

Blackline of Version 3.0 of the Energy Storage Definitions



Existing Definition	Version 2 Revisions (Dec 2022)	Version 3 Revisions (March 2023)	Existing to Final
<p>"acceptable operational reason" means, any one (1) or more of the following:</p> <ul style="list-style-type: none"> (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 asset; (iv) re-positioning a pool asset that is an import asset or an export asset within the energy market to manage physical or operational constraints associated with an interconnection or a neighbouring balancing authority; (v) a circumstance directly resulting in the generating source asset not being capable of operation, which circumstance was solely caused by an occurrence of force majeure; or 	<p>"acceptable operational reason" means:</p> <ul style="list-style-type: none"> (i) any one or more of the following for a pool asset, that is not an import asset or export asset: <ul style="list-style-type: none"> a) a circumstance related to the operation of a pool asset which, if it operated could reasonably be expected to affect the safety of the pool asset, the environment, personnel working at the pool asset or the public; b) re-positioning a pool asset , within the energy market due to the need to meet a dispatch given to that pool asset from the ISO to serve the stand-by operating reserves market; c) re-positioning a pool asset within the energy market to manage physical or operational constraints associated with the pool asset; d) a circumstance directly resulting in the pool asset not being capable of operation, which circumstance was solely caused by an occurrence of force majeure; e) re-positioning a pool asset for electric energy that is: <ul style="list-style-type: none"> A. produced on the property of which a person is the owner or a tenant; and B. consumed solely by that person and solely on that property; or 	<p>No change.</p>	<p>"acceptable operational reason" <u>means:</u></p> <p><u>(i) any one (1) or more of the following for a pool asset, that is not an import asset or export asset:</u></p> <ul style="list-style-type: none"> a) a circumstance related to the operation of a generating <u>pool-source</u> asset which, if it operated could reasonably be expected to affect the safety of the <u>poolsource</u> asset, the environment, personnel working at the <u>poolsource</u> asset or the public; b) re-positioning a <u>poolgenerating source</u> asset assets, within the energy market due to the need to meet a dispatch given to that <u>pool-source</u> asset from the ISO to serve the stand-by operating reserves market; c) re-positioning a <u>generating poolsource</u> asset within the energy market to manage physical or operational constraints associated with the <u>pool source</u> asset; (i) re-positioning a pool asset that is an import asset or an export asset within the energy market to manage physical or operational constraints associated with an interconnection or a neighbouring balancing authority; d) a circumstance directly resulting in the <u>generating pool-source</u> asset not being capable of operation, which

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<p>(vi) re-positioning a generating source asset for electric energy that is:</p> <p>a) produced on the property of which a person is the owner or a tenant; and</p> <p>b) consumed solely by that person and solely on that property.</p>	<p>(ii) re-positioning a pool asset that is an import asset or an export asset within the energy market to manage physical or operational constraints associated with an interconnection or a neighbouring balancing authority.</p>		<p>circumstance was solely caused by an occurrence of force majeure; or</p> <p>e) re-positioning a generating pool source asset for electric energy that is:</p> <p><u>A. a) produced on the property of which a person is the owner or a tenant; and</u></p> <p><u>B. b) consumed solely by that person and solely on that property; or-</u></p> <p><u>(ii) re-positioning a pool asset that is an import asset or an export asset within the energy market to manage physical or operational constraints associated with an interconnection or a neighbouring balancing authority.</u></p>
<p>"aggregated generating facility" means, unless otherwise designated by the ISO, an aggregation of two (2) or more generating units, including any associated reactive power resources, where:</p> <p>(i) each generating unit is rated less than 9 MW;</p> <p>(ii) all generating units are situated in the same proximate location and have a common collector bus or multiple collector busses that can be operated as a common collector bus; and</p> <p>(iii) the aggregated generating facility is connected to the interconnected electric system or the electrical system in the service area of the City of Medicine Hat.</p>	<p>"aggregated facility" means unless otherwise designated by the ISO, an aggregation of 2 or more generating units or energy storage resources, or a combination thereof, including any associated reactive power resources, where:</p> <p>(i) each generating unit or energy storage resource is rated less than 9 MW;</p> <p>(ii) all generating units and energy storage resources are situated in the same proximate location and have a common collector bus or multiple collector busses that can be operated as a common collector bus; and</p> <p>(iii) the aggregated facility is connected to the interconnected electric system or</p>	<p>No change.</p>	<p>"aggregated generating facility" means, unless otherwise designated by the ISO, an aggregation of two (2) or more generating units <u>or energy storage resources, or a combination thereof</u>, including any associated reactive power resources, where:</p> <p>(i) each generating unit <u>or energy storage resource</u> is rated less than 9 MW;</p> <p>(ii) all generating units <u>and energy storage resources</u> are situated in the same proximate location and have a common collector bus or multiple collector busses that can be operated as a common collector bus; and</p> <p>(iii) the aggregated generating facility is connected to the interconnected electric system or the electrical system</p>

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	the electrical system in the service area of the City of Medicine Hat.		in the service area of the City of Medicine Hat.
<p>"Alberta internal load" means a number in MW:</p> <ul style="list-style-type: none"> (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. 	<p>"Alberta internal load" means a number in MW:</p> <ul style="list-style-type: none"> (i) that represents, in an hour, system load plus load served by an on-site generating unit, aggregated facility, or energy storage resource, including those within an industrial system and the City of Medicine Hat; and (ii) which the ISO, using supervisory control and data acquisition data, calculates as the sum of the energy produced by each generating unit, aggregated facility, and energy storage resource in Alberta and the Fort Nelson area in British Columbia, plus import volumes and minus export volumes. 	No change.	<p>"Alberta internal load" means a number in MW:</p> <ul style="list-style-type: none"> (i) that represents, in an hour, system load plus load served by an on-site generating unit or, aggregated generating facility, or energy storage resource, including those within an industrial system and the City of Medicine Hat; and (ii) which the ISO, using <u>SCADA supervisory control and data acquisition</u> data, calculates as the sum of the output of energy produced by each generating unit and, aggregated generating facility, and energy storage resource in Alberta and the Fort Nelson area in British Columbia, plus import volumes and minus export volumes.

