

OVERVIEW

On May 6th 2014, the IESO presented its proposed implementation for Phase 1 of the TR Review:

<http://www.ieso.ca/Documents/consult/se110/se110-20140506->

[TR%20Markets_Phase_I_Implementation_Overview.pdf](#). The proposal included two phases: transition and maintenance. During the transition phase, the base quantity (long-term TRs) and ideal quantity upper limit (combined short-term and long-term TRs) were set for each path at a level which historically could have achieved a balance between congestion rents and TR payments. The maintenance phase was intended to increase and decrease TR quantities to maintain the financial balance, but a specific date at which the maintenance plan would start could not be established. The IESO's goal with this proposal was to re-set TR quantities to a level at which we expect to achieve the Board's confidence level.

Stakeholder comments were received on May 16th. Stakeholder concerns involved the following:

- Historical data is not an accurate reflection of the forecast capability of an intertie. Stakeholders suggest either modifying the upper limit to account for planned outages or anomalies, or using a forward looking approach based on expected transmission capability.
- The initial "ideal quantity" upper limit is a static number until the maintenance plan is implemented, and no date is available for the implementation of the maintenance plan.
- The process leads to a delay in the availability of short-term TRs on many paths and there is no information provided about when short-term TRs will become available on each path.

The IESO feels that the upper limit of TR quantities proposed in the original plan would achieve the Board's confidence level objectives. However, the IESO recognizes that Stakeholders are concerned with the historical analysis approach of achieving the upper limit in the original proposal and has prepared a revised implementation plan to address Stakeholder concerns while achieving the confidence level over time. The plan sets TR upper limits based on forecasted capability of the interties starting in October 2014 and will allow for interim adjustments to maximum TR quantities in the period prior to the activation of the maintenance algorithm. The new plan is designed to achieve a financial balance between congestion rents and TR payments on an aggregate basis prior to the activation of the maintenance algorithm which will provide adjustments on a path basis. The initial upper limit prior to adjustments is referred to as the starting Financial Upper Limit.

In addition, the IESO is proposing a further modification to outage criteria for short-term TRs to consider outages that have an impact for more than 2.5 days rather than the current 7 days.

REVISED IMPLEMENTATION PLAN

1. Set the new year-round base quantity on each path as 25% of the summer Available Transfer Capability (ATC).

The current base quantities are calculated as per Chapter 8, section 4.7 based on the forecasted capability of an intertie, known as the transmission transfer capability. The transmission transfer capability is determined for the financial market only, and reflects expected transmission transfer capability in relation to TR offerings. It is calculated for the simultaneous feasibility test in Ch. 8, section 4.6.3 and to achieve the Board's confidence level in Ch. 8, section 4.7.1. The transmission transfer capability is used to determine the base quantity specified in the market manual which represents the number of long-term transmission rights available. The IESO is able to vary the operating assumptions used to determine the transmission transfer capability under Ch. 8, section 4.7.3.9, and has an obligation under section 4.7.2 to establish operating assumptions that allow the transmission transfer capability to achieve the confidence level in section 4.7.1.

To address Stakeholder concerns about the use of historical data and to establish a consistent approach on all paths with the intent of achieving the Board's stated confidence level objectives, the IESO proposes a revision such that the new base quantity on each path is calculated as 25% of the summer ATC. This value represents a transmission transfer capability de-rated to reflect operating experience and the Board intended confidence level dated September 6, 2013. The new base quantity is a single year-round value. The base quantity will be reviewed at least once per year and will be changed if it differs by 50% or 50MW.

2. Use the current summer base quantity as the target Financial Upper Limit at the start of the process.

The current summer base quantity was developed to represent the expected transmission transfer capability. TR offerings were only increased above this in accordance with the stabilization algorithm (the 2004 confidence level). Under the new confidence level the stabilization algorithm and associated TR increases no longer apply, and we propose to return the upper limit of TR offerings in the first month to the current summer base quantity. This value is the starting point for the process, and will be increased and decreased using either the Interim Maintenance Process (refer to #5) or the Maintenance Algorithm (refer to #6). We will define this value as the starting Financial Upper Limit.

This proposal addresses Stakeholder concerns about the use of historical data and accepts the Stakeholder suggestion to use actual forecast transmission capability to set the number of transmission rights. The current summer base quantity was selected over the current winter base quantity to facilitate the time lag in TR adjustments. For example, if we allowed the current winter base quantity to be offered in February, and the algorithm required a reduction of 4% of that

quantity, then the adjustment would apply to May and could result in TR offerings greater than the summer ATC applicable in May. TR quantities will be limited to a maximum of the summer ATC in all months of the year to accommodate the adjustments.

3. Offer long-term TRs up to the new base quantity and a combination of short and long-term TRs to the starting Financial Upper Limit at the start of the process.

