

Consolidated Authoritative Document Glossary



Term	Definition
"10 minute clock period"	<p>means any one of the following six (6) ten (10) minute periods in any hour:</p> <p>ME:01 to ME:10; ME:11 to ME:20; ME21 to ME30; ME31 to ME40; ME:41 to ME50; ME51 to ME60</p> <p>where "ME" means minute ending.</p> <p>[Rules (2009-09-01)]</p>
"acceptable operational reason"	<p>means, any one (1) or more of the following:</p> <p>(i) a circumstance related to the operation of a generating source asset which if it operated could reasonably be expected to affect the safety of the source asset, the environment, personnel working at the source asset or the public;</p> <p>(ii) re-positioning a generating source asset assets, within the energy market due to the need to meet a dispatch given to that source asset from the ISO to serve the stand-by operating reserves market;</p> <p>(iii) re-positioning a generating source asset within the energy market to manage physical or operational constraints associated with the source asset;</p> <p>(iv) re-positioning a pool asset that is an import asset or an export asset within the energy market to manage physical or operational constraints associated with an interconnection or a neighbouring balancing authority;</p> <p>(v) a circumstance directly resulting in the generating source asset not being capable of operation, which circumstance was solely caused by an occurrence of force majeure; or</p> <p>(vi) re-positioning a generating source asset for electric energy that is:</p> <p>a) produced on the property of which a person is the owner or a tenant; and b) consumed solely by that person and solely on that property.</p> <p>[Rules (2013-01-08)]</p>
"accuracy range"	<p>means an expression of a cost estimate's predicted closeness to final actual costs, which is typically expressed as high/low percentages by which actual results will be over and under the cost estimate.</p> <p>[Rules (2016-04-29)]</p>
"Act"	<p>means the <i>Electric Utilities Act</i> and any regulations made under it.</p> <p>[Rules (2011-07-01), Tariff (2011-07-01)]</p>
"adequacy"	<p>means the ability of the interconnected electric system to supply the aggregate electrical demand and energy requirements of market participants receiving system access service, taking into account planned outages and reasonably expected delayed forced outages and automatic forced outages of system elements.</p> <p>[Rules (2014-07-02)]</p>
"adjacent balancing authority"	<p>means a balancing authority area that is interconnected with another balancing authority area either directly or via a multi-party agreement or transmission tariff.</p> <p>[Alberta Reliability Standards (2010-01-22)]</p>

<p>"adverse reliability impact"</p>	<p>means the impact of an event that results in frequency-related instability; unplanned tripping of load or generation; or uncontrolled separation or cascading outages that affects a widespread area of the Interconnection.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
<p>"affiliate"</p>	<p>as defined in the <i>Business Corporations Act</i> means an affiliated body corporate within the meaning of section 2(1) of that Act, which section states:</p> <p>(a) one body corporate is affiliated with another body corporate if one of them is the subsidiary of the other or both are subsidiaries of the same body corporate or each of them is controlled by the same person, and</p> <p>(b) if 2 bodies corporate are affiliated with the same body corporate at the same time, they are deemed to be affiliated with each other.</p> <p>[Rules (2010-12-01), Tariff (2011-07-01)]</p>
<p>"agent"</p>	<p>includes:</p> <p>(i) a representative of a pool participant duly appointed and authorized by the pool participant under ISO rule 1.8 to act on behalf of and bind the pool participant with regard to transactions and other activities on the Energy Trading System and the automated dispatch and messaging system; or</p> <p>(ii) a representative of a market participant or a pool participant, as the case may be, duly appointed and authorized to act on behalf of and bind that person with regard to other ISO activities, procedures and requirements, which such appointment is made under and in accordance with the applicable ISO rules, authorizations and procedures.</p> <p>[Rules (2009-10-01)]</p>
<p>"agent"</p>	<p>includes:</p> <p>(i) a representative of a pool participant duly appointed and authorized by the pool participant under section 201.2 of the ISO rules, <i>Appointment of Agent</i> to act on behalf of and bind the pool participant with regard to transactions and other activities on the Energy Trading System and the Automated Dispatch and Messaging System; or</p> <p>(ii) a representative of a market participant or a pool participant, as the case may be, duly appointed and authorized to act on behalf of and bind that person with regard to other ISO activities, procedures and requirements, which such appointment is made under and in accordance with the applicable ISO rules, authorizations and procedures.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
<p>"aggregated generating facility"</p>	<p>means an aggregation of generating units, including any reactive power resources, which:</p> <p>(i) the ISO designates as an aggregated generating facility; and</p> <p>(i) are situated in the same proximate location at one or more point of connections.</p> <p>[Alberta Reliability Standards (2011-12-31), Tariff (2015-07-01)]</p>
<p>"aggregated generating facility"</p>	<p>means, unless otherwise designated by the ISO, an aggregation of two (2) or more generating units, including any associated reactive power resources, where:</p> <p>(i) each generating unit is rated less than 9 MW;</p> <p>(ii) all generating units are situated in the same proximate location and have a common collector bus or multiple collector busses that can be operated as a common collector bus; and</p> <p>(iii) the aggregated generating facility is connected to the interconnected electric system or the electrical system in the service area of the City of Medicine Hat.</p> <p>[Rules (2018-09-01)]</p>

<p>"Alberta interchange capability"</p>	<p>means the amount of interconnected electric system transmission capability the ISO determines is available for allocation to all transfer paths, after subtracting amounts for relevant factors including system operating limits, generating capacity and Alberta internal load.</p> <p>[Rules (2012-01-31)]</p>
<p>"Alberta internal load"</p>	<p>means a number in MW:</p> <p>(i) that represents, in an hour, system load plus load served by on-site generating units, including those within an industrial system and the City of Medicine Hat; and</p> <p>(ii) which the ISO, using SCADA data, calculates as the sum of the output of each generating unit in Alberta and the Fort Nelson area in British Columbia, plus import volumes and minus export volumes.</p> <p>[Rules (2011-10-13)]</p>
<p>"allowable dispatch variance"</p>	<p>means:</p> <p>(i) for each generating source asset, other than a wind or solar aggregated generating facility, as measured from the dispatch quantity:</p> <p>(a) plus or minus five (5) MW for a generating source asset with a maximum capability of two hundred (200) MW or less; or</p> <p>(b) plus or minus ten (10) MW for a generating source asset with a maximum capability of greater than two hundred (200) MW;</p> <p>(ii) for each wind or solar aggregated generating facility with a maximum capability of two hundred (200) MW or less:</p> <p>(a) five (5) MW greater than the dispatch quantity and five (5) MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus five (5) MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity; and</p> <p>(iii) for each wind or solar aggregated generating facility with a maximum capability of greater than two hundred (200) MW:</p> <p>(a) ten (10) MW greater than the dispatch quantity and ten (10) MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus ten (10) MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity.</p> <p>[Rules (2018-09-01)]</p>
<p>"ancillary services"</p>	<p>as defined in the Act means those services required to ensure that the interconnected electric system is operated in a manner that provides a satisfactory level of service with acceptable levels of voltage and frequency.</p> <p>[Rules (2010-12-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]</p>
<p>"apparent power"</p>	<p>means the total power, in MVA, in an alternating current power system and is calculated as the vector sum of real power and reactive power.</p> <p>[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]</p>
<p>"area control error"</p>	<p>means the instantaneous difference between actual interchange and scheduled interchange, taking into account the effects of frequency bias, time error and unilateral inadvertent interchange if automatic correction is part of the automatic generation control of the interconnected electric system, and a correction for metering error.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
<p>"arranged interchange"</p>	<p>means the state where the interchange authority has received the interchange information (initial or revised).</p> <p>[Alberta Reliability Standards (2010-01-22)]</p>
<p>"AUC Act"</p>	<p>means the <i>Alberta Utilities Commission Act</i>, as amended from time to time.</p> <p>[Rules (2003-06-01)]</p>

"automatic forced outage"	means the unavailability of a facility which is not anticipated as part of a legal owner's regular maintenance and occurs as a result of an automatic or accidental action. [Rules (2014-07-02)]
"automatic generation control"	means equipment that adjusts generation in a balancing authority area from a central location to maintain frequency or interchange schedule plus or minus frequency bias ; and may also accommodate automatic inadvertent payback and time error correction . [Alberta Reliability Standards (2014-10-01)]
"automatic generation control (AGC)"	means equipment that adjusts a balancing authority's generation in a balancing authority's area from a central location to maintain the balancing authority's frequency or interchange schedule plus or minus frequency bias. AGC may also accommodate automatic inadvertent payback and time error correction. [Rules (2009-05-28)]
"automatic time error correction"	means the component of the area control error equation for the western interconnection that is added to modify the control point for the purpose of continuously paying back primary inadvertent interchange to correct accumulated time error . [Alberta Reliability Standards (2016-12-19)]
"automatic voltage regulator (AVR)"	means the automatic control equipment that adjusts the excitation level of a generating unit to maintain voltage levels. [Rules (2003-06-01), Alberta Reliability Standards (2016-04-01), Tariff (2015-07-01)]
"available capability"	means: (i) for a generating source asset , the maximum MW that the source asset is physically capable of providing; or (ii) for an import source asset , the MW that the pool participant submits in an offer . [Rules (2013-01-08)]
"available transfer capability"	means the remaining transfer capability the ISO determines can be commercially available for transfers over the interconnected transmission network over and above already committed uses, and is calculated as the total transfer capability minus the sum of any applicable transmission reliability margin and existing transmission commitments. [Rules (2012-01-31)]
"balancing authority"	means a 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. [Alberta Reliability Standards (2014-10-01)]
"balancing authority"	means 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. [Rules (2009-05-28)]
"balancing authority area"	means the collection of generation, transmission and loads, within the metered boundaries of the balancing authority and for which the balancing authority maintains load-resource balance. [Rules (2010-12-01), Alberta Reliability Standards (2014-10-01)]
"balancing authority area"	means the collection of generation, transmission and loads within the metered boundaries of the balancing authority and for which the balancing authority maintains load-resource balance. [Tariff (2011-07-01)]
"BES cyber asset"	means a cyber asset that if rendered unavailable, degraded, or misused would, within 15 minutes of its required operation, misoperation, or non-operation, adversely impact one or more facilities, systems, or equipment, which, if