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<p>"allowable dispatch variance" means:</p> <ul style="list-style-type: none"> (i) for each generating source asset, other than a wind or solar aggregated generating facility, as measured from the dispatch quantity: <ul style="list-style-type: none"> (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: <ul style="list-style-type: none"> (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: 	<p>"allowable dispatch variance" means:</p> <ul style="list-style-type: none"> (i) for a source asset that is controllable, as measured from the dispatch quantity: <ul style="list-style-type: none"> (a) plus or minus 5 MW for a source asset with a maximum capability of 200 MW or less; or (b) plus or minus 10 MW for a source asset, with a maximum capability of greater than 200 MW; (ii) for each source asset that is non-controllable with a maximum capability of 200MW or less: <ul style="list-style-type: none"> (a) 5 MW greater than the dispatch quantity and 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 5 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity; (iii) for a source asset that is non-controllable with a maximum capability of greater than 200 MW: <ul style="list-style-type: none"> (a) 10 MW greater than the dispatch quantity and 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 10 MW from the dispatch quantity, if the potential real power 	<p>"allowable dispatch variance" means:</p> <ul style="list-style-type: none"> (i) for a source asset that is controllable, as measured from the dispatch quantity: <ul style="list-style-type: none"> (a) plus or minus 5 MW for a source asset with a maximum capability of 200 MW or less; or (b) plus or minus 10 MW for a source asset, with a maximum capability of greater than 200 MW; (ii) for each source asset that is non-controllable with a maximum capability of 200MW or less: <ul style="list-style-type: none"> (a) 5 MW greater than the dispatch quantity and 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 5 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity; (iii) for a source asset that is non-controllable with a maximum capability of greater than 200 MW: <ul style="list-style-type: none"> (a) 10 MW greater than the dispatch quantity and 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 10 MW from the dispatch quantity, if the potential real power 	<p>"allowable dispatch variance" means:</p> <ul style="list-style-type: none"> (i) for each generating a source asset, other than a wind or solar aggregated generating facility that is controllable, as measured from the dispatch quantity: <ul style="list-style-type: none"> (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 source asset that is non-controllable with a maximum capability of two hundred (200) MW <u>200MW</u> or less: <ul style="list-style-type: none"> (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 a source asset that is non-controllable with a maximum

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<p>(a) ten (10) MW greater than the dispatch quantity and ten (10) MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus ten (10) MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity.</p>	<p>capability is greater than or equal to the dispatch quantity; (iv) for a source asset that is partially-controllable with a maximum capability of 200 MW or less, when the source asset is dispatched within the variable energy resource quantity:</p> <p>(a) 5 MW greater than the dispatch quantity and 5 MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus 5 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</p> <p>(v) for a source asset that is partially-controllable with a maximum capability greater than 200 MW, when the source asset is dispatched within the variable energy resource quantity:</p> <p>(a) 10 MW greater than the dispatch quantity and 10 MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus 10 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</p> <p>or</p> <p>(v) for a source asset that is partially-controllable, when the source asset is</p>	<p>capability is greater than or equal to the dispatch quantity;</p> <p>(iv) for a source asset that is partially-controllable with a maximum capability of 200 MW or less, when the source asset is dispatched within the variable energy resource quantity:</p> <p>(a) 5 MW greater than the dispatch quantity and 5 MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus 5 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</p> <p>(v) for a source asset that is partially-controllable with a maximum capability greater than 200 MW, when the source asset is dispatched within the variable energy resource quantity:</p> <p>(a) 10 MW greater than the dispatch quantity and 10 MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus 10 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</p> <p>or</p>	<p>capability of greater than two hundred (200) MW:</p> <p>(a) ten (10) MW greater than the dispatch quantity and ten (10) MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</p> <p>(b) plus or minus ten (10) MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</p> <p><u>(iv) for a source asset that is partially-controllable with a maximum capability of 200 MW or less, when the source asset is dispatched within the variable energy resource quantity:</u></p> <p><u>(a) 5 MW greater than the dispatch quantity and 5 MW less than the potential real power capability, if the potential real power capability is less than the dispatch quantity; or</u></p> <p><u>(b) plus or minus 5 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</u></p> <p><u>(v) for a source asset that is partially-controllable with a maximum capability greater than 200 MW, when the source asset is dispatched within the variable energy resource quantity:</u></p> <p><u>(a) 10 MW greater than the dispatch quantity and 10 MW less than the</u></p>

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	<p>dispatched outside the variable energy resource quantity:</p> <p>(a) plus or minus 5 MW for a source asset with a maximum capability of 200 MW or less; or</p> <p>(b) plus or minus 10 MW for a source asset with a maximum capability of greater than 200 MW.</p>	<p>(vi) for a source asset that is partially-controllable, when the source asset is dispatched outside the variable energy resource quantity:</p> <p>(a) plus or minus 5 MW <u>of the dispatch quantity</u> for a source asset with a maximum capability of 200 MW or less; or</p> <p>(b) plus or minus 10 MW <u>of the dispatch quantity</u> for a source asset with a maximum capability of greater than 200 MW.</p>	<p><u>potential real power capability, if the potential real power capability is less than the dispatch quantity; or</u></p> <p><u>(b) plus or minus 10 MW from the dispatch quantity, if the potential real power capability is greater than or equal to the dispatch quantity;</u></p> <p><u>(vi) for a source asset that is partially-controllable, when the source asset is dispatched outside the variable energy resource quantity:</u></p> <p><u>(a) plus or minus 5 MW of the dispatch quantity for a source asset with a maximum capability of 200 MW or less; or</u></p> <p><u>(b) plus or minus 10 MW of the dispatch quantity for a source asset with a maximum capability of greater than 200 MW.</u></p>
<p>"automatic generation control (AGC)" means equipment that adjusts a balancing authority's generation in a balancing authority's area from a central location to maintain the balancing authority's frequency or interchange schedule plus or minus frequency bias. AGC may also accommodate automatic inadvertent payback and time error correction.</p>	<p>"automatic generation control" means equipment that adjusts resources that produce or consume electrical energy in a balancing authority area from a central location to maintain the balancing authority's frequency or interchange schedule plus or minus frequency bias; and may also accommodate automatic inadvertent payback and time error correction.</p>	<p>"automatic generation control" means equipment that adjusts a <u>process of adjusting</u> resources that produce or consume electrical energy in a balancing authority area from a central location to:</p> <p><u>(i) maintain the balancing authority's frequency or interchange schedule, plus or minus frequency bias; or and may also</u></p> <p><u>(i)(ii) accommodate automatic inadvertent payback and time error correction.</u></p>	<p>"automatic generation control (AGC)" means equipment that adjusts a balancing authority's generation <u>a process of adjusting resources that produce or consume electrical energy</u> in a balancing authority's authority area from a central location to:</p> <p><u>(i) maintain the balancing authority's frequency or interchange schedule, plus or minus frequency bias. AGC may also; or</u></p> <p><u>(i)(ii) accommodate automatic inadvertent payback and time error</u></p>

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			correction.
" automatic voltage regulator (AVR) " means the automatic control equipment that adjusts the excitation level of a generating unit to maintain voltage levels.	" automatic voltage regulator " means the automatic control equipment that adjusts and continuously maintains the voltage level of a generating unit or an energy storage resource .	No change.	" automatic voltage regulator (AVR) " means the automatic control equipment that adjusts <u>and continuously maintains</u> the <u>excitation voltage level</u> of a generating unit <u>to maintain voltage levels</u> or <u>an energy storage resource</u> .
" available capability " means: (i) for a generating source asset , the maximum MW that the source asset is physically capable of providing; or (ii) for an import source asset , the MW that the pool participant submits in an offer .	" available capability " means: (i) for a source asset , excluding an import asset, the maximum MW that the source asset is physically capable of providing; or (ii) for an import source asset , the MW that the pool participant submits in an offer .	No change.	" available capability " means: (i) for a <u>generating-source asset, excluding an import</u> asset, the maximum MW that the source asset is physically capable of providing; or (ii) for an import source asset , the MW that the pool participant submits in an offer .
" black start capability (BSC) " means the ability of a power plant or generating asset to start up without external electric supply and serve to provide power to the AIES .	" black start capability " means the ability of a generating unit or energy storage resource to start up without external electric supply and provide power to the interconnected electric system .	Retire for April 1, 2024. Definition is no longer used in ISO rules following AUC Decision 27990-D01-2023.	" black start capability (BSC) " means the ability of a <u>power plant or generating asset unit</u> or <u>energy storage resource</u> to start up without external electric supply and <u>serve to</u> provide power to the <u>AIES</u> <u>interconnected electric system</u> .
" bulk transmission line " means a system or arrangement of lines of wire or other conductors and related equipment, wholly in	" bulk transmission line " means a system or arrangement of lines of wire or other conductors and related equipment, wholly in Alberta,	No change.	" bulk transmission line " means a system or arrangement of lines of wire or other conductors and related equipment, wholly in Alberta,

