

ISO Rules

Part 200 Markets

Division 203 Energy Markets

Section 203.6 Available Transfer Capability and Transfer Path Management



Applicability

- 1 Section 203.6 applies to:
 - (a) a **pool participant** seeking to exchange or transact an import or export **interchange transaction**; and
 - (b) the **ISO**.

Capability Limits Determinations by the ISO

- 2(1) The **ISO** must determine and post on the AESO website the following capability limits in MW prior to each **settlement interval**, and also on an as required basis when **interconnected electric system** operating conditions change:
 - (a) the **Alberta interchange capability**;
 - (b) the import and export capability of the combined British Columbia and Montana transfer paths; and
 - (c) the import **available transfer capability** and export **available transfer capability** for each of the British Columbia, Montana and Saskatchewan transfer paths.
- 2(2) Once the **ISO** has determined the limits under subsection 2(1), it must ensure that:
 - (a) the amount in MW of all transmission service for all import and export **interchange transactions** for all transfer paths does not exceed the **Alberta interchange capability** limit referenced in subsection 2(1)(a);
 - (b) the amount in MW of all transmission service for all import and export **interchange transactions** for the combined British Columbia and Montana transfer paths does not exceed the combined limit referenced in subsection 2(1)(b); and
 - (c) the amount in MW of all transmission service for all import and export **interchange transactions** for an individual transfer path does not exceed the limit for that transfer path referenced in subsection 2(1)(c).

Total Transfer Capability Determinations by the ISO

- 3(1) The **ISO** must determine the import **total transfer capability** and the export **total transfer capability** for an individual transfer path, in order to determine the import **available transfer capability** and the export **available transfer capability** for that transfer path.
- 3(2) The **ISO** must make the determinations under subsection 3(1) with reference to the applicable provisions of any related **reliability standards**.

Available Transfer Capability Determinations by the ISO for a Transfer Path

- 4(1) The **ISO** must use the import **available transfer capability** and the export **available transfer capability** limits as referenced under subsection 2(1)(c) for an individual transfer path, as the maximum capability for scheduling **interchange transactions** on that transfer path.
- 4(2) The **ISO** must post on the AESO website the import **available transfer capability** and the export **available transfer capability** as determined for an individual transfer path.

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(3) The **ISO** must post on the AESO website as soon as is reasonably practical any change to the import **available transfer capability** or the export **available transfer capability** for an individual transfer path.

Submission of Interchange Transaction Bids and Offers by a Pool Participant

5(1) Notwithstanding subsection 3.5.2 of the **ISO rules**, *Submission Timing*, a **pool participant** with an import or export energy **interchange transaction** must submit through the **Energy Trading System** the import **offer** or export **bid** for the **interchange transaction**, as applicable, no later than two (2) hours prior to the start of the **settlement interval** in order for the **interchange transaction** to be included in the **energy market merit order**.

(2) A **pool participant** with any form of **interchange transaction** must use all reasonable efforts to procure transmission service from applicable transmission service providers in an amount in MW at least equal to the **available capability** of the **interchange transaction**, which reasonable efforts must include:

- (a) determining whether there is transmission service posted by the applicable transmission service providers and available for that **interchange transaction**; and
- (b) submitting a request to the applicable transmission service providers to procure the transmission service, if it has been posted and is available.

(3) If after complying with subsection (2):

- (a) the **pool participant** is unable to procure all or a portion of the requested transmission service for an energy **interchange transaction**; or
- (b) the transmission service for an energy **interchange transaction** is curtailed after procurement either by any transmission service provider or the **ISO**;

then such a circumstance is a reason the **pool participant** must submit a restatement of **available capability**, and may be the basis for the determination of an **acceptable operational reason** under subsection (iv) of that definition.

(4) For any **pool participant** with an **interchange transaction**, if due to a determination by the **ISO** under subsection 10 the amount in MW of the **interchange transaction** on an individual transfer path exceeds the individual transfer path **available transfer capability** allocation as determined under that subsection, then that circumstance is a reason the **pool participant** may submit a restatement of **available capability** to the level of the allocation, and may be the basis for the determination of an **acceptable operational reason** under subsection (iv) of that definition.

