

MAY 26, 2020

Transmission Rights Clearing Account Disbursement Methodology – Vote to Post

IESO Technical Panel

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Purpose

- To present the IESO's proposal to change the Transmission Rights Clearing Account (TRCA) disbursement methodology, and
- To ask TP for a "Vote to Post" TRCA MR amendments for stakeholder comment

Agenda:

1. Recap
2. Proposal
3. Implementation
4. Market Rule and Market Manual Amendments
5. Next steps



Recap

Recap (1)

- In May 2017, the Ontario Energy Board's Market Surveillance Panel (MSP) issued a recommendation to the IESO on the TRCA disbursement methodology:

Recommendation 4-1:

- A. The IESO should revise the manner in which it allocates disbursements from the Transmission Rights Clearing Account such that disbursements are proportionate to transmission service charges paid over the relevant accrual period.*
- B. The IESO should not disburse any further funds from the Transmission Rights Clearing Account until such time that Recommendation 4-1(A) has been addressed.*

Recap (2)

- The IESO agreed that a review of the TRCA disbursement methodology was warranted and committed to initiate the review while continuing semi-annual disbursements, as directed by the IESO Board.
- The IESO engaged the Brattle Group to deliver a **public report** which recommends allocating 100% of the surplus funds to Ontario loads on the basis of market efficiency
- At the November 2019 MDAG meeting, the IESO discussed its alignment with the Brattle recommendation with stakeholders and its intent to implement the change for the May 2020 scheduled disbursement

Recap (3)

- At the November 2019 and February 2020 TP meetings, the IESO provided the TP a backgrounder on the TRCA and the issue at hand. The IESO also communicated its proposal to allocate all TRCA surplus funds to loads
- Stakeholders provided feedback focused primarily on the proposal's methodology and effective date. Additional stakeholder meetings were held in December, January and April
 - Based on stakeholder feedback, the IESO has modified its proposal on both the methodology and effective date



TRCA Methodology Proposal

Current Disbursement Methodology

- The IESO agrees with the MSP that the current TRCA disbursement methodology (based on proportionate share of volume) over-allocates the TRCA surplus funds to exporters at the expense of Ontario loads*
- Over the last 5 years, loads have received ~87% of the TRCA surplus, while exporters have received ~13% of the TRCA surplus under the current methodology based on volume share
- As noted in the MSP's analysis*, from a fairness perspective, loads contribute a much greater share (~98%) of total transmission costs than exporters and therefore should receive a larger proportion of the disbursement

Details on historical costs and volumetric shares contained in Appendix 1

* *Recommendation 4-1 from the [May 2017 MSP Monitoring Report](#)*

Previously Proposed Methodology (1)

- In November 2019, the IESO proposed to stakeholders that loads should be the sole recipient of TRCA surplus funds
- From an equity perspective:
 - The transmission system (including interties) was built to reliably serve Ontario consumers
 - The vast majority of system costs (such as Global Adjustment) are borne by Ontario consumers which enable traders to conduct their business

Previously Proposed Methodology (2)

- From an efficiency perspective:
 - The current TRCA disbursement methodology incents inefficient export bidding behaviour due to the expectation of a future rebate
 - The impact can lead to inefficient exports, which can be costly to Ontario consumers as it can result in higher costs such as CMSC and unit commitment costs

Stakeholder Feedback on Methodology

- In response to the IESO's proposed TRCA disbursement methodology, stakeholders have provided two main areas of feedback that the proposal to allocate all TRCA surplus funds to loads is unfair to exporters because:
 1. Exporters also contribute to the cost of the transmission system
 2. The OEB approaches to establish transmission rates for loads and exporters are similar cost-based approaches
- Some stakeholders also noted that in some neighbouring jurisdictions, exporters are eligible for congestion disbursement under certain limited circumstances
- The IESO considered this feedback and intends to proceed with the MSP recommended solution that balances market efficiency and equity

Revised TRCA Disbursement Methodology

Allocate TRCA surplus funds to loads and exporter classes based on proportion of transmission service charges paid

- The revised methodology is consistent with the principles of the original proposal and also recognizes the cost contribution of exporters to the transmission system



Implementation of Proposal

Proposed Methodology (1)

- The current TRCA disbursement methodology disburses TRCA surplus funds based on each load and exporter's proportionate share of total energy volume over the prior six-month look-back period
- The proposed approach will divide the TRCA surplus between the load and exporter classes based on the proportion of **transmission costs paid over the TRCA balance period**
- Within each class, respective TRCA surplus funds will be allocated to individual loads and exporters based on their proportionate volumetric share of over the look-back period

Proposed Methodology (2)

- The *balance period* is the six-month period offset 1 month earlier than the look-back period
- Offset is necessary to finalize transmission costs but doesn't impact the split. Historical breakdown in appendix 2.

