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Independent Electricity System Operator
1600-120 Adelaide Street West
Toronto, ON M5H 1T1
t 416.967.7474
www.ieso.ca

August 4, 2022

VIA Email and RESS

Ms. Nancy Marconi
Registrar
Ontario Energy Board
27th Floor 2300 Yonge Street
Toronto, ON M4P 1E4

Dear Ms. Marconi,

Re: Generic Hearing on Uniform Transmission Rates-Related Issues and the Export Transmission Service Rate
Ontario Energy Board File No.: EB-2021-0243

Pursuant to Procedural Order #2 dated April 1, 2022, the Independent Electricity System Operator ("IESO") is writing to file its responses to the undertakings provided by the IESO panel from the Technical Conference on July 28th and July 29th.

Please contact George Dimitropoulos, Senior Advisor, Regulator Affairs at George.dimitropoulos@ieso.ca if you have any questions.

Yours truly,

Devon Huber
Director, Regulatory Affairs & Market Rules

cc: Mr. Patrick Duffy Stikeman Elliott LLP (email)
All EB-2021-0243 Intervenors (email)

UNDERTAKING JT-1.6

Reference: Exhibit I-01-41 - OEB Staff Interrogatory 41 e)

Undertaking: To file or provide a link to the Brattle Report.

Response:

The 2019 Brattle report 'Analysis of the TRCA Surplus Allocation Methodology' is provided as Attachment 1 to this undertaking.

The report can also be found through the following public link, https://www.ieso.ca/-/media/Files/IESO/Document-Library/engage/mdag/mdag-20191004-Analysis-of-the-TRCA-Surplus.ashx.

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UNDERTAKING JT-1.7

Reference: Exhibit I-01-01 - OEB Staff Interrogatory 1 Attachment 1

Undertaking: IESO to reconcile Table 16 and Table 8 in the response to OEB Staff Interrogatory 1, Attachment 1.

Response:

The 'Export Congestion Rent' rows in Table 8 and the "ICP Revenue" rows in Table 16 should match. However, Tables 13 to 16 incorrectly displayed the "ICP amounts paid to transmission rights holders" value in the "ICP revenue" rows. The "Volume" values were subsequently based on the amount of transmission rights owned and not the volume of exports across the line at the time of congestion. See below for the corrected tables.

Table 13 – Revenue, Volume and Number of Hours of ICP at each intertie – ICP >= 4.69/MWh

	Year	2017	2018	2019	2020	2021
Michigan	ICP Revenue ($M)	139.4	121.9	101.6	83.1	105.8
	Volume (TWh)	6	5.3	5.9	6.1	5.1
	# of hours	6947	5136	5195	5392	5060
Minnesota	ICP Revenue ($M)	4.5	0.6	2.9	1.1	0.2
	Volume (TWh)	0.3	0.1	0.2	0.2	0.1
	# of hours	3966	2293	3122	3379	2169
New York	ICP Revenue ($M)	59.2	60.8	21.6	9.1	8.7
	Volume (TWh)	3.6	2.6	1.6	1	0.7
	# of hours	3484	2794	2250	828	741

Table 14 – Revenue, Volume and Number of Hours of ICP at each intertie – ICP >= 1.81/MWh

	Year	2017	2018	2019	2020	2021
Michigan	ICP Revenue ($M)	140.4	123.4	104	86.9	107.5
	Volume (TWh)	6.3	5.8	6.6	7.3	5.7
	# of hours	7236	5571	5774	6377	5563
Minnesota	ICP Revenue ($M)	4.6	0.6	3	1.1	0.2
	Volume (TWh)	0.3	0.1	0.2	0.2	0.1
	# of hours	4365	2508	3504	4138	2474
New York	ICP Revenue ($M)	61	62.1	23	10.4	9.4
	Volume (TWh)	4.2	3	2.1	1.4	0.9
	# of hours	3982	3195	2801	1133	933

Table 15 – Revenue, Volume and Number of Hours of ICP at each intertie – ICP >= 3.53/MWh