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<p>Alberta, whereby electric energy, however produced, is transmitted in bulk, and includes:</p> <ul style="list-style-type: none"> (i) transmission circuits composed of the conductors that form the minimum set required to so transmit electric energy; (ii) insulating and supporting structures; and (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. 	<p>whereby electric energy- is transmitted in bulk and includes:</p> <ul style="list-style-type: none"> (i) transmission circuits composed of the conductors that form the minimum set required to so transmit electric energy; (ii) insulating and supporting structures; and (iii) all property of any kind used for the purpose of, or in connection with, or incidental to, the operation of such a line; <p>but does not include:</p> <ul style="list-style-type: none"> (iv) a substation, (v) operational and control devices; (vi) a generating unit; (vii) an aggregated facility; (viii) an energy storage resource; or (ix) an electric distribution system. 	<p>No change.</p>	<p>whereby electric energy, however produced, is transmitted in bulk, and includes:</p> <ul style="list-style-type: none"> (i) transmission circuits composed of the conductors that form the minimum set required to so transmit electric energy; (ii) insulating and supporting structures; and (iii) all property of any kind used for the purpose of, or in connection with, or incidental to, the operation of such a line; <p>but does not include:</p> <ul style="list-style-type: none"> (iv) a substation, (v) <u>operational and control devices</u>; (vi) <u>a generating unit</u>; (vii) <u>an aggregated generating facility</u>; (viii) <u>an energy storage resource</u>; or (vi)(ix) <u>an electric distribution system</u>.
<p>"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.</p>	<p>"collector bus" means the low voltage side of any step-up transformer connected to the interconnected electric system or the electrical system in the City of Medicine Hat where real power and reactive power are collected within an aggregated facility.</p>	<p>No change.</p>	<p>"collector bus" means the low voltage side of any step-up transformer<u>transformer</u> connected to the interconnected electric system or the electrical system in the City of Medicine Hat where the real power and reactive power <u>produced by any generating units or reactive power resources, or both of them are collected</u> within an aggregated generating facility, are collected.</p>

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<p>"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.</p>	<p>"commercial operation" means the date upon which a load, generating unit, aggregated facility, or energy storage resource begins to operate on the transmission system in a manner acceptable to the ISO and which is expected to be normal for it to operate, after energization and commissioning.</p>	<p>No change.</p>	<p>"commercial operation" means the date upon which a load of, generating unit, aggregated facility, or energy storage resource begins to operate on the transmission system in a manner which is acceptable to the ISO and which is expected to be normal for it to so operate, after energization and commissioning.</p>
<p>"commissioning" means:</p> <ul style="list-style-type: none"> (i) in the case of a new generating unit or a new aggregated generating facility, the process of carrying out, after connection to the interconnected electric system but before commercial operation, activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter commercial operation and, where applicable, meets the ISO's requirements and other relevant standards; (ii) in the case of an existing generating unit or an existing aggregated generating facility that is being modified, the process of carrying out activities designed to test equipment, the facility or a process to confirm that the facility can satisfactorily continue in commercial operation and, where applicable, continue to meet the ISO's requirements and other relevant standards; (iii) in the case of a new transmission facility or a new load facility, the process of carrying out, after energization but before normal operation, activities 	<p>"commissioning" means:</p> <ul style="list-style-type: none"> (i) in the case of a new generating unit, a new aggregated facility, or a new energy storage resource, the process of carrying out, after connection to the interconnected electric system but before commercial operation, activities designed to test equipment or 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, an existing aggregated facility, or an existing energy storage resource that is being modified, the process of carrying out activities designed to test equipment or the facility, or confirm that the facility can satisfactorily continue in commercial operation and, where applicable, continue to meet the ISO's requirements and other relevant standards; 	<p>No change.</p>	<p>"commissioning" means:</p> <ul style="list-style-type: none"> (i) in the case of a new generating unit of, a new aggregated generating facility, or a new energy storage resource, the process of carrying out, after connection to the interconnected electric system but before commercial operation, activities designed to test equipment, or 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 of, an existing aggregated generating facility, or an existing energy storage resource that is being modified, the process of carrying out activities designed to test equipment, or 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;

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<p>designed to test equipment, the facility or a process to confirm that the facility can satisfactorily enter normal operation and, where applicable, meets the ISO's requirements and other relevant standards; and</p> <p>(iv) in the case of an existing transmission facility or an existing load facility that is being upgraded in the form of a requested increase in capacity or revised functionality, the process of carrying out activities designed to test equipment, a facility or a process to confirm that the facility can satisfactorily continue in normal operation and, where applicable, continue to meet the ISO's requirements and other relevant standards.</p>	<p>(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 or the facility, or confirm that the facility can satisfactorily enter normal operation and, where applicable, meets the ISO's requirements and other relevant standards; and</p> <p>(iv) in the case of an existing transmission facility or an existing load facility that is being upgraded in the form of a requested increase in capacity or revised functionality, the process of carrying out activities designed to test equipment or the facility, or confirm that the facility can satisfactorily continue in normal operation and, where applicable, continue to meet the ISO's requirements and other relevant standards.</p>		<p>(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, or the facility, or a process to confirm that the facility can satisfactorily enter normal operation and, where applicable, meets the ISO's requirements and other relevant standards; and</p> <p>(iv) in the case of an existing transmission facility or an existing load facility that is being upgraded in the form of a requested increase in capacity or revised functionality, the process of carrying out activities designed to test equipment, a or the facility, or a process to confirm that the facility can satisfactorily continue in normal operation and, where applicable, continue to meet the ISO's requirements and other relevant standards.</p>
<p>"control centre" means one or more facilities hosting operating personnel that monitor and control the bulk electric system in real-time to perform the reliability tasks, including their associated data centres, of: 1) the ISO, 2) an operator of a transmission facility for transmission facilities at two (2) or more locations, or 3) an operator of a generating unit or an operator of an aggregated generating facility for either generating</p>	<p>"control centre" means one or more facilities, including their associated data centres, hosting operating personnel that monitor and control the bulk electric system in real-time to perform the reliability tasks of any one or more of:</p> <p>(i) the ISO;</p> <p>(ii) an operator of a transmission facility for transmission facilities at 2 or more locations; and</p>	<p>No change.</p>	<p>"control centre" means one or more facilities, including their associated data centres, 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) of any one or more of:</p> <p>(i) the ISO, 2);</p> <p>(ii) an operator of a transmission facility for transmission facilities at two (2) or more locations, or 3); and</p>

