



Memorandum

To: Muneeb Chaudhary, Vice President, Ontario Electricity Financial Corporation

From: Pedro Torres-Basanta

Date: March 07, 2024

Re: Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new} Calculations

Introduction

The Ontario Electricity Financial Corporation (“OEFC”) is required to calculate and publish the Interim (2023) TMC_{Index} and DCR_{new} for 115-230kV as soon as market data is available. The data for both calculations are now available and OEFC has asked Guidehouse to perform these calculations. This memo will provide the Interim (2023) DCR_{new} 115-230kV calculation and the Provisional (2024) calculation, which have been carried out in accordance with past practice, as summarized in the DCR_{new} memo from August 28, 2020¹. Changes to the calculation that have been made since are summarized below.

The calculation of the 115-230kV TMC reflects interim rates resulting from the EB-2022-0250 Uniform Transmission Rate decision and its June 2023 update (EB-2023-0101), issued by the Ontario Energy Board (“OEB”) on December 8, 2022² and June 1, 2023³, respectively.

Global Adjustment – Provincial Funding

Under Ontario Regulation 735/20 amounts payable under certain IESO renewable energy contracts are funded by the Province under section 25.34 of *Electricity Act, 1998*. As a result, the costs associated with such contracts are not included in the GA paid by electricity ratepayers starting January 1, 2021. However, the GA component of TMC has been calculated such that the costs associated with these renewable energy contracts are included in the GA component of TMC after January 1, 2021. The data for the dollar amount of GA used in the TMC calculation is available at the following website: <https://www.ieso.ca/-/media/Files/IESO/Market-Summaries/GA-by-Components.ashx>

Methodology and Results

The Second Interim (2023) and Provisional (2024) DCR_{new} for 115-230kV is given in Table 1. Supporting information on the calculations involved is provided in the sections that follow.

¹ OEFC – DCR_{new} Memo https://www.oefc.on.ca/pdf/2019_final_DCRnew_memo_08-28-2020_en.pdf

² OEB – 2023 UNIFORM TRANSMISSION RATES <https://www.rds.oeb.ca/CMWebDrawer/Record/764048/File/document>

³ OEB – 2023 UNIFORM TRANSMISSION RATES UPDATE <https://www.rds.oeb.ca/CMWebDrawer/Record/792454/File/document>

Table 1: Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new} (cents/kWh)

Voltage	Second Interim (2023) and Provisional (2024)
115-230kV	12.5817

Total Market Cost Calculations

The Second Interim (2023) and Provisional (2024) TMC value for 115-230kV is 12.7784 cents/kWh as shown in Table 2.

Table 2: Calculation of Second Interim (2023) and Provisional (2024) 115-230kV TMC

		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total /
MONTHLY STATISTICS														
days		31	28	31	30	31	30	31	31	30	31	30	31	365
total hours		744	672	744	720	744	720	744	744	720	744	720	744	8760
														Weighted Average
MARKET RATES														
HOEP	c/kWh	3.328	2.267	2.477	2.047	1.655	2.913	3.853	3.033	3.628	3.009	2.990	3.031	2.8569
WMSC	c/kWh	0.533	0.555	0.478	0.537	0.561	0.470	0.544	0.622	0.570	0.547	0.535	0.361	0.5258
Tx network	\$/kW-mth	5.600	5.600	5.600	5.600	5.600	5.600	5.370	5.370	5.370	5.370	5.370	5.370	5.485
Tx line connection	\$/kW-mth	0.920	0.920	0.920	0.920	0.920	0.920	0.880	0.880	0.880	0.880	0.880	0.880	0.900
Debt Retirement Charge	c/kWh	-	-	-	-	-	-	-	-	-	-	-	-	-
Global Adjustment	c/kWh	6.663	9.434	8.885	10.714	10.659	9.166	6.444	8.554	7.000	9.074	7.983	7.790	
TOTAL MARKET COST CALCULATION														
Total market cost per month	c/kW-mth	8,482	8,888	9,461	10,226	10,231	9,687	8,690	9,708	8,688	10,022	8,911	8,944	
Total annual market cost	c/kW-yr													111,939
TMC = total market cost	c/kWh													12.7784

Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new} Calculations

The Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new} is the greater of (i) the average of the 115-230kV TMC for the three-year period from January 2021 through December 2023 inclusive, based on the number of days in each period and (ii) the Final (2022) 115-230kV DCR_{new}. The Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new} is 12.5817 cents/kWh as shown in Table 3.

