

# ISO Rules

## Part 300 System Reliability and Operations

### Division 302 Transmission Constraint Management

#### Section 302.1 Real Time Transmission Market Constraint Management



#### Applicability

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

#### Requirements

##### Real Time Transmission **Market Constraint Mitigation**

**2(1)** ~~Subject~~**The ISO must, 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 **offer that is 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 **offer that is 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) ~~the ISO must~~, 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; and
  - (iii) ~~the ISO must~~, 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 ~~methodology, to all pool assets having in merit offers that are in merit that are effective in mitigating the transmission market constraint;~~ methodology, to all pool assets having in merit offers that are effective in mitigating the transmission constraint; and
  - 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; and
    - (ii) ~~the ISO must curtail using a pro-rata methodology~~, 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 ~~s~~Section 204.2 of the **ISO rules**, *Issuing Dispatches for Dispatch Down Service*; and
  - (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 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 ~~s~~Section 205.8 of the **ISO rules** ~~—, Transmission Must-Run and s~~Section 301.2 of the **ISO rules** ~~—, ISO Directives~~, and issue **dispatches** for **dispatch down service** in accordance with ~~s~~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 ~~s~~Section 103.4 of the **ISO rules**, *Power Pool Financial Settlement*.
- (3) ~~With~~The ISO must, 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.

# ISO Rules

## Part 300 System Reliability and Operations

### Division 302 Transmission Constraint Management

#### Section 302.1 Real Time Transmission Market Constraint Management



(4) ~~When~~ The ISO must, when a **transmission market constraint** has activated or ~~is expected by~~ the ISO ~~expects it~~ to activate a **remedial action scheme**, ~~then after the ISO has ensured~~:

- (a) ~~ensure~~ that the **interconnected electric system** is operating in a safe and reliable mode, ~~the ISO must~~; and then
- (b) recommence the procedural sequence set out in subsection 2(1) to manage the **transmission market constraint**.

#### Additional Real Time Constraint Management Procedures

3—~~As~~ (1) ~~The ISO may, 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) ~~the ISO may, by directive, curtail a pool asset to above or at the minimum stable generation level of that pool asset~~ if the result of following the procedures set out in subsection 2(1)(g)(i) will be to curtail ~~any~~ the 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~~; and
- (b) ~~the ISO, acting reasonably, may~~ in circumstances where abnormal operating or market conditions exist, ~~the ISO acting reasonably may, and~~ 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 with the duties of the ISO under the **Act** to direct the safe, reliable and economic operation of the **interconnected electric system**;
- (e) 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~~ 3(2) ~~The ISO must follow the procedural sequence set out in subsection 2(1) in mitigating a transmission market constraint, 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)~~—3(3) ~~The ISO must, 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(1)(b) or 3(e2) above, then recommence the procedural sequence set out in subsection 2(1) 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 the costs of resolving these **transmission market 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

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



Effective	Description
<del>20xx-xx-xx</del>	<del>Revisions to reflect the replacement of “transmission constraint” with “transmission market constraint”; and administrative revisions to align with current AESO drafting principles.</del>
<del>2012-03</del> 2015-11-26	<del>Initial release</del> 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> .
<del>2015-11</del> 2012-03-26	<del>Revisions to subsections 2(1) and 2(2). Amendment to numbering references in subsection 3(a). Addition of subsection 4 “Reporting”. Initial release</del>