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units or aggregated generating facilities at two (2) or more locations.	(iii) an operator of a generating unit , an aggregated facility , or an energy storage resource for either generating units, aggregated facilities, or energy storage resource at 2 or more locations.		(+)(iii) an operator of a generating unit or an operator of, an aggregated generating facility, or an energy storage resource for either generating units or, aggregated generating facilities, or energy storage resource at two (2) or more locations.
N/A	<p>“controllable” means a pool asset is able to:</p> <ul style="list-style-type: none"> (i) increase energy production or consumption; and (ii) decrease energy production or consumption; <p>to meet a dispatch quantity or directive quantity under normal operating conditions, irrespective of solar or wind conditions.</p>	No change.	N/A
“electric distribution system” as defined in the Act means the plant, works, equipment, systems and services necessary to distribute electricity in a service area, but does not include a generating unit or a transmission facility .	<p>“electric distribution system” means the plant, works, equipment, systems and services necessary to distribute electricity in a service area, but does not include a</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) a transmission facility; or (iii) an energy storage resource. 	<p>“electric distribution system” means the plant, works, equipment, systems and services necessary to distribute electricity in a service area, <u>including energy storage approved by the Commission as part of an electric distribution system</u>, but does not include a</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) a transmission facility; or (iii) an energy storage resource. 	<p>“electric distribution system” as defined in the Act means the plant, works, equipment, systems and services necessary to distribute electricity in a service area, <u>including energy storage approved by the Commission as part of an electric distribution system</u>, but does not include a generating unit or a transmission facility.</p> <ul style="list-style-type: none"> <u>(i) a generating unit;</u> <u>(ii) a transmission facility; or</u> <u>(iii) an energy storage resource.</u>
“electrical islands” means a condition in the electrical system where geographical areas of the interconnected electric system	“electrical islands” means a condition in the electrical system where geographical areas of the interconnected electric system electrically	“electrical islands” means a condition in the electrical system where geographical areas of the interconnected electric system electrically	“electrical islands” means a condition in the electrical system where geographical areas of the interconnected electric system electrically

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electrically separate from the interconnected electric system , resulting from system disturbances , such that there exists both generation and load in these separated areas.	separate from the interconnected electric system , resulting from system disturbances , such that there exists both energy production and consumption in these separated areas.	separate from the interconnected electric system , resulting from system disturbances , such that there exists both <u>energy-electricity</u> production and consumption in these separated areas.	separate from the interconnected electric system , resulting from system disturbances , such that there exists both <u>generationelectricity production</u> and <u>loadconsumption</u> in these separated areas.
" energy storage facility " means a facility with technologies capable of storing and releasing electric energy.	Retired.	No change.	N/A
N/A	<p>"energy storage resource" means the component of an energy storage facility approved by the Commission pursuant to section 13.01 of the HEEA, that uses a technology or process that is capable of using electric energy as an input, storing the energy for a period of time and then discharging electric energy as an output, and includes a share of the following associated facilities that are necessary for the safe, reliable, and economic operation of the energy storage resource, which may be used in common with other energy storage resources:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; and (iv) other items. 	<p>"energy storage resource" means the component of an energy storage facility approved by the Commission pursuant to section 13.01 of the HEEA, that uses a technology or process <u>owned by a pool participant</u> that is capable of using electric energy as an input, storing the energy for a period of time and then discharging electric energy as an output, and includes a share of the following associated facilities that are necessary for the safe, reliable, and economic operation of the energy storage resource, which may be used in common with other energy storage resources:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; and (iv) other items. 	N/A
" 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	" generating asset steady state " means the state of operation that begins the first 10 minute clock period following the period in which the energy production of a source asset , excluding	" generating asset steady state " means the state of operation that begins the first 10 minute clock period following the period in which the <u>energy-electricity</u> production of a source asset , excluding an import asset, has reached the allowable dispatch variance for the source	" "generating asset steady state" means the state of operation that begins the first 10 minute clock period following the period in which <u>the electricity production of a generating source asset's output</u> asset , excluding an import asset,

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has reached the allowable dispatch variance for that generating source asset .	an import asset, has reached the allowable dispatch variance for the source asset .	asset .	has reached the allowable dispatch variance for that generating <u>the</u> source asset .
<p>"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:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; (iv) other items. 	<p>"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:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; (iv) other items; (v) but does not include an energy storage resource. 	No change.	<p>"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:</p> <ul style="list-style-type: none"> (i) fuel and fuel handling equipment; (ii) cooling water facilities; (iii) switch yards; (iv) other items; (v) <u>but does not include an energy storage resource</u>.
<p>"governor or governor system" means automatic control equipment with frequency or speed droop characteristics to control:</p> <ul style="list-style-type: none"> (i) the speed or electric power output of a generating unit, or both; (ii) the electric power input of a load; (iii) the electric power output or input of an energy storage facility, or both; or (iv) the speed or electric power output of an aggregated generating facility. 	<p>"governor or governor system" means automatic control equipment with frequency or speed droop characteristics to control:</p> <ul style="list-style-type: none"> (i) the speed or electric power output of a generating unit, or both; (ii) the electric power input of a load; (iii) the electric power output or input of an energy storage resource, or both; or (iv) the speed or electric power output of an aggregated facility. 	No change.	<p>"governor or governor system" means automatic control equipment with frequency or speed droop characteristics to control:</p> <ul style="list-style-type: none"> (i) the speed or electric power output of a generating unit, or both; (ii) the electric power input of a load; (iii) the electric power output or input of an energy storage facility<u>resource</u>, or both; or

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			(iv) the speed or electric power output of an aggregated generating facility .
<p>"gross real power" means:</p> <ul style="list-style-type: none"> (i) for aggregated generating facilities with one or more collector busses, the sum of real power delivered by the generating units measured at those collector busses; (ii) for aggregated generating facilities without a collector bus, a real power measurement at the generator terminal for each generating unit; (iii) for a generating unit that is not part of an aggregated generating facility, the real power measurement at the generator terminal; or (iv) for an energy storage facility, the real power measurement at the low voltage side of the transmission system step-up transformer. 	<p>"gross real power" means:</p> <ul style="list-style-type: none"> (i) for an aggregated facility, the sum of real power delivered by the generating units or energy storage resources measured at the collector bus; (ii) for a generating unit, the real power measurement at the generator terminal; or (iii) for an energy storage resource, the real power measurement at the low voltage side of the transmission system step-up transformer. 	<p>"gross real power" means:</p> <ul style="list-style-type: none"> (i) for an aggregated facility, the sum of real power delivered by the generating units or energy storage resources measured at the collector bus; <u>or</u> (ii) for a generating unit <u>or synchronous energy storage resource</u>, the real power measurement at the <u>generator stator winding</u> terminal; <u>or</u> (iii) for an energy storage resource, the real power measurement at the low voltage side of the transmission system step-up transformer. 	<p>"gross real power" means:</p> <ul style="list-style-type: none"> (i) for <u>an aggregated generating facilities with one or more collector busses facility</u>, the sum of real power delivered by the generating units <u>or energy storage resources</u> measured at <u>those collector busses</u>; (ii) for aggregated generating facilities without a the collector bus, a real power measurement at the generator terminal for each; or (ii) for a generating unit; (iii) for a generating unit that is not part of an aggregated generating facility, the or synchronous energy storage resource, the real power measurement at the generator stator winding terminal; or (iv) for an energy storage facility, the real power measurement at the low voltage side of the transmission system step-up transformer.
<p>"in merit" means:</p> <ul style="list-style-type: none"> (i) for the energy market, an operating block whose price is at or below system marginal price; 	<p>"in merit" means:</p> <ul style="list-style-type: none"> (i) for the energy market: 	<p>"in merit" means:</p> <ul style="list-style-type: none"> (i) for the energy market: 	<p>"in merit" means:</p> <ul style="list-style-type: none"> <u>(i)</u> for the energy market; <u>;</u>