Illustrative Example of Current Methodology

Example:

Assume over the last 6 month look-back period there was:

- *\$100 TRCA surplus to be disbursed*
- *100MWh of total volume (AQEW+SQEW)*

- TRCA Surplus \$100
 - Load1 consumes 37 MWh (AQEW)
 - Load1 receives \$37 ($37/100 \times \100)
 - Load2 consumes 50 MWh (AQEW)
 - Load2 receives \$50 ($50/100 \times \100)
 - Exporter1 exports 13 MWh (SQEW)
 - Exporter1 receives \$13 ($13/100 \times \100)

Illustrative Example of Proposed Methodology

- Assumptions:
 - TRCA surplus available to disburse: \$100
 - Total transmission costs paid in balance period: \$300 (97% from loads and 3% from exporters)
 - Total AQEW during disbursement period: 7MW (Load1 5MW, Load2 2MW)
 - Total SQEW during disbursement period: 3MW (Exporter1 1MW, Exporter2 2MW)

Illustrative Example of Proposed Methodology cont'd

Based on the above assumptions:

- Allocation to load/exporter classes on total PTS and ETS costs paid:
 - Load class' share of TRCA surplus = 97% share × \$100 surplus = \$97
 - Exporter class' share of TRCA surplus = 3% share × \$100 = \$3
- Disbursement within each class based on AQEW/SQEW shares:
 - Load1: 5MW ($5/7 \times \$97 = \69)
 - Load2: 2MW ($2/7 \times \$97 = \28)
 - Exporter1: 1MW ($1/3 \times \$3 = \1)
 - Exporter2: 2MW ($2/3 \times \$3 = \2)

Timing

- **TRCA Balance Period: November 1 to April 30**
 - Mid-December: November disbursement based on proportionate volume shares from June 1 to November 30 to allocate the TRCA surplus balance as of October 31
- **Look-back Period: December 1 to May 31**
 - April 30: TRCA surplus balance as of April 30 is the amount to be disbursed. Split between loads and exporters is set.
- **TRCA Balance Period: May 1 to October 31**
 - Mid-June: May disbursement based on proportionate volume shares from December 1 to May 31 to allocate the TRCA surplus balance as of April 30
- **Look-back Period: June 1 to November 30**
 - October 31: TRCA surplus balance as of October 31 is the amount to be disbursed. Split between loads and exporters is set.

Implementation of Proposed Methodology

- The allocation within the exporter and load class will continue to be based on volumetric allocation
 - Allocating volumetrically is aligned with how reliability costs (such as market uplifts) are allocated
- To address the issue of transmission costs not being finalized in time for month-end settlement, the IESO will use the respective transmission charges collected over the 6-month balance period to calculate the allocation of the TRCA balance between load and exporters (*historical allocation information in appendix showing no material difference*)
 - The time period used to calculate the transmission cost-based allocation will be aligned with the period that the TRCA surplus was accumulated in

Effective Date

- The IESO originally proposed an effective date of May 2020
- Based on stakeholder feedback received, the IESO is proposing to delay the implementation to November 2020
- The IESO is balancing different perspectives in setting the effective date:
 - The Market Surveillance Panel is recommending an immediate suspension of disbursements and an immediate change in methodology
 - Ontario loads who will benefit from this change
 - Impact to exporters and TR participants, primarily on speculators in TRs who purchase TRs but are not using them to hedge exports



Market Rule Amendments

Chapter 8 – Physical Bilateral Contracts and Financial Markets

4.18 TR Clearing Account

4.18.2 **[Amended Version]** Subject to section 4.18.3, the *IESO Board* may, at such times as it determines appropriate, authorize the debit of funds from the *TR clearing account* in accordance with section 3.6.3 of Chapter 9 for the purpose of using those funds to offset *transmission services charges*.

