affordable, especially for low-income customers. Such programs include free DSM, charitable fuel funds, discount rates, percentage of income payment programs, arrange forgiveness, as well as budget billing, required payment arrangements, and arguably extreme weather disconnection protections (especially where coupled with arrange forgiveness). Such programs can be run in collaboration with government-sponsored social service efforts, or can be offered to qualified customers on a stand-alone basis.

Aggregator—An entity that assembles customers into a buying group for the purchase of a commodity service. The vertically integrated investor-owned utility, municipal utilities and rural electric cooperatives perform this function in today's power market, and others, such as buyer cooperatives, power marketers, affinity groups, or brokers are performing this function in restructured power markets. This is opposed to ***Marketer*** (see below) which will be defined as an entity that represents different suppliers. See also ***Value-driven Aggregator***.

Alternative Retail Electricity Supplier—Often abbreviated "ARES," this is the Illinois name for an Energy Services Company (see ***Energy Services Company***).

Ampere—The unit of measurement of electrical current produced in a circuit by 1 volt acting through a resistance of 1 ohm.

Ancillary Services—Interconnected Operations Services identified by the US Federal Energy Regulatory Commission (Order No. 888 issued

April 24, 1996) as necessary to ensure the reliable operation of the transmission system and facilitate power transfers. Some of these services include: scheduling, system control and dispatch; reactive power supply, voltage support and voltage control, regulation and frequency control; energy imbalance (short-term load following); standby generation; operating reserves, including spinning and supplemental reserves; compensation for real power or transmission losses; dynamic scheduling of generation in response to fluctuations in specific loads; and restoration of generation service or black start capabilities. Transmission providers must include such additional services in an open access transmission tariff.

APPA—The American Public Power Association is a trade association representing the interests of municipal utilities. See also ***Public Utility***.

Area Control Error—The instantaneous difference between actual and scheduled power interchange between two points, taking into account the effects of frequency bias.

Arrange—Money owed on past bills.

Ask—The lowest price offered at which a security or commodity is available for sale.

Ask Size—The number of contracts offered at the ask price (e.g., 150 MW that is being offered in the form of standard 50 MW contracts translates to an "ask size" of 3 contracts).

Asset—An economic resource, tangible or intangible, which is expected to provide benefits to a business.

Automatic Generation Control (AGC)—Equipment that automatically adjusts a Control Area's generation to maintain its interchange schedule plus its share of frequency regulation.

The following AGC modes are typically available:

1. **Tie Line Bias Control**—Automatic generation control with both frequency and interchange terms of Area Control Error considered.

2. **Constant Frequency (Flat Frequency) Control**—Automatic generation control with the interchange term of Area Control Error ignored, This Automatic Generation Control mode attempts to maintain the desired frequency without regard to interchange.

3. **Constant Net Interchange (Flat Tie Line) Control**—Automatic generation control with the frequency term of Area Control Error ignored. This Automatic Generation Control mode attempts to maintain interchange at the desired level without regard to frequency.

Automatic Meter Reading—Often abbreviated AMR, any of several commercially available systems for automatically reading meters without visiting individual meter. Units may use any combination of wireless, telephone, cable, Ethernet (or similar) communication systems. See also ***Network Meter Reading (NMR).***

Automatic Meter Reading Association (AMRA)—Industry organization for utility metering firms.

Available but Not Needed Capability—Net capability of main generating units that are operable but not considered necessary to carry load, and cannot be connected to load within 30 minutes.

Available Resource—The sum of existing generating capacity, plus new units scheduled for service, plus the net of equivalent firm capacity purchases and sales, less existing capacity unavailable due to planned outages.

Available Transfer Capability (ATC)—A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. ATC is defined as the Total Transfer Capability (TTC), less the Transmission Reliability Margin (TRM), less the sum of existing transmission commitments (which includes retail customer service) and the Capacity Benefit Margin (CBM).

Availability—A measure of time a generating unit, transmission line, or other facility is capable of providing service, whether or not it ac-

tually is in service. Typically, this measure is expressed as a percent available for the period under consideration, e.g., an availability of 80% typically means that a plant could have produced power for about 7,000 hours during a year (80% x 8,760 hr/yr = 7,008) had requests been made for such service.

Average Cost—The revenue requirement (which includes any guaranteed rate-of-return) of a utility divided by the utility's sales. Average cost typically includes the costs of existing power plants, transmission, and distribution lines, and other facilities used by a utility to serve its customers. It also includes operating and maintenance, tax, and fuel expenses.

Average Revenue per Kilowatt-hour—The average revenue per kilowatt-hour of electricity sold by sector (residential, commercial, industrial, or other) and geographic area (State, Census division, and National), is calculated by dividing the total monthly revenue by the corresponding total monthly sales for each sector and geographic area.

Avoided Cost—The cost the utility would incur but for the existence of an independent generator or other energy service option. Avoided cost rates have been used as the power purchase price utilities offer independent suppliers ("qualifying facilities," see ***Qualifying Facility***).

Backout Credit see ***Back Out Rate***

Back Out Rate—A credit on an electric bill that purports to represent the cost of electric supply (meaning production, but not transmission or distribution) from the utility. Sometimes also called Supply Credit or Shopping Credit, such numbers are used as a benchmark against which customers seek prices below the credit. That difference is then the amount saved (relative to continued purchasing from the utility) by buying power from a competitive supplier.

Backup Power—Power provided by contract to a customer when that customer's normal source of power is not available.