Submission of E-tags by Pool Participants

6(1) **Pool participants** with any import or export **interchange transactions** who have acquired transmission service must submit **e-tags** to the **ISO** for the **interchange transactions**.

(2) The **ISO** must receive **e-tags** no later than twenty (20) minutes prior to the start of the **settlement interval** in order for the energy components of the **interchange transactions** to be included in an **interchange schedule** referenced in subsection 8.

(3) A **pool participant** must submit one (1) or more **e-tags** for an energy **interchange transaction** such that the final total amount in MW agrees with the **available capability** of the

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single **source asset**:

- (a) as stated two (2) hours prior to the start of the **settlement interval**; or
 - (b) as may be restated in accordance with the provisions of this section 203.6, but in any event the final total amount in MW must not exceed the **available capability** of the single **source asset** as stated at two (2) hours prior to the start of the **settlement interval**.
- (4) If:
- (a) the **pool participant** is unable to procure transmission service, or the transmission service is curtailed by any transmission service provider or the **ISO**, as referenced under subsection 5(3); or
 - (b) there is any other change in the **available capability** for the **sink asset** or the **source asset**, as applicable;
- then the **pool participant** must submit, as applicable:
- (i) an energy restatement in accordance with either subsection 3.5.3.2 or subsection 3.5.4.2 of the **ISO rules**, *Mandatory Energy Restatements*; or
 - (ii) an **ancillary services** restatement in accordance with subsection 3.6.3 of the **ISO rules**, *Restatements*.

Validation of E-Tags by the ISO

- 7(1)** The **ISO** must validate **e-tags** for **interchange transactions** in accordance with the provisions of this subsection 7.
- (2)** An **e-tag** must be validated by the **ISO** prior to the **e-tag** being included in an **interchange schedule**.
- (3)** The **ISO** must validate an **e-tag** with reference to the provisions of the **reliability standards**, INT-006-AB-2 *Response to Interchange Authority*.
- (4)** The **ISO** must reject an **e-tag**:
- (a) if the **interchange transaction** is not being transacted by a **pool participant**;
 - (b) for an import **interchange transaction** if the source **balancing authority** is in the **WECC** and the sink **balancing authority** is the **ISO**, and the source **balancing authority** is not carrying reserves allocated for that import **interchange transaction**;
or
 - (c) if the **e-tag** is not fully completed.
- (5)** If the provisions of this subsection 7 otherwise are complied with, then the **ISO** may validate and include in the **interchange schedule** any **e-tags** that are submitted after the twenty (20) minute deadline set out in subsection 6(2).

Interchange Schedules and Dispatches by the ISO

- 8(1)** Subject to the provisions of this section 203.6, the **ISO** must include in the **interchange schedule** the energy components of **interchange transactions** if the **e-tags** for the **interchange transactions** have been:

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- (a) received by the submission deadline set out in subsection 6(2); and
- (b) validated under subsection 7.

(2) The **ISO** must determine the **interchange schedule** for each transfer path before the start of the **settlement interval**, taking into account the allocation and constraint management procedures and sequencing set out in subsection 10 and subsection 11.

(3) Each **interchange schedule** period must be equal to the **settlement interval**, unless the **ISO** has an agreement with an adjacent **balancing authority** specifying an alternative **interchange schedule** start and end time for an individual transfer path, and in that event the timing of the **interchange schedule** for the transfer path must be governed by the form of agreement.

(4) The **ISO** must treat the energy component of a scheduled **interchange transaction** as a **dispatch** in accordance with the applicable **energy market merit order**.

(5) The **ISO** must not make any changes to an **interchange schedule** for a transfer path except if required to accommodate:

- (a) the delivery of external **supplemental reserves, spinning reserves or contingency reserves**;
- (b) a matter of **reliability** on the **interconnected electric system**, or a similar matter which may occur in any other **balancing authority area**;
- (c) an emergency or a **system emergency** on the **interconnected electric system** or in any other **balancing authority area**;
- (d) a **supply shortfall** or supply surplus matter; or
- (e) any curtailments resulting from the procedures and sequencing set out in subsection 10 and subsection 11.

