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Glossary of Terms used in the Electric Industry

SC's
A2, A3, B1, C1, C4 & C6

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Glossary of Terms used in the Electric Industry

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SECTION 1 ELECTRICAL QUANTITIES

English Term	DEFINITION
Economy energy	Energy sold on an hourly basis to allow the buyer to reduce or withhold from service more expensive generation or schedule less from other sources. The buying system has adequate capacity to cover its own load and may not include economy energy towards meeting its reserve requirements. Seller may include the transaction in its reserve.

SECTION 2 ELECTRIC SYSTEMS

English Term	DEFINITION
Capability	When referring to generation, capability is synonymous with capacity (see below).
Capacity	When referring to generation, capacity is a measure of the ability to generate electric power, usually expressed in MW or kW. Capacity can refer to the output of a single generator, a plant, an entire electric system, a power pool, or a region. There are different sub definitions, such as available capacity, installed capacity, operating capacity, registered capacity, etc.
Capacity emergency	A power deficit. Such a deficit exists when a system's or pool's operating capacity plus firm purchases from the grid, to the extent available or limited by transfer capability, are inadequate to meet this demand plus its regulating requirements.
Conservation energy	Energy sold to supplement energy storage or conserve fuel supplies on the buyer's system. Such transactions normally do not include capacity, and are counted in the seller's reserves.
Contractual path	The physical transmission path(s) between interconnected utility systems defined by a contract covering the delivery of power from one system to the other.
Control area	An area comprised of an electric system or systems, bounded by interconnection metering and telemetry, capable of controlling its generation to maintain its interchange schedule with other control areas, and contributing to frequency regulation of the interconnection. A control area must be able to: • Directly control its generation to continuously balance its actual interchange and scheduled interchange, And • Help the entire interconnection regulate and stabilize the frequency (see also the definition of "System operator" below). A system capable of regulating its generation in order to control its electric energy interchange with other systems.
Parallel path flow	The flow of electric power on an electric system's transmission facilities resulting from scheduled electric power transfers between two other electric systems.

SECTION 3 SYSTEM OPERATIONS

English Term	DEFINITION
Circulating power	Large circulating flows that result from network characteristics and distribution of flows loads and generation determined by the superposition of "loop flows" and to parallel path flows.
Hourly capacity	Capacity, with or without energy, sold on an hourly basis to enable the buyer to meet its load, operating reserve, and firm commitments. Hourly capacity may only be purchased if the buyer has not intentionally left generating facilities out of service or avoided other capacity purchases available to it for economic reasons. Buyer includes the capacity purchased in its operating reserves; seller subtracts from its operating reserves.
Regulating capacity	Generating capacity under automatic control capable of maintaining system frequency and tie line loads within acceptable deviations from schedules (see control area).
Reserve energy	Energy sold to enable the buyer to avoid load relief measures if the seller has no surplus capacity above its operating reserve. Buyer does not add to its operating reserves, but the transaction has the net effect of increasing the buyer's spinning reserve. The seller may include the transaction in its reserve.
Scheduling/Schedule	An agreement between the system operations of two companies, which are either directly interconnected or have arranged for appropriate transmission services, for one to over-generate and the other to under-generate in equal amounts and simultaneously for the purpose of transmitting power from one company to the other.
Scheduling and dispatch deliverables	The deliverables to "customers" from system scheduling and dispatch – the combined activities of generation, demand and transmission scheduling and dispatch – which include for example: • MW and MVAr into and out of the system which are secure against stated generation, demand and transmission contingencies • frequency to defined quality • voltage to defined quality • emergency system restoration for undefined contingencies • area control/transfer error to defined quality.