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<p>(ii) for dispatch down service and load shed service for imports, starting from the lowest priced operating block, the operating blocks with a sum of MW sufficient to meet the MW requirements for dispatch down service or load shed service for imports as applicable; or</p> <p>(iii) for standby operating reserves, any offer that the ISO accepts.</p>	<p>(a) an operating block in an offer whose price is at or below the system marginal price; or</p> <p>(b) an operating block for a bid whose price is at or above the system marginal price;</p> <p>(ii) for dispatch down service and load shed service for imports, starting from the lowest priced operating block, the operating blocks with a sum of MW sufficient to meet the MW requirements for dispatch down service or load shed service for imports as applicable; or</p> <p>for standby operating reserves, any offer that the ISO accepts.</p>	<p>(a) an operating block in an offer whose price is at or below the system marginal price; or</p> <p>(b) an operating block for in a bid whose price is at or above the system marginal price;</p> <p>(ii) for dispatch down service and load shed service for imports, starting from the lowest priced operating block, the operating blocks with a sum of MW sufficient to meet the MW requirements for dispatch down service or load shed service for imports as applicable; or</p> <p>(iii) for standby operating reserves, any offer that the ISO accepts.</p>	<p>(a) an operating block <u>in an offer</u> whose price is at or below <u>the</u> system marginal price; <u>or</u></p> <p><u>(b) (ii) — an operating block in a bid whose price is at or above the system marginal price;</u></p> <p>(ii) for dispatch down service and load shed service for imports, starting from the lowest priced operating block, the operating blocks with a sum of MW sufficient to meet the MW requirements for dispatch down service or load shed service for imports as applicable; or</p> <p>(iii) for standby operating reserves, any offer that the ISO accepts.</p>
<p>"incremental generation costs" means, where the ISO has issued a directive:</p> <p>(i) for energy from a long lead time asset; or</p> <p>(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:</p>	<p>"incremental generation costs" means, where the ISO has issued a directive:</p> <p>(i) for energy from a long lead time asset; or</p> <p>(ii) to cancel one or more of a planned outage, a delayed forced outage, or an automatic forced outage for a source asset, excluding an import asset;</p> <p>and</p> <p>(iii) the directive requires that the long lead time asset or the source asset be made available to, or to actually, operate, exchange electric energy, or provide ancillary services;</p> <p>the reasonable costs incurred that are reasonably attributed to compliance with the</p>	<p>No change.</p>	<p>"incremental generation costs" means, where the ISO has issued a directive:</p> <p>(i) for energy from a long lead time asset; or</p> <p>(ii) to cancel, in the case of a generating source asset, any one (1) one or more of a planned outage, a delayed forced outage, or an automatic forced outage, <u>for a source asset, excluding an import asset;</u> <u>requiring and</u></p> <p><u>(iii) the directive requires that a the long lead time asset or a generating the source asset,</u> be made available to, or to actually, operate, exchange electric energy, or provide ancillary services, those;</p>

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<p>(iii) in the case of compliance with a directive for energy from a long lead time asset:</p> <ul style="list-style-type: none"> (a) the actual costs of all variable charges from Rate STS of the ISO tariff, including any applicable loss factors charge or credit; (b) variable operational and maintenance charges; (c) fuel costs to start and run the long lead time asset or the generating source asset; and (d) other related reasonable costs; <p>(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:</p> <ul style="list-style-type: none"> (a) to plan, prepare for and execute the outage, from initial planning and inception to the date of the directive canceling the outage; (b) subsequent to the date of the directive cancelling the outage and in accordance with good electric industry practice; (c) for re-scheduling personnel, equipment and other materials required for the performance of the work originally to be completed or performed pursuant to the cancelled outage; 	<p>directive and which would have been avoided but for the directive, including:</p> <p>(iv) in the case of compliance with a directive for energy from a long lead time asset:</p> <ul style="list-style-type: none"> (a) the actual costs of all variable charges from Rate STS of the ISO tariff, including any applicable loss factors charge or credit; (b) variable operational and maintenance charges; (c) fuel costs to start and run the long lead time asset or the source asset, excluding an import asset, and (d) other related reasonable costs; <p>(v) in the case of compliance with a directive canceling a planned outage, a delayed forced outage or an automatic forced outage for a source asset, excluding an import asset, costs incurred:</p> <ul style="list-style-type: none"> (a) to plan, prepare for and execute the outage, from initial planning and inception to the date of the directive canceling the outage; (b) subsequent to the date of the directive cancelling the outage and in accordance with good electric industry practice; (c) for re-scheduling personnel, equipment and other materials required for the performance of the work originally to be completed or performed pursuant to the cancelled outage; 		<p>the reasonable costs incurred that are reasonably attributed to compliance with the directive and which would have been avoided but for the directive, and include<u>including</u>:</p> <p>(iii)<u>(iv)</u> in the case of compliance with a directive for energy from a long lead time asset:</p> <ul style="list-style-type: none"> (a) the actual costs of all variable charges from Rate STS of the ISO tariff, including any applicable loss factors charge or credit; (b) variable operational and maintenance charges; (c) fuel costs to start and run the long lead time asset or the generating source asset, excluding an import asset, and (d) other related reasonable costs; <p>(iv)<u>(v)</u> 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, these<u>excluding an import asset</u>, costs incurred:</p> <ul style="list-style-type: none"> (a) to plan, prepare for and execute the outage, from initial planning and inception to the date of the directive canceling the outage; (b) subsequent to the date of the directive cancelling the outage and in accordance with good electric industry practice;

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<p>(d) in the form of verified damages or liquidated claims dollar amounts or claimed by third parties pursuant or related to:</p> <p>(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</p> <p>(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</p> <p>(e) as other related reasonable costs.</p>	<p>(d) in the form of verified damages or liquidated claims dollar amounts or claimed by third parties pursuant or related to:</p> <p>(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</p> <p>(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</p> <p>(e) as other related reasonable costs.</p>		<p>(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;</p> <p>(d) in the form of verified damages or liquidated claims dollar amounts or claimed by third parties pursuant or related to:</p> <p>(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</p> <p>(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</p> <p>(e) as other related reasonable costs.</p>
<p>"legal owner" means the person who owns electric industry property including any one or more of:</p> <p>(i) a generating unit;</p> <p>(ii) any aggregated generating facilities;</p> <p>(iii) a transmission facility;</p> <p>(iv) an electric distribution system;</p>	<p>"legal owner" means the person who owns electric industry property including any one or more of:</p> <p>(i) a generating unit;</p> <p>(ii) an energy storage resource;</p> <p>(iii) an aggregated facility;</p> <p>(iv) a transmission facility;</p>	<p>No change.</p>	<p>"legal owner" means the person who owns electric industry property including any one or more of:</p> <p>(i) a generating unit;</p> <p>(ii) <u>an energy storage resource;</u></p> <p>(ii)(iii) <u>an aggregated generating facilities facility;</u></p>

