

Term	Definition
	means any one of the following six (6) ten (10) minute periods in any hour:
"10 minute clock period"	ME:01 to ME:10; ME:11 to ME:20; ME21 to ME30; ME31 to ME40; ME:41 to ME50; ME51 to ME60 where "ME" means minute ending.
	Rules (2009-09-01)]
"acceptable operational reason"	 means, any one (1) or more of the following: (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; (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; (iii) re-positioning a generating source asset within the energy market to manage physical or operational constraints associated with the source.
"accuracy range"	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 . [Rules (2016-04-29)]
"Act"	means the <i>Electric Utilities Act</i> and any regulations made under it.
"actual net interchange"	[Rules (2011-07-01), Tariff (2011-07-01)] means the algebraic sum of actual MW transfers across all tie lines, including pseudo-ties, to and from all adjacent balancing authorities within the same Interconnection. [Alberta Reliability Standards (2019-07-01)]
"adequacy"	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. [Rules (2014-07-02)]
"adjacent balancing authority"	means a balancing authority area that is interconnected with another balancing authority area either directly or via a multi-party agreement or transmission tariff.



Term	
	Definition [Alberta Poliability Standards (2010-01-22)]
	[Alberta Reliability Standards (2010-01-22)]
"adverse reliability impact"	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 .
	[Alberta Reliability Standards (2017-10-01)]
	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:
	(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
"affiliate"	corporate or each of them is controlled by the same person, and
	(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.
	[Rules (2010-12-01), Tariff (2011-07-01)]
	includes:
	(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
"agent"	automated dispatch and messaging system; or
agent	(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.
	[Rules (2020-09-16)]
	includes:
	(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
"agent"	(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.
	[Alberta Reliability Standards (2014-10-01)]
	means an aggregation of generating units , including any reactive power
	resources, which:
"aggregated generating	
facility"	(i) are situated in the same proximate location at one or more point of
	connections.
	[Alberta Reliability Standards (2011-12-31), Tariff (2015-07-01)]
	means, unless otherwise designated by the ISO , an aggregation of two (2) or
"aggregated generating facility"	more generating units, including any associated reactive power resources,
	where: (i) each generating unit is rated less than 9 MW;
	common collector bus or multiple collector busses that can be operated
	as a common collector bus ; and
	(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.



Term	Definition
	[Rules (2018-09-01)]
"Alberta interchange capability"	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 . [Rules (2012-01-31)]
"Alberta internal load"	means a number in MW: (i) that represents, in an hour, system load plus load served by an on-site generating unit or aggregated generating facility, including those within an industrial system and the City of Medicine Hat; and (ii) which the ISO, using SCADA data, calculates as the sum of the output of each generating unit and aggregated generating facility in Alberta and the Fort Nelson area in British Columbia, plus import volumes and minus export volumes. [Rules (2020-09-16)]
"allowable dispatch variance"	means: (i) for each generating source asset, other than a wind or solar aggregated generating facility, as measured from the dispatch quantity: (a) plus or minus five (5) MW for a generating source asset with a maximum capability of two hundred (200) MW or less; or (b) plus or minus ten (10) MW for a generating source asset with a maximum capability of greater than two hundred (200) MW; (ii) for each wind or solar aggregated generating facility with a maximum capability of two hundred (200) MW or less: (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 (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 (iii) for each wind or solar aggregated generating facility with a maximum capability of greater than two hundred (200) MW: (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 (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. [Rules (2018-09-01)]
"ancillary services"	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. [Rules (2010-12-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]
"apparent power"	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 . [Rules (2010-07-23), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]
"area control error"	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. [Alberta Reliability Standards (2019-07-01)]



Term	Definition
TOTAL	means the state where the interchange authority has received the
"arranged interchange"	interchange information (initial or revised).
	Alberta Reliability Standards (2010-01-22)
"AUC Act"	means the Alberta Utilities Commission Act, as amended from time to time.
	[Rules (2003-06-01)]
	means the unavailability of a facility which is not anticipated as part of a legal
"automatic forced	owner 's regular maintenance and occurs as a result of an automatic or
outage"	accidental action.
	[Rules (2014-07-02)]
	means equipment that adjusts generation in a balancing authority area from a
	central location to maintain frequency or interchange schedule plus or minus
"automatic generation	frequency bias; and may also accommodate automatic inadvertent payback
control"	and time error correction.
	[Alberta Reliability Standards (2014-10-01)]
	means equipment that adjusts a balancing authority's generation in a balancing
"automatic ganaration	authority's area from a central location to maintain the balancing authority's
"automatic generation control (AGC)"	frequency or interchange schedule plus or minus frequency bias. AGC may also
control (AGC)	accommodate automatic inadvertent payback and time error correction.
	[Rules (2009-05-28)]
	means the component of the area control error equation for the western
"automatic time error	interconnection that is added to modify the control point for the purpose of
correction"	continuously paying back primary inadvertent interchange to correct
	accumulated time error.
	[Alberta Reliability Standards (2016-12-19)]
	means the automatic control equipment that adjusts the excitation level of a
"automatic voltage	generating unit to maintain voltage levels.
regulator (AVR)"	[Rules (2003-06-01), Alberta Reliability Standards (2016-04-01),
	Tariff (2015-07-01)]
	means: (i) for a generating source asset , the maximum MW that the source asset is
	physically capable of providing; or
"available capability"	(ii) for an import source asset , the MW that the pool participant submits in an
	offer.
	[Rules (2013-01-08)]
	means the remaining transfer capability the ISO determines can be commercially
	available for transfers over the interconnected transmission network over and
"available transfer	above already committed uses, and is calculated as the total transfer
capability"	capability minus the sum of any applicable transmission reliability margin
	and existing transmission commitments.
	[Rules (2012-01-31)]
	means a responsible entity that integrates resource plans ahead of time,
"balancing authority"	maintains load-interchange generation balance within a balancing authority
Salarioning dutilotity	area and supports Interconnection frequency in real time.
	[Alberta Reliability Standards (2014-10-01)]
	means the responsible entity that integrates resource plans ahead of time,
"balancing authority"	maintains load-interchange-generation balance within a balancing authority
omanomy admiciny	area, and supports interconnection frequency in real time.
	[Rules (2009-05-28)]
Madanahan certeratu	means the collection of generation, transmission and loads, within the metered
"balancing authority	boundaries of the balancing authority and for which the balancing authority
area"	maintains load-resource balance. [Pulos (2010 12 01) Alberta Poliability Standards (2014 10 01)]
	[Rules (2010-12-01), Alberta Reliability Standards (2014-10-01)]



Term	Definition
	means the collection of generation, transmission and loads within the metered
"balancing authority area"	boundaries of the balancing authority and for which the balancing authority
	maintains load-resource balance.
	[Tariff (2011-07-01)]
	means any single event described in subsections (a), (b), or (c) below, or any
	series of such otherwise single events with each separated from the next by one
	minute or less:
	(a) sudden loss of generation:
	(i) due to:
	(A) generating unit tripping;
	(B) loss of aggregating ; generating facility resulting in isolation from the
"balancing contingency	
event"	(C) sudden unplanned outage of a transmission facility; and
	(ii) that causes an unexpected change to the ISO's area control error;
	(b) sudden loss of an import, due to forced outage of transmission equipment
	that causes an unexpected imbalance between generation and demand on
	the Interconnection; and
	(c) sudden restoration of a demand resource that causes an unexpected
	change to the ISO's area control error.
	[Alberta Reliability Standards (2019-07-01)]
	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
	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
"BES cyber asset"	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.)
	[Alberta Reliability Standards (2017-10-01)]
	means one or more BES cyber assets logically grouped to perform one or more
"BES cyber system"	reliability tasks for a functional entity.
	[Alberta Reliability Standards (2017-10-01)]
	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
"BES cyber system	by themselves do not pose a threat or could not be used to allow unauthorized
information"	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.
	[Alberta Reliability Standards (2017-10-01)]
	means, in respect of a pool asset in a settlement interval, a pool participant
	submission to purchase:
"bid"	(i) electric energy and includes all of the operating blocks the pool participant
	uses for that submission; or
	(ii) operating reserves from applicable Alberta markets.
	[Rules (2012-12-03)]