Short term capacity	Capacity and associated energy sold for one or more weeks to supplement or replace available generating capacity on the buyer's system. Buyer includes such capacity in its operating reserves, seller subtracts from its reserves.
System scheduling and dispatch	Scheduling normally relates to timescales up to about a week before the event down to hours before the event. Dispatching normally means real time or near real time activity.
Transmission scheduling and dispatch	The decisions and processes which determine the network topology, the status of transmission plant and the status and level of primary control parameters and which includes for example: • switch and disconnector status • power transformer and phase change transformer control settings • reactive compensation plant (series and shunt) status and output and control settings • status and configuration of automatic tripping and/or switching schemes

SECTION 4 ELECTRICITY MARKET

English Term	DEFINITION
Associated costs	Costs associated with but not necessarily limited to administration, operation and maintenance, taxes, insurance, financing, transmission losses, and dispatching services, discernible as costs for firm transmission service provided. .
Economy transactions	Sale by one company of lower cost power to permit another company to reduce higher cost generation, often priced to split the difference in generating cost and usually cancellable on short notice.
Embedded cost pricing	Pricing based on original cost less accumulated depreciation (as opposed to marginal cost pricing and replacement cost).
Incremental additions	Additions, improvements or capital betterments (including interconnection facilities) to a member's/members' electric transmission system reasonably required for the purpose of increasing transmission capacity to accommodate a transmission service request of another member.
Incremental facilities	Those transmission facilities on a member's electrical system that (i) are under construction or completed but not cleared into plant-in-service accounts on the books and records of the member at the time the initial request for firm transmission service is made, or (ii) are built by a member as a result of a request for firm transmission service.
Least cost planning	Utility expansion planning, taking equal account of generating plant and demand-side investments.
Lowest losing bid	Lowest bid price submitted in the framework of competitive bidding that does win a contract.
Opportunity costs	Extra costs incurred to accommodate a wheeling or transit request from a third party, resulting from the need to change system dispatch from minimum cost or from restrictions in interchanges with other systems.
Original cost	All historical costs associated with the acquisition of an asset.

Ownership-like rights	The rights, benefits and obligations associated with ownership of a fixed amount of transmission capacity (which shall not be affected by future changes in rated transfer capability) resulting from construction of incremental facilities, including the right to use, assign, sell or otherwise dispose of such transmission capacity for as long as the transmission user meets the financial obligation to pay for all costs, including, but not limited to, operation, maintenance and replacement costs and taxes allocated to such incremental facility; but excluding: (i) legal title, (ii) participation rights in future increases or decreases in transfer capability, (iii) the cost of upgrades and (iv) the authority and responsibility for operating, maintaining and replacing such incremental facilities. Costs to be allocated to the recipient of ownership-like rights shall be reasonable, in accordance with the Federal Power Act (FPA) and subject to reasonable provisions for auditing and oversight of such expenses. Subject to the foregoing, ownership-like rights shall be enjoyed for the life of the incremental facilities with which they are associated.
Shadow price	The amount derived from the solution to a mathematical optimization problem which measures the change in the objective function that will result from a unit change in the right-hand side of one of the constraints of the mathematical optimization problem. It can be used to measure marginal cost if the objective function is the cost for which the marginal cost is sought and the right-hand side of the relevant constraint is a measure of the service provided or the output of goods produced.
Sham wholesale	A transaction in which a third party supposedly purchases electric energy. Transaction at wholesale for resale, but actually intends to use it itself.

SECTION 5 ENTITIES IN THE ELECTRICITY MARKET

English Term	DEFINITION
Full requirements customers	Small municipal utilities, cooperatives or electric utilities without own generation whose demand is fully covered by larger utilities and/or generators in the same area.
Holding company power pool	Power pool formed by subsidiaries of a holding company.