	<p>destroyed, degraded, or otherwise rendered unavailable when needed, would affect the reliable operation of the bulk electric system. Redundancy of affected facilities, systems, and equipment shall not be considered when determining adverse impact. Each BES cyber asset is included in one or more BES cyber systems. (A cyber asset is not a BES cyber asset if, for 30 consecutive days or less, it is directly connected to a network within an electronic security perimeter, a cyber asset within an electronic security perimeter, or to a BES cyber asset, and it is used for data transfer, vulnerability assessment, maintenance, or troubleshooting purposes.)</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"BES cyber system"	<p>means one or more BES cyber assets logically grouped to perform one or more reliability tasks for a functional entity.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"BES cyber system information"	<p>means information about the BES cyber system that could be used to gain unauthorized access or pose a security threat to the BES cyber system. BES cyber system information does not include individual pieces of information that by themselves do not pose a threat or could not be used to allow unauthorized access to BES cyber systems, such as, but not limited to, device names, individual IP addresses without context, electronic security perimeter names, or policy statements.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"bid"	<p>means, in respect of a pool asset in a settlement interval, a pool participant submission to purchase:</p> <p>(i) electric energy and includes all of the operating blocks the pool participant uses for that submission; or</p> <p>(ii) operating reserves from applicable Alberta markets.</p> <p>[Rules (2012-12-03)]</p>
"billing capacity"	<p>means, at a point of delivery, the highest of:</p> <p>(i) the highest 15-minute metered demand in the settlement period;</p> <p>(ii) 90% of the highest metered demand in the 24-month period including and ending with the settlement period, but excluding any months during which commissioning occurs; or</p> <p>(iii) 90% of the contract capacity or, when the settlement period contains a transaction under Rate DOS, 100% of the contract capacity.</p> <p>[Tariff (2011-07-01)]</p>
"blackstart resource"	<p>means a generating unit(s) or aggregated generating facility and its associated set of equipment which has the ability to be started without support from the system or is designed to remain energized without connection to the remainder of the system, with the ability to energize a dead bus, meeting the ISO's restoration plan needs for real power and reactive power capability, frequency and voltage control, and that has been included in the ISO's restoration plan.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"black start capability (BSC)"	<p>means the ability of a power plant or generating asset to start up without external electric supply and serve to provide power to the AIES.</p> <p>[Rules (2003-06-01)]</p>
"bulk electric system"	<p>as defined by the Regional Reliability Organization, means the electrical generation resources, transmission lines, interconnections, with neighbouring systems, and associated equipment, generally operated at voltages of one hundred (100) kV or higher; radial transmission facilities serving only load with one (1) transmission source are generally not included in this definition.</p> <p>[Rules (2016-08-30), Alberta Reliability Standards (2014-10-01)]</p>
"bulk transmission line"	<p>means a system or arrangement of lines of wire or other conductors and related equipment, wholly in Alberta, whereby electric energy, however produced, is transmitted in bulk, and includes:</p>

	<p>(i) transmission circuits composed of the conductors that form the minimum set required to so transmit electric energy;</p> <p>(ii) insulating and supporting structures; and</p> <p>(iii) all property of any kind used for the purpose of, or in connection with, or incidental to, the operation of such a line;</p> <p>(iv) but does not include a substation, operational and control devices, a generating unit, an aggregated generating facility or an electric distribution system.</p> <p>[Rules (2012-01-01)]</p>
"business day"	<p>means a day other than:</p> <p>(i) a holiday during which banks in Alberta are generally closed;</p> <p>(ii) Saturday; or</p> <p>(iii) Sunday.</p> <p>[Rules (2010-12-01), Alberta Reliability Standards (2011-12-31)]</p>
"business day"	<p>means a day other than:</p> <p>(i) a holiday during which banks in Alberta are generally closed;</p> <p>(ii) Saturday; or</p> <p>(iii) Sunday.</p> <p>[Tariff (2011-07-01)]</p>
"calibration factor"	<p>means an adjustment to the loss charges ensuring that the actual cost of losses is reasonably recovered through charges and credits under the ISO tariff on an annual basis.</p> <p>[Rules (2012-10-10), Tariff (2015-07-01)]</p>
"cascading"	<p>means the uncontrolled successive loss of system elements triggered by an incident at any location, resulting in widespread electric services interruption that cannot be restrained from sequentially spreading beyond an area predetermined by studies.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"CIP exceptional circumstance"	<p>means a situation that involves or threatens to involve one or more of the following, or similar, conditions that impact safety or bulk electric system reliability: a risk of injury or death; a natural disaster; civil unrest; an imminent or existing hardware, software, or equipment failure; a cyber security incident requiring emergency assistance; a response by emergency services; the enactment of a mutual assistance agreement; or an impediment of large scale workforce availability.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"CIP senior manager"	<p>means a single senior management official with overall authority and responsibility for leading and managing implementation of and continuing adherence to the requirements within the CIP reliability standards, CIP-002 through CIP-011.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"collector bus"	<p>means the low voltage side of any step-up transformers connected to the transmission system where the real power and reactive power produced by any generating units or reactive power resources, or both of them, are collected.</p> <p>[Alberta Reliability Standards (2011-12-31)]</p>
"collector bus"	<p>means the low voltage side of any step-up transformers connected to the interconnected electric system or the electrical system in the City of Medicine Hat where the real power and reactive power produced by any generating units or reactive power resources, or both of them within an aggregated generating facility, are collected.</p> <p>[Rules (2010-09-07)]</p>

<p>"commercial operation"</p>	<p>means the date upon which a load or generating unit begins to operate on the transmission system in a manner which is acceptable to the ISO and which is expected to be normal for it to so operate, after energization and commissioning.</p> <p>[Rules (2010-12-01)]</p>
<p>"commercial operation"</p>	<p>means the date upon which a load, generating unit or aggregated generating facility begins to operate on the transmission system in a manner which is acceptable to the ISO and which is expected to be normal for it to so operate, after energization and commissioning.</p> <p>[Tariff (2015-07-01)]</p>
<p>"Commission"</p>	<p>as defined in the Act means the Alberta Utilities Commission established by the <i>Alberta Utilities Commission Act</i>.</p> <p>[Rules (2010-12-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]</p>
<p>"commissioning"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) in the case of a new generating unit or a new aggregated generating facility, the process of carrying out, after connection to the interconnected electric system but before commercial operation, activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter commercial operation and, where applicable, meets the ISO's requirements and other relevant standards; (ii) in the case of an existing generating unit or an existing aggregated generating facility that is being modified, the process of carrying out activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily continue in commercial operation and, where applicable, continue to meet the ISO's requirements and other relevant standards; (iii) in the case of a new transmission facility or a new load facility, the process of carrying out, after energization but before normal operation, activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter normal operation and, where applicable, meets the ISO's requirements and other relevant standards; and (iv) in the case of an existing transmission facility or an existing load facility that is being upgraded in the form of a requested increase in capacity or revised functionality, the process of carrying out activities designed to test equipment, a facility or a process to confirm that the facility can satisfactorily continue in normal operation and, where applicable, continue to meet the ISO's requirements and other relevant standards. <p>[Rules (2012-12-31)]</p>
<p>"commissioning"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) in the case of a new generating unit or a new aggregated generating facility, the process of carrying out, after synchronization but before commercial operation, activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter commercial operation and, where applicable, meets the ISO's requirements and other relevant standards; (ii) in the case of an existing generating unit or an existing aggregated generating facility that is being modified, the process of carrying out activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily continue in commercial operation and, where applicable, continue to meet the ISO's requirements and other relevant standards; (iii) in the case of a new transmission facility or a new load facility, the process of carrying out, after energization but before normal operation, activities

	<p>designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter normal operation and, where applicable, meets the ISO's requirements and other relevant standards; and</p> <p>(iv) in the case of an existing transmission facility or an existing load facility that is being upgraded in the form of a requested increase in capacity or revised functionality, the process of carrying out activities designed to test equipment, a facility or a process to confirm that the facility can satisfactorily continue in normal operation and, where applicable, continue to meet the ISO's requirements and other relevant standards.</p> <p>[Tariff (2015-07-01)]</p>
"confirmed interchange"	<p>means the state where the interchange authority has verified the arranged interchange.</p> <p>[Alberta Reliability Standards (2010-01-22)]</p>
"constraint effective factor"	<p>means a ratio, based on the results of load flow studies conducted by the ISO, of the change in the flow of electric energy through a transmission constraint to a change in energy production, energy consumption or an electric energy flow across an interconnection.</p> <p>[Rules (2011-05-05)]</p>
"construction contribution"	<p>means the financial contribution in aid of construction, in excess of any available maximum local investment, that a market participant must pay for the construction and associated costs of transmission facilities required to provide system access service.</p> <p>[Tariff (2011-07-01)]</p>
"contingency"	<p>means the unexpected failure or outage of a system component, such as a generating unit, transmission line, circuit breaker, switch or electrical element.</p> <p>[Rules (2014-12-23)]</p>
"contingency"	<p>means the unexpected failure or outage of a system component, such as a generating unit, transmission line, circuit breaker, switch or electrical element.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"contingency reserve"	<p>means the component of operating reserve used to recover the area control error in accordance with reliability standards.</p> <p>[Rules (2014-12-23)]</p>
"contingency reserve"	<p>means the operating reserve used to recover the area control error according to WECC criteria.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"contract capacity"	<p>means the peak demand or supply capability, in MW, as set out in an agreement for system access service.</p> <p>[Rules (2010-12-01), Tariff (2011-07-01)]</p>
"control centre"	<p>means one or more facilities hosting operating personnel that monitor and control the bulk electric system in real-time to perform the reliability tasks, including their associated data centres, of: 1) the ISO, 2) an operator of a transmission facility for transmission facilities at two (2) or more locations, or 3) an operator of a generating unit or an operator of an aggregated generating facility for either generating units or aggregated generating facilities at two (2) or more locations.</p> <p>[Rules (2016-08-30), Alberta Reliability Standards (2017-10-01)]</p>
"control performance standard"	<p>means the reliability standard that sets the limits of the area control error of a balancing authority over a specified time period.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"cost estimate"	<p>means a compilation of all the probable costs of the elements of a project included within a defined scope. The cost estimate is to be provided in the form of the "Cost Estimating Template" available on the AESO website.</p> <p>[Rules (2016-04-29)]</p>
"cranking path"	<p>means a portion of the electric system that can be isolated and then energized to</p>

	<p>deliver electric power from a generation source to enable the startup of one or more other generating units or aggregated generating facilities.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"cyber asset"	<p>means programmable electronic devices, including the hardware, software, and data in those devices.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"cyber security incident"	<p>means a malicious act or suspicious event that:</p> <ul style="list-style-type: none"> • compromises, or was an attempt to compromise, the electronic security perimeter or physical security perimeter, or • disrupts, or was an attempt to disrupt, the operation of a BES cyber system. <p>[Alberta Reliability Standards (2017-10-01)]</p>
"day"	<p>means the twenty-four (24) hour period in Alberta beginning at 00:00:00 and ending at 23:59:59 but which:</p> <p>(i) in the case of the day on which daylight savings begins, is twenty-three (23) hours; or</p> <p>(ii) in the case of the day on which daylight savings ends, is twenty-five (25) hours.</p> <p>[Rules (2013-01-08), Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]</p>
"delayed forced outage"	<p>means the unavailability of a facility which is not anticipated and occurs as a result of a deliberate, manual action.</p> <p>[Rules (2014-07-02)]</p>
"demand"	<p>means:</p> <p>(i) the rate at which electric energy is delivered to or by a system or part of a system, generally expressed in MW, at a given instant or averaged over any designated interval of time; or</p> <p>(ii) the rate at which electric energy is being used.</p> <p>[Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]</p>
"dependability-based misoperation"	<p>means the absence of a protection system or remedial action scheme operation when intended.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"Designated TFO"	<p>means with respect to a Project, the TFO or TFOs whom the ISO has determined pursuant to rule 9.1.1, to be the TFO or TFOs eligible to be issued a Direction or to whom the ISO has issued a Direction, as the case may be but does not include a TFO where the person who is eligible to apply for the construction and operation of the transmission facility was determined by a competitive process developed by the ISO in accordance with the Act..</p> <p>[Rules (2016-11-29)]</p>
"dial-up connectivity"	<p>means a data communication link that is established when the communication equipment dials a phone number and negotiates a connection with the equipment on the other end of the link.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>
"direct loss or damage"	<p>as defined in the Act does not include loss of profits, loss of revenue, loss of production, loss of earnings, loss of contract or any other indirect, special or consequential loss or damage whatsoever arising out of or in any way connected with an Independent System Operator act.</p> <p>[Rules (2010-12-01)]</p>
"Direction"	<p>means where the ISO is authorized by legislation or regulation to either "direct" a TFO to assist the ISO or to do any other thing or where the ISO is authorized by the ISO rules to require a market participant to do any other thing, that the ISO has directed such TFO or market participant accordingly. A market participant or TFO, as the case may be, to whom a direction has been delivered by the ISO may refuse to comply with such direction only if such market participant or TFO</p>