Chapter 9 – Settlements and Billing (1)

4.7 TR Clearing Account Disbursements

4.7.1 **[Amended Version]** Disbursements from the *TR clearing account* ordered by the *IESO Board* pursuant to section 4.18.2 of Chapter 8 shall be distributed among *market participants* based on the proportionate share of all *transmission service charges* paid during *energy market billing periods* immediately preceding the current *energy market billing period*, in accordance with this section 4.7.

Chapter 9 – Settlements and Billing (2)

4.7 TR Clearing Account Disbursements

4.7.1.1 **[Amended Version]** The portion of the total disbursements from the *TR clearing* account allotted to *market participants* that have paid provincial transmission charges shall be disbursed to *market participants* on an individual basis as a non-hourly *settlement amount* according to each *market participant's* proportionate quantity of energy withdrawn from the *IESO-controlled grid* at all *RWMs* excluding *intertie metering points* during *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*, in the manner described in sections 4.7.2 and 4.7.3.

Chapter 9 – Settlements and Billing (3)

4.7 TR Clearing Account Disbursements

4.7.1.2 **[Amended Version]** The portion of the total disbursements from the *TR clearing account* allotted to *market participants* that have paid *export transmission service* charges shall be disbursed to *market participants* on an individual basis as a non-hourly *settlement amount* according to each *market participant's* proportionate quantity of *energy* withdrawn from the *IESO-controlled grid* at all *intertie metering points* during *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*, in the manner described in sections 4.7.2 and 4.7.3.

Chapter 9 – Settlements and Billing (4)

4.7 TR Clearing Account Disbursements

4.7.2 The portion of any disbursement from the *TR clearing account* payable to *market participant 'k'* in the current *energy market billing period* shall be calculated as follows:

[Amended] For *market participants* that have paid provincial transmission service charges in the *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*:

$$\mathbf{[Amended]} \text{TRCAC}_k = \text{TRCAD}_L \times \sum_H^{M,T} [(AQEW_{k,h}^{m,t}) / \sum_{K,H}^{M,T} (AQEW_{k,h}^{m,t})]$$

Chapter 9 – Settlements and Billing (5)

4.7.2 (cont'd)

[Amended] For *market participants* that have paid *export transmission service* charges in the *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*:

$$\mathbf{[Amended]} \text{TRCAC}_k = \text{TRCAD}_E \times \sum_H^{I,T} [(S\text{QEW}_{k,h}^{i,t}) / \sum_{K,H}^{I,T} (S\text{QEW}_{k,h}^{i,t})]$$

Chapter 9 – Settlements and Billing (6)

Definitions

Where:

- **[Amended]** $TRCAD_L = (\$_{K}TD_C / \$_{K}TD_{C,C1}) \times TRCAD$
- **[Amended]** $TRCAD_E = (\$_{K}TD_{C1} / \$_{K}TD_{C,C1}) \times TRCAD$
- $TRCAC_k$ = the *TR clearing account* credit payable to *market participant 'k'* in the current *energy market billing period*
- $TRCAD$ = the total dollar value of all disbursements from the *TR clearing account* authorised by the *IESO Board* in the current *energy market billing period*

Chapter 9 – Settlements and Billing (7)

Definitions (cont'd)

- **[Amended]** $TRCAD_L$ = the portion of the total dollar value of all disbursements from the *TR clearing account* authorized by the *IESO Board* in the current *energy market billing period* allocated to *market participants* that have paid provincial transmission service charges "C" in the *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*
- **[Amended]** $TRCAD_E$ = the portion of the total dollar value of all disbursements from the *TR clearing account* authorized by the *IESO Board* in the current *energy market billing period* allocated to *market participants* that have paid *export transmission service* charges "C1" in the *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*

Chapter 9 – Settlements and Billing (8)

Definitions (cont'd)

- **[Amended]** M = the set of all *RWMs* 'm' and excluding *intertie metering points* 'm' during *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*
- **[Amended]** I = *intertie metering points* 'i' during *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*
- K = the set of all *market participants* 'k' during *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*

Chapter 9 – Settlements and Billing (9)

Definitions (cont'd)