Term Definition means, at a point of delivery, the highest of: (i) the highest 15-minute metered demand in the settlement	
(ii) 90% of the highest metered demand in the 24-month perio	
ending with the settlement period, but excluding any mont	
"billing capacity" commissioning occurs; or	no during willon
(iii) 90% of the contract capacity or, when the settlement per	iod contains a
transaction under Rate DOS, 100% of the contract capacit	
Tariff (2011-07-01)]	•
means a generating unit(s) or aggregated generating facility	y 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 cor	nnection to the
"blackstart resource" remainder of the system, with the ability to energize a dead bus	
iso s restoration plan needs for real power and reactive power	
frequency and voltage control, and that has been included in th	e ISO 's
restoration plan.	
[Alberta Reliability Standards (2017-10-01)]	
"black start capability means the ability of a power plant or generating asset to start	
(RSC)" external electric supply and serve to provide power to the AlES).
rules (2003-06-01)]	
as defined by the Regional Reliability Organization, means the	
generation resources, transmission lines, interconnections , w	
systems, and associated equipment, generally operated at vol	
"bulk electric system" hundred (100) kV or higher; radial transmission facilities serv	
one (1) transmission source are generally not included in this d	
[Rules (2016-08-30), Alberta Reliability Standards (2014-10-01	
will no longer be in effect for Alberta Reliability Standards as of means all system elements that are included in the following:	2022-06-06]
(i) all system elements that have all terminals energized at	100 kV or higher
that are not part of a radial circuit ;	100 KV OI HIGHEI
(ii) a radial circuit comprised of system elements that have	e all terminals
energized at 100 kV or higher where the radial circuit co	
(a) any facility included in items (iv) through (vii) below; or	
(b) 2 or more generating resources, being generating u	
aggregated generating facilities, that have a comb	
authorized real power higher than 67.5 MW;	
(iii) a transformer that has its primary terminal and at least or	ne secondary
terminal energized at 100 kV or higher;	
(iv) a generating unit that has a maximum authorized real	
than 18 MW where system access service is provided t	
"bulk electric system" switchyard that is directly connected to transmission fac	
at 100 kV or higher, including all system elements from	
the generating unit to the transmission facilities energ	gized at 100 kV or
higher;	outhorized real
(v) an aggregated generating facility that has a maximum power higher than 67.5 MW where system access serv	
through a switchyard that is directly connected to transm	
energized at 100 kV or higher, including all system elem	
collector bus to the transmission facilities energized at	
and excluding the generating units and the collector sys	
(vi) all generating units and aggregated generating faciliti	
access service is provided through a common switchyar	
connected to transmission facilities energized at 100 k	
the generating units and aggregated generating facility	



Term	Definition
	combined maximum authorized real power higher than 67.5 MW,
	including all system elements from the terminal of each generating unit
	and from the collector bus of each aggregated generating facility to
	transmission facilities energized at 100 kV or higher, and excluding the
	generating units and collector system feeders of each aggregated
	generating facility;
	(vii) a blackstart resource, including all system elements from the terminal or
	the blackstart resource to transmission facilities that are energized at
	100 kV or higher; and
	(viii) a static or dynamic reactive power resource that is dedicated to supplying
	or absorbing reactive power to or from the transmission system and is connected:
	(a) to transmission facilities energized at 100 kV or higher;
	 (b) through a dedicated transformer that is directly connected to transmission facilities energized at 100 kV or higher; or
	(c) through a non-dedicated transformer that has its primary terminal and
	at least one secondary terminal energized at 100 kV or higher;
	including all system elements from the terminal of the reactive power
	resource to the transmission facilities energized at 100 kV or higher.
	[Alberta Reliability Standards (2020-08-06)]
	Alberta Reliability Standards 2022-08-06: for facilities that are not currently
	considered part of the bulk electric system under the version of the definition in
	effect on 2014-10-01 but will be part of the bulk electric system under the version of the definition approved on 2020-08-06]
	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:
	(i) transmission circuits composed of the conductors that form the minimum set
	required to so transmit electric energy;
	(ii) insulating and supporting structures; and
"bulk transmission line	(iii) all property of any kind used for the purpose of, or in connection with, or
	incidental to, the operation of such a line;
	(iv) but does not include a substation, operational and control devices, a
	generating unit, an aggregated generating facility or an electric
	distribution system.
	[Rules (2012-01-01)]
	means a day other than:
"business day"	(i) a Saturday; or
,	(ii) a holiday as that term is defined in the <i>Interpretation Act</i>
	[Rules (2020-09-16)]
	means a day other than:
"husings day"	(ii) a holiday during which banks in Alberta are generally closed;
"business day"	(iii) Saturday; or (iv) Sunday.
	[Alberta Reliability Standards (2011-12-31)]
	means a day other than:
	(i) a holiday during which banks in Alberta are generally closed;
"business day"	(ii) Saturday; or
	(iii) Sunday.
	[Tariff (2011-07-01)]
	means an adjustment to the loss charges ensuring that the actual cost of losses
	Ineans an adjustment to the loss charges ensume that the actual cost of losses
"calibration factor"	is reasonably recovered through charges and credits under the ISO tariff on an



Term	Definition
	[Rules (2012-10-10), Tariff (2015-07-01)]
"cascading"	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.
	[Alberta Reliability Standards (2014-10-01)]
"CIP exceptional circumstance"	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.
	[Alberta Reliability Standards (2017-10-01)]
"CIP senior manager"	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.
	Alberta Reliability Standards (2017-10-01)]
"collector bus"	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.
	Alberta Reliability Standards (2011-12-31)]
"collector bus"	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.
	Rules (2010-09-07)]
"commercial operation"	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 .
	[Rules (2010-12-01)]
"commercial operation"	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 . [Tariff (2015-07-01)]
"Commission"	as defined in the Act means the Alberta Utilities Commission established by the <i>Alberta Utilities Commission Act</i> .
"Commission"	[Rules (2010-12-01), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-01)]



Term	Definition
	means:
"commissioning"	(ii) 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. [Rules (2012-12-31)]
"commissioning"	means: (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 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. [Tariff (2015-07-01)]
ll a a sa fi susa a cl	means the state where the interchange authority has verified the arranged
"confirmed interchange"	interchange.
	[Alberta Reliability Standards (2010-01-22)]



