Guidehouse

Memorandum

**To:** **Mike Manning, Chief Operating Officer, Ontario Electricity Financial Corporation**

**From:** **Pedro Torres-Basanta**

**Date:** **March 01, 2022**

**Re:** **Second Interim (2021) and Provisional (2022) 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 and the Provisional (2022) calculation, which have 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

[1] OEFC – DCRnew Memo
https://www.oefc.on.ca/pdf/2019_final_DCRnew_memo_08-28-2020_en.pdf

[2] OEB - 2021 UNIFORM TRANSMISSION RATES
https://www.rds.oeb.ca/CMWebDrawer/Record/697719/File/document

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 (2021) and Provisional (2022) $DCR_{new}$ for 115-230kV is given in Table 1. Supporting information on the calculations involved is provided in the sections that follow.

**Table 1: Second Interim (2021) and Provisional (2022) 115-230kV DCRnew (cents/kWh)**

| Voltage | Second Interim (2021) and Provisional (2022) |
|---|---|
| 115-230kV | 12.3342 |

### Total Market Cost Calculations

The Second Interim (2021) and Provisional (2022) TMC value for 115-230kV is 12.3426 cents/kWh as shown in Table 2.

**Table 2: Calculation of Second Interim (2021) and Provisional (2022) 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 | 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 | |
| **TOTAL MARKET COST CALCULATION** | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | **12.3426** |

### Second Interim (2021) and Provisional (2022) 115-230kV $DCR_{new}$ Calculations

The Second Interim (2021) and Provisional (2022) 115-230kV $DCR_{new}$ 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 $DCR_{new}$. The Second Interim (2021) and Provisional (2022) 115-230kV $DCR_{new}$ is 12.3342 cents/kWh as shown in Table 3.

**Table 3: Second Interim (2021) and Provisional (2022) 115-230kV DCRnew**

| | 2019 Final | 2020 Final | 2021 Second Interim | 2022 Provisional |
|---|---|---|---|---|
| TMC (P)<br>Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc. | 12.0946 | 12.5647 | 12.3426 | |
| $DCR_{new}$ | 11.8008 | 12.0131 | | |
| $DCR_{new}$ 2020 Second Interim = greater of:<br>i) Average of TMC (2019, 2020, 2021)<br>ii) DCRnew 2020 Final | 12.3342<br>12.0131 | | | |
| $DCR_{New}$ 2021 Second Interim | | | 12.3342 | |
| $DCR_{New}$ 2022 Provisional | | | | 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 $DCR_{new}(P)$ 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 (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 |