	Year	2017	2018	2019	2020	2021
Michigan	**ICP Revenue ($M)**	139.9	122.6	102.9	85	106.7
	Volume (TWh)	6.1	5.5	6.2	6.6	5.4
	# of hours	7072	5303	5446	5772	5271
Minnesota	**ICP Revenue ($M)**	4.6	0.6	3	1.1	0.2
	Volume (TWh)	0.3	0.1	0.2	0.2	0.1
	# of hours	4114	2371	3269	3706	2309
New York	**ICP Revenue ($M)**	60.1	61.5	22.3	9.8	9.1
	Volume (TWh)	3.9	2.7	1.8	1.1	0.8
	# of hours	3694	2985	2473	948	815

Table 16 – Revenue, Volume and Number of Hours of ICP at each intertie – ICP > $0/MWh

	Year	2017	2018	2019	2020	2021
Michigan	**ICP Revenue ($M)**	140.6	123.6	104.4	87.5	107.8
	Volume (TWh)	6.5	6	7	7.9	6
	# of hours	7439	5839	6106	6881	5890
Minnesota	**ICP Revenue ($M)**	4.6	0.6	3	1.2	0.2
	Volume (TWh)	0.3	0.1	0.2	0.2	0.1
	# of hours	4581	2639	3800	4574	2658
New York	**ICP Revenue ($M)**	61.2	62.2	23.2	10.7	9.5
	Volume (TWh)	4.5	3.1	2.3	1.7	1
	# of hours	4241	3349	3112	1364	1037

Note: Intertie congestion price (ICP) revenue are calculated based on net flow. Volume quantities and the number of hours are specific to exports at times of congestion.

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UNDERTAKING JT-1.8

Reference: Exhibit I-01-01 – OEB Staff Interrogatory 1 Attachment 1 Table 23

Undertaking: IESO to look to provide a version of Table 23 without Exports, if it can.

Response:

The IESO is of the view that producing a version of Table 23 without exports is not realistic. The data provided in Table 23 - Surplus Baseload Generation (SBG) from 2014-2021 are actual curtailed energy values based on variable generation and maneuvered nuclear generation. Directionally, if there were no exports, the quantities of SBG would significantly increase, up to the additional production from variable generation and the remaining capacity from nuclear resources. The IESO would also expect much more frequent reliability issues such as nuclear unit shutdowns if no exports were available during these times. This exercise would require the IESO to assume that Ontario has no export capability and is essentially operating as an island. In that hypothetical scenario, Ontario would have invested in a very different supply mix, which would lead to different SBG outcomes.

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UNDERTAKING JT-1.9

Reference: The IESO's 2021 Annual Planning Outlook & 2012 CRA Study

Undertaking: IESO to respond to Mr. Rubenstein's question about change in supply conditions over the next 10 years as compared to those considered in the 2012 CRA Study.

Response:

As discussed in the IESO's Annual Planning Outlook (APO) the future supply mix is uncertain, with recognition that there is a potential for considerable change in the 2020s and into the 2030s. However, based on recent history and the nature of Ontario's supply mix, CRA's 2013 and 2015 model years are more representative of near-term supply conditions.

Witness: Tom Chapman, Jason Kwok

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UNDERTAKING JT-1.10

Reference: Exhibit I-08-13 – SEC Interrogatory 13

Undertaking: IESO to advise what exactly the IESO would be contracting for with Erie Lake and how those costs would be recovered and how those costs would be incorporated as they are an export driven component to the project, who those costs would be recovered from and how exporters would pay for their share of those costs, if at all, and to advise of the various options or what if it's just at high level look like, to understand if this project is in place and there is export costs who is paying for it and how this would work out.

Response:

Fortis announced in late July 2022 that ITC had suspended development activities and commercial negotiations relating to the Lake Erie Connector project due to recent macroeconomic conditions:

https://financialpost.com/globe-newswire/fortis-inc-releases-second-quarter-2022-results-and-2022-sustainability-report.

The IESO is assessing the implications of this announcement.