Term	Definition
	means a ratio, based on the results of load flow studies conducted by the ISO , of
"constraint effective factor"	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.
	[Rules (2011-05-05)]
	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	construction and associated costs of transmission facilities required to provide
contribution"	system access service.
	Tariff (2011-07-01)]
	means the unexpected failure or outage of a system component, such as a
"contingonous"	
"contingency"	generating unit, transmission line, circuit breaker, switch or electrical element.
	[Rules (2014-12-23)]
	means the unexpected failure or outage of a system component, such as a
"contingency"	generating unit, transmission line, circuit breaker, switch or electrical element.
	[Alberta Reliability Standards (2014-10-01)]
	means the component of operating reserve used to recover the area control
"contingency reserve"	error in accordance with reliability standards.
	[Rules (2014-12-23)]
	means the operating reserve used to recover the area control error according
"contingency reserve"	to WECC criteria.
	[Alberta Reliability Standards (2014-10-01)]
	means the peak demand or supply capability, in MW, as set out in an agreement
"contract capacity"	for system access service.
	[Rules (2010-12-01), Tariff (2011-07-01)]
	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
"control centre"	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.
	[Rules (2016-08-30), Alberta Reliability Standards (2017-10-01)]
	means the reliability standard that sets the limits of the area control error of a
"control performance	balancing authority over a specified time period.
standard"	[Alberta Reliability Standards (2014-10-01)]
	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
"cost estimate"	of the "Cost Estimating Template" available on the AESO website.
	[Rules (2016-04-29)]
	means a portion of the electric system that can be isolated and then energized to
	deliver electric power from a generation source to enable the startup of one or
cranking path"	more other generating units or aggregated generating facilities.
	[Alberta Reliability Standards (2017-10-01)]
	means programmable electronic devices, including the hardware, software, and
"cyber asset"	data in those devices.
Cyber asset	[Alberta Reliability Standards (2017-10-01)]
	means a malicious act or suspicious event that:
	 compromises, or was an attempt to compromise, the electronic security
"cyber security incident"	perimeter or physical security perimeter, or
	 disrupts, or was an attempt to disrupt, the operation of a BES cyber
	system.
	j oyotom.



Term	Definition
	Alberta Reliability Standards (2017-10-01)]
	means the twenty-four (24) hour period in Alberta beginning at 00:00:00 and
	ending at 23:59:59 but which:
	(i) in the case of the day on which daylight savings begins, is twenty-three (23)
	hours; or
"day"	(ii) in the case of the day on which daylight savings ends, is twenty-five (25)
	hours.
	Rules (2013-01-08), Alberta Reliability Standards (2014-10-01),
	Tariff (2015-07-01)]
	means the unavailability of a facility which is not anticipated and occurs as a
"delayed forced outage"	result of a deliberate, manual action.
	[Rules (2014-07-02)]
	means:
	(i) the rate at which electric energy is delivered to or by a system or part of a
"demand"	system, generally expressed in MW, at a given instant or averaged over any
demand	designated interval of time; or
	(ii) the rate at which electric energy is being used.
	Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]
"dependability-based	means the absence of a protection system or remedial action scheme
misoperation"	operation when intended.
illisoperation	[Alberta Reliability Standards (2014-10-01)]
	means with respect to a Project , the TFO or TFO s 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
"Designated TFO"	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
	[Rules (2016-11-29)]
	means a data communication link that is established when the communication
"dial-up connectivity"	equipment dials a phone number and negotiates a connection with the
шш ир сонносить,	equipment on the other end of the link.
	[Alberta Reliability Standards (2017-10-01)]
	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
"direct loss or damage"	consequential loss or damage whatsoever arising out of or in any way connected
	with an Independent System Operator act.
	[Rules (2010-12-01)]
	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 to do any other thing, that the iso
	or TFO, as the case may be, to whom a direction has been delivered by the ISO
"Direction"	may refuse to comply with such direction only if such market participant or TFO
	notifies the ISO that the market participant or TFO considers that
	(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.
	[Rules (2009-09-01)]
	16 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \



Term	Definition
	means a direction the ISO gives to a market participant instructing the market
"directive"	participant to take any action the ISO deems necessary to maintain the
	reliability of the interconnected electric system.
	[Rules (2012-07-10), Alberta Reliability Standards (2014-10-01)]
	means a direction the ISO gives to a market participant to take any action the
dino ati a	ISO deems necessary to maintain the reliability of the interconnected electric
"directive"	system.
	[Tariff (2015-07-01)]
	has the same meaning as that provided in the Act, which means a direction from
"dispatch"	the ISO to a pool participant to cause, permit or alter the exchange of electric
dispatch	energy or ancillary services.
	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
	means a service which:
"dispotab dawn	(i) a pool participant elects to provide via an offer ; and
"dispatch down service"	(ii) requires reducing energy production from a source asset in response to a
Service	dispatch.
	[Rules (2013-01-08)]
	means an unplanned event which produces an abnormal system condition or the
"disturbance"	effects experienced by a power system following a contingency, such as high or
disturbance	low frequency, abnormal voltage, or oscillations in the system.
	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
	means a performance measure applied to a balancing authority (BA) or
"disturbance control	reserve sharing group (RSG) for recovering from a disturbance within fifteen
standard"	(15) minutes by restoring area control error (ACE) to zero (0) or to its pre-
Standard	disturbance level.
	[Alberta Reliability Standards (2014-10-01)]
	means devices capable of monitoring and recording system data pertaining to a
	disturbance, including:
	(i) sequence of event recorders which record equipment response to the
	disturbance;
	(ii) fault recorders, which record actual waveform data replicating the system
"disturbance	primary voltages and currents and which may include protective relays that
monitoring equipment"	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.
	[Alberta Reliability Standards (2014-10-01)]
	means, in relation to the transmission elements that comprise the transmission
"downstream constrain	constraint, those elements of the interconnected electric system more proximate to the load or consumption side of the transmission constraint than
side"	to the supply side of the transmission constraint .
	[Rules (2011-05-05)]
	means an electronic identifier which contains specific transactional information,
"e-tag"	necessary for scheduling an interchange transaction .
e-iay	[Rules (2012-01-31), Alberta Reliability Standards (2014-10-01)]
	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
electric distribution	generating unit or a transmission facility.
system"	Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tariff (2011-07-
	[Rules (2010-04-30), Alberta Reliability Standards (2014-10-01), Tallif (2011-07-01)
	N.\1



Term	Definition
I GIIII	means a condition in the electrical system where geographical areas of the
"electrical islands"	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)]
	means cyber assets that perform electronic access control or electronic access
"electronic access	monitoring of the electronic security perimeter(s) or BES cyber systems. This
control or monitoring	includes intermediate systems.
systems"	Alberta Reliability Standards (2017-10-01)]
	means a cyber asset interface on an electronic security perimeter that allows
"electronic access	routable communication between cyber assets outside an electronic security
point"	perimeter and cyber assets inside an electronic security perimeter.
ponit	Alberta Reliability Standards (2017-10-01)]
	means the logical border surrounding a network to which BES cyber systems
electronic security	are connected using a routable protocol.
perimeter"	Alberta Reliability Standards (2017-10-01)]
	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
"emergency"	might result in cascading effects; or
	(ii) a state in which the interconnected electric system lacks sufficient
	ancillary services.
	[Tariff (2011-07-01)]
	means energy provided to the party experiencing a system emergency , by the
"emergency assistance"	
	[Rules (2003-06-01)]
	means energy provided to a person experiencing a system emergency . [Alberta Reliability Standards (2014-10-01)]
emergency assistance"	Alberta Reliability Standards (2014-10-01)]
	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
"emergency rating"	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)]
	means a facility with technologies capable of storing and releasing electric
"energy storage facility"	
0, 0 ,	[Rules (2016-04-25)]
	means, as determined by the legal owner of the equipment, as applicable, the
	maximum and minimum voltage, current, frequency, real power, reactive
"equipment rating"	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)]
	manner on determined by the level europe of the equipment on any limited
	means, as determined by the legal owner of the equipment, as applicable,
"equipment rating"	the maximum and minimum voltage, current, frequency, real power, reactive
equipment rating	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.