The IESO had previously proposed to auction long-term TRs at 25% of the new base quantity even when the total previously sold long-term TRs exceeded the target maximum. This resulted in the potential for many months in which short-term TRs would not be available on some paths. In order to allow expiry of existing long-term TRs and to provide availability of short-term TRs, the long-term TRs will only be auctioned when the previously sold long-term TRs expire below the new base quantity; i.e., long-term TRs will be capped to a maximum of the new base quantity. Short-term TRs will be available if the total sold long-term TRs is below the target upper limit (or below the value at which the maximum is set by the interim algorithm or maintenance algorithm).

As per the outage criteria proposed in the original plan, and with the additional outage criteria in this paper, TR offerings can be further limited by planned and foreseeable outages and constraints.

Short-term TRs will be available sooner than under the previous proposal due to the new ratio of base quantity to Financial Upper Limit quantity, and because long-term TRs will not be sold until previously sold long-term TRs have expired below the new base quantity. This addresses Stakeholder concerns about the lack of availability of short-term TRs during the initial months.

4. Implement interim changes in October.

TRs offered for October 2014 will be limited to the starting Financial Upper Limit which is set at the current summer base quantity on each path. Long-term TRs will not be offered if previously sold long-term TRs exceed the new base quantity. Short-term TRs will not be offered if previously sold long-term TRs exceeds the starting point of the Financial Upper Limit.

TR Offerings in future months:

- In October, November and December, TRs may be offered up to the starting Financial Upper Limit (the starting point)
- In October, the IESO will publish the pre-auction report for the January LT auction. Long-term TRs may be offered up to 25% of the new base quantity if the quantity of previously sold long-term TRs is less than new base quantity.
- In November, the IESO will publish the pre-auction report for the January ST auction with the first adjustment to the starting Financial Upper Limit according to the Interim Maintenance Process.

- In December, the IESO will publish the pre-auction report for the February ST auction with the first adjustment to January's Financial Upper Limit according to the Interim Maintenance Process.
- In all months, TR offerings may be limited by outage criteria considerations and will not be offered above summer ATC regardless of the Financial Upper Limit.

5. Interim Maintenance Process

The IESO is proposing a monthly Interim Maintenance Process to partially achieve the Board's stated confidence level objectives and to address Stakeholder concerns that the previously proposed initial ideal quantity would remain as a static upper limit until the path-based maintenance algorithm becomes available (at an undetermined date). The Interim Maintenance Process will facilitate a move towards financial balance of congestion rents and TR payments on an aggregate basis in the interim period before the maintenance algorithm becomes available. It will do this by making monthly adjustments to the Financial Upper Limit based on the monthly aggregate balance of congestion rents and TR payments. This process will continue until the maintenance algorithm on a path by path basis is available.

The Interim Maintenance Process will consider the monthly collected congestion rents and TR payment obligations for the most recent available month, as published in the TRCA section of the monthly market summary:

- If the process is implemented in October, the pre-auction report published in November will consider the aggregate congestion rents and TR payments balance for October published in the monthly market summary. The first adjustment to the Financial Upper Limit will appear in the pre-auction report published in November (based on October data) and will apply to TRs valid in January. The new Financial Upper Limit for each path for January will be the starting Financial Upper Limit for that path increased or decreased by 4% if an adjustment is required.
- The pre-auction report published in December will consider the aggregate congestion rents and TR payments balance for November in the monthly market summary. If an adjustment is required, the new Financial Upper Limit for each path for February will be January's Financial Upper Limit for that path increased or decreased by 4%.
- If aggregate congestion rents collected exceed TR payment obligations (as per data in the monthly market summary) then the Interim Maintenance Process will increase the monthly Financial Upper Limit on all paths by 4% of the starting Financial Upper Limit (in the first month of adjustment) or 4% of the adjusted Financial Upper Limit (in all other months).
- If aggregate TR payment obligations exceed congestion rents collected (as per data in the monthly market summary) then the Interim Maintenance Process will decrease the monthly

Financial Upper Limit on all paths by 4% of the starting Financial Upper Limit (in the first month of adjustment) or the adjusted Financial Upper Limit (in all other months).

The adjustments apply to all paths, including single-circuit paths that were not included in the previous stabilization process.

For example, assuming that the process is implemented in October and results in an adjustment each month:

	Oct*	Nov*	Dec*	Jan	Feb	Mar
Monthly Financial Upper Limit	Starting Financial Upper Limit	Starting Financial Upper Limit	Starting Financial Upper Limit	Starting Financial Upper Limit +/- (4% of Starting Financial Upper Limit)	January Financial Upper Limit +/- (4% of January Financial Upper Limit)	February Financial Upper Limit +/- (4% of February Financial Upper Limit)

*If the process is implemented in October, the first adjustments will be in the pre-auction report published in November which is for the January TRs. Therefore no adjustments are made to November or December, and the starting upper limit applies.

6. Maintenance Algorithm

The maintenance algorithm will replace the Interim Maintenance Process. The maintenance algorithm will carry over the adjusted monthly Financial Upper Limit from each path, and make adjustments to each path based on the cumulative balance of congestion rents and TR payments on that path. Instead of considering only monthly congestion rents and TR payments (as in the Interim Maintenance Process), the maintenance algorithm will consider a cumulative balance of congestion rents and TR payments beginning in the first month of its activation. This is the algorithm presented to Stakeholders on May 6th 2014, but starts from the adjusted Financial Upper Limit rather than previously proposed “ideal quantity”.