A N N E X E S

SECTION 1 ELECTRICAL QUANTITIES

English Term	DEFINITION
Banking	Energy delivered or received by a utility with the intent that it will be returned in kind in the future.
Economy energy	Electric energy produced and supplied from a more economical source in one system and substituted for that being produced or capable of being produced by a less economical source in another system. (NERC)
Emergency energy	Electric energy purchased by a member system whenever an event on that system causes insufficient Operating Capability to cover its own demand requirement.
Extra high voltage [EHV]	A voltage greater than 345 kV. (AEMC)
Extra high voltage [EHV]*	A term applied to voltage levels that are higher than 230000 volts. (IEEE)
Frequency bias	A value, usually expressed in megawatts per 0.1 Hertz (MW/0.1 Hz), associated with a Balancing Authority Area that approximates the Balancing Authority Area's response to Interconnection frequency error. (NERC)
Frequency offset	A difference between the actual and the nominal value of the system frequency in order to correct the synchronous time. (UCTE)
Frequency response (Equipment)	The ability of a system or elements of the system to react or respond to a change in system frequency. (NERC)
Frequency response (System)	The sum of the change in demand, plus the change in generation, divided by the change in frequency, expressed in megawatts per 0.1 Hertz (MW/0.1 Hz).
High voltage [HV]	A voltage greater than 1 kV. (AEMC)

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High voltage [HV][*]	A class of nominal system voltages equal to or greater than 100000 V and equal or less than 230000 V.
Inadvertent energy	The difference between the quantity of energy scheduled for delivery and the quantity of energy actually delivered pursuant to such schedule. (IEEE)
Power pool	Two or more interconnected electric systems planned and operated to supply power for their combined demand requirements.
Power transfer	The instantaneous rate at which active energy is transferred. (AEMC)
Real power	The portion of electricity that supplies energy to the load. (NERC)
Test energy	Energy delivered by one party to another for the purpose of testing facilities that are either directly or indirectly connected to the "interconnection facilities" between the two parties. Both the supplying and receiving systems have adequate capacity to cover their own load. The receiving party may not include test energy towards meeting its reserve requirements. The supplying party may include test energy in its reserve. (IEEE)

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SECTION 2 ELECTRICITY SYSTEM

English Term	DEFINITION
Area Control Error	The instantaneous difference between a Balancing Authority's net actual and scheduled interchange, taking into account the effects of Frequency Bias and correction for meter error. (NERC)
Black system	The absence of voltage on all or a significant part of the transmission system or within a region following a major supply disruption, affecting one or more power stations and a significant number of customers.
Capacity benefit margin (CBM)	The amount of firm transmission transfer capability preserved by the transmission provider for Load Serving Entities (LSE), whose loads are located on that Transmission Service Provider's system, to enable access by the LSE to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in time of emergency generation deficiencies.
Contract path	Usually the most direct physical transmission tie between two interconnected entities. When utility systems interchange power, the transfer is presumed to take place across the "contract path" notwithstanding the electrical fact that power flow in the network will distribute in accordance with network flow conditions. This term can also mean to arrange for power transfer between systems.
Contract path	An agreed upon electrical path for the continuous flow of electric power between the parties of an Interchange Transaction. (NERC)
Dynamic interchange schedule or dynamic schedule	A telemetered reading or value that is updated in real time and used as a schedule in the AGC/ACE equation and the integrated value of which is treated as a schedule for interchange accounting purposes. Commonly used for scheduling jointly owned generation to or from another Balancing Authority Area. (NERC)

Dynamic schedule service	Provides the metering, telemetering, computer software, hardware, communications, engineering and administration required to electronically move a transmission customer's generation or demand out of the Control area to which it is physically connected and into a different Control area.
Dynamic Transfer	The provision of the real-time monitoring, telemetering, computer software, hardware, communications, engineering, energy accounting (including inadvertent interchange), and administration required to electronically move all or a portion of the real energy services associated with a generator or load out of one Balancing Authority Area into another.
Flowgate	A designated point on the transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. (NERC)
Interconnected operations services (IOS)	A service (exclusive of basic energy and transmission services) that is required to support the reliable operation of interconnected Bulk Electric Systems. (NERC)
Load factor	A multiplier used to describe the additional electric energy loss for each incremental of electricity used or transmitted. (AEMC)
Monotonic instability	A power system is monotonically unstable for a particular steady-state operating condition if following a disturbance its instability is caused by insufficient synchronizing torque. Note: The trajectory for monotonic instability may not be strictly monotonic or have less than one oscillation. The main criterion is insufficient synchronizing torque and the nomenclature is derived historically from the fact that in most cases for such instability the trajectories are monotonic. (IEEE)
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. (IEEE)
Non-recallable available	Total transmission capability less the transmission