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



Term	Definition
	(iii) prevents 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.
	[Rules (2014-07-02)]
	means any occurrence, and its effects, which:
	(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
"force majeure"	(iii) prevents the ISO or a market participant from performing its obligations
10100 111 4, 0 4110	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.
	Tariff (2015-07-01)]
	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
"forced outage"	accidental action.
	[Tariff (2015-07-01)]
	means the seven (7) day period starting at 00:00:00 immediately following the
"forecast scheduling	day a pool participant submits a particular bid or offer.
period"	[Rules (2014-12-23)]
	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
"frequency bias"	authority area's response to the frequency error of the Interconnection.
	Alberta Reliability Standards (2014-10-01)
	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
"frequency bias	balancing authority to contribute its frequency response to the
setting"	Interconnection.
	[Alberta Reliability Standards (2014-10-01)]
	means the difference between the actual and scheduled frequency. (FA - FS);
"frequency error"	
	[Alberta Reliability Standards (2010-01-22)]
	means:
	(i) for an equipment, the ability of a system, or elements of the system, to react
"fraguency roomanaa"	or respond to a change in system frequency; or (ii) for a system, the sum of the change in demand , plus the change in
"frequency response"	generation, divided by the change in frequency, expressed in MW per zero
	point one Hz (MW/0.1 Hz).
	[Alberta Reliability Standards (2014-10-01)]
	means a remedial action scheme that provides the same performance as
	· · ·
l	
"functionally equivalent	follows: (i) each remedial action scheme can detect the same conditions and provide
"functionally equivalent	(i) each remedial action scheme can detect the same conditions and provide
remedial action	(i) each remedial action scheme can detect the same conditions and provide mitigation to comply with all reliability standards ; and
	 (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
remedial action	 each remedial action scheme can detect the same conditions and provide mitigation to comply with all reliability standards; and each remedial action scheme may have different components and operating characteristics.
remedial action	 (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. [Alberta Reliability Standards (2014-10-01)]
remedial action	 (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. [Alberta Reliability Standards (2014-10-01)] means a protection system that provides performance as follows:
remedial action scheme"	 (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. [Alberta Reliability Standards (2014-10-01)] means a protection system that provides performance as follows: (i) each protection system can detect the same faults within the zone of
remedial action scheme" "functionally equivalent	 (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. [Alberta Reliability Standards (2014-10-01)] means a protection system that provides performance as follows: (i) each protection system can detect the same faults within the zone of protection and provide the clearing times and coordination needed to comply
remedial action scheme"	 (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. [Alberta Reliability Standards (2014-10-01)] means a protection system that provides performance as follows: (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
remedial action scheme" "functionally equivalent	 (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. [Alberta Reliability Standards (2014-10-01)] means a protection system that provides performance as follows: (i) each protection system can detect the same faults within the zone of protection and provide the clearing times and coordination needed to comply



Term	Definition
	[Alberta Reliability Standards (2014-10-01)]
"generating asset steady state"	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 allowable dispatch variance for that generating source asset. [Rules (2020-09-16)]
"generating unit"	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 : (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; (iv) other items. [Rules (2010-12-01), Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]
"good electric industry practice"	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. [Rules (2010-12-01), Tariff (2011-07-01)]
"governor or governor system"	means automatic control equipment with speed droop characteristics to control generating unit speed and/or electric power output.
	[Alberta Reliability Standards (2014-10-01)]
"governor or governor system"	means automatic control equipment with frequency or speed droop characteristics to control: (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 . [Rules (2018-09-01)]
"gross real power"	means: (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. [Rules (2016-04-25)]
"HEEA"	means the Hydro and Electric Energy Act (Alberta). [Rules (2003-06-01)]
"hh"	refers to the current clock hour. [Rules (2003-06-01)]



Term	Definition
	means the sixty (60) minute period ending that hour. For example, HE 24
"hour ending or HE"	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.
	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
	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
"import load remedial	more system access customer load breakers which such service is designed
action scheme (ILRAS)"	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.
	[Rules (2003-06-01)]
	means:
	(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
"in merit"	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.
	[Rules (2013-01-08)]
"inadvertent	means the difference between the net actual interchange of the balancing
interchange"	authority and the net interchange schedule of the balancing authority.
31	[Alberta Reliability Standards (2014-10-01)]
	means, where the ISO has issued a directive:
	(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:
	(iii) in the case of compliance with a directive for energy from a long lead time
	asset:
	(a) the actual costs of all variable charges from Rate STS of the ISO tariff ,
	including any applicable loss factors charge or credit;
"incremental generation	
costs"	(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:
	(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:



Term	Definition
	 (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.
	[Rules (2014-07-02)]
"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)]
	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:
"interactive remote	1) cyber assets used or owned by the Responsible Entity, 2) cyber assets
access"	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.
	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)]
:t	means energy transfers that cross balancing authority boundaries.
"interchange"	Alberta Reliability Standards (2010-01-22)]
	means the responsible entity that authorizes implementation of valid and
	balanced interchange schedules between balancing authority areas, and
"interchange authority "	ensures communication of interchange information for reliability assessment
	purposes. [Alberta Reliability Standards (2010-01-22)]
	means, for a given settlement interval , the planned interchange of electricity
	between the ISO and an adjacent balancing authority which results from the
"interchange schedule"	validation and scheduling of interchange transactions.
	[Rules (2012-01-31)]
	means, for a given settlement interval, the planned interchange of energy
"interchange schedule"	between the ISO and an adjacent balancing authority which results from the
interenange senedate	validation and scheduling of interchange transactions.
	[Alberta Reliability Standards (2014-10-01)]
"interchenge	means an energy or ancillary services transaction that crosses one or more
"interchange transaction"	balancing authority area boundaries. Rules (2010-04-30), Alberta Reliability Standards (2014-10-01),
transaction	Tariff (2011-07-01)]
	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
system"	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 .



Term	Definition
	[Rules (2010-12-01), Alberta Reliability Standards (2011-12-31),
	Tariff (2011-07-01)]
	means the entity outside of Alberta responsible for the reliability of its "local"
"interconnected	transmission system, and that operates or directs the operations of the
transmission operator "	transmission facilities.
•	[Alberta Reliability Standards (2010-01-22)]
	means the electrical connection of the AIES with any electric system in a
"interconnection"	jurisdiction bordering Alberta.
	[Rules (2003-06-01)]
	means the electrical connection of the interconnected electric system with any
	electric system in a jurisdiction bordering Alberta and when capitalized, it means
"interconnection"	any one (1) of the three (3) major electric system networks in North America:
	Eastern, Western, and ERCOT.
	[Alberta Reliability Standards (2014-10-01)]
	means the maximum time that an interconnection reliability operating limit
"interconnection	can be violated before the risk to the interconnection or other reliability
	coordinator area(s) becomes greater than acceptable. Each interconnection
Tv"	reliability operating limit Tv must be less than or equal to thirty (30) minutes.
	[Alberta Reliability Standards (2015-09-01)]
"interconnection	means a system operating limit, that if violated, could lead to instability,
reliability operating	uncontrolled separation or cascading outages that adversely impact the
limits"	reliability of the bulk electric system.
	[Alberta Reliability Standards (2014-10-01)]
	means a cyber asset or collection of cyber assets performing access control to
"intermediate system"	restrict interactive remote access to only authorized users. The intermediate
micrimediate system	system must not be located inside the electronic security perimeter.
	[Alberta Reliability Standards (2017-10-01)]
	means the demand that a load market participant makes available to the ISO
"interruptible demand"	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)]
	as defined in the <i>Transmission Regulation</i> means a transmission facility ,
	including its associated components, that links one or more electric systems
"intertie"	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)]
	means the Independent System Operator as defined in the Act being the
"ISO"	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)]
	as defined in the Act means the rules made by the Independent System
"ISO rules"	Operator under section 19 and 20 of the Act .
	[Rules (2010-12-01), Alberta Reliability Standards (2014-10-01),
	Tariff (2011-07-01)]
	as defined in the Act means the tariff prepared by the ISO under section 30 of
"ISO tariff"	the Act that has been approved by the Commission .
100 tarm	[Rules (2010-04-30), Alberta Reliability Standards (2014-10-01),
	Tariff (2011-07-01)]