Table 3: Second Interim (2023) and Provisional (2024) 115-230kV DCR_{new}

	2021 Final	2022 Final	2023 Second Interim	2024 Provisional
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	12.3426	12.6242	12.7784	
DCR _{new}	12.3342	12.5105		
DCR _{new} 2022 Second Interim = greater of: i) Average of TMC (2021, 2022, 2023) ii) DCR _{new} 2022 Final	12.5817	12.5105		
DCR _{New} 2023 Second Interim			12.5817	
DCR _{New} 2024 Provisional				12.5817

Background on TMC and the DCR

A significant number of Non-Utility Generator (“NUG”) Power Purchase Agreements (“PPAs”) contain provisions that provide for annual contract price adjustment based on the Ontario Hydro Direct Customer Rate (“DCR”). Since the DCR ceased to exist upon market opening it was necessary to establish a replacement index. OEFC approved the replacement of the DCR in the PPAs between OEFC and NUG’s on the basis set out in the draft working paper dated June 24, 2002 prepared by the working committee of OEFC representatives and Independent Power Producers Society of Ontario representatives (“*working paper*”). This replacement index is based on the fully loaded cost of 100% load factor power that the typical direct customer would pay going forward in the restructured market, at the voltage provided. Values for DCR_{new}(P) and TMC(P) in this paper are calculated in accordance with the *working paper*, for year P.

Calculation of the Wholesale Market Charge (“WMSC”) for a given month currently includes the following components:

1. Hourly Uplift Settlement Charges (amount in \$/MWh from IESO data identified as being ‘final’);
2. Daily Uplift Charges (amount in \$/MWh from IESO data identified as being ‘final’);
3. Monthly Uplift Charges (amount in \$/MWh from IESO data identified as being ‘final’);
4. IESO Administration Charge (amount in \$/MWh as determined by the OEB);
5. Rural or Remote Electricity Rate Protection (amount in \$/MWh, as determined by the OEB);
6. Capacity Based Demand Response charges (amount in \$/MWh from IESO data identified as being ‘final’); and,
7. Renewable Generation Connection Monthly Compensation Settlement Credit (amount in \$/MWh from IESO data identified as being ‘final’, except for the month of December, which has been identified as ‘preliminary’).

The WMSC published in IESO Monthly Market Reports (under Wholesale Market Electricity Charges)⁴ are not used for TMC calculations, since they are based on preliminary hourly uplift settlement charges.

Recovering the Cost of Renewable Energy Generation Connections

The recovery of certain connection costs incurred by distribution companies with respect to renewable generation was enabled by Ontario Regulation 330/09. Guidehouse has included the Renewable Generation Connection Monthly Compensation Settlement Credit amounts in the monthly Wholesale Market Service Charges component of the TMC; however, for clarity, the monthly rates have been provided in Table 4 below. These values are also published within the Wholesale Market Electricity Charges section of the IESO's Monthly Market Reports.⁴

Table 4: Renewable Energy Generation Connection Monthly Compensation Settlement Credit

Month (2023)	Rate (\$/MWh)	Preliminary / Final
January	\$ 0.0239	Final
February	\$ 0.0261	Final
March	\$ 0.0245	Final
April	\$ 0.0282	Final
May	\$ 0.0277	Final
June	\$ 0.0261	Final
July	\$ 0.0234	Final
August	\$ 0.0248	Final
September	\$ 0.0268	Final
October	\$ 0.0270	Final
November	\$ 0.0259	Final
December	\$ 0.0246	Final

⁴ IESO Monthly Market Report: <https://www.ieso.ca/en/Power-Data/Monthly-Market-Report>