transfer Capability (NATC)	reliability margin, less non-recallable reserved transmission service (including the capacity benefit margin). (NERC)

Optimization service	Operations to improve service reliability of either or both systems with or without transferring energy. (IEEE)
Recallable available Transmission capability (RATC)	Total transmission capability less the transmission reliability margin, less recallable transmission service, less non-recallable transmission service (including the capacity benefit margin). RATC must be considered differently in the planning and operating horizons. In the planning horizon, the only data available are recallable and nonrecallable transmission service reservations, whereas in the operating horizon transmission schedules are known.
Scheduling, system control and dispatch service	Provides for a) scheduling, b) confirming and implementing an interchange schedule with other control areas, including intermediary control areas providing transmission service, and c) ensuring operational security during the interchange transaction.
System reliability (system minutes)	Energy not supplied in MWh x 60 System maximum Demand in MW (AEMC)
Transmission reliability margin [TRM]	That amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

SECTION 3 SYSTEM OPERATIONS

English Term	DEFINITION
Adequate regulating margin	The minimum on-line capacity that can be increased or decreased to allow the electric system to respond to all reasonable instantaneous demand changes to be in compliance with the control performance criteria.
Adjacent Balancing Authority	A Balancing Authority Area that is interconnected another Balancing Authority Area either directly or via a multi-party agreement or transmission tariff.
Area control error	The instantaneous difference between actual and scheduled interchange, taking into account the effects of frequency bias.
Balancing Authority	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.
Balancing Authority Area	The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.
Burden	Operation of the Bulk Electric System that violates or is expected to violate a System Operating Limit or Interconnection Reliability Operating Limit in the Interconnection, or that violates any other NERC, Regional reliability Organization, or local operating reliability standards or criteria.
Commission, commit	To connect to a network in operating condition.
Commitment	The commencement of the process of starting up and synchronising a generating unit to the power system.
Control block	One or more control areas, working together in the secondary control function, with respect to the other control blocks of the synchronous area.
Control Performance Standard	The reliability standard that sets the limits of a Balancing Authority's Area Control Error over a specified time period. (NERC)
Critical single credible contingency capacity	The contingency capacity reserves available for the purpose of arresting a frequency decline due to a critical

	single credible contingency event.
Corrective operation	The use of fast automatic controls to quickly reduce transmission loading within safe limits if a contingency occurs. (IEEE)
Curtailability	The right of a transmission provider to interrupt all or part of a transmission service due to constraints that reduce the capability of the transmission network to provide that transmission service. Transmission service is to be curtailed only in cases where system reliability is threatened or emergency conditions exist. (NERC)
Curtailment	A reduction in the scheduled capacity or energy delivery of an Interchange Transaction.
Decommission, decommit	To disconnect from a network and remove from service. (AEMC)
Dispatch	The operating control of a power system involving: • the assignment of generation to specific generating stations and other sources of supply; • the control of principle tie lines and switching; and • the scheduling of energy transactions with interconnected electric utility. (AEMC)
Dispatch algorithm	The algorithm used to the loading level for each scheduled generating unit or scheduled load in each dispatch interval.
Disturbance Control Standard	The reliability standard that sets the time limit following a Disturbance within which a Balancing Authority must return its Area Control Error to within a specified range.
Dynamic schedule	A telemetered reading or value that is updated in real time and used as a schedule in the automatic generation control/area control error equation and the integrated value of which is treated as a schedule. Commonly used for “scheduling” commonly owned generation or remote load to or from another control area.
Dynamic schedule service	See Interconnected Operations Services (Section 2 of Annexes)
Emergency transfers	Electric power that is scheduled and reliably transferred from an area with sufficient generating capacity margin to an area that has a temporary deficiency of generating capacity or other deficit system condition.
Forced derating	An unplanned component failure (immediate, delayed,

	postponed) or other condition that requires the output of the unit be reduced immediately or before the next weekend.

