Terms Used in the Policies

ACTUAL INTERCHANGE. The metered interchange over a specific INTERCONNECTION between two PHYSICALLY ADJACENT CONTROL AREAS.

ANTI-ALIASING FILTER. An analog filter installed at a metering point to remove aliasing errors from the data acquisition process. The filter is designed to remove the high frequency components of the signal over the AGC sample period.

ADEQUATE REGULATING MARGIN. The minimum on-line capacity that can be increased or decreased to allow the system to respond to all reasonable demand changes in order to be in compliance with the Control Performance Standard.

ADJACENT CONTROL AREAS. Two CONTROL AREAS that are interconnected:

- Directly to each other, or
- Via a multi-party agreement or transmission tariff. (Examples include Independent System Operator and Power Pool agreements.)

AREA CONTROL ERROR (ACE). The instantaneous difference between net actual and scheduled interchange, taking into account the effects of frequency bias including a correction for meter error.

AUTOMATIC GENERATION CONTROL (AGC). Equipment that automatically adjusts a CONTROL AREA'S generation from a central location to maintain its interchange schedule plus frequency bias.

BULK ELECTRIC SYSTEM. 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.

CAPACITY EMERGENCY. A capacity emergency exists when a system's or pool's operating capacity, plus firm purchases from other systems, to the extent available or limited by transfer capability, is inadequate to meet its demand plus its regulating requirements.

CLOCK HOUR. The 60-minute period ending at :00. All surveys, measurements, and reports are based on clock hour periods unless specifically noted.

COMMONLY OR JOINTLY OWNED UNITS (COU/JOU). These terms may be used interchangeably to refer to a unit in which two or more CONTROL AREAS share ownership.

CONTRACT INTERMEDIARY CONTROL AREA. A NERC CONTROL AREA that has connecting facilities in the SCHEDULING PATH between the SENDING CONTROL AREA and RECEIVING CONTROL AREAS and operating agreements that establish the conditions for the use of such facilities.

CONTROL AREA. An electrical system bounded by interconnection (tie-line) metering and telemetry. It controls generation directly to maintain its INTERCHANGE SCHEDULE with other CONTROL AREAS and contributes to frequency regulation of the INTERCONNECTION.

CONSTRAINED FACILITY. A transmission facility (line, transformer, breaker, etc.) that is approaching, is at, or is beyond its OPERATING SECURITY LIMIT.

CONSTRAINT. A limitation placed on INTERCHANGE TRANSACTIONS that flow over a CONSTRAINED FACILITY.

DEMAND. The rate at which energy is being used by the customer.

DISTRIBUTION FACTOR (DF). The portion of an INTERCHANGE TRANSACTION, expressed in per unit that flows across a transmission facility (Flowgate).

DISTURBANCE. 1. Any perturbation to the electric system. 2. The unexpected change in ACE that is caused by the sudden loss of generation or interruption of load.

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 CONTROL AREA.

ENERGY DEFICIENT ENTITY. A LOAD SERVING ENTITY who foresees or is experiencing an ENERGY EMERGENCY situation.

ENERGY EMERGENCY. A condition when a LOAD SERVING ENTITY has exhausted all other options and can no longer provide its customers' expected energy requirements.

FREQUENCY BIAS SETTING. A value, in MW/0.1 Hz, set into a CONTROL AREA's AGC equipment to represent a CONTROL AREA's response to a frequency deviation.

HOST CONTROL AREA. 1. A CONTROL AREA that confirms and implements INTERCHANGE TRANSACTIONS for a PURCHASING-SELLING ENTITY that operates generation or serves customers directly within the CONTROL AREA'S metered boundaries. 2. The CONTROL AREA within whose metered boundaries a jointly owned unit is physically located.

HOURLY VALUE. Data measured on a clock-hour basis.

INADVERTENT INTERCHANGE. The difference between the CONTROL AREA's NET ACTUAL INTERCHANGE and NET SCHEDULED INTERCHANGE.

INTERCHANGE. Energy transfers that cross CONTROL AREA boundaries.

INTERCHANGE ARRANGEMENT. The process of finding a seller and buyer for an interchange transaction, plus reserving TRANSMISSION SERVICES.

INTERCHANGE CONFIRMATION. Agreement of the terms of the INTERCHANGE SCHEDULE prior to its implementation.

INTERCHANGE DISTRIBUTION CALCULATOR. The mechanism used by RELIABILITY COORDINATORS in the Eastern Interconnection to calculate the distribution of INTERCHANGE TRANSACTIONS over specific transmission interfaces, which are known as "Flowgates." It includes a database of all INTERCHANGE TRANSACTIONS and a matrix of the Distribution Factors for the Eastern Interconnection.

INTERCHANGE IMPLEMENTATION. The physical initiation of the INTERCHANGE SCHEDULE by entering it into the CONTROL AREA'S energy management system or by approving a schedule that has been electronically transferred into the energy management system.

INTERCHANGE SCHEDULE. The planned INTERCHANGE between two ADJACENT CONTROL AREAS that results from the implementation of one or more INTERCHANGE TRANSACTION(S).