Term	Definition
	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;
"legal owner"	(iv) an electric distribution system;
· J	(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)]
	means the person who owns electric industry property including any one or
	more of:
	(i) a generating unit;
	(ii) any aggregated generating facilities;
"legal owner"	(iii) a transmission facility; (iv) an electric distribution system;
legal Owner	(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.
	[Rules (2010-09-07)]
	means the person who owns electric industry property including any one or
	more of:
	(i) a generating unit;
	(ii) an aggregated generating facility;
	(iii) a transmission facility;
"legal owner"	(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. [Tariff (2016-07-01)]
	means an amount of load contracted by the ISO to provide:
	(i) instantaneous fifty-nine point five (59.5) Hz underfrequency load
"Load Shed Service"	shedding; or
2044 01104 001 1100	(ii) manual load shedding.
	[Rules (2003-06-01)]
	means a generating source asset that:
	(i) requires more than one (1) hour to synchronize to the system under normal
	operating conditions; or
"long lead time asset"	(ii) is synchronized but has varying start-up times for distinct portions of its MW
long lead time asset	and which requires more than one (1) hour to deliver such additional
	portions of its MW; and
	which is not delivering all of its energy for reasons other than an outage.
	[Rules (2014-07-02)]
"long term adequacy (LTA)"	means the ability of future electric system energy supply to meet expected
	aggregate electrical demand requirements over several years.
,	[Rules (2008-08-11)]
"loss factor"	means the value, in percent, which reasonably represents the contribution to
"loss factor"	transmission system losses, based on location, of a generating facility, export service, import service, or other opportunity service, and which the ISO
	pervice, import service, or other opportunity service, and without the 130



Term	Definition
	establishes in accordance with section 501.10 of the ISO rules, Transmission
	Loss Factors.
	[Rules (2017-01-01)]
	means a number, expressed as a percentage, the ISO determines: (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.
"loss factor"	and
	(iii) for each import and export interchange transaction scheduled on the interconnected electric system, which when multiplied by the demand, in MW, of the transaction reasonably represents the impact on transmission
	system losses.
	[Tariff (2015-07-01)]
	[Rules (2008-08-11)]
	[Rules (2008-08-11)]
"market participant"	 (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.
	[Rules (2020-09-16)]
"market participant"	as defined in the Act means: (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 . [Alberta Reliability Standards (2011-12-31), Tariff (2011-07-01)]
	as defined in the Act means the corporation continued by section 32 of the
"Market Surveillance Administrator"	Alberta Utilities Commission Act. [Rules (2010-04-30), Tariff (2011-07-01)]
"material adverse change"	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 . [Rules (2010-04-30), Tariff (2011-07-01)]
"maximum authorized charging power"	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.
	[Rules (2016-04-25)]
"maximum authorized discharging power"	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.
	[Rules (2016-04-25)]



Term	Definition
	means:
"maximum authorized real power"	 (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.
	[Alberta Reliability Standards (2011-12-31)]
"maximum authorized real power"	 (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. [Rules (2018-09-01)]
	'
"maximum capability"	means: (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.
	[Rules (2013-01-08), Tariff (2015-07-01)]
"merit order"	means: (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. [Rules (2013-01-08)]
"meter"	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. [Rules (2003-06-01)]
"metered demand"	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 . [Rules (2010-07-23), Tariff (2011-07-01)]
"metered energy"	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. [Rules (2010-07-23)]
"metered energy"	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.
1	[Tariff (2015-07-01)]



Term	Definition
"metering equipment"	as defined in the AESO Measurement System Standard 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. [Rules (2010-04-30), Tariff (2011-07-01)]
"meter"	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. [Alberta Reliability Standards (2014-10-01)]
"minimum stable generation"	means: (i) the greater of the minimum generation level, in MW, that a source asset can be continuously operated at without: (a) becoming unstable; or (b) violating environmental permits; or (ii) in the case of a source asset that is integral to onsite industrial processes offering gross generation onto the interconnected electric system, the greater of: (a) the generation level set out in subsection (i); (b) the generation level the operator anticipates the source asset is required to operate at in order to avoid either: (A) a forced shut down of the onsite industrial processes; or (B) a reduction of onsite industrial processes where the reduction results in any increase in net-to-grid generation; or (c) the generation level the operator anticipates the source asset can operate at to produce net-to-grid generation of zero(0); or (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: (a) a forced shut down of the onsite industrial processes; or (b) a reduction of onsite industrial processes where the reduction results in any increase in net-to-grid generation. [Rules (2012-03-28)]
"misoperation"	 means any one of the following: 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. [Rules (2016-08-30), Alberta Reliability Standards (2010-01-22)]
"month"	means a calendar month. [Rules (2003-06-01), Alberta Reliability Standards (2014-10-01), Tariff (2015-07-01)]
"mothball outage"	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. [Rules (2016-06-07)]
	means the document referred to in section (34)(1) of the Act .