Frequency response mode	The mode of operation of a generating unit which allows automatic changes to the generated power when the frequency of the power system changes. (AEMC)
Host Balancing Authority	1. A Balancing Authority that confirms and implements Interchange Transactions for a Purchasing Selling Entity that operates generation or serves customers directly within the Balancing Authority's metered boundaries. 2. The Balancing Authority within whose metered boundaries a jointly owned unit is physically located. (NERC)
Host control area (HCA)	A Control Area that confirms and implements scheduled interchange for a Transmission Customer that operates generation or serves customers directly within the Control Area's metered boundaries. The Control Area within whose metered boundaries a commonly owned unit or terminal is physically located.
Inadvertent energy Balancing	A control area's accounting of its inadvertent interchange, which is the accumulated difference between actual and scheduled interchange.
Inadvertent interchange or Inadvertent	The difference between the Balancing Authority's Net Actual Interchange and Net Scheduled Interchange ($I_A - I_S$).
Inadvertent interchange	The difference between Actual Interchange and scheduled interchange. (IEEE)
Incremental heat rate	The amount of additional heat that must be added to a thermal generating unit at a given loading to produce an additional unit of output. It is usually expressed in British thermal units per kilowatt hour (Btu/kWh) of output.
Intermediary control area	A control area that has connecting facilities in the scheduling path between the sending and receiving control areas and has operating agreements that establish the conditions for the use of such facilities.
Interconnection Reliability Operating Limit	The value (such as MW, MVAr, Amperes, Frequency or Volts)derived from, or a subset of the System Operating Limits, which if exceeded, could expose a widespread area of the Bulk Electric System to instability, uncontrolled separation(s) or cascading outages. (NERC)
Joint control	Automatic generation control of jointly owned units by

	two or more Balancing Authorities.
Lambda	A term commonly given to the incremental cost that solves the economic dispatch calculation. It represents the cost of the next kilowatt hour that could be produced from dispatchable units on the system.
Net dependable capacity	The maximum capacity a unit can sustain over a specified period.
Net energy for load	The electric energy requirements of an electric system, defined as system net generation, plus energy received from others, less energy delivered to others through interchange. It includes system losses but excludes energy required for storage at energy storage facilities.
Net schedule	The algebraic sum of all scheduled transactions across a given transmission path or between control areas for a given period or instant in time.
Net scheduled interchange	The algebraic sum of all Interchange Schedules across a given path or between Balancing Authorities for a given period or instant in time.
Non-credible contingency event	A single credible contingency event that has the potential for the most significant impact on the power system at that time. Typically this would be the instantaneous loss of the largest generating unit on the power system or the instantaneous loss of an interconnection. (AEMC)
Normal (precontingency) operating procedures	Operating procedures that are normally invoked by the system operator to alleviate potential facility overloads or other potential system problems in anticipation of a contingency.
Operating Reserve-Supplemental	The portion of Operating Reserve consisting of: • Generation (synchronized or capable of being synchronized to the system) that is fully available to serve load within the Disturbance Recovery Period following the contingency event; or • Load fully removable from the system within the Disturbance Recovery Period following the contingency event.
Overlap regulation service	A method of providing regulation service in which the Balancing Authority providing the regulation service incorporates another Balancing Authority actual interchange, frequency response and schedules into providing Balancing Authority's AGC/ACE equation.