INTERCHANGE TRANSACTION. A TRANSACTION that crosses one or more Control Area boundaries.

INTERCHANGE TRANSACTION CANCELLATION. The complete withdrawal of an INTERCHANGE TRANSACTION by a PURCHASING-SELLING ENTITY *prior* to the start time of the TRANSACTION.

INTERCHANGE TRANSACTION TERMINATION. The complete interruption of an INTERCHANGE TRANSACTION by a PURCHASING-SELLING ENTITY *after* the start time of the TRANSACTION.

INTERCHANGE TRANSACTION CURTAILMENT. The complete or partial interruption of an INTERCHANGE TRANSACTION that has started or "holding" of a new INTERCHANGE TRANSACTION that has not yet started by a TRANSMISSION PROVIDER, RELIABILITY COORDINATOR, or CONTROL AREA to maintain operating security.

INTERCONNECTION. When capitalized, any one of the three bulk electric system networks in North America: Eastern, Western, and ERCOT. When not capitalized, the facilities that connect two systems or CONTROL AREAS.

INTERMEDIARY CONTROL AREA. A CONTROL AREA on the SCHEDULING PATH between the SOURCE CONTROL AREA and SINK CONTROL AREA.

INTERRUPTIBLE LOAD. Demand that can be interrupted by direct action of the supplying system's system operator in accordance with contractual provisions.

LEAP SECOND. A second of time added occasionally by the National Institute of Standards and Technology to correct for the offset between the clock-hour day and the solar day.

LOAD. The amount of electric power delivered or required at any specified point or points on a system.

LOAD-SERVING ENTITY. The entity who serves the end-use customer's energy requirements.

JOINT CONTROL. Automatic generation control of jointly owned units by two or more CONTROL AREAS.

METERED VALUE. A measured electrical quantity that may be collected by telemetering, SCADA, or other means.

NET ACTUAL INTERCHANGE. The algebraic sum of all metered interchange over all INTERCONNECTIONS between two PHYSICALLY ADJACENT CONTROL AREAS.

NET INTERCHANGE SCHEDULE (OR NET SCHEDULE). The algebraic sum of all INTERCHANGE SCHEDULES with each ADJACENT CONTROL AREA.

NET SCHEDULED INTERCHANGE. The net of all INTERCHANGE SCHEDULES with all ADJACENT CONTROL AREAS. It is, in essence, the scheduled interchange with the INTERCONNECTION.

NET ENERGY FOR LOAD. Net system generation plus INTERCHANGE received minus INTERCHANGE delivered.

NON-SPINNING RESERVE. That operating reserve not connected to the system but capable of serving demand within a specified time, or interruptible load that can be removed from the system in a specified time.

OPERATING AUTHORITY. An entity that:

1. Has ultimate accountability for a defined portion of the BULK ELECTRIC SYSTEM to meet one or more of three reliability objectives – generation/demand balance, transmission security, and/or emergency preparedness; and
2. Is accountable to NERC and its Regional Reliability Councils for complying with NERC and Regional Policies; and
3. Has the authority to control or direct the operation of generating resources, transmission facilities, or loads, to meet these Policies.

OPERATING RESERVE. That capability above firm system demand required to provide for regulation, load forecasting error, equipment forced and scheduled outages and local area protection. It consists of spinning and non-spinning reserve.

OPERATING SECURITY. The ability of a power system to withstand or limit the adverse effects of any credible contingency to the system including overloads beyond emergency ratings, excessive or inadequate voltage, loss of stability or abnormal frequency deviations.

OPERATING SECURITY LIMIT. The value of a system operating parameter (e.g. total power transfer across an interface) that satisfies the most limiting of prescribed pre- and post-contingency operating criteria as determined by equipment loading capability and acceptable stability and voltage conditions.

OVERLAP REGULATION SERVICE. A method of providing regulation service in which the CONTROL AREA providing the regulation service incorporates all of the other CONTROL AREA's tie lines, frequency response, and schedules into its own AGC/ACE equation.

PHYSICALLY ADJACENT CONTROL AREAS. Two CONTROL AREAS that are directly interconnected with each other.

PSEUDO-TIE. A telemetered reading or value that is updated in real time and used as a tie line flow in the AGC/ACE equation but for which no physical tie or energy metering actually exists. The integrated value is used as a metered MWh value for interchange accounting purposes.

PURCHASING-SELLING ENTITY (PSE). An entity that is eligible to purchase or sell energy or capacity and reserve transmission services.

RECEIVING CONTROL AREA. The CONTROL AREA importing the INTERCHANGE.

REGION. One of the NERC Reliability Councils.

REGIONAL SECURITY PLAN. The plan that explains how the Regional Council will meet the NERC Operating Policies that deal with operational security.