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<p>(v) an industrial system that has been designated as such by the Commission; and</p> <p>(vi) a load facility with system access service under subsection 101(2) of the Act.</p>	<p>(v) an electric distribution system;</p> <p>(vi) an industrial system that has been designated as such by the Commission; and</p> <p>(vii) a load facility with system access service under subsection 101(2) of the Act.</p>		<p>(iii)(iv) a transmission facility;</p> <p>(iv)(v) an electric distribution system;</p> <p>(v)(vi) an industrial system that has been designated as such by the Commission; and</p> <p>(vi)(vii) a load facility with system access service under subsection 101(2) of the Act.</p>
<p>"long lead time asset" means a generating source asset that:</p> <p>(i) requires more than one (1) hour to synchronize to the system under normal operating conditions; or</p> <p>(ii) is synchronized but has varying start-up times for distinct portions of its MW and which requires more than one (1) hour to deliver such additional portions of its MW; and</p> <p>which is not delivering all of its energy for reasons other than an outage.</p>	<p>"long lead time asset" means a source asset, excluding an import asset, that:</p> <p>(i) requires more than one hour to synchronize to the system under normal operating conditions; or</p> <p>(ii) is synchronized but has varying start-up times for distinct portions of its MW and which requires more than one hour to deliver such additional portions of its MW; and</p> <p>which is not delivering all of its energy for reasons other than an outage.</p>	<p>No change.</p>	<p>"long lead time asset" means a generating source asset, excluding an import asset, that:</p> <p>(i) requires more than one (1) hour to synchronize to the system under normal operating conditions; or</p> <p>(ii) is synchronized but has varying start-up times for distinct portions of its MW and which requires more than one (1) hour to deliver such additional portions of its MW; and</p> <p>which is not delivering all of its energy for reasons other than an outage.</p>

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<p>"loss factor" means the value, in percent, which reasonably represents the contribution to transmission system losses, based on location, of a generating facility, export service, import service, or other opportunity service, and which the ISO establishes in accordance with section 501.10 of the ISO rules, <i>Transmission Loss Factors</i>.</p>	<p>"loss factor" means the value, in percent, which reasonably represents the contribution to transmission system losses, based on location, of a generating unit, energy storage resource, export service, import service, or other opportunity service, and which the ISO establishes in accordance with Section 501.10 of the ISO rules, <i>Transmission Loss Factors</i>.</p>	No change.	<p>"loss factor" means the value, in percent, which reasonably represents the contribution to transmission system losses, based on location, of a generating facilityunit, energy storage resource, export service, import service, or other opportunity service, and which the ISO establishes in accordance with sectionSection 501.10 of the ISO rules, <i>Transmission Loss Factors</i>.</p>
<p>"market participant" means</p> <ul style="list-style-type: none"> (i) any person that supplies, generates, transmits, distributes, trades, exchanges, purchases or sells electricity, electric energy, electricity services or ancillary services; or (ii) any broker, brokerage or forward exchange that trades or facilitates the trading of electricity, electric energy, electricity services or ancillary services. 	<p>"market participant" means:</p> <ul style="list-style-type: none"> (i) any person that supplies, stores, 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. 	No change.	<p>"market participant" means:</p> <ul style="list-style-type: none"> (i) any person that supplies, <u>stores</u>, generates, transmits, distributes, trades, exchanges, purchases₁ or sells electricity, electric energy, electricity services₁ or ancillary services; or (ii) any broker, brokerage₁ or forward exchange that trades or facilitates the trading of electricity, electric energy, electricity services₁ or ancillary services.
<p>"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.</p>	Retired	No change.	N/A

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<p>"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.</p>	<p>"maximum authorized charging power" means, for an energy storage resource or an aggregated facility containing an energy storage resource, the maximum gross real power that the ISO has authorized the energy storage resource or aggregated facility to receive from the interconnected electric system, as measured at the low voltage side of the transmission system step-up transformer.</p>	<p>"maximum authorized charging power" means: for an energy storage resource or an aggregated facility containing an energy storage resource, the maximum gross real power that the ISO has authorized the energy storage resource or aggregated facility to receive from the interconnected electric system, as measured at the low voltage side of the transmission system step-up transformer.</p> <p>(i) <u>for an aggregated facility containing an energy storage resource, the sum of the maximum gross real power that the ISO authorizes the aggregated facility to receive from the interconnected electric system, as measured at the collector bus of the aggregated facility;</u></p> <p>(ii) <u>for a synchronous energy storage resource, the maximum gross real power that that the ISO has authorizes the energy storage resource to receive from the interconnected electric system, as measured at the stator winding terminal of the energy storage resource.</u></p>	<p>"maximum authorized charging power" means: ;</p> <p>(i) <u>for an aggregated facility containing an energy storage facility resource, the sum of the maximum gross real power that the ISO has authorized each energy storage authorizes the aggregated facility to receive from the interconnected electric system, as measured at the low voltage side collector bus of the transmission system step-up transformer. aggregated facility;</u></p> <p>(ii) <u>for a synchronous energy storage resource, the maximum gross real power that that the ISO has authorizes the energy storage resource to receive from the interconnected electric system, as measured at the stator winding terminal of the energy storage resource.</u></p>
<p>"maximum authorized real power" means:</p> <p>(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</p> <p>(ii) for a generating unit that is not part of an aggregated generating facility, the</p>	<p>"maximum authorized real power" means:</p> <p>(i) for an aggregated facility, the sum of the maximum gross real power that may be delivered to the collector buses of the aggregated facility;</p> <p>(ii) for a generating unit, the maximum gross real power that may be delivered to the</p>	<p>"maximum authorized real power" means:</p> <p>(i) for an aggregated facility, the sum of the maximum gross real power that may be delivered to the collector buses of the aggregated facility;</p> <p>(ii) for a generating unit or synchronous energy storage resource, the maximum gross real power that may be delivered to</p>	<p>"maximum authorized real power" means:</p> <p>(i) for an aggregated generating facility, the sum of the maximum gross real power that may be delivered to the collector busses buses of the aggregated generating facility; or</p> <p>(ii) for a generating unit that is not part of an aggregated generating facility or</p>

