

Transmission Rights (TR) Auction Process Update

SE 110 - Webinar
December 12th, 2016

Outline

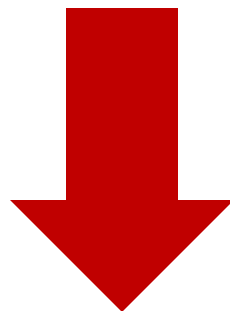
- Background (SE-110)
- Implementation of TRA Process Changes
- Update on TR Market Comprehensive Review

Background

- Transmission Rights Market Review (SE-110) initiated in 2013 to review the design of the TR market
 - Phase I: review of the confidence level and stabilization design
 - Phase II: comprehensive design review
- Based on the IESO analysis and stakeholder input, the IESO Board revised the TR confidence level such that congestion rents collected should be sufficient to cover the IESO's TR Payment obligations on a per-path basis
- IESO Board recommendation addressed in stages recognizing IT changes were required for complete implementation
- Interim (and current) process established such that congestion rents balanced TR payouts on an aggregate basis
- IESO now ready to fully implement the IESO Board recommendation

TRA Process Changes

Current Process – Aggregated TR Congestion Rents are balanced with TR payouts on all paths



New Process – TR Congestion Rent are balanced with TR payout on a per-path basis

TRA Process Changes

- Changes to the existing TR auction process:
 - *Target a cumulative per path based balance of zero*
 - *Revised Long-term (LT) & Short-term (ST) Pre-Auction Public Reports*
 - *New Monthly Financial Public Report*
 - *Financial Dead-band (per-path)*
- Financial upper limit will be carried over from the existing interim process
- Adjustments to financial upper limit for each path will be made when cumulative difference between congestion rent and payout will exceed a pre-defined **dead-band**

TRA Process Changes

Revised LT Pre-auction Report:

Existing LT Pre-Auction Report Field Names	Update
Injection Zone	Removed (Path Name & Description will be provided in the "Help" file)
Path Name	Retained
Withdrawal Zone	Removed (Path Name & Description will be provided in the "Help" file)
Path Description	Removed (Path Name & Description will be provided in the "Help" file)
Forecast Total Transfer Capability (MW)	Redefined as "Expected ATC"
Maximum Transmission Rights Offered (MW*)	Redefined as "Total TR Available"
Notes	Retained (Financial Limit will be defined in a separate field)

Revised LT Pre-Auction Report Field Names	Description
Expected ATC (MW)	Available Transfer Capability (ATC) used for calculating TRs
Financial Upper Limit (MW)	Upper limit on TRs offered based on financial data
Base-Quantity (MW)	Max. cumulative rights on a path for LTA
Total TR Available (MW)	Total rights available for the ownership period
Total TR Already Sold (MW)	Total TRs sold in previous three LTA
TR Offered for Round 1 (MW)	TRs offered in the first round of auction
TR Offered for Round 2 (MW)	TRs offered in the second round of auction
Notes	Information on Transmission Outages & Limitations

* TR - Transmission Rights

** LTA - Long-term Auctions

TRA Process Changes

Pre-Auction LT Report Sample



Pre-Auction Report for Long Term Transmission Rights

Time Structure: LT_20160901
Published: Oct 19, 2016

Transmission Rights for the following intertie paths will be offered for all hours for the period: Sep 01, 2016 to Aug 31, 2017

Path Name	Expected ATC (MW)	Financial Upper Limit (MW)	Base Quantity (MW)	Total TR Available (MW)	Total TR Already Sold (MW)	TR Offered for Round 1 (MW)	TR Offered for Round 2 (MW)	Notes
MAN-ON								
MANSK-ON								
MICH-ON								
MIN-ON								
NY-ON								
ON-MAN								
ON-MANSK								
ON-MICH								
ON-MIN								
ON-NY								
ON-QBEAU								
ON-QD4Z								
ON-QD5A								
ON-QH4Z								
ON-QH9A								
ON-QOUTA								
ON-QP33C								
ON-QQ4C								
ON-QX2Y								
QBEAU-ON								
QD4Z-ON								
QD5A-ON								
QH4Z-ON								
QH9A-ON								
QOUTA-ON								
QP33C-ON								
QQ4C-ON								
QX2Y-ON								

The window for accepting bids in this Auction will be from:

Round 1 Aug 17, 2016 09:00:00 to Aug 18, 2016 17:00:00

Round 2 Aug 20, 2016 09:00:00 to Aug 21, 2016 17:00:00

Notes:

Further information regarding Forecast Total Transfer Capability and Maximum Transmission Rights offered for this auction can be found at:
http://www.ieso.ca/imoweb/pubs/marketOps/mo_TransmissionRights.pdf



TRA Process Changes

Revised ST Pre-auction Report:

Existing ST Pre-Auction Report Field Names	Update
Injection Zone	Removed (Path Name & Description will be provided in the "Help" file)
Path Name	Retained
Withdrawal Zone	Removed (Path Name & Description will be provided in the "Help" file)
Path Description	Removed (Path Name & Description will be provided in the "Help" file)
Forecast Total Transfer Capability (MW)	Redefined as "Expected ATC"
Maximum Transmission Rights Offered (MW*)	Redefined as "Total TR Available"
Notes	Retained (Financial Limit will be defined in a separate field)

Revised ST Pre-Auction Report Field Names	Description
Expected ATC (MW)	Available Transfer Capability (ATC) used for calculating TRs
Financial Upper Limit (MW)	Upper limit on TRs offered based on financial data
Total TR Available (MW)	Total rights available for the ownership period
Total TR Already Sold (MW)	Total TRs sold in previous four LTA
TR Offered for Round 1 (MW)	TRs offered in the auction
Notes	Information on Transmission Outages & Limitations