(6) If the **ISO** is required to accommodate any matter referred to in subsection 8(5), then the **ISO** must issue the resulting **interchange schedule** changes.

Saskatchewan Inadvertent Energy Management

9 If the **ISO** is required to manage an amount of **inadvertent energy** on the Saskatchewan transfer path, then:

- (a) the **inadvertent energy** is not eligible to set the **pool price**; and
- (b) **inadvertent energy** payback on the Saskatchewan transfer path must not exceed twenty-five (25) MW.

Available Transfer Capability Allocations for Transfer Paths

10(1) At approximately eighty-five (85) minutes prior to a **settlement interval**, the **ISO** must determine whether the capability limits under subsection 2 may be exceeded, and if so then the **ISO** must determine the individual transfer path **available transfer capability** allocations in accordance with the following procedures:

- (a) the **ISO** must calculate the net **interchange transaction** amount in MW, at each potential **system marginal price**, taking into account:

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- (i) the energy **interchange transaction** amounts in MW, and the prices for **bids** and **offers**;
 - (ii) the **interchange transaction** amount in MW for **ancillary services**; and
 - (iii) applicable counterflows; and
- (b) the **ISO** may exclude any **wheel through transaction** amounts in MW if those amounts will not result in any limits or allocations under this section 203.6 being exceeded.

(2) The **ISO** must comply with the following additional procedures in the following sequence to determine the allocation of each of the individual transfer path **available transfer capability** allocations:

- (a) the net amount in MW of all **interchange transactions** for the individual transfer path must be compared to the limit determined for that individual transfer path as referenced in subsection 2(1)(c), and:
 - (i) if that net amount is equal to or greater than the limit, then the allocation must be set at that limit; and
 - (ii) if that net amount is less than the limit, then the allocation must be set at that net amount;
- (b) for the British Columbia and Montana transfer paths, the sum in MW of their individual transfer path allocations calculated under subsection 10(2)(a) must be compared to the combined British Columbia and Montana transfer path limit referenced in subsection 2(1)(b);
- (c) if the combined transfer path limit of subsection 2(1)(b) is not exceeded, then the allocations must remain as determined in accordance with subsection 10(2)(a), but if it is exceeded, then a further allocation must be done in accordance with the following sequence in order to ensure the combined transfer path limit as determined under subsection 2(1)(b) is not exceeded:
 - (i) first, the British Columbia, or the Montana, or both the British Columbia and the Montana transfer path allocations must be reduced as necessary by the applicable **ancillary services** type **interchange transaction** amounts in MW;
 - (ii) second, the British Columbia, or the Montana, or both the British Columbia and the Montana transfer path allocations must be reduced as necessary by the applicable energy **interchange transaction** amounts in MW, with the reduction being in reverse merit order based on **bid** and **offer** prices; and
 - (iii) third, if there are equally priced British Columbia and Montana energy **interchange transactions**, then the British Columbia and Montana allocations must be reduced on a pro rata basis using the following formula:

the MW allocation for each of the Montana and British Columbia transfer paths as determined in accordance with subsection 10(2)(a), as may be reduced under subsections 10(2)(c)(i) and 10(2)(c)(ii);

divided by

the sum in MW calculated under in subsection 10(2)(b) as may be

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reduced under subsections 10(2)(c)(i) and 10(2)(c)(ii);

multiplied by

the amount by which that sum exceeds the combined British Columbia and Montana transfer path limit referenced in subsection 2(1)(b);