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<p>maximum gross real power that may be delivered to the stator winding terminal of the generating unit.</p>	<p>stator winding terminal of the generating unit; or</p> <p>(iii) for an energy storage resource, the maximum gross real power that may be delivered to the stator winding terminal of the energy storage resource.</p>	<p>the stator winding terminal of the generating unit <u>or energy storage resource</u>; or</p> <p>(iii) for an energy storage resource, the maximum gross real power that may be delivered to the stator winding terminal of the energy storage resource.</p>	<p><u>synchronous energy storage resource</u>, the maximum gross real power that may be delivered to the stator winding terminal of the generating unit <u>or energy storage resource</u>.</p>
<p>"maximum capability" means:</p> <p>(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</p> <p>(ii) for a source asset that is an import asset, the available capability.</p>	<p>"maximum capability" means:</p> <p>(i) for a pool asset, the maximum quantity expressed in 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</p> <p>(ii) for a source asset that is an import asset, the available capability.</p>	<p>No change.</p>	<p>"maximum capability" means:</p> <p>(i) for a generating unit or aggregated generating facility <u>pool asset</u>, the maximum <u>quantity expressed in MW</u>, 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</p> <p>(ii) for a source asset that is an import asset, the available capability.</p>
<p>N/A</p>	<p>"non-controllable" means a pool asset is not able to:</p> <p>(i) increase energy production or consumption; and</p> <p>(ii) decrease energy production or consumption,</p> <p>to meet a dispatch quantity or directive quantity under normal operating conditions in all solar or wind conditions.</p>	<p>"non-controllable" means a pool asset is not able to: —</p> <p>increase energy production or consumption; and</p> <p>decrease energy production or consumption;</p> <p>to meet a dispatch quantity or directive quantity under normal operating conditions in all solar or wind conditions.</p>	<p>N/A</p>

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Existing Definition	Version 2 Revisions (Dec 2022)	Version 3 Revisions (March 2023)	Existing to Final
<p>"operational deviation" means:</p> <ul style="list-style-type: none"> (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, <i>Delivery Requirements for Energy</i>; or (ii) a generating source asset operating in generating asset steady state varies outside its allowable dispatch variance, due to force majeure or any other circumstances related to the operation of the generating source asset which could reasonably be expected to affect the available capability or safety of the generating source asset, third party facilities, contracts or arrangements, the environment, personnel working at the generating source asset or the public. 	<p>"operational deviation" means a circumstance where:</p> <ul style="list-style-type: none"> (i) a source asset, excluding an import asset, is unable to comply with the ramping requirements set out in subsection 4 of Section 203.4 of the ISO rules, <i>Delivery Requirements for Energy</i>; or (ii) a source asset, excluding an import asset, operating in generating asset steady state varies outside its allowable dispatch variance, due to force majeure or any other circumstances related to the operation of the source asset, which could reasonably be expected to affect the available capability or safety of the source asset, third party facilities, contracts or arrangements, the environment, personnel working at the source asset or the public. 	<p>"operational deviation" means a circumstance where:</p> <ul style="list-style-type: none"> (i) a source asset, excluding an import asset, is unable to comply with the ramping requirements set out in subsection 4 of Section 203.4 of the ISO rules, <i>Delivery Requirements for Energy</i>; or (ii) a source asset, excluding an import asset, operating in generating asset steady state varies outside its allowable dispatch variance, due to force majeure or any other circumstances related to the operation of the source asset, which could reasonably be expected to affect the available capability or safety of the source asset, third party facilities, contracts or arrangements, the environment, personnel working at the source asset or the public. 	<p>"operational deviation" means :</p> <p>(i) — a generating circumstance where:</p> <ul style="list-style-type: none"> (i) <u>a source asset, excluding an import asset,</u> is unable to comply with the ramping requirements set out in section 4 of subsection 4 of Section 203.4 of the ISO rules, <i>Delivery Requirements for Energy</i>; or (ii) <u>a source asset, excluding an import asset,</u> operating in generating asset steady state varies outside its allowable dispatch variance, due to force majeure or any other circumstances related to the operation of the generating source asset, which could reasonably be expected to affect the available capability or safety of the generating source asset, third party facilities, contracts or arrangements, the environment, personnel working at the generating source asset or the public.
<p>"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:</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) an aggregated generating facility; (iii) a transmission facility; (iv) an electric distribution system; (v) an industrial system that has been designated as such by the Commission; and 	<p>"operator" means a person given express authority by a legal owner to operate on the legal owner's behalf any one or more of its electric industry properties, including:</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) an aggregated facility; (iii) an energy storage resource; (iv) a transmission facility; (v) an electric distribution system; 	<p>No change.</p>	<p>"operator" means a person given expressedexpress authority by a legal owner to operate on the legal owner's behalf any one (1) or more of its electric industry properties, including:</p> <ul style="list-style-type: none"> (i) a generating unit; (ii) an aggregated generating facility; (iii) <u>an energy storage resource</u>; (iv) <u>a transmission facility</u>; (v) <u>an electric distribution system</u>;

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<p>(vi) a load facility with system access service under subsection 101(2) of the Act;</p> <p>and includes the legal owner, if no such other person has been so authorized.</p>	<p>(vi) an industrial system that has been designated as such by the Commission;</p> <p>and</p> <p>(vii) a load facility with system access service under subsection 101(2) of the Act;</p> <p>and includes the legal owner, if no such other person has been so authorized.</p>		<p>(vi) an industrial system that has been designated as such by the Commission;</p> <p>and</p> <p>(vii) a load facility with system access service under subsection 101(2) of the Act;</p> <p>and includes the legal owner, if no such other person has been so authorized.</p>
N/A	<p>“partially-controllable” means a pool asset that contains one or more controllable resource and one or more non-controllable resources.</p>	<p>“partially-controllable” means a pool asset that contains one or more controllable resources and one or more non-controllable resources.</p>	N/A
N/A	<p>“point of common coupling” 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 facilities which may be any combination of a load facility, generating unit, aggregated facility, or energy storage resource.</p>	No change.	N/A
<p>“point of connection” means a point at which electric energy is transferred between a transmission facility that is not an industrial system, and</p> <p>(i) the high voltage side of any aggregated generating facilities or generating unit;</p> <p>(ii) an electric distribution system;</p> <p>(iii) an industrial system that has been designated as such by the Commission;</p> <p>or</p>	<p>“point of connection” means a point at which electric energy is transferred between a transmission facility that is not an industrial system, and</p> <p>(i) the high voltage side of any aggregated facility, energy storage resource, or generating unit;</p> <p>(ii) an electric distribution system;</p> <p>(iii) an industrial system that the Commission designates ; or</p>	No change.	<p>“point of connection” means a point at which electric energy is transferred between a transmission facility that is not an industrial system, and</p> <p>(i) the high voltage side of any aggregated generating facilitiesfacility, energy storage resource, or generating unit;</p> <p>(ii) an electric distribution system;</p> <p>(iii) an industrial system that has been designated as such by the Commission designates ; or</p>

