



## Memorandum

**To:** Mike Manning, Chief Operating Officer, Ontario Electricity Financial Corporation  
**From:** Pedro Torres-Basanta  
**Date:** August 22, 2023  
**Re:** Interim (2023) 115-230kV DCR<sub>new</sub> Calculations

### Introduction

The Ontario Electricity Financial Corporation (“OEFC”) is required to calculate and publish the Interim (2023) TMC<sub>Index</sub> and DCR<sub>new</sub> 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<sub>new</sub> 115-230kV calculation, which has been carried out in accordance with past practice, as summarized in the DCR<sub>new</sub> memo from August 28, 2020.<sup>1</sup> 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-2021-0276 Uniform Transmission Rate decision and the subsequent EB-2022-0084 Uniform Transmission Rates Update decision, issued by the Ontario Energy Board (“OEB”) on December 16, 2021<sup>2</sup> and April 7, 2022<sup>3</sup> 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 since 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 Interim (2023) DCR<sub>new</sub> for 115-230kV is given in Table 1. Supporting information on the calculations involved is provided in the sections that follow.

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<sup>1</sup> OEFC – DCR<sub>new</sub> Memo  
[https://www.oefc.on.ca/pdf/2019\\_final\\_DCRnew\\_memo\\_08-28-2020\\_en.pdf](https://www.oefc.on.ca/pdf/2019_final_DCRnew_memo_08-28-2020_en.pdf)

<sup>2</sup> OEB - 2022 UNIFORM TRANSMISSION RATES  
<https://www.rds.oeb.ca/CMWebDrawer/Record/735873/File/document>

<sup>3</sup> OEB – 2022 Uniform Transmission Rates Update  
<https://www.rds.oeb.ca/CMWebDrawer/Record/745099/File/document>

**Table 1: Interim (2023) 115-230kV DCR<sub>new</sub> (cents/kWh)**

Voltage	2023 Interim Jan - Jun
115-230kV	12.5120

**Total Market Cost Calculations**

The Interim (2023) TMC value for 115- 230kV is 13.1052 cents/kWh, as shown in Table 2.

**Table 2: Calculation of Interim (2023) 115-230kV TMC**

		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total /
<b>MONTHLY STATISTICS</b>														
days		31	28	31	30	31	30							181
total hours		744	672	744	720	744	720							4344
														<b>Weighted Average</b>
<b>MARKET RATES</b>														
HOEP	c/kWh	3.328	2.267	2.477	2.047	1.655	2.913							2.4505
WMSC	c/kWh	0.528	0.550	0.473	0.532	0.553	0.434							0.5112
Tx network	\$/kW-mth	5.600	5.600	5.600	5.600	5.600	5.600							5.600
Tx line connection	\$/kW-mth	0.920	0.920	0.920	0.920	0.920	0.920							0.920
Debt Retirement Charge	c/kWh	-	-	-	-	-	-							-
Global Adjustment	c/kWh	6.663	9.434	8.885	10.714	10.659	9.166							
<b>TOTAL MARKET COST CALCULATION</b>														
Total market cost per month	c/kW-mth	8,478	8,884	9,457	10,223	10,225	9,661							
Total annual market cost	c/kW-yr													56,929
TMC = total market cost	c/kWh													<b>13.1052</b>

**Interim (2023) 115-230kV DCR<sub>new</sub> Calculations**

The Interim (2022) 115-230kV DCR<sub>new</sub> is the greater of (i) the average of the 115-230kV TMC for the three-year period from July 2020 through June 2023 inclusive, based on the number of days in each period and (ii) the Final (2022) 115-230kV DCR<sub>new</sub>. The Interim (2023) 115-230kV DCR<sub>new</sub> is 12.5120 cents/kWh as shown in Table 3.

**Table 3: Interim (2023) 115-230kV DCR<sub>new</sub>**

	2020 Final, Jul-Dec	2021 Final	2022 Final	2023 Interim Jan - Jun
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	12.0420	12.3426	12.6242	13.1052
DCR <sub>new</sub>	12.0131	12.3342	12.5105	
DCR <sub>new</sub> 2022 Interim = greater of:				
i) Average of TMC (July 2020 to June 2023)	12.5120			
ii) DCR <sub>new</sub> 2022 Final	12.5105			
DCR <sub>New</sub> 2023 Interim				12.5120

### 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. The Board of Directors of 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 (“IPPSO”) 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<sub>new</sub>(P) and TMC(P) in this paper are calculated in accordance with the *working paper*, for year P.

It should be noted that Calculation of the Wholesale Market Service Charges (“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 and 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 June, which has been identified as ‘preliminary’).

The WMSC published in IESO monthly reports (under Wholesale Market Electricity Charges)<sup>4</sup> 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 in the Wholesale Market Electricity Charges section of the IESO's Monthly Market Report<sup>4</sup>.

**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	Preliminary

\*The Final June Renewable Energy Generation Connection Monthly Compensation Settlement Credit was not provided by the IESO due technical issues on their reporting site as of August 22, 2023.

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