ISO Rules
Part 300 System Reliability and Operations
Division 302 Transmission Constraint Management
Section 302.1 Real Time Transmission Constraint Management

Applicability

1 Section 302.1 applies to:

(a) a **market participant**; and

(b) the **ISO**.

Requirements

Real Time Transmission Constraint Mitigation

2(1) Subject to subsection 3, the **ISO** must comply with the following procedures in the following sequence to mitigate a **transmission constraint** in the present, real time:

(a) taking into account the **constraint effective factors**, determine the **pool assets** that would be effective in mitigating the **transmission constraint** and apply the appropriate procedure set out in this subsection 2(1) to those effective **pool assets**;

(b) ensure that any **pool assets** effective in mitigating the **transmission constraint** are not generating MW above their **maximum capability** by cancelling any related **directives**;

(c) curtail by **directives** any **downstream constraint side** service under **ISO tariff** rate schedules *Rate XOS 1 Hour*, and *Rate XOS 1 Month* and any **upstream constraint side** service under **ISO tariff** rate schedule *Rate IOS*, that are effective in mitigating the **transmission constraint**;

(d) curtail by **directives** any **loads** receiving service under **ISO tariff** rate schedules *Rate DOS Dispatchable* and *Rate DOS Term* at the **downstream constraint side** of the **transmission constraint**, that are effective in mitigating the **transmission constraint;**

(e) issue a **dispatch** to any **pool asset** that is under contract with the **ISO** to provide **transmission must-run** and that is effective in mitigating the **transmission constraint** at the **downstream constraint side;**

(f) issue a **directive** for **transmission-must run** to any **pool asset** that is not under contract with the **ISO** to provide **transmission must-run** and that is effective in mitigating the **transmission constraint** at the **downstream constraint side**;

(g) issue **directives** to curtail any **pool assets** that are effective in mitigating the **transmission constraint** at the **upstream constraint side** using the following additional procedures:

(i) the **ISO** must curtail using the energy market **merit order** with the highest priced in merit **offer** from the **pool asset** effective in mitigating the **transmission constraint** being curtailed first, followed by the **pool asset** with the next highest priced in merit **offer**, if necessary, during the remainder of the then current **settlement interval** and the next two (2) **settlement intervals**;

(ii) if there is a need to curtail two (2) or more such **pool assets** having equally priced **offers**, then the **ISO** must issue **directives** to the **pool assets** to curtail using a pro-rata methodology;

(iii) if the **transmission constraint** persists on a continuous basis for longer than the remainder of the then current **settlement interval** and the next two (2) **settlement intervals**, then the **ISO** must reallocate the required curtailment, using a pro-rata methodology, to all **pool assets** having in merit **offers** that are effective in mitigating the **transmission constraint**; and

(h) curtail by **directives** any **loads** receiving service under **ISO tariff** rate schedule *Rate DTS* at the **downstream constraint side** of the **transmission constraint**, if so required by the **reliability** criteria*,* using the following procedures:

(i) the **ISO** must allocate the **load** curtailment using the energy market **merit order** with the lowest priced effective **bid** being curtailed first, followed by the next lowest priced effective **bid**, if necessary;

(ii) if there is a need to curtail **loads** with equal price **bids**, or there are no **bids** remaining, then the **ISO** must curtail using a pro-rata methodology.

(2) The **ISO** must comply with the following procedures in order to restore the energy balance to the **interconnected electric system**:

(a) where the procedures set out in subsections 2(1)(e) or 2(1)(f) are used, issue **dispatches** for **dispatch down service** in accordance with section 204.2 of the **ISO rules**, *Issuing Dispatches for Dispatch Down Service*;

(b) except where the procedures set out in subsection 2(1)(e) and 2(1)(f) are used:

