

ISO Rules

Part 300 System Reliability and Operations

Division 303 Inerties

Section 303.2 Available Transfer Capability Allocation



External Consultation Draft
October 22, 2018

Applicability

- 1 Section 303.2 applies to:
 - (a) the **ISO**.

Capability Limits Determinations

- 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 and Available Transfer Capability Calculations

- 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 calculate the import **available transfer capability** and the export **available transfer capability** for that transfer path.
- 3(2) The **ISO** must make the determinations and calculations under subsection 3(1) with reference to the applicable provisions of any related **reliability standards**.

Available Transfer Capability for a Transfer Path

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

Available Transfer Capability Allocations for Transfer Paths

- 5(1) At approximately 85 minutes prior to a **settlement interval** the **ISO** must determine whether the capability limits under subsection 2(2) may be exceeded, and if so then the **ISO** must determine the individual transfer path **available transfer capability** allocations in accordance

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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:
 - (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 303.2 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 5(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 5(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 5(2)(a), as may be reduced under subsections 5(2)(c)(i) and 5(2)(c)(ii);

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divided by

the sum in MW calculated under in subsection 5(2)(b) as may be reduced under subsections 5(2)(c)(i) and 5(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 5(2)(c) plus the Saskatchewan transfer path allocation calculated under subsection 5(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 5(2)(a) and 5(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 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 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 5(2)(c) and the Saskatchewan transfer path allocation under subsection 5(2)(a), as may be reduced under subsections 5(2)(e)(i), and 5(2)(e)(ii);

divided by

the sum in MW referred to in subsection 5(2)(d), as may be reduced under subsections 5(2)(e)(i) and 5(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 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 2 hours prior to the start of the **settlement interval** in accordance with section 203.1 of the **ISO rules**, *Offers and Bids for Energy*;

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- (b) the limits referenced under subsection 2; and
- (c) all allocations made under this subsection 5.

(4) If, after 85 minutes prior to a **settlement interval**, any of the limits referenced in subsection 2 have changed, then the **ISO** must follow the procedures and sequence set out in Section 303.3, *Inertie Path Operations*.

Revision History

Date	Description
XXXX-XX-XX	Initial release