	<p>notifies the ISO that the market participant or TFO considers that</p> <ul style="list-style-type: none"> (a) a real and substantial risk of damage to its transmission facility or generation unit could result if the direction were complied with; (b) a real and substantial risk to the safety of its employees or the public could result if the direction were complied with; or (c) a real and substantial risk of undue injury to the environment could result if the direction were complied with. <p>[Rules (2009-09-01)]</p>
"directive"	<p>means a direction the ISO gives to a market participant instructing the market participant to take any action the ISO deems necessary to maintain the reliability of the interconnected electric system.</p> <p>[Rules (2012-07-10), Alberta Reliability Standards (2014-10-01)]</p>
"directive"	<p>means a direction the ISO gives to a market participant to take any action the ISO deems necessary to maintain the reliability of the interconnected electric system.</p> <p>[Tariff (2015-07-01)]</p>
"dispatch"	<p>has the same meaning as that provided in the Act, which means a direction from the ISO to a pool participant to cause, permit or alter the exchange of electric energy or ancillary services.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]</p>
"dispatch down service"	<p>means a service which:</p> <ul style="list-style-type: none"> (i) a pool participant elects to provide via an offer; and (ii) requires reducing energy production from a source asset in response to a dispatch. <p>[Rules (2013-01-08)]</p>
"disturbance"	<p>means an unplanned event which produces an abnormal system condition or the effects experienced by a power system following a contingency, such as high or low frequency, abnormal voltage, or oscillations in the system.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]</p>
"disturbance control standard"	<p>means a performance measure applied to a balancing authority (BA) or reserve sharing group (RSG) for recovering from a disturbance within fifteen (15) minutes by restoring area control error (ACE) to zero (0) or to its pre-disturbance level.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"disturbance monitoring equipment"	<p>means devices capable of monitoring and recording system data pertaining to a disturbance, including:</p> <ul style="list-style-type: none"> (i) sequence of event recorders which record equipment response to the disturbance; (ii) fault recorders, which record actual waveform data replicating the system primary voltages and currents and which may include protective relays that provide this functionality; and (iii) dynamic disturbance recorders which record incidents that portray system behaviour during disturbances, such as low-frequency (0.1 Hz - 3 Hz) oscillations, abnormal frequency or voltage excursions, and which may include phasor measurement units. <p>[Alberta Reliability Standards (2014-10-01)]</p>
"downstream constraint side"	<p>means, in relation to the transmission elements that comprise the transmission constraint, those elements of the interconnected electric system more proximate to the load or consumption side of the transmission constraint than to the supply side of the transmission constraint.</p> <p>[Rules (2011-05-05)]</p>
"e-tag"	<p>means an electronic identifier which contains specific transactional information, necessary for scheduling an interchange transaction.</p> <p>[Rules (2012-01-31), Alberta Reliability Standards (2014-10-01)]</p>

"electric distribution system"	as defined in the Act means the plant, works, equipment, systems and services necessary to distribute electricity in a service area, but does not include a generating unit or a transmission facility . [Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"electrical islands"	means a condition in the electrical system where geographical areas of the interconnected electric system electrically separate from the interconnected electric system , resulting from system disturbances , such that there exists both generation and load in these separated areas. [Rules (2003-06-01)]
"electronic access control or monitoring systems"	means cyber assets that perform electronic access control or electronic access monitoring of the electronic security perimeter(s) or BES cyber systems . This includes intermediate systems . [Alberta Reliability Standards (2017-10-01)]
"electronic access point"	means a cyber asset interface on an electronic security perimeter that allows routable communication between cyber assets outside an electronic security perimeter and cyber assets inside an electronic security perimeter . [Alberta Reliability Standards (2017-10-01)]
"electronic security perimeter"	means the logical border surrounding a network to which BES cyber systems are connected using a routable protocol. [Alberta Reliability Standards (2017-10-01)]
"emergency"	means, as declared by the ISO , either: (i) any abnormal system condition which requires immediate manual or automatic action to prevent abnormal system frequency deviation, abnormal voltage levels, equipment damage, or tripping of system elements which might result in cascading effects; or (ii) a state in which the interconnected electric system lacks sufficient ancillary services . [Tariff (2011-07-01)]
"emergency assistance"	means energy provided to the party experiencing a system emergency , by the other party. [Rules (2003-06-01)]
"emergency assistance"	means energy provided to a person experiencing a system emergency . [Alberta Reliability Standards (2014-10-01)]
"emergency rating"	means, as determined by the legal owner of the equipment or facility, the equipment rating or the facility rating that the equipment or facility can sustain for a specified period, and takes into account the physical or safety limits of the equipment or facility and assumes acceptable loss of equipment or facility life during the period. [Rules (2016-08-15)] [Alberta Reliability Standards (2019-01-01)]
"energy storage facility"	means a facility with technologies capable of storing and releasing electric energy. [Rules (2016-04-25)]
"equipment rating"	means, as determined by the legal owner of the equipment, as applicable, the maximum and minimum voltage, current, frequency, real power , reactive power and apparent power limit of individual equipment under the following conditions: (i) steady state, (ii) short-circuit, and (iii) transient. [Rules (2016-08-15)]
"equipment rating"	means, as determined by the legal owner of the equipment, as applicable, the maximum and minimum voltage, current, frequency, real power , reactive power and apparent power limit of individual equipment under the following conditions: (i) steady state, (ii) short-circuit, and (iii) transient. [Alberta Reliability Standards (2019-01-01)]
"external routable"	means the ability to access a BES cyber system from a cyber asset that is

"connectivity"	outside of its associated electronic security perimeter via a bi-directional routable protocol connection. [Alberta Reliability Standards (2017-10-01)]
"facility rating"	means, as determined by the legal owner of the facility, the most limiting applicable equipment rating of the individual equipment that comprises the facility. [Rules (2016-08-15), Alberta Reliability Standards (2019-01-01)]
"fault"	means an event occurring on an electric system such as a short circuit, a broken wire, or an intermittent connection. [Alberta Reliability Standards (2015-09-01)]
"final cost estimate"	means an <i>Association for the Advancement of Cost Engineering Practices</i> Class 1 cost estimate , which is a cost estimate in an accuracy range between -3 to -10% and +3 to +15%. [Rules (2016-04-29)]
"final cost report"	means a document to be completed in the form of the "Final Cost Report" posted on the AESO website. [Rules (2016-04-29)]
"final energization"	means the date on which a transmission facility project or system access service project, including a project that is energized in stages, is fully energized and operational, as specified in an energization certificate or energization checklist of the ISO . [Rules (2016-04-29)]
"financial information"	means any information and records about the business, credit and financial standing, condition and viability of a market participant or its credit support provider. [Rules (2011-07-01)]
"financial obligation"	means any debt, payment or similar obligation of a market participant actually incurred or likely to be incurred under the ISO rules , the reliability standards , the ISO tariff or as a counterparty to any contract with the ISO . [Rules (2011-07-01), Tariff (2015-07-01)]
"financial security"	means sufficient enforceable credit support to secure the financial obligations of a market participant to the ISO . [Rules (2011-07-01)]
"financial security"	means any sufficient enforceable credit support to secure the financial obligations of a market participant to the ISO or a legal owner of transmission facilities . [Tariff (2015-07-01)]
"firm interchange transaction"	means an import or export interchange transaction for which the source balancing authority carries the associated operating reserve . [Rules (2009-05-28)]
"firm load"	means the load to which the ISO and applicable market participants use reasonable best efforts to supply power without interruption . [Rules (2013-01-08)]
"firm load"	means the load that the ISO and system members will use reasonable best efforts to supply without interruption. [Alberta Reliability Standards (2014-10-01)]
"flexible block"	means an operating block in an energy offer for which the ISO may issue a dispatch for full or partial amounts of MW. [Rules (2013-01-08)]
"force majeure"	means any occurrence, and its effects, which: (i) is beyond the reasonable control of the market participant ; (ii) could not have been avoided through the use of good electric industry practice or by the exercise of reasonable diligence; and (iii) prevents a market participant from performing its obligations under the ISO

	<p>rules, ISO tariff or reliability standards, as applicable; but does not include a lack of finances or any occurrence which can be overcome by incurring reasonable additional expenses.</p> <p>[Rules (2014-07-02)]</p>
"force majeure"	<p>means any occurrence, and its effects, which:</p> <ul style="list-style-type: none"> (i) is beyond, the reasonable control of the ISO or a market participant; (ii) could not have been avoided through the use of good electric industry practice or by the exercise of reasonable diligence; and (iii) prevents the ISO or a market participant from performing its obligations under the ISO rules, ISO tariff or reliability standards, as applicable; but does not include a lack of finances or any occurrence which can be overcome by incurring reasonable additional expenses. <p>[Tariff (2015-07-01)]</p>
"forced outage"	<p>means the unavailability of a facility which is not anticipated as part of a legal owner's regular maintenance and occurs as a result of an automatic or accidental action.</p> <p>[Tariff (2015-07-01)]</p>
"forecast scheduling period"	<p>means the seven (7) day period starting at 00:00:00 immediately following the day a pool participant submits a particular bid or offer.</p> <p>[Rules (2014-12-23)]</p>
"frequency bias"	<p>means a value, usually expressed in MW per zero point one Hz (MW/0.1 Hz), associated with a balancing authority area that approximates the balancing authority area's response to the frequency error of the Interconnection.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"frequency bias setting"	<p>means a value, usually expressed in MW per zero point one Hz (MW/0.1 Hz), set into the area control error algorithm of a balancing authority that allows the balancing authority to contribute its frequency response to the Interconnection.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"frequency error"	<p>means the difference between the actual and scheduled frequency. (FA - FS);</p> <p>[Alberta Reliability Standards (2010-01-22)]</p>
"frequency response"	<p>means:</p> <ul style="list-style-type: none"> (i) for an equipment, the ability of a system, or elements of the system, to react or respond to a change in system frequency; or (ii) for a system, the sum of the change in demand, plus the change in generation, divided by the change in frequency, expressed in MW per zero point one Hz (MW/0.1 Hz). <p>[Alberta Reliability Standards (2014-10-01)]</p>
"functionally equivalent remedial action scheme"	<p>means a remedial action scheme that provides the same performance as follows:</p> <ul style="list-style-type: none"> (i) each remedial action scheme can detect the same conditions and provide mitigation to comply with all reliability standards; and (ii) each remedial action scheme may have different components and operating characteristics. <p>[Alberta Reliability Standards (2014-10-01)]</p>
"functionally equivalent protection system"	<p>means a protection system that provides performance as follows:</p> <ul style="list-style-type: none"> (i) each protection system can detect the same faults within the zone of protection and provide the clearing times and coordination needed to comply with all reliability standards; and (ii) each protection system may have different components and operating characteristics. <p>[Alberta Reliability Standards (2014-10-01)]</p>
"generating asset steady state"	<p>means the state of operation that begins the first 10 minute clock period following the period in which a generating source asset's output has reached the</p>