- (d) the allocation resulting from subsection 10(2)(c) plus the Saskatchewan transfer path allocation calculated under subsection 10(2)(a) must then be compared to the **Alberta interchange capability** limit referenced in subsection 2(1)(a); and
- (e) if the **Alberta interchange capability** limit is not exceeded, then the allocations must remain as determined in accordance with subsections 10(2)(a) and 10(2)(c), but if that limit is exceeded, then a further allocation of **available transfer capability** must be done in accordance with the following sequence in order to ensure that the **Alberta interchange capability** limit as determined under subsection 2(1)(a) is not exceeded:
 - (i) first, any individual one (1), or any combination of the British Columbia, Montana, and Saskatchewan transfer path allocations must be reduced as necessary by the applicable **ancillary service type interchange transaction** amount in MW;
 - (ii) second, any individual one (1), or any combination of the British Columbia, Montana, and Saskatchewan transfer path allocations must be reduced as necessary by the applicable energy **interchange transaction** amounts in MW, with the reduction being in reverse merit order based on **bid** and **offer** prices; and
 - (iii) third, if there are equally priced British Columbia, Montana and Saskatchewan energy **interchange transactions**, then the British Columbia, Montana and Saskatchewan allocations must be reduced on a pro rata basis using the following formula:

the MW allocation for each of the Montana and British Columbia transfer paths as determined in accordance with subsection 10(2)(c) and the Saskatchewan transfer path allocation under subsection 10(2)(a), as may be reduced under subsections 10(2)(e)(i), and 10(2)(e)(ii);

divided by

the sum in MW referred to in subsection 10(2)(d), as may be reduced under subsections 10(2)(e)(i) and 10(2)(e)(ii);

multiplied by

the amount by which that sum exceeds the **Alberta interchange capability** limit referenced in subsection 2(1)(a);

(3) At approximately eighty-five (85) minutes prior to a **settlement interval**, the **ISO** must post on the AESO website:

- (a) the total in MW of all energy import **offers** and export **bids** received for each transfer path and the combinations of transfer paths referenced under subsection 2, at two (2) hours prior to the start of the **settlement interval** in accordance with subsection 5(1);

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- (b) the limits referenced under subsection 2; and
- (c) all allocations made under this subsection 10.

(4) If, after eighty-five (85) minutes prior to a **settlement interval**, any of the limits referenced in subsection 2 have decreased, then the **ISO** must curtail **interchange transactions** in accordance with the procedures and sequence set out in subsection 11.

Transfer Path Constraint Management

11(1) If, after carrying out the procedures set out in subsection 10, within fifteen (15) minutes prior to the start of the **settlement interval** and based on the **e-tags** submitted under subsection 6 the limits referenced in subsection 2 are still exceeded, then the **ISO** must curtail **interchange transactions** in accordance with the sequential procedures set out in this subsection 11.

(2) The **ISO** must determine the effective **interchange transactions** for mitigating a constraint caused by limits being exceeded at the **Alberta interchange capability** level, the combined Montana and BC transfer path capability level, or at each individual transfer path level.

(3) The **ISO** may determine that any **wheel through transaction** is not effective in mitigating a constraint, based on its analysis under subsection 11(2).

(4) The **ISO** must comply with the following procedures in the following sequence to mitigate the remaining constraint:

- (a) assess all **interchange transactions** for transmission services against the limits referenced under subsection 2 and allocations made under subsection 10, and determine the **interchange transactions** that will be effective in mitigating the constraint;
- (b) curtail the transmission service of **interchange transactions** under the sequencing set out in subsection 11(4)(c), mitigating the constraint in the following order at the following levels, where effective:
 - (i) an individual transfer path limit level;
 - (ii) the combined Montana and British Columbia transfer path level; or
 - (iii) the **Alberta interchange capability** level; and
- (c) curtail at the effective level:
 - (i) **inadvertent energy** payback **interchange transactions**, prior to the curtailment of any **interchange transactions** on the Saskatchewan transfer path;
 - (ii) transmission services of any effective **interchange transactions** for **ancillary services**;
 - (iii) transmission services of any effective energy **interchange transactions** based on **bid** and **offer** prices in reverse merit order; and
 - (iv) transmission services of any effective energy **interchange transactions** on a pro rata basis in accordance with the following formula:
scheduled amount of each effective **interchange transaction**;

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multiplied by
total amount necessary to mitigate the constraint;
divided by
total scheduled amount of all effective **interchange transactions**.

Revision History

<i>Effective</i>	<i>Description</i>
2013-08-13	Initial release