(i) in circumstances where the **ISO** has notice of a **transmission constraint** that is anticipated to be of a significant duration and magnitude, as determined by the **ISO** acting reasonably, issue a **dispatch** to any **pool asset** that is effective in restoring the energy balance to the **interconnected electric system** and that is under contract with the **ISO** to provide **transmission must-run** in accordance with section 205.8 of the **ISO rules** - *Transmission Must-Run* and section 301.2 of the **ISO rules** - *ISO Directives,* and issue dispatches for **dispatch down service** in accordance with section 204.2 of the **ISO rules** - *Issuing Dispatches for Dispatch Down Service*; and

(ii) in all other circumstances, or where necessary to supplement the volume **dispatched** for **transmission must-run** in subsection 2(2)(b)(i), issue **dispatches** for **transmission constraint rebalancing**, in accordance with the energy market **merit order**, and make payment to a **pool participant** with a **source asset** that has provided energy for **transmission constraint rebalancing** in accordance with subsection 7(1) of section 103.4 of the **ISO rules**.

(3) With regard to any of the procedures set out in subsection 2(1) that involve **pool asset** or **load** curtailment, if the **pool asset** or **load** is supplying both **ancillary services** and energy production, then the **ISO** must first curtail **ancillary services** before energy production.

(4) When a **transmission constraint** has activated or is expected by the **ISO** to activate a **remedial action scheme**, then after the **ISO** has ensured that the **interconnected electric system** is operating in a safe and reliable mode, the **ISO** must recommence the procedural sequence set out in subsection 2(1) to manage the **transmission constraint**.

Additional Real Time Constraint Management Procedures

3 As the circumstances may warrant, the **ISO** may take into account the following alternative or complementary procedures to mitigate any present, real time **transmission constraint**:

(a) if the result of following the procedures set out in subsection 2(1)(g)(i) will be to curtail any **pool asset** below its **minimum stable generation** level but the **ISO** expects the **transmission constraint** to last only a short duration, then the **ISO** by **directive** may curtail the **pool asset** to above or at the **minimum stable generation** level of that **pool asset**;

(b) in circumstances where abnormal operating or market conditions exist, the **ISO** acting

reasonably may, in implementing mitigation measures to address a **transmission constraint**, take procedural steps not listed in subsection 2(1) if those steps are substantially consistent with **good electric industry operating practice** and the duties of the **ISO** under the **Act** to direct the safe, reliable and economic operation of the **interconnected electric system**;

(c) the abnormal conditions referred to in subsection 3(b) include circumstances of unusual natural risks to the **interconnected electric system**, and issues raised by a unique real time system configuration or **reliability** concerns stemming from voltage or **reactive power** effects;

(d) in mitigating a **transmission constraint**, the **ISO** must follow the procedural sequence set out in subsection 2(1) and any more specific and complementary **ISO rules** applicable for a given regional area of the **interconnected electric system**, unless real time operating conditions change such that following the specified sequence would put the **ISO** in contravention of any **reliability standard** requirement by failing to achieve compliance within the operating limits or required response time specified in that **reliability standard**;

(e) if the **ISO** alters the procedural sequence as set out in subsection 2(1) or takes alternate mitigating actions because of the circumstances referred to in subsection 3(b) or 3(d) above, then once the **ISO** is assured that the **interconnected electric system** is operating in a safe and reliable mode, the **ISO** must recommence the procedural sequence set out in subsection 2(1).

Reporting

4(1) The **ISO** must use reasonable efforts to publish, as near to real time as possible, information on the location of **transmission constraints** and the costs of resolving these constraints.

(2) The **ISO** must monitor and publicly report on the costs incurred as a result of mitigating **transmission constraints** on an annual basis.

Revision History

Effective	Description
2025-02-06	Administrative revisions necessary to reflect the changes to *Rate DOS* in the ISO tariff.
2015-11-26	Revisions to subsections 2(1) and 2(2). Amendment to numbering references in subsection 3(a). Addition of subsection 4 “Reporting”.
2013-01-08	Previously defined terms have been un-defined and the words have been un-bolded. Reference to section 6.3.6.3 *Determining Dispatch Down Service Dispatch Quantity* has been replaced with section 204.2 *Issuing Dispatches for Dispatch Down Service*.
2012-03-26	Initial release