	<p>MW specified in an energy market dispatch, plus or minus the allowable dispatch variance for that generating source asset.</p> <p>[Rules (2013-01-08)]</p>
"generating unit"	<p>as defined in the Act means the component of a power plant that produces, from any source, electric energy and ancillary services, and includes a share of the following associated facilities that are necessary for the safe, reliable and economic operation of the generating unit, which may be used in common with other generating units:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; (iv) other items. <p>[Rules (2010-12-01), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]</p>
"good electric industry practice"	<p>means the standard of practice attained by exercising that degree of knowledge, skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced person engaged in the same type of undertaking in the same or similar circumstances, including determining what is reasonable in the circumstances having regard for safety, reliability and economic considerations but is not intended to be limited to the optimum practice, method or act, to the exclusion of all others, and rather is intended to include practices, methods and acts generally accepted in Alberta.</p> <p>[Rules (2010-12-01), Tariff (2011-07-01)]</p>
"governor or governor system"	<p>means automatic control equipment with speed droop characteristics to control generating unit speed and/or electric power output.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"governor or governor system"	<p>means automatic control equipment with frequency or speed droop characteristics to control:</p> <ul style="list-style-type: none"> (i) the speed or electric power output of a generating unit, or both; (ii) the electric power input of a load; (iii) the electric power output or input of an energy storage facility, or both; or (iv) the speed or electric power output of an aggregated generating facility. <p>[Rules (2018-09-01)]</p>
"gross real power"	<p>means:</p> <ul style="list-style-type: none"> (i) for aggregated generating facilities with one or more collector busses, the sum of real power delivered by the generating units measured at those collector busses; (ii) for aggregated generating facilities without a collector bus, a real power measurement at the generator terminal for each generating unit; (iii) for a generating unit that is not part of an aggregated generating facility, the real power measurement at the generator terminal; or (iv) for an energy storage facility, the real power measurement at the low voltage side of the transmission system step-up transformer. <p>[Rules (2016-04-25)]</p>
"HEEA"	<p>means the Hydro and Electric Energy Act (Alberta).</p> <p>[Rules (2003-06-01)]</p>
"hh"	<p>refers to the current clock hour.</p> <p>[Rules (2003-06-01)]</p>
"hour ending or HE"	<p>means the sixty (60) minute period ending that hour. For example, HE 24 includes the time between 23:00 and 24:00. For pool price and dispatch purposes, the hour starts at hh:00:00 and ends hh:59:59 for hh+1.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]</p>
"import load remedial action scheme (ILRAS)"	<p>means a service provided by one (1) or more ancillary service providers that consists of a transfer tripping scheme between the 500 kV circuit breakers at Langdon and Cranbrook on the Alberta-British Columbia intertie and one (1) or</p>

	<p>more system access customer load breakers which such service is designed so that the tripping of the intertie causes the load breakers to open automatically, within eight (8) cycles of the trip initiation of the 500 kV breakers.</p> <p>[Rules (2003-06-01)]</p>
"in merit"	<p>means :</p> <ul style="list-style-type: none"> (i) for the energy market, an operating block whose price is at or below system marginal price; (ii) for dispatch down service and load shed service for imports, starting from the lowest priced operating block, the operating blocks with a sum of MW sufficient to meet the MW requirements for dispatch down service or load shed service for imports as applicable; or (iii) for standby operating reserves, any offer that the ISO accepts. <p>[Rules (2013-01-08)]</p>
"inadvertent interchange"	<p>means the difference between the net actual interchange of the balancing authority and the net interchange schedule of the balancing authority.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"incremental generation costs"	<p>means, where the ISO has issued a directive:</p> <ul style="list-style-type: none"> (i) for energy from a long lead time asset; or (ii) to cancel, in the case of a generating source asset, any one (1) or more of a planned outage, a delayed forced outage or an automatic forced outage, requiring that a long lead time asset or a generating source asset, be made available to, or to actually, operate, exchange electric energy or provide ancillary services, those reasonable costs incurred that are reasonably attributed to compliance with the directive and which would have been avoided but for the directive, and include: <ul style="list-style-type: none"> (iii) in the case of compliance with a directive for energy from a long lead time asset: <ul style="list-style-type: none"> (a) the actual costs of all variable charges from Rate STS of the ISO tariff, including any applicable loss factors charge or credit; (b) variable operational and maintenance charges; (c) fuel costs to start and run the long lead time asset or the generating source asset; and (d) other related reasonable costs; (iv) in the case of compliance with a directive canceling a planned outage, a delayed forced outage or an automatic forced outage for a generating source asset, those costs incurred: <ul style="list-style-type: none"> (a) to plan, prepare for and execute the outage, from initial planning and inception to the date of the directive canceling the outage; (b) subsequent to the date of the directive cancelling the outage and in accordance with good electric industry practice; (c) for re-scheduling personnel, equipment and other materials required for the performance of the work originally to be completed or performed pursuant to the cancelled outage; (d) in the form of verified damages or liquidated claims dollar amounts or claimed by third parties pursuant or related to: <ul style="list-style-type: none"> (A) any third party contract terms and conditions for performing repair, retrofit, upgrade or maintenance work on or directly related to the source asset during the outage, which third party work has been cancelled or otherwise cannot be performed due to the outage cancellation; and (B) any third party market or hedging transactions directly related to participation in the energy or ancillary services market by the source asset which is the subject of the directive; and (e) as other related reasonable costs. <p>[Rules (2014-07-02)]</p>

"inflexible block"	means an operating block in an energy offer for which the ISO may issue a dispatch for only the full amount of MW in the operating block . [Rules (2013-01-08)]
"interactive remote access"	means user-initiated access by a person employing a remote access client or other remote access technology using a routable protocol. Remote access originates from a cyber asset that is not an intermediate system and not located within any of the Responsible Entity's electronic security perimeter(s) or at a defined electronic access point . Remote access may be initiated from: 1) cyber assets used or owned by the Responsible Entity, 2) cyber assets used or owned by employees, and 3) cyber assets used or owned by vendors, contractors, or consultants. Interactive remote access does not include system-to-system process communications. Note: the "Responsible Entity" referred to in this definition is identified in the applicability section of each Version 5 CIP Cyber Security reliability standard . [Alberta Reliability Standards (2017-10-01)]
"interchange"	means energy transfers that cross balancing authority boundaries. [Alberta Reliability Standards (2010-01-22)]
"interchange authority "	means the responsible entity that authorizes implementation of valid and balanced interchange schedules between balancing authority areas , and ensures communication of interchange information for reliability assessment purposes. [Alberta Reliability Standards (2010-01-22)]
"interchange schedule"	means, for a given settlement interval , the planned interchange of electricity between the ISO and an adjacent balancing authority which results from the validation and scheduling of interchange transactions . [Rules (2012-01-31)]
"interchange schedule"	means, for a given settlement interval , the planned interchange of energy between the ISO and an adjacent balancing authority which results from the validation and scheduling of interchange transactions . [Alberta Reliability Standards (2014-10-01)]
"interchange transaction"	means an energy or ancillary services transaction that crosses one or more balancing authority area boundaries. [Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"interconnected electric system"	as defined in the Act means all transmission facilities and all electric distribution systems in Alberta that are interconnected, but does not include an electric distribution system or a transmission facility within the service area of the City of Medicine Hat or a subsidiary of the City, unless the City passes a bylaw that is approved by the Lieutenant Governor in Council under section 138 of the Act . [Rules (2010-12-01), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]
"interconnected transmission operator "	means the entity outside of Alberta responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission facilities. [Alberta Reliability Standards (2010-01-22)]
"interconnection"	means the electrical connection of the AIES with any electric system in a jurisdiction bordering Alberta. [Rules (2003-06-01)]
"interconnection"	means the electrical connection of the interconnected electric system with any electric system in a jurisdiction bordering Alberta and when capitalized, it means any one (1) of the three (3) major electric system networks in North America:

	Eastern, Western, and ERCOT. [Alberta Reliability Standards (2014-10-01)]
"interconnection reliability operating limit Tv"	means the maximum time that an interconnection reliability operating limit coordinator area(s) becomes greater than acceptable. Each interconnection reliability operating limit Tv must be less than or equal to thirty (30) minutes. [Alberta Reliability Standards (2015-09-01)]
"interconnection reliability operating limits"	means a system operating limit , that if violated, could lead to instability, uncontrolled separation or cascading outages that adversely impact the reliability of the bulk electric system . [Alberta Reliability Standards (2014-10-01)]
"intermediate system"	means a cyber asset or collection of cyber assets performing access control to restrict interactive remote access to only authorized users. The intermediate system must not be located inside the electronic security perimeter . [Alberta Reliability Standards (2017-10-01)]
"interruptible demand"	means the demand that a load market participant makes available to the ISO via contract or agreement for curtailment. [Alberta Reliability Standards (2014-10-01)]
"interruption"	means any action causing partial or full curtailment of electrical power flow. [Rules (2003-06-01)]
"intertie"	as defined in the <i>Transmission Regulation</i> means a transmission facility , including its associated components, that links one or more electric systems outside Alberta to one or more points on the interconnected electric system . [Rules (2009-05-28), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"ISO"	means the Independent System Operator as defined in the Act being the corporation established by section 7 of the Act . [Rules (2010-12-01), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]
"ISO fees"	as defined in the Act means the fees established by the ISO pursuant to the Act . [Rules (2009-12-16)]
"ISO rules"	as defined in the Act means the rules made by the Independent System Operator under section 19 and 20 of the Act . [Rules (2010-12-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"ISO tariff"	as defined in the Act means the tariff prepared by the ISO under section 30 of the Act that has been approved by the Commission . [Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"legal owner"	means the person who owns electric industry property including any one (1) or more of: (i) a generating unit ; (ii) an aggregated generating facility ; (iii) a transmission facility ; (iv) an electric distribution system ; (v) an industrial system that has been designated as such by the Commission ; and (vi) a load facility with system access service under subsection 101(2) of the Act . [Alberta Reliability Standards (2014-10-01)]