- **[Amended]** T = the set of all *metering intervals* 't' in *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*
- H = the set of all *settlement hours* 'h' in *energy market billing periods* immediately preceding the current *energy market billing period*, as determined by the *IESO Board*
- **[Amended]** C = the set of all monthly service charge types 'c' as follows: 650,651,652
- **[Amended]** C1 = the set of all monthly export transmission charge types 'c' as follows: 653

Chapter 9 – Settlements and Billing (10)

4.8 Additional Non-Hourly Settlement Amounts

4.8.1 The *IESO* shall, at the end of each *energy market billing period*, recover from *market participants*, on a pro-rata basis across all allocated quantities of *energy* withdrawn at all *RWMs* and *intertie metering points* during all *metering intervals* and *settlement hours* within that *energy market billing period*, the following amounts:

4.8.1.7 **[Intentionally left blank - Section deleted]**

Chapter 9 – Settlements and Billing (11)

4.8 Additional Non-Hourly Settlement Amounts

4.8.3 The *IESO* shall, at the end of each *energy market billing period*, recover from *market participants*, in the manner specified in the applicable *market manual*, the following amounts:

4.8.3.1 **[Intentionally left blank – section deleted];**

4.8.3.2 **[Intentionally left blank – section deleted];**

4.8.3.3 any compensation for *capacity market participants* paid in that

4.8.3.4 **[Amended]** any funds borrowed by the *IESO* and any associated interest costs incurred by the *IESO* in the preceding *energy market billing period* pursuant to section 6.14.5.2;

Chapter 9 – Settlements and Billing (12)

6.14 Payment Default

6.14.5 If the *IESO* borrows short-term funds pursuant to section 6.14.4, it shall recover this borrowing:

6.14.5.2 **[Amended]** where the insufficient funds were due to the circumstances referred to in section 6.14.4.1 (b), in the manner referred to in sections 4.19.3 and 4.19.5 of Chapter 8 and then, if necessary, by recovering from *market participants* proportionately based on *transmission service charges* paid during all intervals and *settlement hours* within the *energy market billing period* in which the *IESO* invoices the *market participants*.

Chapter 9 – Settlements and Billing (13)

6.14 Payment Default

6.14.5.2.1 **[Amended]** Where a *market participant* has paid provincial transmission service charges, recovery pursuant to section 6.14.5.2 shall be recovered individually, proportionate to the quantities of *energy* withdrawn at all *RWMs* excluding *intertie metering points* during all intervals and *settlement hours* within the *energy market billing period* in which the *IESO* invoices the *market participants*, in accordance with section 6.14.5.3

6.14.5.2.2 **[Amended]** Where a *market participant* has paid *export transmission service* charges, recovery pursuant to section 6.14.5.2 shall be recovered individually, proportionate to the quantities of *energy* withdrawn at all *intertie metering points* during all intervals and *settlement hours* within the *energy market billing period* in which the *IESO* invoices the *market participants*, in accordance with section 6.14.5.3

Chapter 9 – Settlements and Billing (14)

6.14 Payment Default

6.14.5.3 **[Amended Version]** The portion of any short-term funds borrowed by the IESO to be recovered from *market participant 'k'* in the current *energy market billing period* shall be calculated as follows:

For *market participants* that have paid provincial transmission service charges in the current *energy market billing period*:

$$\text{TRCAC}_k = \text{TRCAD}_L \times \sum_H^{M,T} [(AQEW_{k,h}^{m,t}) / \sum_{K,H}^{M,T} (AQEW_{k,h}^{m,t})]$$

For *market participants* that have paid *export transmission service* charges in the current *energy market billing period*:

$$\text{TRCAC}_k = \text{TRCAD}_E \times \sum_H^{I,T} [(SQEW_{k,h}^{i,t}) / \sum_{K,H}^{I,T} (SQEW_{k,h}^{i,t})]$$

Changes to Market Manuals

- The IESO evaluated changes to market manuals based on the threshold established from the recommendations of the Advisory Group on IESO Governance and Decision-Making
- The impact to market manuals in relation to these proposed changes to the market rules are limited
 - IESO Charge Types and Equations market manual will be updated to mirror the changes made to the variables in Chapter 9 Section 4.7 and 6.14
 - Minor updates to Market Manual 5: Settlements Part 5.5: Physical Markets Settlement Statements section 1.6.27 to reflect the updated disbursement methodology
 - Minor updates to Format Specifications for Settlement Statement Files and Data Files market manual to reflect updates that will be implemented to settlement tools