Planning reserve	The difference between a control area's expected annual peak capability and its expected annual peak demand expressed as a percentage of the annual peak demand.
Point of receipt	A location that the Transmission Service Provider specifies on its transmission system where an Interchange Transaction enters or a Generator delivers its output.
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 delivering party. (IEEE)
Point-to-point transmission service	The reservation and/or transmission of energy on either a firm basis and/or non-firm basis from the point(s) of receipt to the point(s) of delivery including any ancillary services that are provided by the transmission provider in conjunction with such service.
Post contingency operating procedures	Operating procedures that are invoked by the system operator to mitigate or alleviate system problems after a contingency has occurred. (NERC)
Power transfer	Often used interchangeably with "power interchange", but is more general in that it refers to movement of power by reducing one or more generating sources and increasing one or more sources of similar amount anywhere in the interconnected systems.
Power transfer distribution factor (PTDF)	A measure of the responsiveness or change in electrical loadings on system facilities due to a change in electric power transfer from one area to another, expressed in percent (up to 100%) of the change in power transfer. The PTDF applies only for the pre-contingency configuration of the systems under studies.
Pre-dispatch	Forecast of dispatch performed one day before the trading day on which dispatch is scheduled to occur. (AEMC)
Pre-dispatch schedule	A schedule published daily for each trading interval for the period from the 0430 trading interval on the next day to the 0400 trading interval on the second day after the day on which the pre-dispatch schedule is published.
Pseudo-tie	A telemetered reading or value that is updated in real time and used as a "virtual" tie line flow in the automatic

	generation control/area control error equation but for which no physical tie or energy metering actually exists. The integrated value is used as a metered megawatthour (MWh) value for interchange accounting purposes. (NERC)
Preventive operation	The practice of limiting transfers to what can be safety transmitted even if the worst single contingency occurs. (IEEE)
Ramp period	The time between ramp start and end times usually expressed in minutes. (NERC)
Ramp rate	(Schedule) The rate, expressed in megawatts per minute, at which the interchange schedule is attained during the ramp period. (Generator) The rate, expressed in megawatts per minute, that a generator changes its output.
Recallability	The right of a transmission provider to interrupt all or part of a transmission service for any reason, including economic, that is consistent with Federal Energy Regulatory Commission policy and the transmission provider's transmission service tariffs or contract provisions.
Regulation service	The process whereby one Balancing Authority contracts to provide corrective response to all or a portion of the ACE of another Balancing Authority. The Balancing Authority providing the response assumes the obligation of meeting all applicable control criteria as specified by NERC for itself and the Balancing Authority for which it is providing the Regulation Services.
Schedule	To set up a plan or arrangement for an Interchange Transaction. (NERC)
Schedule confirmation	The process of verifying the accuracy of an interchange schedule(s) between all the entities to the transaction.
Schedule implementation	The process of entering the details of a negotiated schedule into the control system(s) of a control area(s) involved in a transaction of power and energy.
Schedule period	The length of time between the nominal starting and ending time of each schedule.
Scheduled derating	A combination of maintenance and planned deratings.

Scheduled losses	The scheduled power transfer to a transmission provider for compensation of losses incurred on that provider's transmission system due to a transfer of power between purchasing and selling entities.