"legal owner"	<p>means the person who owns electric industry property including any one or more of:</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) any aggregated generating facilities; (iii) a transmission facility; (iv) an electric distribution system; (v) an industrial system that has been designated as such by the Commission; and (vi) a load facility with system access service under subsection 101(2) of the Act. <p>[Rules (2010-09-07)]</p>
"legal owner"	<p>means the person who owns electric industry property including any one or more of:</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) an aggregated generating facility; (iii) a transmission facility; (iv) an electric distribution system; (v) an industrial system that has been designated as such by the Commission; and (vi) a load facility with system access service under subsection 101(2) of the Act. <p>[Tariff (2016-07-01)]</p>
"Load Shed Service"	<p>means an amount of load contracted by the ISO to provide:</p> <ul style="list-style-type: none"> (i) instantaneous fifty-nine point five (59.5) Hz underfrequency load shedding; or (ii) manual load shedding. <p>[Rules (2003-06-01)]</p>
"long lead time asset"	<p>means a generating source asset that:</p> <ul style="list-style-type: none"> (i) requires more than one (1) hour to synchronize to the system under normal operating conditions; or (ii) is synchronized but has varying start-up times for distinct portions of its MW and which requires more than one (1) hour to deliver such additional portions of its MW; and <p>which is not delivering all of its energy for reasons other than an outage.</p> <p>[Rules (2014-07-02)]</p>
"long term adequacy (LTA)"	<p>means the ability of future electric system energy supply to meet expected aggregate electrical demand requirements over several years.</p> <p>[Rules (2008-08-11)]</p>
"loss factor"	<p>means the value, in percent, which reasonably represents the contribution to transmission system losses, based on location, of a generating facility, export service, import service, or other opportunity service, and which the ISO establishes in accordance with section 501.10 of the ISO rules, <i>Transmission Loss Factors</i>.</p> <p>[Rules (2017-01-01)]</p>
"loss factor"	<p>means a number, expressed as a percentage, the ISO determines:</p> <ul style="list-style-type: none"> (i) for each generating unit, aggregated generating facility, industrial system that has been designated as such by the Commission, Fort Nelson and the City of Medicine Hat, which when multiplied by the MW output of the facility reasonably represents the facility's impact on average transmission system losses; (ii) for each Rate DOS, which when multiplied by the demand, in MW, reasonably represents the service's impact on transmission system losses; and (iii) for each import and export interchange transaction scheduled on the interconnected electric system, which when multiplied by the demand, in

	<p>MW, of the transaction reasonably represents the impact on transmission system losses.</p> <p>[Tariff (2015-07-01)]</p>
"LTA metrics"	<p>means all adequacy information related items, including historical data and forecasts that the ISO will regularly capture, calculate and report on.</p> <p>[Rules (2008-08-11)]</p>
"LTA threshold"	<p>means the magnitude measured with respect to one of the LTA metrics that, if exceeded, would indicate a need for the consideration of preventative action.</p> <p>[Rules (2008-08-11)]</p>
"LTA threshold actions"	<p>means out-of-market measures the ISO may choose to implement to remedy an actual or impending LTA issue, where for the purpose of this definition, out-of-market measures are actions that either create revenue or cost impacts outside the energy market for market participants. LTA threshold actions are intended to preserve LTA until new generation capacity is built or load decreases.</p> <p>[Rules (2008-08-11)]</p>
"market participant"	<p>as defined in the Act means:</p> <ul style="list-style-type: none"> (i) any person that supplies, generates, transmits, distributes, trades, exchanges, purchases or sells electricity, electric energy, electricity services or ancillary services; or (ii) any broker, brokerage or forward exchange that trades or facilitates the trading of electricity, electric energy, electricity services or ancillary services. <p>[Rules (2009-12-16), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]</p>
"Market Surveillance Administrator"	<p>as defined in the Act means the corporation continued by section 32 of the <i>Alberta Utilities Commission Act</i>.</p> <p>[Rules (2010-04-30), Tariff (2011-07-01)]</p>
"material adverse change"	<p>means a downgrade in the credit rating of a market participant by any credit rating agency, or an event that may result in the materially weaker creditworthiness of a market participant as reasonably determined by the ISO.</p> <p>[Rules (2010-04-30), Tariff (2011-07-01)]</p>
"maximum authorized charging power"	<p>means, for an energy storage facility, the maximum gross real power that the ISO has authorized each energy storage facility to receive from the interconnected electric system, as measured at the low voltage side of the transmission system step-up transformer.</p> <p>[Rules (2016-04-25)]</p>
"maximum authorized discharging power"	<p>means, for an energy storage facility, the maximum gross real power that the ISO has authorized each energy storage facility to deliver to the interconnected electric system, as measured at the low voltage side of the transmission system step-up transformer.</p> <p>[Rules (2016-04-25)]</p>
"maximum authorized real power"	<p>means:</p> <ul style="list-style-type: none"> (i) for an aggregated generating facility with one or more collector busses, the sum of the maximum gross real power that the ISO has authorized the generating units to deliver to those collector busses; (ii) for an aggregated generating facility without a collector bus, the maximum gross real power that the ISO has authorized each generating unit to deliver to its generator terminal; or (iii) for a generating unit that is not part of an aggregated generating facility, the maximum gross real power that the ISO authorizes the generating unit to deliver to its generator terminal. <p>[Alberta Reliability Standards (2011-12-31)]</p>

<p>"maximum authorized real power"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) for an aggregated generating facility, the sum of the maximum gross real power that may be delivered to the collector busses of the aggregated generating facility; or (ii) for a generating unit that is not part of an aggregated generating facility, the maximum gross real power that may be delivered to the stator winding terminal of the generating unit. <p>[Rules (2018-09-01)]</p>
<p>"maximum capability"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) for a generating unit or aggregated generating facility, the maximum MW that it is physically capable of providing under optimal operating conditions while complying with all applicable ISO rules and terms and conditions of the ISO tariff; or (ii) for a source asset that is an import asset, the available capability. <p>[Rules (2013-01-08), Tariff (2015-07-01)]</p>
<p>"merit order"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) for the energy market, the dispatch down service market or load shed service for imports, a list of operating blocks sorted by price; or (ii) for standby operating reserves, a list of procured volumes sorted by price. <p>[Rules (2013-01-08)]</p>
<p>"meter"</p>	<p>means the apparatus which measures active energy, reactive energy or both, including any internal recorder, or clock, which is normally tested as part of the apparatus.</p> <p>[Rules (2003-06-01)]</p>
<p>"metered demand"</p>	<p>means the rate at which electric energy is delivered to a point of delivery or from a point of supply, in MW, measured by the relevant metering equipment and averaged over a 15-minute or other interval as deemed necessary by the ISO.</p> <p>[Rules (2010-07-23), Tariff (2011-07-01)]</p>
<p>"metered energy"</p>	<p>means the quantity of electric energy transferred to a point of delivery or from a point of supply, in MWh, reflected by the relevant metering equipment during a particular period of time.</p> <p>[Rules (2010-07-23)]</p>
<p>"metered energy"</p>	<p>means the quantity of electric energy transferred to a point of delivery or from a point of supply, in MWh, measured by the relevant metering equipment during a particular period of time.</p> <p>[Tariff (2015-07-01)]</p>
<p>"metering equipment"</p>	<p>as defined in the <i>AESO Measurement System Standard</i> means all measurement transformers, meters, recorders, remote communication equipment and associated wiring required for the measurement and, if applicable, remote storage of the active energy and reactive energy interval data for a single metering point.</p> <p>[Rules (2010-04-30), Tariff (2011-07-01)]</p>
<p>"meter"</p>	<p>means the apparatus which measures active energy, reactive power or both, including any internal recorder, or clock, which is normally tested as part of the apparatus.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
<p>"minimum stable generation"</p>	<p>means:</p> <ul style="list-style-type: none"> (i) the greater of the minimum generation level, in MW, that a source asset can be continuously operated at without: <ul style="list-style-type: none"> (a) becoming unstable; or (b) violating environmental permits; or (ii) in the case of a source asset that is integral to onsite industrial processes

	<p>offering gross generation onto the interconnected electric system, the greater of:</p> <p>(a) the generation level set out in subsection (i);</p> <p>(b) the generation level the operator anticipates the source asset is required to operate at in order to avoid either:</p> <p>(A) a forced shut down of the onsite industrial processes; or</p> <p>(B) a reduction of onsite industrial processes where the reduction results in any increase in net-to-grid generation; or</p> <p>(c) the generation level the operator anticipates the source asset can operate at to produce net-to-grid generation of zero(0); or</p> <p>(iii) in the case of a source asset that is integral to onsite industrial processes offering net generation onto the interconnected electric system, the generation level the operator anticipates the source asset is required to operate at in order to avoid either:</p> <p>(a) a forced shut down of the onsite industrial processes; or</p> <p>(b) a reduction of onsite industrial processes where the reduction results in any increase in net-to-grid generation.</p> <p>[Rules (2012-03-28)]</p>
"misoperation"	<p>means any one of the following:</p> <ul style="list-style-type: none"> any failure of a protection system element to operate within the specified time when a fault or abnormal condition occurs within a zone of protection. any operation for a fault not within a zone of protection, except an operation as backup protection for a fault in an adjacent zone that is not cleared within a specified time for the protection for that zone. any unintentional protection system operation when no fault or other abnormal condition has occurred unrelated to on-site maintenance and testing activity. <p>[Rules (2016-08-30), Alberta Reliability Standards (2010-01-22)]</p>
"month"	<p>means a calendar month.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]</p>
"mothball outage"	<p>means a reduction in the available capability of a source asset which is anticipated and occurs as a result of deliberate manual action and is not a planned outage.</p> <p>[Rules (2016-06-07)]</p>
"needs identification document"	<p>means the document referred to in section (34)(1) of the Act.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]</p>
"needs identification document estimate"	<p>means an <i>Association of the Advancement of Cost Engineering Practices</i> Class 4 cost estimate, which is a cost estimate in an accuracy range between -15 to -30% and +20 to +50%, as directed by the ISO.</p> <p>[Rules (2016-04-29)]</p>
"NERC"	<p>means the North American Electric Reliability Corporation.</p> <p>[Rules (2008-11-13), Alberta Reliability Standards (2014-10-01)]</p>
"net actual interchange"	<p>means the sum of all metered interchange over all interconnections between the balancing authority areas of two (2) adjacent balancing authorities.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
"net energy for load"	<p>means net balancing authority area generation, plus energy received from other balancing authority areas, less energy delivered to balancing authority areas through interchange; it includes balancing authority area losses but excludes energy required for storage at energy storage facilities.</p> <p>[Alberta Reliability Standards (2010-01-22)]</p>
"net interchange schedule"	<p>means the sum of all interchange schedules with each adjacent balancing authority.</p>