Next Steps

- **May 26:** Request that the Technical Panel vote to post the TRCA MR amendments for stakeholder comment
- The IESO will seek IESO Board approval after the Technical Panel (TP) process is completed

Next Steps - Dates

- **May 26, 2020:** Ask TP for a “Vote to Post” TRCA MR amendments for stakeholder comment
- **June 23, 2020:** Ask TP for a “Vote to Recommend” TRCA MR amendments to the IESO Board
- **August 25, 2020:** IESO Board to vote on TRCA MR amendments
- **November 2020:** TRCA MR amendments goes into effect for December 2020 disbursement (for period June to November 2020, inclusive)



Appendix

Appendix 1: TRCA Methodology Historical Breakdown

Appendix 2: Comparison of Cost Breakdown over Periods

Appendix 1 - TRCA Methodology Historical Breakdown: Cost and Volume

Look-back Period	Proportion of Transmission Cost: Provincial Transmission Service Charge	Proportion of Transmission Cost: Export Transmission Service Charge	Proportion of Volume: Ontario Load	Proportion of Volume: Export
Jun–Nov 2015	\$788 MM (98%)	\$19 MM (2%)	62 TWh (87%)	9 TWh (13%)
Dec 2015–May 2016	\$732 MM (97%)	\$21 MM (3%)	66 TWh (85%)	11 TWh (15%)
Jun–Nov 2016	\$808 MM (98%)	\$20 MM (2%)	68 TWh (86%)	11 TWh (14%)
Dec 2016–May 2017	\$709 MM (97%)	\$19 MM (3%)	65 TWh (86%)	10 TWh (14%)
Jun–Nov 2017	\$761 MM (98%)	\$16 MM (2%)	64 TWh (88%)	9 TWh (12%)
Dec 2017–May 2018	\$768 MM (98%)	\$19 MM (2%)	67 TWh (87%)	10 TWh (13%)
Jun–Nov 2018	\$855 MM (98%)	\$16 MM (2%)	68 TWh (89%)	9 TWh (11%)
Dec 2018–May 2019	\$752 MM (98%)	\$18 MM (2%)	67 TWh (87%)	10 TWh (13%)
Jun–Nov 2019	\$819 MM (98%)	\$18 MM (2%)	66 TWh (87%)	10 TWh (13%)

TRCA: Transmission Rights Clearing Account

Appendix 2 – Historical Proportion of Transmission Costs Paid

- The following chart shows the historical proportion of total transmission charges collected between Provincial Transmission Service and Export Transmission Service charges based on past look-back and balance periods
- Historical allocation has been stable ~98% from PTS and 2% from ETS charges
- Using the look-back period or balance period to calculate the 6-month allocation has yielded almost identical results

Appendix 2 – Historical Proportion of Transmission Costs Paid (cont'd)

Look-back Period	Provincial Transmission Service Charge	Export Transmission Service Charge	Balance Period (look-back period shifted back by 1 month)	Balance Period: Provincial Transmission Service Charge	Balance Period: Export Transmission Service Charge
Jun-Nov 2015	97.7%	2.3%	May-Oct 2015	97.7%	2.3%
Dec 2015-May 2016	97.2%	2.8%	Nov 2015-Apr 2016	97.1%	2.9%
Jun-Nov 2016	97.6%	2.4%	May-Oct 2016	97.7%	2.3%
Dec 2016-May 2017	97.4%	2.6%	Nov 2016-Apr 2017	97.4%	2.6%
Jun-Nov 2017	97.9%	2.1%	May-Oct 2017	97.8%	2.2%
Dec 2017-May 2018	97.6%	2.4%	Nov 2017-Apr 2018	97.6%	2.4%
Jun-Nov 2018	98.2%	1.8%	May-Oct 2018	98.1%	1.9%
Dec 2018-May 2019	97.7%	2.3%	Nov 2018-Apr 2019	97.8%	2.2%
Jun-Nov 2019	97.8%	2.2%	May-Oct 2019	97.7%	2.3%