



Memorandum

To: Mike Manning, Chief Operating Officer, Ontario Electricity Financial Corporation
From: Craig Sabine and Dixon Grant
Date: September 14, 2021
Re: Interim (2021) 115-230kV DCR_{new} Calculations

Introduction

The Ontario Electricity Financial Corporation (“OEFC”) is required to calculate and publish the Interim (2021) 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 (2021) DCR_{new} 115-230kV calculation, which has been carried out in accordance with past practice, as summarized in the DCR_{new} memo from August 28, 2020.¹ 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-2020-0251 Uniform Transmission Rate decision, issued by the Ontario Energy Board (“OEB”) on December 17, 2020.²

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.

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

² OEB – UTR Decision and Order
<https://www.rds.oeb.ca/CMWebDrawer/Record/697694/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 Interim (2021) DCR_{new} for 115-230kV is given in Table 1. Supporting information on the calculations involved is provided in the sections that follow.

Table 1: Interim (2021) 115-230kV DCR_{new} (cents/kWh)

Voltage	2021 Interim Jan - Jun
115-230kV	12.2036

Total Market Cost Calculations

The Interim (2021) TMC value for 115- 230kV is 12.6666 cents/kWh, as shown in Table 2.

Table 2: Calculation of Interim (2021) 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							181
total hours		744	672	744	720	744	720							4344
														Weighted Average
MARKET RATES														
HOEP	c/kWh	1.686	3.252	1.707	0.852	1.357	2.442							1.8626
WMSC	c/kWh	0.413	0.554	0.453	0.395	(0.006)	0.500							0.3813
Tx network	\$/kW-mth	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
Debt Retirement Charge	c/kWh	-	-	-	-	-	-							
Global Adjustment	c/kWh	9.290	6.579	9.901	11.517	10.750	9.753							
TOTAL MARKET COST CALCULATION														
Total market cost per month	c/kW-mth	9,018	7,523	9,518	9,735	9,547	9,684							
Total annual market cost	c/kW-yr													55,024
TMC = total market cost	c/kWh													12.6666

Interim (2021) 115-230kV DCR_{new} Calculations

The Interim (2021) 115-230kV DCR_{new} is the greater of (i) the average of the 115-230kV TMC for the three-year period from July 2018 through June 2021 inclusive, based on the number of days in each period and (ii) the Final (2020) 115-230kV DCR_{new}. The Interim (2021) 115-230kV DCR_{new} is 12.2036 cents/kWh as shown in Table 3.

Table 3: Interim (2021) 115-230kV DCR_{new}

	2018 Final Jul - Dec	2019 Final	2020 Final	2021 Interim Jan - Jun
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	11.2458	12.0946	12.5647	12.6666
DCR _{new}			12.0131	
DCR _{new} 2021 Interim = greater of: i) Average of TMC (July 2018 to June 2021) ii) DCR _{new} 2020 Final	12.2036	12.0131		
DCR _{New} 2021 Interim			12.2036	

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 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 Section 7 of the IESO monthly reports.

Table 4: Renewable Energy Generation Connection Monthly Compensation Settlement Credit

Month	Rate (\$/MWh)	Preliminary
January	0.0212	Final
February	0.0226	Final
March	0.0223	Final
April	0.0252	Final
May	0.0244	Final
June	0.0222	Preliminary