



## Memorandum

**To:** Mike Manning, Chief Operating Officer, Ontario Electricity Financial Corporation  
**From:** Pedro Torres-Basanta  
**Date:** September 14, 2022  
**Re:** Final (2021) 115-230kV DCR<sub>new</sub> Calculations

### Introduction

The Ontario Electricity Financial Corporation (“OEFC”) is required to calculate and publish the Final (2021) 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 Final (2021) 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 the rates resulting from the EB-2020-0251 Uniform Transmission Rate decision, issued by the Ontario Energy Board (“OEB”) on December 17, 2020<sup>2</sup>.

### COVID-19 Pandemic Response

In 2020, as part of the government's response to the COVID-19 pandemic, a portion of the Global Adjustment (“GA”) was deferred for Class A and non-RPP Class B customers for the months of April, May and June 2020 (the “deferred GA amounts”) under amendments to Ontario Regulation 429/04 made under the *Electricity Act, 1998* and Ontario Regulation 191/20 made under the *Emergency Management and Civil Protection Act*. The deferred GA amounts are being recovered from the same classes of customer that benefited from the deferrals during 2021.

Given the short deferral period and minimal amount involved, the deferred GA amounts were included in the total dollar amount of GA that was used to calculate TMC for 2020 and, therefore, the recovery of these deferred GA amounts from customers will not be included in TMC for 2021.

### 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.

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<sup>1</sup> OEFC – DCR<sub>new</sub> Memo  
[h 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 - 2021 UNIFORM TRANSMISSION RATES  
<https://www.rds.oeb.ca/CMWebDrawer/Record/697719/File/document>

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 Final (2021) 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.

**Table 1: Final (2021) 115-230kV DCR<sub>new</sub> (cents/kWh)**

Voltage	Final (2021)
115-230kV	12.3342

### Total Market Cost Calculations

The Final (2021) TMC value for 115-230kV is 12.3426 cents/kWh as shown in Table 2.

**Table 2: Calculation of Final (2021) 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	31	31	30	31	30	31	365	
total hours		744	672	744	720	744	720	744	744	720	744	720	744	8760	
		<b>Weighted Average</b>													
<b>MARKET RATES</b>															
HOEP	c/kWh	1.686	3.252	1.707	0.852	1.357	2.442	2.608	4.048	2.924	3.861	3.936	3.462	2.6747	
WMSC	c/kWh	0.417	0.558	0.457	0.399	(0.002)	0.504	0.504	0.591	0.530	0.611	0.123	0.443	0.4273	
Tx network	\$/kW-mth	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	4.670	
Tx line connection	\$/kW-mth	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	
Debt Retirement Charge	c/kWh	-	-	-	-	-	-	-	-	-	-	-	-	-	
Global Adjustment	c/kWh	9.290	6.579	9.901	11.517	10.750	9.753	8.626	6.062	8.596	6.676	6.886	7.211		
<b>TOTAL MARKET COST CALCULATION</b>															
Total market cost per month	c/kW-mth	9,021	7,526	9,521	9,737	9,550	9,687	9,277	8,505	9,220	8,838	8,424	8,815		
Total annual market cost	c/kW-yr														108,121
TMC = total market cost	c/kWh														<b>12.3426</b>

### Final (2021) 115-230kV DCR<sub>new</sub> Calculations

The Final (2021) 115-230kV DCR<sub>new</sub> is the greater of (i) the average of the 115-230kV TMC for the three-year period from January 2019 through December 2021 inclusive, based on the number of days in each period and (ii) the Final (2020) 115-230kV DCR<sub>new</sub>. The Final (2021) 115-230kV DCR<sub>new</sub> is 12.3342 cents/kWh as shown in Table 3.

**Table 3: Final (2021) 115-230kV DCR<sub>new</sub>**

	2019 Final	2020 Final	2021 Final
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	12.0946	12.5647	12.3426
DCR <sub>new</sub>	11.8008	12.0131	
DCR <sub>new</sub> 2020 Final = greater of: i) Average of TMC (2019, 2020, 2021) ii) DCR <sub>new</sub> 2020 Final	12.3342 12.0131		
DCR <sub>New</sub> 2021 Final			12.3342

**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<sub>new</sub>(P) and TMC(P) in this paper are calculated in accordance with the *working paper*, for year P.

Calculation of the 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 June, which has been identified as ‘preliminary’).

The WMSC published in IESO monthly reports (currently Section 7 of that report) 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<sup>3</sup>.

**Table 4: Renewable Energy Generation Connection Monthly Compensation Settlement Credit**

Month (2021)	Rate (\$/MWh)	Preliminary / Final
January	0.0212	Final
February	0.0226	Final
March	0.0223	Final
April	0.0252	Final
May	0.0244	Final
June	0.0222	Final
July	0.0215	Final
August	0.0196	Final
September	0.0242	Final
October	0.024	Final
November	0.0231	Final
December	0.0214	Final

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<sup>3</sup> IESO Monthly Market Report  
<https://www.ieso.ca/en/Power-Data/Monthly-Market-Report>