

The purpose of this paper is to provide an overview on the IESO's analysis plan relating to the Transmission Rights (TR) Market confidence level changes and associated stabilization algorithm implemented in 2004. This analysis plan has been developed through consultation with stakeholders.

The analysis outlined below is intended to determine if the current design has achieved the intended benefits of:

- Increased import/export competition
- Increased energy trade, specifically imports
- Increased participation/ownership in the TR market

The rationale for the confidence level change implemented in 2004 was that an increase in TR quantities would lead to the ability for more participants to hedge their trades, which in turn would result in more bids and offers, and increased competition. At the time the changes were made Ontario sometimes relied upon imports for reliability of supply, so an increase in the number of TRs sold was also expected to increase power system reliability through an increase in imports. It was also anticipated that the new process would allow for increased participation and competition in the TR market itself, with more TR quantities being available for ownership. Further information can be found in the [Phase 1 Discussion Paper](#) posted on the SE-110 web page.

If the analysis determines that the intended benefits have not been materially achieved, the IESO will review and develop recommendations for improvements and efficiencies.

Stakeholder Feedback

Stakeholder feedback to the IESO's [Proposed Analysis Paper](#) (which was presented at the May 16 meeting) has led to a number of changes in the planned analysis allowing for a more thorough evaluation. As a result, the analysis will now be performed for each month in the study period and by path, where applicable, allowing data to be presented monthly or quarterly. In addition, the import/export competition analysis has been modified to establish a connection between offer/bid quantities and TR ownership. The study period for the analysis remains from 2003-2012.

Increased Import/Export Competition

The analysis is intended to determine if there has been an increase in import/export competition since the confidence level changes in 2004. While it is difficult to demonstrate the impact on market clearing price from increased imports/exports alone, due to additional variables such as changes in demand, generation, underlying fuel costs, global adjustment and uplifts; it is possible to examine offer/bid quantities and intertie congestion to show if the MWs available for trade activity on the interties has increased or decreased. A review of offer/bid quantities provides an indication of potential trade activity while excluding the limitations of internal constraints and congestion on the interties.

An increase in import/export competition could be shown by an increase in the number of participants registered as importers/exporters; however this can only be attributed to the availability of more TRs if

the importers/exporters are also registered as TR market participants or have access to TRs through private bilateral contracts.

The IESO will perform the following analysis for the years 2003-2012:

- Monthly offer/bid quantities of imports/exports by path
 - Total quantity
 - Quantity from market participants who own a corresponding TR
- Number of participants registered as importers/exporters at year end for each year in the study period, and the number of registered importers/exporters that are also registered as participants in the TR market
- Percentage of hours in each month of the study period with import/export congestion in the unconstrained sequence, by path

Increased Energy Trade

The analysis is intended to determine whether there has been an increase in energy trade since the confidence level changes implemented in 2004. At the time the confidence level changes were implemented the IESO sometimes relied on imports for reliability, so the expected increase in energy trade was specifically related to imports. Since that time Ontario has become a net exporter, so the analysis will review both imports and exports.

The IESO intends to review historical scheduled transaction data. The real-time dispatch constrained schedule will be used to represent transactions which actually flowed. It should be noted that the results are directly impacted by the variables of demand and price in both Ontario and the neighbouring jurisdictions. We do not intend to attempt to analyze what portion of the change can be attributed to TRs alone.

In order to review the effect TR ownership may have had on energy trade, the IESO will compare total actual imports/exports with those that are “hedged” by participants owning TRs. The actual imports/exports will be determined using the real-time dispatch constrained schedule. The analysis will be in monthly increments. This analysis could have limitations due to the fact that there may be contractual agreements between TR holders and market participants who are trading the energy that the IESO is not aware of, and would therefore not be captured.

The IESO will perform the following analysis for the years 2003-2012:

- Monthly quantities of scheduled imports/exports by path, based on the real-time dispatch constrained schedule
 - Total quantity (representing the transactions which could be “hedged” through TR ownership)
 - Quantity from market participants who own a corresponding TR (representing the quantities that are “hedged” through TR ownership)

- Those paths for which TRs were sold above their base amount due to the stabilization algorithm will be highlighted on a monthly basis

Increased Participation/Ownership in the TR Market

The analysis is intended to determine whether the increase in TR availability through the confidence level changes implemented in 2004 has contributed to an increase in participation and ownership in the TR market. The IESO will review the number of participants registered in the TR market each year and the number actively bidding in the TR auctions. The analysis will also review the total quantity of TRs owned and offered at auction, and highlight months in which stabilization resulted in an increase in TRs.

A review of TR market share on each path, i.e. the number of participants owning TRs and the percentage of TRs owned by the participant, may demonstrate the extent to which the confidence level changes contribute to the rate of participation and ownership in the TR market, and whether continuing to increase TR quantities could have an effect on encouraging more participation.

A review of the rate of return for rights holders based on TR auction market clearing price and the intertie congestion price may demonstrate whether there is adequate competition in the TR market. The limitation of this analysis is that it will reflect the rate of return to TR holders who are financial participants only, as those participants who trade will have additional costs. The capturing of those costs would be extremely intensive as we would need to capture hedged trades by participant for each hour of congestion and would need to understand the revenue that they received for each.

The IESO will perform the following analysis for the years 2003-2012:

- Number of participants registered in the TR market at year end for each year in the study period, and the number of TR market participants that are actively bidding in TR auctions each year
- Monthly quantity of TRs owned by market participants and offered by the IESO at auction. Months in which stabilization resulted in TRs over the base quantity will be highlighted
- Market share on the intertie – number of TR holders and the quantity owned on each path
- Rate of return for TR holders on a speculative investment basis only