Scheduled interchange	Electric power scheduled to flow between entities, usually the net of all sales, purchases, and wheeling transactions between those areas at a given time.
Scheduled interchange	Electric power scheduled to flow between control areas, usually the net of all sales, purchases, and wheeling transactions between those areas at a given time. (IEEE)
Single contingency	The sudden, unexpected failure or outage of a system facility or element (generating unit, transmission line, transformer, etc.).
Single contingency	A contingency event which in the circumstances, is considered to have a very low probability of occurrence. Examples could include three phase electrical faults on the power system, or simultaneous disruptive events such as multiple generating unit failures or double circuit transmission line failure caused by tower collapse. (AEMC)
Single credible contingency event	A sequence of related events which result in the removal from service of one transmission or distribution line, or transformer. The sequence of events may include the application and clearance of a fault of defined severity.
Short term capacity reserve standard	The level of short term capacity reserve required for a particular period.
Subregion	A portion of a Region. A subregion may consist of one or more control areas.
Supervisory control	A form of remote control comprising an arrangement for the selective control of remote facilities by an electrical means over one or more communications media.
Supervisory control and data acquisition	A system of remote control and telemetry used to monitor and control the transmission system.
Tie line	A circuit connecting two Balancing Authority Areas.
Tie line bias	A mode of Automatic Generation Control that allows the Balancing Authority to: 1). maintain its Interchange Schedule and 2) respond to Interconnection frequency error.
Time error	The difference between the Interconnection time measured at the Balancing Authority (ies) and the time specified by the National Institute of Standards and Technology. Time error is caused by the accumulation of frequency error over a given period.

SECTION 4 ELECTRICITY MARKET

English Term	DEFINITION
Ancillary cost	1. A cost of providing an auxiliary or supplementary good and/or service that is related to, required by, or integral to another good or service. 2. An evolving term of art in the context of electricity transmission, it generally refers to the cost of any service provided in support of the transmission grid. Such services might include: reactive power, frequency support, phase shifting, black start capability, circuit disconnection or other such services that may be provided on request of system control center. (IEEE**)**
Buy-through	An agreement between utility and customer import power when the customer's service would otherwise be interrupted. (IEEE)
Capacity Purchases/Sales	Total of all capacity purchases/sales from entities outside the interconnection boundaries of the reporting party. Transfers such as economy, maintenance, general purpose, nondisplacement or emergency should not be included.
Constrained off	In respect to a generating unit, the state where, due to a constraint on a network the output of that generating unit is limited below the level to which it would otherwise have been dispatched by National Electricity Market Management Company Limited (NEMMCO) on the basis of its dispatch offer.
Contestable	In relation to transmission services or distribution services, a service which is permitted by the laws of the relevant participating jurisdiction to be provided by more than one network service provider as a contestable service or on a competitive basis.
Cost pool	A pool used to collect the costs associated with the use of asset categories by a group of distribution network users with like load, metering and voltage characteristics for the purpose of preparing distribution service prices.
Contract path	A specific contiguous electrical path from a point of receipt to a point of delivery for which transfer rights

	have been contracted. (NERC)
Contract path	The transmission path specified in a contract for power transport transactions. Frequently a considerable amount of the transaction will not flow over this path. (AEMC)
Dispatch bid	A bid submitted by a market participant for dispatch of a scheduled load.
Dispatch offer	An offer submitted by a market participant for dispatch of a scheduled generating unit.
Distribution factors	Measures of the electrical effects of an electric power transfer on system facilities or an outage (or removal from service) of a system facility or element on the remaining system facilities. (IEEE)
Economy energy	Electric energy produced and supplied from a more economical source in one system and substituted for that being produced or capable of being produced by a less economical source in another system. (NERC)
Economy transfers	Electric power that is scheduled and reliably transferred between two areas or entities in the short term, or on the spot market, to take advantage of the disparity in the cost of electric power between the entities, thereby reducing, operating costs and providing mutual benefit. (IEEE)
Energy constrained scheduled generating unit	A scheduled generating unit in respect of which the amount of electricity it is capable of supplying on a trading day is less than the amount of electricity it would supply on that trading day if it were dispatched to its full nominated availability for the whole trading day. (NERC)
Energy constrained scheduled load	A scheduled load in respect of which the amount of electricity it can take in a trading day, if normally off, or it can off-load, if normally on, is constrained.

