

ISO Rules

Part 300 System Reliability and Operations

Division 302 Transmission Constraint Management

Section 302.1 Real Time Transmission Market Constraint Management



External Consultation Draft
August 31, 2018

Applicability

- 1 Section 302.1 applies to:
- (a) **an electricity market participant**; and
 - (b) the **ISO**.

Requirements

Real Time Transmission **Market** Constraint Mitigation

2(1) Subject to subsection 3, the **ISO** must comply with the following procedures in the following sequence to mitigate a **transmission market 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 market 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 market 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 market constraint**;
- (d) curtail by **directives**, any **loads** receiving service under **ISO tariff** rate schedules *Rate DOS 7 Minutes*, *Rate DOS 1 Hour* and *Rate DOS Term* at the **downstream constraint side** of the **transmission market constraint**, that are effective in mitigating the **transmission market 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 market 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 market constraint** at the **downstream constraint side**;
- (g) issue **directives** to curtail any **pool assets** that are effective in mitigating the **transmission market 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 market 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**;

ISO Rules

Part 300 System Reliability and Operations

Division 302 Transmission Constraint Management

Section 302.1 Real Time Transmission Market Constraint Management



- (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 market 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 ~~(iv)~~(iii) methodology, to all **pool assets** having in merit **offers** that are effective in mitigating the **transmission market 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 market 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 subsection 2(1)(e) or (f) are used, issue **dispatches** for **dispatch down service** in accordance with ~~section~~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 (f) are used:
 - (i)- in circumstances where the **ISO** has notice of a **transmission market 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~~Section 205.8 of the **ISO rules**—, *Transmission Must-Run* and ~~section~~Section 301.2 of the **ISO rules**—, *ISO Directives*, and issue **dispatches** for **dispatch down service** in accordance with ~~section~~Section 204.2 of the **ISO rules**—, *Issuing Dispatches for Dispatch Down Service*;
 - (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~~Section 103.4 of the **ISO rules**, *Power Pool Financial Settlement*.

(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 market 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

ISO Rules

Part 300 System Reliability and Operations

Division 302 Transmission Constraint Management

Section 302.1 Real Time Transmission Market Constraint Management



operating in a safe and reliable mode, the **ISO** must recommence the procedural sequence set out in subsection 2(1) to manage the **transmission market 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 market 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 market 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 market 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 market 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 market constraints** and costs of resolving these constraints.

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

Revision History

Effective	Description
XXXX-XX-XX	Revised to clarify “market participant” as “electricity market participant”, and “transmission constraint” as “transmission market constraint”.

ISO Rules

Part 300 System Reliability and Operations

Division 302 Transmission Constraint Management

Section 302.1 Real Time Transmission Market Constraint Management



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 <i>Determining Dispatch Down Service Dispatch Quantity</i> has been replaced with section 204.2 <i>Issuing Dispatches for Dispatch Down Service</i> .
2012-03-26	Initial release