Term	Definition
"needs identification	Rules (2003-06-01), Alberta Reliability Standards (2014-10-01),
document"	Tariff (2011-07-01)]
	means an Association of the Advancement of Cost Engineering Practices
"needs identification document estimate"	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.
	[Rules (2016-04-29)]
"NERC"	means the North American Electric Reliability Corporation.
NERC	[Rules (2008-11-13), Alberta Reliability Standards (2014-10-01)]
	means the sum of all metered interchange over all interconnections between
"net actual interchange"	the balancing authority areas of two (2) adjacent balancing authorities.
	[Alberta Reliability Standards (2014-10-01)]
	means net balancing authority area generation, plus energy received from
	other balancing authority areas, less energy delivered to balancing authority
"net energy for load"	areas through interchange; it includes balancing authority area losses but
	excludes energy required for storage at energy storage facilities.
	[Alberta Reliability Standards (2010-01-22)]
"net interchange	means the sum of all interchange schedules with each adjacent balancing
schedule"	authority.
Scriculo	[Alberta Reliability Standards (2014-10-01)]
net scheduled	means the algebraic sum of all interchange schedules across a given path or
interchange or NSI"	between balancing authorities for a given period or instant in time.
interenange of itel	[Alberta Reliability Standards (2010-01-22)]
	means an electronic instruction:
	(i) to the ISO from two (2) counterparty pool participants ; and
"net settlement	(ii) containing transactional information including volumes, start and end times,
instruction"	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)]
	means that a protection system operates as designed and the fault is cleared
"normal clearing"	in the time normally expected with proper functioning of the installed protection
	Systems. [Dulco (2016-04-25) Alberto Beliebility Standards (2010-01-22)]
	[Rules (2016-04-25), Alberta Reliability Standards (2010-01-22)] 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
"normal rating"	on a continuous basis.
	Rules (2016-08-15)] [Alberta Reliability Standards (2019-01-01)]
	means those periods of time which are not on peak.
"off peak"	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
	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
"offer"	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)
	means the identity of any market participant who has ultimate control and
"offer control	determination of the price and quantity of offers or bids as applicable.
information"	[Rules (2012-12-03)]
	means the periods:
	(i) from 07:00:00 to 22:59:59 inclusive, Mountain Time in Alberta; or
"on peak"	(ii) when dealing with inadvertent interchange , that NERC defines, with
on poun	Saskatchewan being treated the same as the western interconnection.
	[Rules (2014-12-23)]
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Term	Definition
TOTAL	means the time:
	(i) from 07:00 to 23:00 inclusive, Mountain Time in Alberta; or
"on peak"	(ii) when dealing with inadvertent interchange , that NERC defines with
on peak	Saskatchewan being treated the same as the western interconnection .
	Alberta Reliability Standards (2014-10-01)
	means any one (1) of the seven (7) price and quantity pairs the ISO allocates to
"operating block"	a pool asset within a settlement interval for the purposes of submitting bids
	and offers.
	Rules (2013-01-08)]
	means the real power capability above system demand required to provide for
"operating reserve"	regulation, forced outages and unplanned outages.
operating receive	[Rules (2014-12-23), Tariff (2015-07-01)]
	means the capability above system demand required to provide for regulation ,
"operating reserves"	load forecasting errors, equipment outages, and local area protection.
operating reserves	[Alberta Reliability Standards (2019-07-01)]
	means the maximum amount of actual power that can be transferred over direct
	or parallel transmission elements comprising an interconnection from one
operating transfer	balancing authority to another balancing authority, and as further defined by
capability (OTC)"	the WECC.
	Rules (2009-05-28)]
	means the period from 00:00 Saturday to 24:00 Friday.
"operating week"	Rules (2004-10-14)]
	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
"operational deviation"	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)]
	means individuals who perform current day or next day outage coordination or
"operations support	assessments, or who determine system operating limits, interconnection
personnel"	reliability operating limits, or operating nomograms, in direct support of real
	time operations of the bulk electric system.
	[Alberta Reliability Standards (2018-04-01)]
	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;
"operator"	(iii) a transmission facility, (iv) an electric distribution system;
Operator	(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)]
	<u>, , , , , , , , , , , , , , , , , , , </u>



Term	Definition
"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;
	(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)]
	means a document setting out the allocation of resources against which cost
"original budget"	performance will be measured and assessed.
	[Rules (2016-04-29)]
	means the Alberta – British Columbia transfer path as identified by WECC in the
"Path 1"	document "Major WECC Transfer Paths in the Bulk Electric System".
	[Alberta Reliability Standards (2010-01-22)]
	as defined in the Act includes an individual, unincorporated entity, partnership,
"person"	association, corporation, trustee, executor, administrator or legal representative.
person	Rules (2010-09-07), Alberta Reliability Standards (2014-10-01),
	Tariff (2011-07-01)]
	means cyber assets that control, alert, or log access to the physical security
"physical access	perimeter(s), exclusive of locally mounted hardware or devices at the physical
control systems"	security perimeter such as motion sensors, electronic lock control mechanisms,
, , , , , , , , , , , , , , , , , , ,	and badge readers.
	[Alberta Reliability Standards (2017-10-01)]
	means the maximum amount of electric power that a transmission facility is
"physical capacity"	rated by its legal owner to be able to transmit without suffering damage.
	[Tariff (2015-07-01)]
	means the physical border surrounding locations in which BES cyber assets,
"physical security	BES cyber systems, or electronic access control or monitoring systems
perimeter"	reside, and for which access is controlled.
	[Alberta Reliability Standards (2017-10-01)]
	means the full or partial unavailability of a facility which is anticipated as part of a
"planned outage"	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)]
	means the unavailability of a facility which is anticipated as part of a legal
"planned outage"	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.
planning authority	
	[Alberta Reliability Standards (2015-09-01)]
	means a point on the transmission system that is owned by a legal owner of a transmission facility and that is, or could be, connected to one or more
"point of common	facilities which may be any combination of load facilities, generating units ,
coupling"	aggregated generating facilities or energy storage facilities.
	[Alberta reliability standards (2019-10-25)]



Term	Definition
	means a point at which electric energy is transferred between a transmission
"point of connection"	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)]
	means the point at which electricity is transferred from transmission facilities to
"point of delivery"	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)]
"naint of	means the point at which electricity is transferred between the interconnected
"point of interconnection"	electric system and a neighbouring jurisdiction and where the electricity so transferred is measured.
interconnection	[Rules (2010-04-30), Tariff (2011-07-01)]
	means the point at which electricity is transferred to transmission facilities from
	facilities owned by a market participant receiving system access service
"point of supply"	under the ISO tariff, including a generating unit, aggregated generating
point of supply	facility or an electric distribution system.
	Rules (2020-09-16)]
	means the point at which electricity is transferred to transmission facilities from
	facilities owned by a market participant receiving system access service
"point of supply"	under the ISO tariff, including a generating unit, an aggregated generating
' ' '	facility or an electric distribution system.
	[Tariff (2015-07-01)]
	means one (1) or more generating units, aggregated generating facilities,
"pool asset"	load assets, import assets or export assets, identified by a single pool ID the
poor asset	ISO assigns, and registered to a pool participant.
	[Rules (2013-01-08)]
	means a unique identifier the ISO assigns to a pool asset for the primary
"pool ID"	purpose of enabling a pool participant to enter into transactions in the power
poor is	pool.
	[Rules (2011-07-01)]
	means a market participant who is registered to transact, listed in the pool
"pool participant"	participant list.
	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)]
	as defined in the Act means the price for each hour, in \$/ MWh , established and
"pool price"	reported by the ISO , in accordance with the ISO rules , for electric energy
	exchanged through the power pool . [Alberta Reliability Standards (2010-12-01)]
	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
"pool price"	exchanged through the power pool .
"pool price"	[Rules (2013-01-08)]
	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
"pool price"	through the power pool .
	Tariff (2015-07-01)]
	[· · · · · · · · · · · · · · · · · · ·



Term	Definition
	means an Association for the Advancement of Cost Engineering Practices
"post permit and	Class 2 cost estimate, which is a cost estimate in an accuracy range
i. license estimate"	between -5 to -15% and +5 to +20%.
	[Rules (2016-04-29)]
"nower footor"	means the ratio of real power to apparent power.
"power factor"	[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]
	means the ratio of real power to apparent power.
"power factor"	[Tariff (2015-07-01)]
	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
"power pool"	energy.
	[Rules (2009-12-16)]
	as defined in the Act means the scheme operated by the Independent System
	Operator for:
"power pool"	(i) exchange of electric energy; and
	(ii) financial settlement for the exchange of electric energy.
	[Tariff (2011-07-01)]
	as defined in the Act means a power purchase arrangement included in Alberta
	Regulation AR 175/2000, being the <i>Power Purchase Arrangements</i>
	Determination Regulation, but does not include:
	(i) the power purchase arrangement that applies to the H.R. Milner generating
	unit;
"nower nurshage	(ii) the power purchase arrangement that applies to the Sturgeon generating
"power purchase	units;
arrangement"	(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 .
	[Tariff (2011-07-01)]
"primary inadvertent	means the component of inadvertent interchange caused by the regulating
interchange"	deficiencies of the balancing authority area.
ge	[Alberta Reliability Standards (2016-12-19)]
	means the project generally described as any one of the following:
	(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 ;
"Project"	(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 .
	[Rules (2008-08-11)]
"Project Change	means a document to be completed substantially in the form of the "Project Change Authorization Form" posted by the ISO on its website.
Proposal"	
	[Rules (2005-08-25)] 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
"Project Energization"	
-	certificate or energization checklist of the ISO.
	[Rules (2005-12-01)]
"Project Material"	means with respect to a Project , all equipment, material and construction,
-	installation, testing and commissioning services required for the construction of