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(iv) a load facility with system access service under subsection 101(2) of the Act .	(iv) a load facility with system access service under subsection 101(2) of the Act .		(iv) a load facility with system access service under subsection 101(2) of the Act .
" point of supply " means the point at which electricity is transferred to transmission facilities from facilities owned by a market participant receiving system access service under the ISO tariff , including a generating unit, aggregated generating facility or an electric distribution system .	" point of supply " means the point at which electric energy is transferred to a transmission facility from a facility owned by a market participant receiving system access service under the ISO tariff including a generating unit, aggregated facility or an electric distribution system .	" point of supply " means the point at which electric energy is transferred to a transmission facility from a facility owned by a market participant receiving system access service under the ISO tariff including a generating unit, aggregated facility or an electric distribution system .	" point of supply " means the point at which electricity electric energy is transferred to a transmission facilities facility from facilities facility owned by a market participant receiving system access service under the ISO tariff , including a generating unit, aggregated generating facility or an electric distribution system .
" pool asset " means one (1) or more generating units, aggregated generating facilities , load assets, import assets or export assets, identified by a single pool ID the ISO assigns, and registered to a pool participant .	" pool asset " means either one or more of a source asset or a sink asset registered to a pool participant and identified by a single pool ID the ISO assigns.	No change.	" pool asset " means either one (1) or more generating units, aggregated generating facilities, load assets, import assets or export assets, of a source asset or a sink asset registered to a pool participant and identified by a single pool ID the ISO assigns, and registered to a pool participant.
" ramping " means changing the production of a generating source asset and begins at the effective time specified in the most current dispatch and continues until the time the generating source asset's output has reached the allowable dispatch variance for that generating source asset .	" ramping " means a change in the output of electric energy of a pool asset , beginning at the effective time specified in the most current dispatch and continuing until the time the pool asset has reached the allowable dispatch variance for that pool asset .	Retired.	N/A

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<p>"scheduled generator outage" means the period of time as planned by the legal owner of a generating unit or the legal owner of an aggregated generating facility during which that generating unit or aggregated generating facility is partially or fully removed, derated from, or otherwise is not physically or mechanically available for service due to planned or scheduled maintenance or repairs to any of the plant, equipment or components of the generating unit.</p>	Retired.	No change.	N/A
<p>"sink asset" is a subcategory of pool asset and means one (1) or more load assets or export assets.</p>	<p>"sink asset" is a pool asset that consumes or exports electricity from the interconnected electric system.</p>	No change.	<p>"sink asset" is a subcategory of pool asset and means one (1) or more load assets or export assets that consumes or exports electricity from the <u>interconnected electric system</u>.</p>
<p>"source asset" is a subcategory of pool asset and means one (1) or more aggregated generating facilities, generating units, or import assets.</p>	<p>"source asset" is a pool asset that produces or delivers electric energy to the interconnected electric system.</p>	No change.	<p>"source asset" is a subcategory of pool asset and means one (1) or more aggregated generating facilities, generating units, or import assets that produces or delivers electric energy to the <u>interconnected electric system</u>.</p>

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<p>"transmission facility" as defined in the Act means an arrangement of conductors and transformation equipment that transmits electricity from the high voltage terminal of the generation transformer to the low voltage terminal of the step down transformer operating phase to phase at a nominal high voltage level of more than 25,000 volts to a nominal low voltage level of 25,000 volts or less, and includes:</p> <ul style="list-style-type: none"> (i) transmission lines energized in excess of 25,000 volts; (ii) insulating and supporting structures; (iii) substations, transformers and switchgear; (iv) operational, telecommunication and control devices; (v) all property of any kind used for the purpose of, or in connection with, the operation of the transmission facility, including all equipment in a substation used to transmit electric energy from (A) the low voltage terminal, to (B) electric distribution system lines that exit the substation and are energized at 25,000 volts or less, and (vi) connections with electric systems in jurisdictions bordering Alberta, <p>but does not include a generating unit or an electric distribution system.</p>	<p>"transmission facility" means an arrangement of conductors and transformation equipment that transmits electricity from the high voltage terminal of the generation transformer to the low voltage terminal of the step down transformer operating phase to phase at a nominal high voltage level of more than 25 000 volts to a nominal low voltage level of 25000 volts or less, and includes</p> <ul style="list-style-type: none"> (i) transmission lines energized in excess of 25000 volts, (ii) insulating and supporting structures, (iii) substations, transformers and switchgear, (iv) operational, telecommunication and control devices, (v) all property of any kind used for the purpose of, or in connection with, the operation of the transmission facility, including all equipment in a substation used to transmit electric energy from (A) the low voltage terminal, to (B) electric distribution system lines that exit the substation and are energized at 25 000 volts or less, and (vi) connections with electric systems in jurisdictions bordering Alberta, <p>but does not include:</p> <ul style="list-style-type: none"> (vii) a generating unit; (viii) an electric distribution system; or (ix) an energy storage resource. 	<p>"transmission facility" means an arrangement of conductors and transformation equipment that transmits electricity from the high voltage terminal of the generation transformer to the low voltage terminal of the step down transformer operating phase to phase at a nominal high voltage level of more than 25 000 volts to a nominal low voltage level of 25000 volts or less, and includes</p> <ul style="list-style-type: none"> (i) transmission lines energized in excess of 25000 volts, (ii) insulating and supporting structures, (iii) substations, transformers and switchgear, (iv) operational, telecommunication and control devices, (v) all property of any kind used for the purpose of, or in connection with, the operation of the transmission facility, including all equipment in a substation used to transmit electric energy from (A) the low voltage terminal, to (B) electric distribution system lines that exit the substation and are energized at 25 000 volts or less, and (vi) connections with electric systems in jurisdictions bordering Alberta, and <p><u>(vii) energy storage included in a needs identification document that has been approved by the Commission;</u></p> <p>but does not include:</p> <p><u>(vii)(viii) a generating unit;</u></p>	<p>"transmission facility" as defined in the Act means an arrangement of conductors and transformation equipment that transmits electricity from the high voltage terminal of the generation transformer to the low voltage terminal of the step down transformer operating phase to phase at a nominal high voltage level of more than 25 000 volts to a nominal low voltage level of 25,000<u>25000</u> volts or less, and includes:</p> <ul style="list-style-type: none"> (i) transmission lines energized in excess of 25,000<u>25000</u> volts; (ii) insulating and supporting structures; (iii) substations, transformers and switchgear; (iv) operational, telecommunication and control devices; (v) all property of any kind used for the purpose of, or in connection with, the operation of the transmission facility, including all equipment in a substation used to transmit electric energy from (A) the low voltage terminal, to (B) electric distribution system lines that exit the substation and are energized at 25 000 volts or less, and (vi) connections with electric systems in jurisdictions bordering Alberta, <u>and</u> <p><u>(vii) energy storage included in a needs identification document that has been approved by the Commission;</u></p> <p>but does not include:</p> <p><u>(viii) a generating unit</u>;</p>

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		<p>(viii)(ix) an electric distribution system; or (ix)(x) an energy storage resource.</p>	<p>(vii)(ix) an electric distribution system; or (viii)(x) an energy storage resource.</p>
<p>"transmission must-run" means a service whereby a generating source asset that is not in merit may receive a directive to operate at a minimum specified MW output level in order to maintain system security.</p>	<p>"transmission must-run" means a service whereby a source asset that is not in merit may receive a directive to operate at a minimum specified MW output level in order to maintain system security.</p>	<p>No change.</p>	<p>"transmission must-run" means a service whereby a generating source asset that is not in merit may receive a directive to operate at a minimum specified MW output level in order to maintain system security.</p>
<p>N/A</p>	<p>"variable energy resource quantity" means the portion of the maximum capability of a source asset, starting from 0 MW, that is deemed to be dependent on solar or wind conditions.</p>	<p>No change.</p>	<p>N/A</p>