Backup Supply Service—See ***Interconnected Operations Services***.

Balancing and Settlement—A process of reconciling the total kWh (including Losses during delivery) provided to the system on behalf of a customer (or group of customers) to the amount of power used by that customer during a given time period. Settlement will be completed when the cost of the imbalance between scheduled delivery and aggregated customer usage is assessed. The settlement process relies on readings from interval meters, readings from billing meters, and load profiles to calculate the customer's usage.

Banking Energy—delivered or received by a utility with the intent that it will be returned in kind in the future. See Storage, Energy Exchange.

Barrel—A volumetric unit of measure for crude oil and petroleum products equivalent to 42 US gallons.

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

Baseload—The minimum amount of electric power delivered or required over a given period of time at a constant rate. On an hourly or monthly load profile, this is the level of demand or usage that is seen as a minimum on most hours, including evenings, thereby forming the "base" that peaks rest on.

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

Baseload Plant—A plant normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially round-the-clock constant rate. These units are operated to maximize system mechanical and thermal efficiency and minimize system operating costs. Nuclear plants are commonly baseloaded units, for example, due to their very low running (as versus installation) costs.

Bbl—The abbreviation for barrel.

Bef—The abbreviation for 1 billion cubic feet, usually applied to natural gas.

Beta—A coefficient that is a measurement of a security's price fluctuation due to factors that simultaneously affect the prices of all marketable securities. A Beta of 1.0 means that the security's price fluctuation is the same as the overall market as measured by the S&P 500 Index. A Beta greater than 1.0 means that a security's price fluctuation is greater than the S&P 500 Index.

Bid—The highest price a prospective buyer is prepared to pay for a security or commodity at a particular time.

Biddable Franchise—See Competitive Franchise.

Bid Size—The number of contracts offered at the bid price.

Bilateral Contract—A direct contract between the power producer and user or broker outside of a centralized power pool or PoolCo.

Blackstart Capability—The ability of a generating unit or station to go from a shutdown condition to an operating condition and start delivering power independently from the rest of the electric system.

Block Forward—Cal PX term for spot energy destined for future delivery at a specified hour or month—they differ from futures in that they are available only up to 6 months in advance and are intended for physical delivery rather than as a purely financial instrument

Boiler—A device for generating steam for power, processing, or heating purposes or for producing hot water for heating purposes or hot water supply. Heat from a contained combustion source (typically called the "burner") is transferred to a fluid circulating inside the boiler.

Bottleneck Facility—A point on the system, such as a transmission line, through which all electricity must pass to get to its intended buyers. If there is limited capacity at this point, some priorities must be developed to decide whose power gets through.

Bottom-up—An approach taken when unbundling utility rates, and the opposite of a "top-down" approach. Bottom-up implies consider-

ation of all components of a utility rate for possible competition, including transmission, distribution, customer service, metering, marketing, taxes, etc. as well as the energy component (which is generally considered the "top" of the rate). A top-down approach involves an examination in the reverse order and typically results in only the energy component becoming subject to competition, instead of all aspects of the utility rate.

BPA (Bonneville Power Administration)—One of five federal Power Marketing Administrations that sell low-cost electric power produced by federal hydroelectric dams to agricultural and municipal users. BPA serves Idaho, Oregon, and Washington as well as parts of Nevada and Wyoming.

Broker—A third party who establishes a transaction between a seller and a purchaser without taking title to the power. Such an agent may also aggregate customers and arrange for transmission, firming and other ancillary services as needed.

Btu (British Thermal Unit)—A standard unit for measuring the quantity of heat energy equal to the quantity of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

Bulk Electric System—A term commonly applied to the portion of an electric utility system that encompasses the electrical generation resources and bulk transmission system.

Bulk Power Supply—Often this term is used interchangeably with wholesale power supply. In broader terms, it refers to the aggregate of electric generating plants, transmission lines, and related equipment. The term may refer to those facilities within one electric utility, or within a group of utilities in which the transmission lines are interconnected.

Buy Through—An agreement between utility and customer to import power when the customer's service would otherwise be interrupted and to price such power at prevailing spot market rates.

Bypass—A situation that allows a customer to get full or partial electricity or natural gas service from a non-utility supplier instead of a

utility, typically by connecting to a main transmission line instead of using the local utility's distribution system.

EDITOR'S NOTE: Only "A" through "B" is shown here. The remainder of this glossary is available—e-mail Mr. Audin at energywiz@aol.com for updated information.

This article appeared as one of Mr. Audin's "Tips of the Month" commentaries. More can be found at www.EnergyBuyer.org. They are brief excerpts from the Energvwiz seminar "Profiting From Deregulation: Power Techniques for Power Purchasing," the only seminar focused on training customers and consultants to handle retail power procurement. For those interested in taking this course, more information is available it www.energywiz.com and www.energyseminars.com.

ABOUT THE AUTHOR

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Audin has been named Energy Manager of the Year by three different national or regional organizations, most recently by the Association of Professional Energy Managers in 1995. In 1993, the Association of Energy Engineers (AEE) named him their International Energy Manager of the Year, and in 1996 inducted him into its Energy Manager's Hall of Fame, the highest recognition in that field.

He served on the board of the New York Designer's Lighting Forum, the *Energy User News* Technical Advisory Board, and an ASHRAE 90.1 technical committee. His column on lighting and energy issues has appeared quarterly, in *Architectural Record* magazine since 1991, and his work appears frequently in energy-related publications and on such Web-based magazines as E-Source's *Power Tools*.

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