Term	Definition
	the Project and provided by a third party, but excluding any engineering
	services;
	[Rules (2005-08-25)]
"Project Progress	means a document to be completed substantially in the form of the "Monthly
Report "	Project Progress Report" posted by the ISO on its website.
-	[Rules (2005-08-25)]
"protected cyber assets"	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. [Alberta Reliability Standards (2017-10-01)]
	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: (i) protective relays which respond to electrical quantities; (ii) communications systems necessary for correct operation of protective functions;
"protection system"	 (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. [Rules (2012-12-31), Alberta Reliability Standards (2014-10-01)]
"Quarterly Projects Report"	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. [Rules (2005-08-25)]
	means an arrangement of contiguous system elements energized at 50 kV or higher that:
	 (a) extend from a system element on the networked transmission system in a linear or branching configuration;
	(b) connect to one or more of a load facility, a generating unit, or an aggregated generating facility; and
"radial circuit"	(c) comprise the only circuit by which power can flow between the networked transmission system and the facilities identified in item (b) under normal operating conditions,
	and includes an arrangement where the circuit energized at 50 kV or higher is connected to another circuit energized at 50 kV or higher, either through a switching device that is operated normally open or through facilities energized at less than 50 kV where the circuit would be a radial circuit if the connection did not exist.
	[Alberta Reliability Standards (2020-08-06)]
"ramp rate"	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 .



Term	Definition
	[Rules (2013-01-08)]
	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
"ramping"	the generating source asset's output has reached the allowable dispatch
l	variance for that generating source asset.
	[Rules (2020-09-16)]
	means the maximum amount of electric power that a transmission facility is
"rated capacity"	rated by the manufacturer to be able to transmit.
l	[Tariff (2011-07-01)]
	means the power, in MVAr, developed when there are inductive, capacitive or
l	nonlinear elements in an alternating current power system and is calculated as
"reactive power"	the vector difference between apparent power and real power.
	[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]
	means the power, in MW, which does useful work and is developed when there
"real power"	are resistive elements in an electric power system.
	[Rules (2010-07-23), Alberta Reliability Standards (2011-12-31)]
	means the component of operating reserve :
	(i) responsive to automatic generation control; and
"regulating reserve"	(ii) frequency responsive;
	that is sufficient to provide normal regulating margin.
	[Rules (2014-12-23) Alberta Reliability Standards (2019-07-01)]
	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,
"regulating reserve	Regulating Reserve Technical Requirements and Performance Standards, and
resource"	that can, in any combination, deliver or receive electric energy from the
	interconnected electric system.
<u> </u>	[Rules (2018-02-01)]
	means the combination of adequacy and system security.
"reliability"	Rules (2004-08-04), Alberta Reliability Standards (2014-10-01),
<u> </u>	Tariff (2015-07-01)]
L	means the entity that is registered with NERC and as defined under the NERC
"reliability coordinator"	functional model.
	[Alberta Reliability Standards (2015-07-08)]
	means the collection of generation, transmission, and loads within the
	boundaries of the a reliability coordinator . Its boundary coincides with one or
area"	more balancing authority areas.
System (KWS)	
	, , , , , , , , , , , , , , , , , , , ,
"reliability standards"	
Tonability Standards	
"remedial action	
	, ,
"remedial action	
"reliability management system (RMS)" "reliability standards" "remedial action scheme" "remedial action	[Alberta Reliability Standards (2015-07-08)] 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)] as defined in the Transmission Regulation means the reliability standards undesection 19. [Rules (2008-08-11), Alberta Reliability Standards (2014-10-01)] 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)] means a scheme designed to detect predetermined power system conditions and to automatically take corrective actions that may include, but are not limite to, adjusting or tripping generation (MW and MVar), tripping load, or reconfiguring a power system(s) in order to accomplish objectives such as:



Term	Definition
	 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.
	The following do not individually constitute a remedial action scheme:
	 a protection system installed for the purpose of detecting faults on transmission facilities and isolating the faulted facilities;
	 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:
	(i) generator loss-of-field;(ii) transformer top-oil temperature;(iii) overvoltage; or(iv) overload
	to protect the facility against damage by removing it from service;
	f) a controller that switches or regulates one or more of the following:
	 (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
	and that is located at and monitors quantities solely at the same station as the facility being switched or regulated;
	g) a flexible alternating current transmission controller that remotely switches static shunt reactive devices located at other stations to regulate the output of a single flexible alternating current transmission device;
	 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;
	 a temporary SCADA action scheme that may be implemented to facilitate construction of transmission projects to assist in system performance during temporary build stages;



Term	Definition
	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:
	 (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"	means a cyber security incident that has compromised or disrupted one or more reliability tasks of a functional entity.
	[Alberta Reliability Standards (2017-10-01)]
"reportable disturbance"	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 [Alberta Reliability Standards (2012-10-01)]
	means the scan rate values of the area control error of a balancing authority area measured in MW and includes the difference between the actual net interchange of the balancing authority area and its scheduled net interchange, plus its frequency bias setting obligation, plus correction for any known meter error; and in the western interconnection, reporting area control error includes automatic time error correction.
	[Alberta Reliability Standards (2019-07-01)]
"reserve sharing group"	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. [Alberta Reliability Standards (2012-10-01)]
"sabotage event"	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: (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)]
	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)]



Term	Definition
101111	means the algebraic sum of all scheduled MW transfers, including dynamic
"scheduled net	schedules, to and from all adjacent balancing authorities within the same
interchange"	Interconnection, including the effect of scheduled ramps.
interenange	[Alberta Reliability Standards (2019-07-01)]
	means the transmission service arrangements reserved by a market participant
"scheduling path"	for an interchange transaction.
	[Alberta Reliability Standards (2010-01-22)]
llocovnity boood	means a misoperation caused by the incorrect operation of a protection
"security-based	system or remedial action scheme.
misoperation"	[Alberta Reliability Standards (2014-10-01)]
	means any of the geographic areas determined by the Commission as the area
"service area"	of an electric distribution system pursuant to ss. 28 and 29 of the HEEA .
	[Rules (2008-11-13)]
	means a document that provides the scope of work, cost estimates , project
	schedule, assumptions and risks for a transmission system project or system
"service proposal"	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)]
	means an Association for the Advancement of Cost Engineering Practices
"service proposal	Class 3 cost estimate, which is a cost estimate in an accuracy range
estimate"	between -10 to -20% and +10 to +30%, as directed by the ISO .
	[Rules (2016-04-29)]
	means a period beginning on the hour and ending sixty (60) minutes later and is
	the time increment for which:
"settlement interval"	(i) the ISO financially settles energy amounts; and
	(ii) the load settlement system calculates distinct load estimates.
	[Rules (2011-07-01)]
	means the period starting on the first day of each calendar month at 00:00 hours
"settlement period"	and ending on the last day of the same calendar month at 24:00 hours.
	[Tariff (2011-07-01), Rules (2010-04-30)]
W = 1 - 1 4 W	is a subcategory of pool asset and means one (1) or more load assets or export
"sink asset"	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.
Source asset	[Rules (2013-01-08)]
	means contingency reserve that is immediately and automatically responsive
	to frequency deviations through the action of a governor or other control
"spinning reserve"	system.
	[Rules (2014-12-23)], [Alberta Reliability Standards (2015-07-20)]
	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,
spinning reserve	Spinning Reserve Technical Requirements and Performance Standards, and
resource"	that can, in any combination, deliver or receive electric energy from the
	interconnected electric system.
	[Rules (2018-02-01)]
	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
"substation fraction"	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)]
	L . C (2011 07 01/)