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UNDERTAKING JT-1.11

Reference: Exhibit I-01-34 – OEB Staff Interrogatory 34

Undertaking: The IESO to provide its view with references to appropriate historical documentation as to the purpose of the ICP mechanism.

Response:

As stated in response to OEB Staff Interrogatory 34 b), it is the IESO's view that the purpose of the ICP mechanism was, and remains, to allocate access to interties through the use of a dynamic pricing mechanism that automatically adjusts to changing market conditions and to utilize any surplus generated by that mechanism to offset costs for Ontario consumers. The IESO achieves this purpose by disbursing any surplus in the Transmission Rights Clearing Account (TRCA) to Ontario consumers as detailed in response to JT-1.3.

The purpose of the ICP, its relationship to the ETS, and the evolution of the TRCA disbursement methodology can be traced through a number of historical documents including:

- Sections 3.3, 4.5 and 4.6 of the Final Report of the Market Design Committee (MDC) dated January 29, 1999 outlined a framework and rationale that would become the basis of the ICP, the TR market and exporter's responsibility for uplift charges. The Final Report is filed as Attachment 1 to this undertaking. The Committee noted at page 4-11 that "this congestion pricing approach will encourage the efficient use of the interties and will provide useful price signals to market participants regarding the relative merits of alternative investments in generation on either side of the constrained interties or transmission upgrades to expand the intertie capabilities." As part of Recommendation 4-11, the Committee recommended that "[n]et auction revenues [from the TR market] should be used to offset revenue requirements for Basic Use Service."
- The OEB approved the establishment of the ETS at a rate of $1/MWh in its decision dated May 26, 2000 in RP-1999-044.[1] In making that decision, the OEB reviewed the nascent congestion pricing and transmission rights regimes. With respect to those regimes, the OEB stated its "general expectation that, under the Market Rules, the congestion management system of the IMO will yield some net revenue that will be credited to transmission customers (market participants)." The OEB settled on a $1/MWh flat rate

[1] https://www.oeb.ca/documents/cases/RP-1999-0044/dec.pdf

because it was not possible at that time to assess whether "net revenue arising from the congestion management will be greater or less than the revenue from the $1/MWh flat rate".

- The basic structure of the congestion pricing regime recommended by the MDC was implemented in the Market Rules, including the intention that net revenues would be used to offset transmission service charges. In particular, section 4.18.2 of Chapter 8 of the Market Rules (which has been in place since Market opening) provided the IESO board with the discretion to disburse surplus funds from the TRCA "for the purpose of using those funds to offset *transmission services charges*."
- The OEB's Market Surveillance Panel (MSP) reviewed congestion pricing and the TRCA in its January 2013 report that covered the November 2011 to April 2012 period.[2] The MSP recommended a number of changes to the IESO's handling of the TRCA, including in section 4.2.6 of the report a recommendation that the IESO authorize annual disbursements of any surplus in the TRCA.
- In its decision dated June 6, 2013 in EB-2012-0031, the OEB noted at page 6 that "[t]here was disagreement amongst the experts, and amongst the parties, as to how the allocation of the producer surplus and [revenue from the ICP] should be viewed. The allocation of these amounts to Ontario consumers, either directly or indirectly, impacts which ETS rate option appears to provide the greatest benefit." In particular, there was a disagreement as to whether the benefits of the ICP revenue flowed "completely to Ontario consumers" or if "some of the [ICP revenue] would likely flow to traders." The OEB noted that the IESO was undertaking a review of the distribution of revenue received from the ICP at that time.
- As described in page 12 of the IESO's ETS Rate Submission, the IESO undertook the Transmission Rights Review in 2013-2014 in response to the MSP's recommendations and implemented changes which resulted in significantly higher amounts of intertie congestion funds being available for disbursement to domestic consumers and exporters from the TRCA on a semi-annual basis.
- The MSP reviewed the methodology utilized to disburse any surplus from the TRCA in its May 2017 report that covered the November 2015 to April 2016 period.[3] When discussing the purpose of congestion rents, the MSP noted that "[a]ny congestion rent collected by the IESO and paid to transmission owners would go to offset the revenue requirement of those companies, thus reducing the regulated rates charged to their transmission customers. It follows that, in Ontario, transmission customers benefit from congestion rent." The MSP recommended that the IESO modify its historic practice of allocating the TRCA surplus on a volumetric basis to an allocation based on proportion of transmission service charges paid by Ontario consumers and exporters respectively.