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 to be short-term firm transmission service for purposes of service availability.
Interchange Distribution Calculator	The mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of Interchange Transactions over specific Flowgates. It includes a database of all Interchange Transactions and a matrix of the Distribution Factors for the Eastern Interconnection.
Interchange Transaction	An agreement to transfer energy from a seller to a buyer that crosses one or more Balancing Authority Area boundaries.
Interchange Schedule	An agreed-upon Interchange Transaction size (megawatts), start and end time, beginning and ending ramps times and rate, and type required for delivery and receipt of power and energy between the Source and Sink Balancing Authorities involved in the transaction.
Opportunity cost or economic cost	1. (General economics) the value or worth of the next best use (or opportunity) for an economic good, or the value of the sacrificed alternative. 2. (General economics) the cost savings or benefit foregone by adhering to an externally imposed constraint (e.g., government edict or pre-existing contractual obligations). That is, the difference between what can be achieved while adhering to the constraint and what can be achieved in the absence of the constraint. 3. (Electric power industry context) increase in net cost including the net cost of economy energy purchases and sales or other valid economic costs which result from the provision of an incremental transmission service. (IEEE)
Regulating capability constraints	Constraints on the formulation of a realizable dispatch or predispatch schedule due to the need to provide for regulating capability. (NERC)
Settlements	The activity of producing bills and credit notes for market participants. (AEMC)

Standby demand	The demand specified by contractual arrangement with a customer to provide power and energy to that customer as a secondary source or backup for the outage of the customer's primary source. Standby demand is usually intended to be used infrequently by any one customer. (IEEE)

SECTION 5 ENTITIES IN THE ELECTRICITY MARKET

English Term	DEFINITION
Code participant	A person being: (a) National Electricity Market Management Company Limited (NEMMCO) or (b) A person who is registered with NEMMCO including a network service provider, a system operator, a special participant, a generator, a customer and a market participant.
Code participant agent	An agent of a code participant appointed to coordinate operations of one or more of its facilities on its behalf.
Connecting utility	The utility to which the non-utility generator is connected. (Often referred to as the "host utility"). (NERC)
Control area utility	The utility operating the control area in which the non-utility generator is located.
Distribution network service Provider	A person who engages in the activity of owning, controlling, or operating a distribution system.
First-tier customer	A customer which has classified its electricity purchase at any connection point as a first tier load. (AEMC)
Intending customer	A customer which has classified any load as an intending load. (AEMC)
Participating jurisdiction	A jurisdiction that is a "participating jurisdiction" under the national electricity law.
Load-Serving Entity	Secures energy and transmission service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers. (NERC)

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. (IEEE)

Non-registered Customer	A person who: 1. purchases electricity through a connection point with the national grid than from the spot market; and 2. is eligible to register as a customer and classify the load described in (1) a first-tier load or a second-tier load, but has not so classified the load.
Non-registered second-tier customer	A person who: 1. purchases electricity through a connection point with the national grid a person other than the local retailer or the spot market; and 2. has not classified that load as a second-tier load as part of the registration process.
Planning Authority	The responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems.
Power pool	Two or more companies operating together in an integrated manner to achieve certain mutual benefits.
Receiving party	The entity receiving the capacity and/or energy transmitted by the transmission provider to point(s) of delivery.
Second-tier customer	A customer which has classified any load as a second tier load.
Sink Balancing Authority	The Balancing Authority in which the load (sink) is located for an Interchange Transaction. (This will also be a Receiving Balancing Authority for the resulting Interchange Schedule). (NERC)
Source Balancing Authority	The Balancing Authority in which the generation (source) is located for an Interchange Transaction. (This will also be a Sending Balancing Authority for the resulting Interchange Schedule).
Special participant	A system operator or a distribution system operator.
Transmitting member	Any member possessing a right to existing firm transmission capacity either through ownership or contractual arrangements.

SECTION 7 ELECTRICAL PLANT - SECONDARY

English Term	DEFINITION
Revenue meter	The meter that is used for obtaining metering data for assessing settlement for energy purchased/sold.
Unit protection	Protection of specific component of the power system where the measurements for parameter assessment can be made at the limits of the equipment on either side. (AEMC)