Term	Definition
	means the periods:
"aupar paak"	(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
"super-peak"	23:59:59; and
	(iii) in all other months, in the evening, from 17:00:00 to 23:59:59.
	Rules (2014-12-23)]
	means contingency reserve that is
	(i) generation capable of being connected to the interconnected electric
	system and loaded within ten (10) minutes; or
"supplemental reserve"	(ii) load connected to the interconnected electric system which can be
	reduced within ten (10) minutes.
	Rules (2014-12-23)]
	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,
"supplemental reserve	Supplemental Reserve Technical Requirements and Performance Standards,
resource"	and that can, in any combination, deliver or receive electric energy from the
	interconnected electric system.
	Rules (2018-02-01)]
"supply transmission	means service under Rate Schedule Supply Transmission Service.
service (STS)"	Rules (2003-06-01)]
	means the service obtained by a market participant through a connection to the
"system access	transmission system, and includes access to exchange electric energy and
service"	ancillary services.
	Rules (2020-09-16)]
	as defined in the Act means the service obtained by market participants
"system access	through a connection to the transmission system , and includes access to
service"	exchange electric energy and ancillary services.
	[Tariff (2011-07-01)]
	as defined in the Act means the service obtained by market participants
"system access	through a connection to the transmission system , and includes access to
service"	exchange electric energy and ancillary services.
	[Alberta Reliability Standards (2020-08-06]
	has the same meaning as in the ISO tariff.
"System Contribution"	Rules (2005-09-29)]
	means an assembly of electrical equipment, including associated switches:
	(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,
	such as a generator, transformer, circuit breaker, bus section, transmission line,
"system element"	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.
	[Rules (2016-08-30), Alberta Reliability Standards (2016-08-30)]
	means the total, in an hour, of all metered demands under <i>Rate DTS</i> , <i>Rate FTS</i>
"system load"	and Rate DOS of the ISO tariff plus transmission system losses.
-	Rules (2011-10-13) 1
	means, as determined by the ISO, the value expressed in MW, MVar, MVA, A,
system operating limit"	Hz or kV, that satisfies the most limiting of the following:
	<u> </u>



Term	Definition
	(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
	post-contingency),
	for a specified system configuration.
	[Alberta Reliability Standards (2019-01-01)]
	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
"system security"	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)]
	means a variance from a requirement in the CIP Cyber Security reliability
"technical feasibility	standards that achieves a level of reliability of the interconnected electric
exception"	system that is comparable to or higher than compliance with the requirement.
	[Alberta Reliability Standards (2017-03-21)]
	means, for a given period, the accumulation of frequency error as measured by the difference between:
"time error"	
time error	(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)]
	means an offset to the Interconnection 's scheduled frequency to return the
"time error correction"	time error for the Interconnection to a predetermined value.
time error correction	Alberta Reliability Standards (2012-10-01)]
	means the amount of real power the ISO determines can be reliably transferred
"total transfer	over the interconnected transmission network under specified system conditions.
capability"	[Rules (2012-01-31)]
	means a limitation imposed by one (1) or more transmission elements to normal
	economic merit operation of generation, load and interchange transactions or
"transmission	to the flow of electrical energy from one part of the interconnected electric
constraint"	system to the other.
	[Rules (2003-06-01)]
	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
"transmission	market dispatch it receives to restore the energy balance on the
constraint rebalancing"	interconnected electric system due to measures taken to mitigate a
	transmission constraint.
	[Rules (2015-11-26), Tariff (2015-11-26)]
"Transmission	means, with respect to a specific Project , the customer, as defined in the ISO
Customer"	tariff, who has made application for system access service.
	[Rules (2005-08-25)]
	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
"transmission facility"	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,



Term Definition	
(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 w	ith the
operation of the transmission facility, including all equipment in a s	
used to transmit electric energy from (A) the low voltage terminal,	
electric distribution system lines that exit the substation and are	` '
at 25 000 volts or less, and	ogo
(vi) connections with electric systems in jurisdictions bordering Alberta	
but does not include a generating unit or an electric distribution sys	
Rules (2010-04-30), Alberta Reliability Standards (2014-10-01),	
Tariff (2011-07-01)]	
means a transmission facility proposal as referred to in s. 35(1)(a) of the	ne Act for
a Project that following the ISO's issuance of a Direction is submitted	
I ransmission Facility Designated TEO to the Commission in accordance with the ISO's Di	
Proposal" approval pursuant to the HEEA.	
[Rules (2008-08-11)]	
means a service whereby a generating source asset that is not in me	rit mav
"transmission must- receive a directive to operate at a minimum specified MW output level	
run" to maintain system security.	
[Rules (2013-01-08)]	
moons the antity responsible for the reliability of its "lead" transmissi	ion
"transmission operator" system, and that operates or directs the operations of the transmission operator	on
"transmission operator" facilities.	
[Alberta Reliability Standards (2010-01-22)]	
means the entity that is registered with NERC and as defined under the	e NERC
"transmission planner" functional model.	
Alberta Reliability Standards (2015-09-01)]	
means that amount of transfer capability the ISO determines is necess	ary to
"transmission reliability ensure the reliable operation of the interconnected electric system to	aking into
margin" account uncertainties in system conditions and the need for operating	flexibility.
[Rules (2012-01-31)]	
as defined in the Act means all transmission facilities in Alberta that	are a part
"transmission system" of the interconnected electric system.	
[Rules (2010-09-07), Alberta Reliability Standards (2011-12-31)]	
as defined in the Act means all transmission facilities in Alberta that	are part
"transmission system" of the interconnected electric system.	
[Tariff (2015-07-01)]	
means, for each year, the total of the transmission system losses or	t he
"transmission system losses"	
[Rules (2005-05-25)]	
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means a protection scheme that enables pre-configured devices to aut	
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Term	Definition
"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)]
	means the equipment that automatically controls the reactive power resources
"voltage regulating system"	to regulate the voltage level at any collector bus.
	[Alberta Reliability Standards (2016-04-01)]
"voltage regulating system"	means the equipment that automatically controls the reactive power resources
	to regulate the voltage level:
	(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. [Rules (2016-04-25)]
"WECC"	- / -
	means the Western Electricity Coordinating Council.
	[Rules (2003-06-01), Alberta Reliability Standards (2014-10-01)] means the area comprised of those portions of western Canada, northern
"western interconnection"	Mexico and the western United States in which members of the WECC operate
	synchronously connected transmission systems.
	Rules (2010-12-01), Tariff (2008-08-01)
	means the area comprised of those portions of western Canada, northern
"western interconnection"	Mexico and the western United States in which members of the WECC operate
	synchronously connected transmission systems.
	Alberta Reliability Standards (2014-10-01)
	means an interchange transaction that:
"wheel through transaction"	(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.
	[Rules (2012-01-31)]
"wide-area"	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.
	[Alberta Reliability Standards (2015-07-08)]
"wind turbine generator"	means a single generating unit, turbine and associated power electronics which
	converts mechanical energy from wind to electric energy.
	[Rules (2010-09-07)]