

Memorandum

To: Kenneth Russell, Counsel, Ontario Electricity Financial Corporation

From: Stephen Cartwright CFA

Date: July 17, 2007

Re: Final 2006 and Interim 2007 DCR_{new} Calculations

Introduction

OEFC is required to calculate and publish the Final DCR $_{new}$ (2006) once the rebate data has been finalized by the IESO and the Interim DCR $_{new}$ (2007) within 60 days of the end of the previous half-year period. The data for both calculations is now available and OEFC has asked Navigant Consulting to perform these calculations.

Methodology and Results

The Final DCR_{new} (2006) and Interim DCR_{new} (2007) values for both 115kV and 230kV are given in Table 1. Unless changes are made to the structure of regulated rates for 115kV and 230kV directly connected customers, it is expected that the DCR_{new} will be the same for both voltage levels going forward.

Table 1: Final DCR_{new} (2006) and Interim DCR_{new} (2007) for 115kV and 230kV

Voltage	2006 Final	2007 Interim
115 kV and 230 kV	6.6377	6.7192

TMC Calculations

The Final TMC (2006) for both the 115kV and 230kV is 6.6721 cents/kWh, as shown in Table 2. Note that for all years subsequent to 2002, the TMC values for 115kV and 230kV are the same based on the prevailing regulated rate structure.

Table 2: Calculation of Final 115kV and 230kV TMC (2006)

		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total /
MONTHLY STATISTICS														Weighted Average
MARKET RATES														71.0.ago
HOEP	c/kWh	5.554	4.812	4.901	4.352	4.632	4.608	5.052	5.272	3.542	4.020	4.971	3.925	4.6383
WMSC	c/kWh	0.474	0.409	0.635	0.538	0.624	0.465	0.505	0.512	0.380	0.381	0.504	0.426	0.4884
Tx network	\$/kWmth	2.830	2.830	2.830	2.830	2.830	2.830	2.830	2.830	2.830	2.830	2.830	2.830	
Tx line connection	\$/kWmth	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	
DRC	c/kWh	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	
BPPR Rebate	c/kWh	-	-	-	-	-	-	-	-	-	-	-	-	
ONPA Rebate	c/kWh	(0.127)	(0.127)	(0.127)	(0.127)	(0.154)	(0.154)	(0.154)	(0.062)	(0.062)	(0.062)	(0.070)	(0.070)	
Global Adjustment	c/kWh	(0.240)	0.426	0.236	0.615	0.310	0.285	0.102	(0.066)	1.346	1.055	0.379	1.014	
TOTAL MARKET COST CALCUL	ATION													
Total market cost per month	c/kWmth	5,098	4,545	5,086	4,741	4,912	4,616	4,981	5,093	4,617	4,899	5,034	4,825	
Total annual market cost	c/kWhyr													58,447
TMC = total market cost	c/kWh													6.6721

The Interim TMC (2007) for both the 115kV and 230kV is 6.7160 cents/kWh, as shown in Table 2. Note that for all years subsequent to 2002, the TMC values for 115kV and 230kV are the same based on the prevailing regulated rate structure.

Table 3: Calculation of Interim 115kV and 230kV TMC (2007)

		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Total /
MONTHLY STATISTICS						-			_					Weighted
MARKET RATES														
HOEP	c/kWh	4.448	5.912	5.485	4.605	3.850	4.438	-	-	-	-	-	-	4.7740
WMSC	c/kWh	0.599	0.545	0.451	0.365	0.446	0.557	-	-	-	-	-	-	0.4933
Tx network	\$/kWmth	2.830	2.830	2.830	2.830	2.830	2.830	-	-			-	-	
Tx line connection	\$/kWmth	0.820	0.820	0.820	0.820	0.820	0.820	-	-	-	-	-	-	
DRC	c/kWh	0.700	0.700	0.700	0.700	0.700	0.700	-	-	-	-	-	-	
ONPA Rebate	c/kWh	(0.070)	(0.273)	(0.273)	(0.273)	0.001	0.001	-	-	-	-	-	-	
Global Adjustment	c/kWh	0.681	(0.551)	(0.037)	0.472	1.040	0.657	-	-	-	-	-	-	
TOTAL MARKET COST CALCULA	ATION													
Total market cost per month	c/kWmth	5,095	4,621	5,071	4,591	4,857	4,939	-	-	-	-	-	-	
Total annual market cost	c/kWhyr													29,174
TMC = total market cost	c/kWh													6.7160

115kV and 230kV DCRnew Calculations

The Final DCR_{new} (2006) for both 115kV and 230kV is 6.6377 cents/kWh, as shown in Table 4, and represents the greater of (i) the average of the TMC for the six half-year periods from January 2004 through December 2006 inclusive, and (ii) the Final DCR_{new}(2005).

Table 4: Final 2006 DCR_{new} for 115kV and 230kV

	2004 Final	2005 Final	2006 Final
Avg annual HOEP	4.9950	6.8354	4.6383
TMC (P) Current, based on actual HOEP WMSC, regulated tariffs, estimated rebate, etc.	6.0428	7.1982	6.6721
DCR _{new} (115kV)	6.0848	6.4410	
DCR _{new} (230kV)	6.0790	0.4410	
Final DCR _{new} (2006) = greater of: i) Average TMC (2004,2005,2006) ii) DCR _{new} (2005)	6.6377 6.4410		
Therefore, Final DCR _{new} (2006)			6.6377

The Interim DCR_{new} (2007) for both 115kV and 230kV is 6.7192 cents/kWh, as shown in Table 5, and represents the greater of (i) the average of the TMC for the six half-year periods from July 2004 through June 2007 inclusive, and (ii) the Final DCR_{new}(2006).

Table 5: Interim 2007 DCR_{new} for 115kV and 230kV

	2004 Final	2005 Final	2006 Final	2007
	2004 Final	2005 FIIIai	2006 Final	Interim
Avg annual HOEP	4.9950	6.8354	4.6383	
TMC (P)				
Current, based on actual HOEP	6.0428	7.1982	6.6721	6.7160
WMSC, regulated tariffs,				
estimated rebate, etc.				
Final 6 months of 2004 TMC	5.8655			
DCR _{new} (115kV)	6.0848	6.4410	6 6070	
DCR _{new} (230kV)	6.0790	6.4410	6.6372	
Interim DCR _{new} (2007) = greater of: i) TMC (July 2004 to June 2007) ii) DCR _{new} (2006)	6.7192 6.6372			
Therefore, Interim DCR _{new} (2007)				6.7192

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

Background on the DCR

A significant number of NUG 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 non-utility generators on the basis set out in the draft working paper dated June 24, 2002 prepared by the working committee of OEFC representatives and 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 Wholesale Market Service Charges 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. Monthly uplift charges (amount in \$/MWh from IESO data identified as being 'final');
- 3. IESO Administration Charge (amount in \$/MWh as determined by the OEB); and,
- 4. Rural and Remote Electricity Rate Protection (amount in \$/MWh, as determined by the OEB)

The Wholesale Market Service Charges published in IESO monthly reports (currently Section 8 of that report) are not used for TMC calculations, since they are based on unfinalized 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). 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. More detail on these new rebates and their treatment in the calculation of total market cost can be viewed in the updated Navigant Consulting letter to OEFC dated April 20, 2006 and posted on the OEFC website.