REGULATION SERVICE. The process whereby one CONTROL AREA contracts to provide corrective response to all or a portion of the ACE of another CONTROL AREA. The controlling utility assumes the obligation of meeting all applicable control criteria as specified by NERC. Adjustments to control parameters shall be per applicable NERC Operating Policies. Control may be transferred by transmittal of an ACE quantity or the transmittal of the actual tie flows and corresponding schedules (see Overlap Regulation Service and Supplemental Regulation Service).

RELIABILITY COORDINATOR. An entity that provides the security assessment and emergency operations coordination for a group of CONTROL AREAS. RELIABILITY COORDINATORS must not participate in the wholesale or retail merchant functions.

RESERVE SHARING GROUP. A group whose members consist of two or more CONTROL AREAS that collectively maintain, allocate, and supply operating reserves required for each CONTROL AREA's use in recovering from contingencies within the group. Scheduling energy in from an adjoining CONTROL AREA to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period which the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker (e.g., between zero and ten minutes) then, for the purposes of Disturbance Control Performance, the areas become a reserve sharing group.

SCHEDULE (*verb*). To set up a plan or arrangement for an INTERCHANGE TRANSACTION.

SCHEDULE (*noun*). An INTERCHANGE SCHEDULE.

SCHEDULING ENTITY – An entity responsible for approving and implementing INTERCHANGE SCHEDULES. SCHEDULING ENTITY refers to a CONTROL AREA or a third party authorized by NERC for this function, such as a Scheduling Agent.

SCHEDULING PATH. The TRANSMISSION SERVICE arrangements reserved by the PURCHASING-SELLING ENTITY for a TRANSACTION.

SCHEDULED TOTAL INTERCHANGE. The net of all INTERCHANGE SCHEDULES with all ADJACENT CONTROL AREAS. It is, in essence, the scheduled interchange with the INTERCONNECTION.

SECURITY AREA. The group of CONTROL AREAS under the purview of a RELIABIITY COORDINATOR.

RELIABILITY COORDINATOR FUNCTION. The process of maintaining bulk transmission security for a CONTROL AREA, group of CONTROL AREAS, subregion, etc.

RELIABILITY COORDINATOR INFORMATION SYSTEM (SCIS). A generic reference to the communication system in the Eastern Interconnection, the WSCCnet (Western Interconnection), and the ERCOT Communication System as applicable.

SENDING CONTROL AREA. The CONTROL AREA exporting the INTERCHANGE

SINK CONTROL AREA. The CONTROL AREA in which the load (sink) is located for an INTERCHANGE TRANSACTION. (This will also be a RECEIVING CONTROL AREA for the resulting INTERCHANGE SCHEDULE.)

SOURCE CONTROL AREA. The CONTROL AREA in which the generation (source) is located for an INTERCHANGE TRANSACTION. (This will also be a SENDING CONTROL AREA for the resulting INTERCHANGE SCHEDULE.)

SUBREGION. A portion of a Region.

SUPPLEMENTAL REGULATION SERVICE. A method of providing regulation service in which the CONTROL AREA providing the regulation service receives a signal representing all or a portion of the other CONTROL AREA's ACE.

SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA). A system of remote control and telemetry used to monitor and control the transmission system.

SPECIAL PROTECTION SYSTEM. A protection system designed to perform functions other than the isolation of electrical faults. Also called "remedial action scheme."

SPINNING RESERVE. Unloaded generation that is synchronized and ready to serve additional demand.

STATION SERVICE. The electric supply for the ancillary equipment used to operate a generating station or substation.

STATION SERVICE GENERATOR. A generator (usually found in hydro plants) used to supply electric energy for station service equipment.

SUPPLEMENTAL REGULATION SERVICE. A method of providing regulation service in which the CONTROL AREA providing the regulation service receives a signal representing all or a portion of the other CONTROL AREA's ACE.

SYSTEM. A combination of generation, transmission, and distribution components comprising an electric utility, or group of utilities.

SYSTEM OPERATOR. A person authorized to operate or supervise the operation of the bulk electric system.

SYSTEM PERSONNEL. Those people who have the capability to affect system operations and who must abide by the authority vested in the System Operator. May include power plant operators, system maintenance personnel, power schedulers, power marketers, etc.

TOTAL ACTUAL INTERCHANGE. The algebraic sum of all INTERCHANGE metered with all PHYSICALLY ADJACENT CONTROL AREAS. It is, in essence, the actual interchange with the Interconnection.

TRANSACTION. An agreement arranged by a PURCHASING-SELLING ENTITY to transfer energy from seller to a buyer.

TRANSMISSION OPERATING ENTITY. An entity that owns, operates, or manages transmission facilities, which may include CONTROL AREAS, transmission owners within the CONTROL AREA, pools, subregions, Regions, or combinations of CONTROL AREAS, pools, subregions, or Regions.

TRANSMISSION PROVIDER. As defined by FERC, the public utility (or its Designated Agent) that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce and provides transmission service under the Tariff. As used in the NERC Policies: Any entity that provides Transmission Service.

TRANSMISSION SERVICE. (FERC-defined term) Point-To-Point Transmission Service provided under Part II of the Tariff on a firm and non-firm basis.