	[Alberta Reliability Standards (2014-10-01)]
"net scheduled interchange or NSI"	means the algebraic sum of all interchange schedules across a given path or between balancing authorities for a given period or instant in time. [Alberta Reliability Standards (2010-01-22)]
"net settlement instruction"	means an electronic instruction: (i) to the ISO from two (2) counterparty pool participants ; and (ii) containing transactional information including volumes, start and end times, and applicable pool assets , which enables the ISO to perform netting of metered energy for purposes of calculating power pool settlements. [Rules (2011-07-01)]
"normal clearing"	means that a protection system operates as designed and the fault is cleared in the time normally expected with proper functioning of the installed protection systems . [Rules (2016-04-25), Alberta Reliability Standards (2010-01-22)]
"normal rating"	means, as determined by the legal owner of the equipment or facility, the equipment rating or the facility rating that the equipment or facility can sustain on a continuous basis. [Rules (2016-08-15)] [Alberta Reliability Standards (2019-01-01)]
"off peak"	means those periods of time which are not on peak . [Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
"offer"	means, in respect of a pool asset in a settlement interval , a pool participant submission to sell: (i) electric energy or dispatch down service and includes all of the operating blocks the pool participant uses for that submission; or (ii) operating reserves to applicable Alberta markets. [Rules (2012-12-03), Alberta Reliability Standards (2014-10-01)]
"offer control information"	means the identity of any market participant who has ultimate control and determination of the price and quantity of offers or bids as applicable. [Rules (2012-12-03)]
"on peak"	means the periods: (i) from 07:00:00 to 22:59:59 inclusive, Mountain Time in Alberta; or (ii) when dealing with inadvertent interchange , that NERC defines, with Saskatchewan being treated the same as the western interconnection . [Rules (2014-12-23)]
"on peak"	means the time: (i) from 07:00 to 23:00 inclusive, Mountain Time in Alberta; or (ii) when dealing with inadvertent interchange , that NERC defines with Saskatchewan being treated the same as the western interconnection . [Alberta Reliability Standards (2014-10-01)]
"operating block"	means any one (1) of the seven (7) price and quantity pairs the ISO allocates to a pool asset within a settlement interval for the purposes of submitting bids and offers . [Rules (2013-01-08)]
"operating reserve"	means the real power capability above system demand required to provide for regulation, forced outages and unplanned outages . [Rules (2014-12-23), Tariff (2015-07-01)]
"operating reserves"	means the capability above system demand required to provide for regulation , load forecasting errors, equipment forced and scheduled outages and local area protection. It consists of spinning reserve and non-spinning reserve . [Alberta Reliability Standards (2015-07-08)]
"operating transfer capability (OTC)"	means the maximum amount of actual power that can be transferred over direct or parallel transmission elements comprising an interconnection from one balancing authority to another balancing authority , and as further defined by the WECC .

	[Rules (2009-05-28)]
"operating week"	means the period from 00:00 Saturday to 24:00 Friday. [Rules (2004-10-14)]
"operational deviation"	means: (i) a generating source asset is unable to comply with the ramping requirements set out in section 4 of subsection 203.4 of the ISO rules , Delivery Requirements for Energy; or (ii) a generating source asset operating in generating asset steady state varies outside its allowable dispatch variance , due to force majeure or any other circumstances related to the operation of the generating source asset which could reasonably be expected to affect the available capability or safety of the generating source asset , third party facilities, contracts or arrangements, the environment, personnel working at the generating source asset or the public. [Rules (2013-01-08)]
"operational planning analysis"	means an analysis of the expected system conditions for the next day's operation. (That analysis may be performed either a day ahead or as much as 12 months ahead.) Expected system conditions include things such as load forecast(s), generation output levels, and known system constraints (transmission facility outages, generator outages, equipment limitations, etc.). [Alberta Reliability Standards (2015-07-08)]
"operations support personnel"	means individuals who perform current day or next day outage coordination or assessments, or who determine system operating limits , interconnection reliability operating limits , or operating nomograms, in direct support of real time operations of the bulk electric system . [Alberta Reliability Standards (2018-04-01)]
"operator"	means a person given expressed authority by a legal owner to operate on the legal owner's behalf any one (1) or more of its electric industry properties, including: (i) a generating unit ; (ii) an aggregated generating facility ; (iii) a transmission facility ; (iv) an electric distribution system ; (v) an industrial system that has been designated as such by the Commission ; and (vi) a load facility with system access service under subsection 101(2) of the Act ; and includes the legal owner , if no such other person has been so authorized. [Rules (2010-09-07)]
"operator"	means a person given expressed authority by a legal owner to operate on the legal owner's behalf any one (1) or more of its electric industry properties, including: (i) a generating unit ; (ii) an aggregated generating facility ; (iii) a transmission facility ; (iv) an electric distribution system ; (v) an industrial system that has been designated as such by the Commission ; and (vi) a load facility with system access service under subsection 101(2) of the Act ; and includes the legal owner , if no such other person has been so authorized. [Alberta Reliability Standards (2014-10-01)]
"original budget"	means a document setting out the allocation of resources against which cost performance will be measured and assessed. [Rules (2016-04-29)]

"Path 1"	means the Alberta – British Columbia transfer path as identified by WECC in the document "Major WECC Transfer Paths in the Bulk Electric System". [Alberta Reliability Standards (2010-01-22)]
"person"	as defined in the Act includes an individual, unincorporated entity, partnership, association, corporation, trustee, executor, administrator or legal representative. [Rules (2010-09-07), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"physical access control systems"	means cyber assets that control, alert, or log access to the physical security perimeter(s) , exclusive of locally mounted hardware or devices at the physical security perimeter such as motion sensors, electronic lock control mechanisms, and badge readers. [Alberta Reliability Standards (2017-10-01)]
"physical capacity"	means the maximum amount of electric power that a transmission facility is rated by its legal owner to be able to transmit without suffering damage. [Tariff (2015-07-01)]
"physical security perimeter"	means the physical border surrounding locations in which BES cyber assets , BES cyber systems , or electronic access control or monitoring systems reside, and for which access is controlled. [Alberta Reliability Standards (2017-10-01)]
"planned outage"	means the full or partial unavailability of a facility which is anticipated as part of a legal owner's regular maintenance, including for the purposes of construction, commissioning or testing, and occurs as a result of a deliberate manual action. [Rules (2016-06-07)]
"planned outage"	means the unavailability of a facility which is anticipated as part of a legal owner's regular maintenance and occurs as a result of a deliberate, manual action. [Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]
"planning authority"	means the entity that is registered with NERC and as defined under the NERC functional model. [Alberta Reliability Standards (2015-09-01)]
"point of connection"	means a point at which electric energy is transferred between a transmission facility that is not an industrial system, and (i) the high voltage side of any aggregated generating facilities or generating unit ; (ii) an electric distribution system ; (iii) an industrial system that has been designated as such by the Commission ; or (iv) a load facility with system access service under subsection 101(2) of the Act . [Rules (2010-09-07), Alberta Reliability Standards (2014-10-01)]
"point of delivery"	means the point at which electricity is transferred from transmission facilities to facilities owned by a market participant receiving system access service under the ISO tariff , including an electric distribution system . [Tariff (2011-07-01), Rules (2010-04-30)]
"point of interconnection"	means the point at which electricity is transferred between the interconnected electric system and a neighbouring jurisdiction and where the electricity so transferred is measured. [Rules (2010-04-30), Tariff (2011-07-01)]
"point of supply"	means the point at which electricity is transferred to transmission facilities from facilities owned by a market participant receiving system access service under the ISO tariff , including a generating unit or an electric distribution system . [Rules (2010-04-30)]

"point of supply"	means the point at which electricity is transferred to transmission facilities from facilities owned by a market participant receiving system access service under the ISO tariff , including a generating unit , an aggregated generating facility or an electric distribution system . [Tariff (2015-07-01)]
"pool asset"	means one (1) or more generating units , aggregated generating facilities , load assets, import assets or export assets, identified by a single pool ID the ISO assigns, and registered to a pool participant . [Rules (2013-01-08)]
"pool ID"	means a unique identifier the ISO assigns to a pool asset for the primary purpose of enabling a pool participant to enter into transactions in the power pool . [Rules (2011-07-01)]
"pool participant"	means a market participant who is registered to transact, listed in the pool participant list . [Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
"pool price"	as defined in the Act means the price for each hour, in \$/MWh, established and reported by the ISO , in accordance with the ISO rules , for electric energy exchanged through the power pool . [Alberta Reliability Standards (2010-12-01)]
"pool price"	as defined in the Act means the price for each hour, in \$/MWh, established and reported by the ISO , in accordance with the ISO rules , for electric energy exchanged through the power pool . [Rules (2013-01-08)]
"pool price"	as defined in the Act means the price for each hour established and reported by the ISO , in accordance with the ISO rules , for electric energy exchanged through the power pool . [Tariff (2015-07-01)]
"post permit and license estimate"	means an <i>Association for the Advancement of Cost Engineering Practices</i> Class 2 cost estimate , which is a cost estimate in an accuracy range between -5 to -15% and +5 to +20%. [Rules (2016-04-29)]
"power factor"	means the ratio of real power to apparent power . [Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]
"power factor"	means the ratio of real power to apparent power. [Tariff (2015-07-01)]
"power pool"	as defined in the Act means the scheme operated by the ISO for (i) exchanges of electric energy, and (ii) financial settlement for the exchange of electric energy. [Rules (2009-12-16)]
"power pool"	as defined in the Act means the scheme operated by the Independent System Operator for: (i) exchange of electric energy; and (ii) financial settlement for the exchange of electric energy. [Tariff (2011-07-01)]

<p>"power purchase arrangement"</p>	<p>as defined in the Act means a power purchase arrangement included in Alberta Regulation AR 175/2000, being the <i>Power Purchase Arrangements Determination Regulation</i>, but does not include:</p> <ul style="list-style-type: none"> (i) the power purchase arrangement that applies to the H.R. Milner generating unit; (ii) the power purchase arrangement that applies to the Sturgeon generating units; (iii) a power purchase arrangement that expires in accordance with the unit effective term completion date specified in the power purchase arrangement; (iv) a power purchase arrangement that is terminated under section 15.2 of the power purchase arrangement; (v) a power purchase arrangement that is terminated by the balancing pool. <p>[Tariff (2011-07-01)]</p>
<p>"primary inadvertent interchange"</p>	<p>means the component of inadvertent interchange caused by the regulating deficiencies of the balancing authority area.</p> <p>[Alberta Reliability Standards (2016-12-19)]</p>
<p>"Project"</p>	<p>means the project generally described as any one of the following:</p> <ul style="list-style-type: none"> (i) the means or manner by which a constraint or condition affecting the operation or performance transmission system could be alleviated as identified in a NID approved by the EUB pursuant to s. 34(3) of the Act; (ii) the request for system access service pursuant to s. 5(5)(b) of the TR; (iii) all the transmission facility proposals referred to in s. 35(1)(a) of the Act with respect to a specific approved NID; or (iv) the "transmission line", as defined in the HEEA, which has been approved by the EUB pursuant to the HEEA. <p>[Rules (2008-08-11)]</p>
<p>"Project Change Proposal"</p>	<p>means a document to be completed substantially in the form of the "Project Change Authorization Form" posted by the ISO on its website.</p> <p>[Rules (2005-08-25)]</p>
<p>"Project Energization"</p>	<p>means the date on which a project, including a project that is energized in stages, is fully energized and operational, as specified in an energization certificate or energization checklist of the ISO.</p> <p>[Rules (2005-12-01)]</p>
<p>"Project Material"</p>	<p>means with respect to a Project, all equipment, material and construction, installation, testing and commissioning services required for the construction of the Project and provided by a third party, but excluding any engineering services;</p> <p>[Rules (2005-08-25)]</p>
<p>"Project Progress Report "</p>	<p>means a document to be completed substantially in the form of the "Monthly Project Progress Report" posted by the ISO on its website.</p> <p>[Rules (2005-08-25)]</p>
<p>"protected cyber assets"</p>	<p>means one or more cyber assets connected using a routable protocol within or on an electronic security perimeter that is not part of the highest impact BES cyber system within the same electronic security perimeter. The impact rating of protected cyber assets is equal to the highest rated BES cyber system in the same electronic security perimeter. A cyber asset is not a protected cyber asset if, for 30 consecutive days or less, it is connected either to a cyber asset within the electronic security perimeter or to the network within the electronic security perimeter, and it is used for data transfer, vulnerability assessment, maintenance, or troubleshooting purposes.</p> <p>[Alberta Reliability Standards (2017-10-01)]</p>