* TR - Transmission Rights
** LTA - Long-term Auctions

TRA Process Changes

Pre-Auction ST Report Sample



Pre-Auction Report for Short Term Transmission Rights

Time Structure: ST_20160901
Published: Oct 19, 2016

Transmission Rights for the following intertie paths will be offered for all hours for the period: Sep 01, 2016 to Sep 30, 2016

Path Name	Expected ATC (MW)	Financial Upper Limit (MW)	Total TR Available (MW)	Total TR Already Sold (MW)	TR Offered (MW)	Notes
MAN-ON						
MANSK-ON						
MICH-ON						
MIN-ON						
NY-ON						
ON-MAN						
ON-MANSK						
ON-MICH						
ON-MIN						
ON-NY						
ON-QBEAU						
ON-QD4Z						
ON-QD5A						
ON-QH4Z						
ON-QH9A						
ON-QOUTA						
ON-QP33C						
ON-QQ4C						
ON-QX2Y						
QBEAU-ON						
QD4Z-ON						
QD5A-ON						
QH4Z-ON						
QH9A-ON						
QOUTA-ON						
QP33C-ON						
QQ4C-ON						
QX2Y-ON						

The window for accepting bids in this Auction will be from:

Round 1 Aug 17, 2016 09:00:00 to Aug 18, 2016 17:00:00

Notes:

Further information regarding Forecast Total Transfer Capability and Maximum Transmission Rights offered for this auction can be found at: http://www.ieso.ca/imoweb/pubs/marketOps/mo_TransmissionRights.pdf



TRA Process Changes

New Monthly Financial Report:

New Monthly Financial Report Field Names	Description
Monthly Congestion Rents	Payment collected due price difference between Ontario zone and an inertie zone
Monthly TR Payouts	Payments to TR rights holders
Manual Adjustment	Adjustments made manually to congestion rents or TR payouts
Cumulative Congestion Rents	Sum of congestion rents starting from MM YYYY
Cumulative TR Payouts	Sum of TR payouts starting from MM YYYY
Cumulative Manual Adjustment	Sum of manual adjustments starting from MM YYYY
Cumulative Net Balance	Sum of Cumulative Congestion Rents and Cumulative Manual Adjustment minus Cumulative TR payouts
Dead-band	Pre-specified range for the cumulative difference between congestion rents and TR payouts per path for which no adjustment to the financial limit is required
Notes	Comments
<p>* TR - Transmission Rights ** MM - Month *** YYYY - Year</p>	

TRA Process Changes

New Financial Report Sample



Transmission Rights Monthly Financial Report

TR OwnershipPeriod : Oct 2016
Published : Nov 15, 2016

Path Name	Monthly Congestion Rents (\$)	Monthly TR Payouts (\$)	Manual Adjustment (\$)	Cumulative Congestion Rents (\$)	Cumulative TR Payouts (\$)	Cumulative Manual Adjustment (\$)	Cumulative Net Balance (\$)	Deadband (\$)	Notes
MAN-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MANSK-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MICH-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MIN-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
NY-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-MAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-MANSK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-MICH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-NY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QBEAU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QD4Z	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QD5A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QH4Z	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QH9A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QOUTA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QP33C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QQ4C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ON-QX2Y	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QBEAU-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QD4Z-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QD5A-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QH4Z-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QH9A-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QOUTA-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QP33C-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QQ4C-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
QX2Y-ON	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Notes:

Further information regarding Forecast Total Transfer Capability and Maximum Transmission Rights offered for this auction can be found at: http://www.ieso.ca/imoweb/pubs/marketOps/mo_TransmissionRights.pdf

TRA Process Changes

Dead-band

- An ideal dead-band would limit manual intervention and allow time for adjustments to impact the financial balance before triggering further adjustments
- A static dollar amount, updated as needed, and defined by the TR Auctions process owners
- Initial dead-band of zero to be implemented on all paths
- Dead-band can vary for each path and the dead-band could be modified in future

ALGORITHM

TRCA Balance	Cumulative Difference between Monthly Congestion Rents Collected and TR Payments (by TR path)	Impact on Monthly TRs (by TR path)
N/A	Between the upper and lower limits of the dead-band	No change
> TRCA threshold*	Exceeds upper limit of the dead-band (CR>TR)	Increase financial upper limit by 4%
< TRCA threshold*	Exceeds upper limit of the dead-band (CR>TR)	No change**
N/A	Less than lower limit of the dead-band (CR<TR)	Decrease financial upper limit by 4%

* The TRCA threshold is currently \$20M
** TRs offered will not be increased when TRCA balance is below threshold

TRA Process Changes

- New process will replace the existing interim process on March 01, 2017 ([Baseline 37.0](#))
- Red-line version of **Market Manual 4.4 – Transmission Rights Auction** will be posted on January 11th, 2017
- New Monthly Financial and revised LT & ST Pre-Auction reports will be posted on [Pending IT Service Changes](#) page on December 14th, 2016

Update on TR Market Comprehensive Review

- Potential enhancements to Ontario's electricity markets under Market Renewal may affect the overall design of the TR market
- Comprehensive TR market review, initially **Phase II of SE-110**, would be undertaken as part of Market Renewal
- IESO proposes to close SE-110

Questions?

- Any questions can be sent directly to engagement@ieso.ca