The maintenance algorithm will adjust TR quantities if the balance of congestion rents and TR payments is outside of a dead-band. Adjustments will not be made monthly, but only when the balance is outside of the dead-band. The dead-band will be Stakeholdered through market manual revisions prior to the activation of the maintenance algorithm. Similar to the Interim Maintenance Process, adjustment increments will increase or decrease the adjusted monthly Financial Upper Limit by 4%.

A specific date is not available for the implementation of the public report of congestion rents and TR payments, and the automated process required to implement the maintenance algorithm. Possible dates are the December 2014 baseline, March 2015 baseline or June 2015 baseline.

Maintenance Algorithm Timing Example:

If available with the December baseline, the December published report will be based on November 2014 congestion rent and TR payment data for each path. The first adjustments will be in the pre-auction report published in December which will impact short-term TRs offered for March. Cumulative data from November 2014 will be included in each monthly report going forward.

REVISED OUTAGE LIMITATION CRITERIA FOR SHORT-TERM TRS

In order to achieve the Board’s confidence level, the IESO proposes to further revise the outage criteria for short-term TRs. Long-term TRs are currently limited based on outages that have an impact for more than 30 days in the one-year period, and short-term TRs are currently limited based on outages that have an impact for more than 7 days out of the one-month period. The ratios are not the same. The IESO proposes to modify the short-term outage criteria to consider outages that have an impact for more than 2.5 days rather than the current 7 days.

TR AVAILABILITY ON EACH PATH

The following table details the current and revised base quantities on each path.

Path	Summer ATC w/ ALL Elements I/S	New Base Quantity = ATC/4 rounded to the nearest multiplier of 4 (minimum = 16)	Financial Upper Limit for the first 3 short-term auctions = old summer base quantity*
MAN-ON	263	64	150
MANSK-ON	0	0	0
MICH-ON	1350	336	850
MIN-ON	80	20	80
NY-ON	1600	400	800
ON-MAN	263	64	150
ON-MANSK	0	0	0
ON-MICH	1500	376	750
ON-MIN	130	32	130
ON-NY	1600	400	900
ON-QBEAU	470	0	0
ON-QD4Z	0	0	0
ON-QD5A	190	48	115
ON-QH4Z	85	20	65
ON-QH9A	60	0	0
ON-QOUTA	1230	312	615
ON-QP33C	0	0	0
ON-QQ4C	120	0	0
ON-QX2Y	0	0	0
QBEAU-ON	790	196	390
QD4Z-ON	55	16	36
QD5A-ON	240	60	110
QH4Z-ON	0	0	0
QH9A-ON	120	0	0
QOUTA-ON	1230	308	615
QP33C-ON	335	84	190
QQ4C-ON	0	0	0
QX2Y-ON	65	16	45

*the starting Financial Upper Limit applies in the first three months of the new process. This Financial Upper Limit will then be increased or decreased by 4% to balance congestion rents and TR payments. The adjusted Financial Upper Limits will carry over into subsequent months for further adjustments.

The availability of TRs under the new proposal is dependent on the expiry of previously sold LT TRs. The following table shows the quantity and valid dates of previously sold LT TRs on each path. This information is provided to address Stakeholder feedback requesting visibility on the availability of TRs in the initial months:

Auction Name	TR Ownership Months	Import Paths										Export Paths						
		Michigan - ON	New York - ON	PQAT - ON	Manitoba - ON	PQBEAU - ON	PQP33C - ON	PQD5A - ON	Minnesota - ON	PQD4Z - ON	PQXZY - ON	ON - Michigan	ON - New York	ON - PQAT	ON - Manitoba	ON - PQD5A	ON - Minnesota	ON - PQH4Z
LT_20131001	October 2013 - September 2014	164	225	153	37	97	46	27	7	9	11	23	250	153	0	28	0	16
LT_20140101	January 2014 - December 2014	212	225	153	37	97	47	27	20	9	11	187	250	153	37	28	32	16
LT_20140401	April 2014 - March 2015	212	125	153	0	97	47	27	16	9	11	200	150	153	0	28	0	16
LT_20140701	July 2014 - June 2015	212	200	153	0	97	47	27	16	9	11	187	225	153	0	28	0	16
LT_20141001	October 2014 - September 2015	Pre-auction report publication date July 17, 2014																
Previously Sold TRs Valid in October 2014		636	550	459	37	291	141	81	52	27	33	574	625	459	37	84	32	48
New Base Quantity (ATC/4, rounded to nearest multiplier of 4)		336	400	308	64	196	84	60	20	16	16	376	400	312	64	48	32	20
Starting Financial Upper Limit (old summer from MM 4.4)		850	800	615	150	390	190	110	80	36	45	750	900	615	150	115	130	65