<p>"protection system"</p>	<p>means an arrangement of equipment designed to do one or both of protect equipment and maintain the reliable operation of the interconnected electric system including:</p> <ul style="list-style-type: none"> (i) protective relays which respond to electrical quantities; (ii) communications systems necessary for correct operation of protective functions; (iii) voltage-sensing and current-sensing devices providing inputs to protective relays; (iv) station direct current supply associated with protective functions including station batteries, battery chargers and non-battery-based direct current supply; and (v) control circuitry associated with protective functions through the trip coils of the circuit breakers or other interrupting devices. <p>[Rules (2012-12-31), Alberta Reliability Standards (2014-10-01)]</p>
<p>"Quarterly Projects Report"</p>	<p>means a document to be prepared by the ISO substantially in the form of the "Quarterly Projects Report" posted by the ISO on its website.</p> <p>[Rules (2005-08-25)]</p>
<p>"ramp rate"</p>	<p>means the rate at which a pool asset is able to change its level of production, in MW per minute, in response to a dispatch or directive.</p> <p>[Rules (2013-01-08)]</p>
<p>"ramping"</p>	<p>means changing the production of a generating source asset and begins at the effective time specified in the most current dispatch and continues until the time the source asset has reached the MW specified in the dispatch, plus or minus the allowable dispatch variance for that source asset.</p> <p>[Rules (2013-01-08)]</p>
<p>"rated capacity"</p>	<p>means the maximum amount of electric power that a transmission facility is rated by the manufacturer to be able to transmit.</p> <p>[Tariff (2011-07-01)]</p>
<p>"reactive power"</p>	<p>means the power, in MVar, developed when there are inductive, capacitive or nonlinear elements in an alternating current power system and is calculated as the vector difference between apparent power and real power.</p> <p>[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]</p>
<p>"real power"</p>	<p>means the power, in MW, which does useful work and is developed when there are resistive elements in an electric power system.</p> <p>[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]</p>
<p>"real time"</p>	<p>means present time as opposed to future time.</p> <p>[Alberta Reliability Standards (2015-07-08)]</p>
<p>"regulating reserve"</p>	<p>means the component of operating reserve:</p> <ul style="list-style-type: none"> (i) responsive to automatic generation control; and (ii) frequency responsive; <p>that is sufficient to provide normal regulating margin.</p> <p>[Rules (2014-12-23)]</p>
<p>"regulating reserve resource"</p>	<p>means a single device or single system that is eligible to provide regulating reserves pursuant to subsection 3(1) of Section 205.4 of the ISO Rules, <i>Regulating Reserve Technical Requirements and Performance Standards</i>, and that can, in any combination, deliver or receive electric energy from the interconnected electric system.</p> <p>[Rules (2018-02-01)]</p>
<p>"reliability"</p>	<p>means the combination of adequacy and system security.</p> <p>[Rules (2004-08-04), Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]</p>
<p>"reliability coordinator"</p>	<p>means the entity that is registered with NERC and as defined under the NERC functional model.</p>

	[Alberta Reliability Standards (2015-07-08)]
"reliability coordinator area"	means the collection of generation, transmission, and loads within the boundaries of the a reliability coordinator . Its boundary coincides with one or more balancing authority areas. [Alberta Reliability Standards (2015-07-08)]
"reliability management system (RMS)"	means the contractual reliability management program implemented through the WECC Reliability Criteria Agreement, the WECC RMS Agreements and the Generator RMS Agreements. [Rules (2003-06-01)]
"reliability standards"	as defined in the <i>Transmission Regulation</i> means the reliability standards under section 19. [Rules (2008-08-11), Alberta Reliability Standards (2014-10-01)]
"remedial action scheme"	means a protection scheme designed to perform pre-planned corrective measures following a disturbance to provide for acceptable interconnected electric system performance or equipment protection. [Tariff (2011-07-01)]
"remedial action scheme"	<p>means a scheme designed to detect predetermined power system conditions and to automatically take corrective actions that may include, but are not limited to, adjusting or tripping generation (MW and MVar), tripping load, or reconfiguring a power system(s) in order to accomplish objectives such as:</p> <ul style="list-style-type: none"> • maintaining stability of the transmission system; • maintaining acceptable transmission system voltages; • maintaining acceptable transmission system power flows; or • limiting the impact of cascading or extreme events. <p>The following do not individually constitute a remedial action scheme:</p> <ol style="list-style-type: none"> a) a protection system installed for the purpose of detecting faults on transmission facilities and isolating the faulted facilities; b) a protection system for automatic underfrequency load shedding and automatic undervoltage load shed comprised of only distributed relays; c) out-of-step tripping and power swing blocking schemes; d) an automatic reclosing scheme; e) a scheme applied on a facility for non-fault conditions, including, but not limited to: <ol style="list-style-type: none"> (i) generator loss-of-field; (ii) transformer top-oil temperature; (iii) overvoltage; or (iv) overload <p>to protect the facility against damage by removing it from service;</p> f) a controller that switches or regulates one or more of the following: <ol style="list-style-type: none"> (i) series or shunt reactive devices, (ii) flexible alternating current transmission system devices, (iii) phase-shifting transformers, variable-frequency transformers, or (iv) tap-changing transformers <p>and that is located at and monitors quantities solely at the same station as the facility being switched or regulated;</p> g) a flexible alternating current transmission controller that remotely switches static shunt reactive devices located at other stations to

	<p>regulate the output of a single flexible alternating current transmission device;</p> <ul style="list-style-type: none"> h) a scheme or controller that remotely switches shunt reactors and shunt capacitors for voltage regulation that would otherwise be manually switched; i) a scheme that automatically de-energizes a line for a non-fault operation when one end of the line is open; j) a scheme that provides anti-islanding protection (e.g. protects load from the effects of being isolated with generation that may not be capable of maintaining acceptable frequency and voltage); k) an automatic sequence that proceeds when manually initiated solely by a power system operator; l) a temporary SCADA action scheme that may be implemented to facilitate construction of transmission projects to assist in system performance during temporary build stages; m) modulation of high voltage direct current or flexible alternating current transmission via supplementary controls, such as angle damping or frequency damping applied to damp local or inter-area oscillations; n) a sub-synchronous resonance protection scheme that directly detects sub-synchronous quantities (e.g., currents or torsional oscillations); or o) a generator control including, but not limited to: <ul style="list-style-type: none"> (i) automatic generation control; (ii) generation excitation (e.g. automatic voltage regulation and power system stabilizers); (iii) fast valving, and (iv) speed governing.
	[Rules (2016-09-09), Alberta Reliability Standards (2016-09-09)]
"reportable cyber security incident"	<p>means a cyber security incident that has compromised or disrupted one or more reliability tasks of a functional entity.</p>
	[Alberta Reliability Standards (2017-10-01)]
"reportable disturbance"	<p>means any loss of supply that causes an area control error change greater than or equal to eighty per cent (80%) of the ISO's most severe single contingency</p>
	[Alberta Reliability Standards (2012-10-01)]
"reserve sharing group"	<p>means a group whose members consist of two (2) or more balancing authorities that collectively maintain, allocate and supply operating reserves required for each balancing authority's use in recovering from contingencies within the group.</p>
	[Alberta Reliability Standards (2012-10-01)]
"sabotage event"	<p>means an occurrence or resulting circumstance that a responsible entity suspects or determines to have been deliberately caused, and results in, or could result in, adverse effects upon the function or operation of any of the following:</p> <ul style="list-style-type: none"> (i) one (1) or more generating units; (ii) one (1) or more transmission facilities; (iii) one or more electric distribution systems; or (iv) the operational, telecommunication, or control devices associated with one (1) or more generating units, transmission facilities, or electric distribution systems.
	[Alberta Reliability Standards (2014-10-01)]

"scheduled generator outage"	means the period of time as planned by the legal owner of a generating unit or the legal owner of an aggregated generating facility during which that generating unit or aggregated generating facility is partially or fully removed, derated from, or otherwise is not physically or mechanically available for service due to planned or scheduled maintenance or repairs to any of the plant, equipment or components of the generating unit . [Rules (2013-01-08)]
"scheduling path"	means the transmission service arrangements reserved by a market participant for an interchange transaction . [Alberta Reliability Standards (2010-01-22)]
"security-based misoperation"	means a misoperation caused by the incorrect operation of a protection system or remedial action scheme . [Alberta Reliability Standards (2014-10-01)]
"service area"	means any of the geographic areas determined by the Commission as the area of an electric distribution system pursuant to ss. 28 and 29 of the HEEA . [Rules (2008-11-13)]
"service proposal"	means a document that provides the scope of work, cost estimates , project schedule, assumptions and risks for a transmission system project or system access service project. The service proposal is to be completed in accordance with the "Service Proposal Guidelines" posted on the AESO website. [Rules (2016-04-29)]
"service proposal estimate"	means an <i>Association for the Advancement of Cost Engineering Practices</i> Class 3 cost estimate , which is a cost estimate in an accuracy range between -10 to -20% and +10 to +30%, as directed by the ISO . [Rules (2016-04-29)]
"settlement interval"	means a period beginning on the hour and ending sixty (60) minutes later and is the time increment for which: (i) the ISO financially settles energy amounts; and (ii) the load settlement system calculates distinct load estimates. [Rules (2011-07-01)]
"settlement period"	means the period starting on the first day of each calendar month at 00:00 hours and ending on the last day of the same calendar month at 24:00 hours. [Tariff (2011-07-01), Rules (2010-04-30)]
"sink asset"	is a subcategory of pool asset and means one (1) or more load assets or export assets. [Rules (2013-01-08)]
"source asset"	is a subcategory of pool asset and means one (1) or more aggregated generating facilities , generating units , or import assets. [Rules (2013-01-08)]
"spinning reserve"	means contingency reserve that is immediately and automatically responsive to frequency deviations through the action of a governor or other control system. [Rules (2014-12-23)], [Alberta Reliability Standards (2015-07-20)]
"spinning reserve resource"	means a single device or single system that is eligible to provide spinning reserves pursuant to subsection 3(1) of Section 205.5 of the ISO Rules, <i>Spinning Reserve Technical Requirements and Performance Standards</i> , and that can, in any combination, deliver or receive electric energy from the interconnected electric system . [Rules (2018-02-01)]
"substation fraction"	means the share of a substation's capacity attributable to a market participant under Rate DTS or Rate STS, calculated by dividing the contract capacity of the individual system access service by the sum of all contract capacities of all system access services provided at the same substation under Rate DTS and Rate STS. [Tariff (2011-07-01)]

