

Memorandum

To: Kenneth Russell, Counsel, Ontario Electricity Financial Corporation

From: Todd Williams

Date: June 1, 2013

Re: Final (2012) 115-230kV DCR_{new} Calculations

Introduction

The Ontario Electricity Financial Corporation (“OEFC”) is required to calculate and publish the Final (2012) TMC 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 Navigant Consulting to perform these calculations.

The calculation of the 115-230kV TMC has been adjusted to reflect changes to rates resulting from the updated EB-2011-0268 Ontario Uniform Transmission Rate Order, issued by the Ontario Energy Board (“OEB”) on November 23, 2011.

Additionally, the calculation of the 115-230kV TMC has been adjusted to include settlement amounts to recover certain costs incurred by distribution companies for the connection of new renewable generation to their distribution systems. The costs for 2012 will be assessed for each month over the entire period and will be charged to participants based on their proportion of Allocated Quantity of Energy Withdrawn (“AQEW”) for the month¹. The recovery of these costs was enabled by Regulation 330/09², and the monthly amounts are approved by the OEB.

The Renewable Generation Connection – Monthly Compensation Settlement Credit has been added to the Wholesale Market Service Charges (“WMSC”) component of the 115-230kV TMC, and has been broken out for reference in the background section of this memo. The Independent Electricity System Operator (“IESO”) also introduced a Daily Uplift Charge as of October 2011, which has been added to the WMSC component of the 115-230kV TMC³.

¹ IESO – Recovering the Cost of Renewable Energy Connections; July 22, 2010
<http://www.ieso.ca/imoweb/news/newsItem.asp?newsItemID=5300>

² Ontario Regulation 330/09
http://www.e-laws.gov.on.ca/html/reg/english/elaws_regs_090330_e.htm

³ IESO – Electricity Charges Explained
<http://www.ieso.ca/imoweb/role/wholesaleCharges.asp>

Final (2012) 115-230kV DCR_{new} Calculations

The Final (2012) 115-230kV DCR_{new} is the greater of (i) the average of the 115-230kV TMC for the three calendar-year periods from January 2010 through December 2012 inclusive, based on the number of days in each period and (ii) the Final (2011) 115-230kV DCR_{new}. The Final (2012) 115-230kV DCR_{new} is 7.7539 cents/kWh, as shown in Table 3.

Table 3: Final (2012) 115-230kV DCR_{new}

	2010 Final	2011 Final	2012 Final
Avg annual HOEP	3.6255	3.0152	2.2805
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	8.1132	7.2933	7.1351
DCR _{new}	7.6383	7.7539	
DCR _{new} = greater of:			
i) Average of TMC (2010, 2011, 2012)	7.5135		
ii) Final DCR _{new} (2011)	7.7539		
Final DCR _{new} (2012)			7.7539

The documentation supporting the values used in the calculation shown herein is all publicly available via the IESO, the OEB, and Hydro One Networks, Inc.

Background on 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_{new}(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 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. OPA Administration Charge (amount in \$/MWh, as determined by the OEB); and,
7. Renewable Generation Connection Monthly Compensation Settlement Credit.

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.

At market opening, the Market Power Mitigation Agreement ("MPMA") rebate framework applied to all Ontario consumers, and as such, is incorporated in DCR_{new} calculations. Bill 210 replaced the MPMA rebate with the more transparent Business Protection Plan Rebate ("BPPR") insofar as customers are concerned. While the MPMA rebate was used in the TMC calculations for May 1, 2002 to April 30, 2003, the BPPR was used in the TMC calculation for subsequent periods.

Once again the rebate mechanism changed and the calculation of TMC was updated to reflect this change. Under the Electricity Restructuring Act 2004 (Bill 100), a new rebate mechanism was created called the global adjustment. The global adjustment reflects the difference between total payments made to contracted assets (including NUGs and RFP generators), load reduction contracts and regulated OPG generators (prescribed assets) and any offsetting market revenues. The global adjustment is calculated and paid each month and can be either positive or negative.

In addition to the global adjustment, the new regulation includes the OPG Non-Prescribed Assets ("OPNA") rebate, which ended April 30, 2009, but was last paid to market participants for the period ending January 31, 2009.

Additional details on these rebates and their treatment in the calculation of total market cost can be viewed in the updated Navigant Consulting letter to OEFC dated April 27, 2006 and posted on the OEFC website.

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. Navigant 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 (2012)	Rate (\$/MWh)	Preliminary / Final
January	\$ 0.1295	Final
February	\$ 0.1424	Final
March	\$ 0.1432	Final
April	\$ 0.1545	Final
May	\$ 0.1480	Final
June	\$ 0.1399	Final
July	\$ 0.1237	Final
August	\$ 0.1316	Final
September	\$ 0.1502	Final
October	\$ 0.1482	Final
November	\$ 0.1434	Final
December	\$ 0.1359	Final