[2] https://www.oeb.ca/oeb/_Documents/MSP/MSP_Report_Nov2011-Apr2012_20130114.pdf
[3] https://www.oeb.ca/sites/default/files/msp-report-nov2015-apr2016_20170508.pdf

- In response to the MSP recommendations, the IESO undertook a review of the TRCA disbursement methodology as described at page 12 of the IESO's ETS Rate Submission, including the retention of the Brattle Group to prepare the report identified in response to Undertaking JT-1.6. The Brattle Group reviewed the options available for the disbursement of TRCA surpluses, including providing surplus TRCA funds to transmission operators to offset transmission charges (see page 18 of the report). The Brattle Group noted that there was no process to adjust the Uniform Transmission Rate to account for surplus TRCA funds, this objective could be met by the direct transfer of funds to transmission customers (internal load and exporters) to lower their cost of using the transmission system.
- The IESO adopted the MSP's recommendation to allocate TRCA surplus disbursements based on proportion of transmission service charges paid effective June 2021 and made the requisite changes to the Market Rules. Under the revised disbursement methodology, approximately 98% of any surplus disbursed from the TRCA now flows to Ontario consumers either directly or through the consumer's local distribution company.

As shown in Table 5 of Attachment 1 to OEB Staff Interrogatory 1, the TRCA disbursement to Ontario loads substantially exceeded the amount of revenue collected from the ETS between 2017 and 2021. In May 2022, the IESO made a semi-annual TRCA disbursement of $70.8 million for the prior 6-month period.

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UNDERTAKING JT-1.12

Reference: No reference provided.

Undertaking: IESO to provide key web links to places on the website where the procurement activities are being described.

Response:

The IESO's procurement mechanisms are generally located in the following Resource Acquisition webpage: https://www.ieso.ca/en/Sector-Participants/Resource-Acquisition-and-Contracts/Overview

Additional key web links to procurement activities include:

- Long-Term RFP and Expedited Process: https://www.ieso.ca/en/Sector-Participants/Resource-Acquisition-and-Contracts/Long-Term-RFP-and-Expedited-Process
- Mid-Term RFP: https://www.ieso.ca/en/Sector-Participants/Resource-Acquisition-and-Contracts/Medium-Term-RFP
- Stakeholder Engagement for the Long-term RFP and Expedited Process, and Mid-Term RFP: https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Long-Term-RFP

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UNDERTAKING JT-1.13

Reference: No reference provided.

Undertaking: IESO to respond to Mr. Pattani's question about meeting area requirements in a particular load area, limited up to the point of reducing export capability.

Response:

To approach this question, a distinction is required between local area, or regional planning, and bulk system planning. Generally, in conducting local area planning, now commonly referred to in Ontario as regional planning, consideration of imports and exports is typically not within the scope of the local planning studies. However, when assessing the bulk supply in a given portion of the system, imports and exports are taken into account.

Section 3.2 of the Ontario Resource and Transmission Assessment Criteria[1] (ORTAC) outlines how imports and exports should be considered when stressing the system being studied, in order to determine the transfer capability of relevant transmission interfaces. It specifies that for all-in-service conditions, the effect of bilateral assistance on the tie-line should be studied. However, section 3.2 on its own does not stipulate that the transmission system needs to be planned (i.e., that recommendations need to be made) to maintain existing capabilities – the need for maintaining the intertie capability is tied to the resulting reliability, economic, operational and resiliency benefits, and the cost of the reinforcement option(s) and the alternatives being contemplated.

[1] https://www.ieso.ca/-/media/Files/IESO/Document-Library/Market-Rules-and-Manuals-Library/market-manuals/connecting/IMO-REQ-0041-TransmissionAssessmentCriteria.ashx

Witness: Tom Chapman, Jason Kwok

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