<p>"super-peak"</p>	<p>means the periods:</p> <ul style="list-style-type: none"> (i) in the morning, from 05:00:00 to 07:59:59; (ii) in November, December and January, in the evening, from 16:00:00 to 23:59:59; and (iii) in all other months, in the evening, from 17:00:00 to 23:59:59. <p>[Rules (2014-12-23)]</p>
<p>"supplemental reserve"</p>	<p>means contingency reserve that is</p> <ul style="list-style-type: none"> (i) generation capable of being connected to the interconnected electric system and loaded within ten (10) minutes; or (ii) load connected to the interconnected electric system which can be reduced within ten (10) minutes. <p>[Rules (2014-12-23)]</p>
<p>"supplemental reserve resource"</p>	<p>means a single device or single system that is eligible to provide supplemental reserves pursuant to subsection 3 of Section 205.6 of the ISO Rules, <i>Supplemental Reserve Technical Requirements and Performance Standards</i>, and that can, in any combination, deliver or receive electric energy from the interconnected electric system.</p> <p>[Rules (2018-02-01)]</p>
<p>"supply transmission service (STS)"</p>	<p>means service under <i>Rate Schedule Supply Transmission Service</i>.</p> <p>[Rules (2003-06-01)]</p>
<p>"system access service"</p>	<p>as defined in the Act means the service obtained by a market participant through a connection to the transmission system, and includes access to exchange electric energy and ancillary services.</p> <p>[Rules (2010-12-01)]</p>
<p>"system access service"</p>	<p>as defined in the Act means the service obtained by market participants through a connection to the transmission system, and includes access to exchange electric energy and ancillary services.</p> <p>[Tariff (2011-07-01)]</p>
<p>"System Contribution"</p>	<p>has the same meaning as in the ISO tariff.</p> <p>[Rules (2005-09-29)]</p>
<p>"system element"</p>	<p>means an assembly of electrical equipment, including associated switches:</p> <ul style="list-style-type: none"> (i) that is generally treated as a single electrical device; (ii) that has terminals that are connected to other electrical devices; and (iii) through which electric power is provided to or flows to, through or from the transmission system, <p>such as a generator, transformer, circuit breaker, bus section, transmission line, collector system feeder, continuously variable reactive compensation device, switched capacitor, switched reactor, series compensator, energy storage device, inverter, or rectifier or similar electrical device that is comprised of one or more components and has terminals connected to other similar devices, but does not include any components electrical device that is part of an electric distribution system or any generator connected to a collector system feeder.</p> <p>[Rules (2016-08-30), Alberta Reliability Standards (2016-08-30)]</p>
<p>"system load"</p>	<p>means the total, in an hour, of all metered demands under <i>Rate DTS</i>, <i>Rate FTS</i> and <i>Rate DOS</i> of the ISO tariff plus transmission system losses.</p> <p>[Rules (2011-10-13)]</p>
<p>"system operating limit"</p>	<p>means, as determined by the ISO, the value expressed in MW, MVar, MVA, A, Hz or kV, that satisfies the most limiting of the following:</p> <ul style="list-style-type: none"> (i) facility ratings (applicable equipment ratings or facility ratings pre- and post-contingency); (ii) transient stability limits (applicable transient stability limits pre- and post-contingency); (iii) voltage stability limits (applicable voltage stability limits pre- and post-contingency); and (iv) system voltage limits (applicable system voltage limits pre- and

	<p>post-contingency), for a specified system configuration. [Alberta Reliability Standards (2019-01-01)]</p>
"system security"	<p>means the safe scheduling, operation and control of the AIES on a day-to-day basis in accordance with the specified technical, security and operational standards to withstand events such as electric short circuits, unanticipated loss of AIES components and switching operations without experiencing cascading loss of AIES components or uncontrolled loss of load. [Rules (2003-06-01)]</p>
"technical feasibility exception"	<p>means a variance from a requirement in the CIP Cyber Security reliability standards that achieves a level of reliability of the interconnected electric system that is comparable to or higher than compliance with the requirement. [Alberta Reliability Standards (2017-03-21)]</p>
"time error"	<p>means, for a given period, the accumulation of frequency error as measured by the difference between: (i) the Interconnection time each balancing authority measures; and (ii) the time the National Institute of Standards and Technology specifies. [Alberta Reliability Standards (2012-10-01)]</p>
"time error correction"	<p>means an offset to the Interconnection's scheduled frequency to return the time error for the Interconnection to a predetermined value. [Alberta Reliability Standards (2012-10-01)]</p>
"total transfer capability"	<p>means the amount of real power the ISO determines can be reliably transferred over the interconnected transmission network under specified system conditions. [Rules (2012-01-31)]</p>
"transmission constraint"	<p>means a limitation imposed by one (1) or more transmission elements to normal economic merit operation of generation, load and interchange transactions or to the flow of electrical energy from one part of the interconnected electric system to the other. [Rules (2003-06-01)]</p>
"transmission constraint rebalancing"	<p>means the delivery of energy from a pool asset on the downstream constraint side of a transmission constraint in response to that portion of an energy market dispatch it receives to restore the energy balance on the interconnected electric system due to measures taken to mitigate a transmission constraint. [Rules (2015-11-26), Tariff (2015-11-26)]</p>
"Transmission Customer"	<p>means, with respect to a specific Project, the customer, as defined in the ISO tariff, who has made application for system access service. [Rules (2005-08-25)]</p>
"transmission facility"	<p>as defined in the Act means an arrangement of conductors and transformation equipment that transmits electricity from the high voltage terminal of the generation transformer to the low voltage terminal of the step down transformer operating phase to phase at a nominal high voltage level of more than 25 000 volts to a nominal low voltage level of 25000 volts or less, and includes (i) transmission lines energized in excess of 25000 volts, (ii) insulating and supporting structures, (iii) substations, transformers and switchgear, (iv) operational, telecommunication and control devices, (v) all property of any kind used for the purpose of, or in connection with, the operation of the transmission facility, including all equipment in a substation used to transmit electric energy from (A) the low voltage terminal, to (B) electric distribution system lines that exit the substation and are energized at 25 000 volts or less, and (vi) connections with electric systems in jurisdictions bordering Alberta, but does not include a generating unit or an electric distribution system.</p>

	[Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"Transmission Facility Proposal"	means a transmission facility proposal as referred to in s. 35(1)(a) of the Act for a Project that, following the ISO's issuance of a Direction , is submitted by a Designated TFO to the Commission in accordance with the ISO's Direction for approval pursuant to the HEEA . [Rules (2008-08-11)]
"transmission must-run"	means a service whereby a generating source asset that is not in merit may receive a directive to operate at a minimum specified MW output level in order to maintain system security . [Rules (2013-01-08)]
"transmission operator"	means the entity responsible for the reliability of its "local" transmission system , and that operates or directs the operations of the transmission facilities . [Alberta Reliability Standards (2010-01-22)]
"transmission planner"	means the entity that is registered with NERC and as defined under the NERC functional model. [Alberta Reliability Standards (2015-09-01)]
"transmission reliability margin"	means that amount of transfer capability the ISO determines is necessary to ensure the reliable operation of the interconnected electric system taking into account uncertainties in system conditions and the need for operating flexibility. [Rules (2012-01-31)]
"transmission system"	as defined in the Act means all transmission facilities in Alberta that are a part of the interconnected electric system . [Rules (2010-09-07), Alberta Reliability Standards (2011-12-31)]
"transmission system"	as defined in the Act means all transmission facilities in Alberta that are part of the interconnected electric system . [Tariff (2015-07-01)]
"transmission system losses"	means, for each year, the total of the transmission system losses on the interconnected electric system . [Rules (2005-05-25)]
"under voltage load shed"	means a protection scheme that enables pre-configured devices to automatically shed load to stabilize voltage when voltage falls below predetermined limits. [Alberta Reliability Standards (2014-10-01)]
"under voltage load shed (UVLS)"	means a protection scheme that enables pre-configured devices to automatically shed load to stabilize voltage when voltage falls below predetermined limits. [Rules (2003-06-01)]
"underfrequency load shedding"	means the automatic or manual actions required to shed system load when the system frequency falls below the normal system operating frequency of sixty (60) Hz in order to allow for the return to a secure state. [Rules (2003-06-01), Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]
"unplanned outage"	means the unavailability of a facility which is not anticipated as part of a legal owner's regular maintenance and occurs as a result of a deliberate, manual action. [Tariff (2015-07-01)]
"upstream constraint side"	means, in relation to the transmission elements that comprise the transmission constraint , those elements of the interconnected electric system more proximate to the supply side of the transmission constraint than to the load or consumption side of the transmission constraint . [Rules (2011-05-05)]
"voltage regulating system"	means the equipment that automatically controls the reactive power resources to regulate the voltage level at any collector bus . [Alberta Reliability Standards (2016-04-01)]

<p>"voltage regulating system"</p>	<p>means the equipment that automatically controls the reactive power resources to regulate the voltage level:</p> <ul style="list-style-type: none"> (i) at any collector bus for an aggregated generating facility; or (ii) at a control point for an energy storage facility, as specified by a market participant in accordance with the applicable section of the ISO rules. <p>[Rules (2016-04-25)]</p>
<p>"WECC"</p>	<p>means the Western Electricity Coordinating Council.</p> <p>[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]</p>
<p>"western interconnection"</p>	<p>means the area comprised of those portions of western Canada, northern Mexico and the western United States in which members of the WECC operate synchronously connected transmission systems.</p> <p>[Rules (2010-12-01), Tariff (2008-08-01)]</p>
<p>"western interconnection"</p>	<p>means the area comprised of those portions of western Canada, northern Mexico and the western United States in which members of the WECC operate synchronously connected transmission systems.</p> <p>[Alberta Reliability Standards (2014-10-01)]</p>
<p>"wheel through transaction"</p>	<p>means an interchange transaction that:</p> <ul style="list-style-type: none"> (i) is represented by a single e-tag; (ii) is comprised of an import offer over one transfer path and an export bid over a different transfer path that specify quantities equal to one another; and (iii) originates and terminates outside of the Alberta balancing authority area. <p>[Rules (2012-01-31)]</p>
<p>"wide-area"</p>	<p>means the entire ISO area as well as the critical flow and status information from adjacent reliability coordinator areas as determined by detailed system studies to allow the calculation of interconnection reliability operating limits.</p> <p>[Alberta Reliability Standards (2015-07-08)]</p>
<p>"wind turbine generator"</p>	<p>means a single generating unit, turbine and associated power electronics which converts mechanical energy from wind to electric energy.</p> <p>[Rules (2010-09-07)]</p>