

**Haldimand County Hydro Inc.
2012 Electricity Distribution Rates
EB-2011-0170
Vulnerable Energy Consumers Coalition (“VECC”)
Interrogatory Responses**

Lost Revenue Adjustment Mechanism (LRAM)

VECC Question # 1

Reference: Manager's Summary, Page 10

Preamble: Haldimand applied for the recovery of LRAM in its 2010 COS rate application (EB-2009-0265) for the rate years 2006 to 2009 attributable to CDM programs implemented in 2005 to 2007.

- a) Please confirm that the LRAM amounts Haldimand is seeking to recover in this application are new amounts not included in past LRAM claims.

Response

HCHI confirms that the LRAM amount it is seeking to recover in this application is a new amount not included in the LRAM recovery from its 2010 COS rate application (EB-2009-0265). The past LRAM recovery included lost revenues between January 1, 2006 and December 31, 2009 for programs delivered in 2005, 2006, and 2007. Table 1 below illustrates the claim periods of both the previously approved and currently requested LRAM claims. It shows that the requested LRAM claim is for lost revenue that was not included in the previous LRAM claim.

**Table 1 - Details of HCHI's LRAM Claims
Currently Applied For (Current) and Previously Approved (Past)**

Programs	Lost revenue in the following years was covered by:							
	2006	2007	2008	2009	Jan 1 to Apr 30 2010	May 1 to Dec 31 2010	2011	Jan 1 to Apr 30 2012
2005 programs	Past LRAM claim	Past LRAM claim	Past LRAM claim	Past LRAM claim	Current LRAM claim			
2006 programs	Past LRAM claim	Past LRAM claim	Past LRAM claim	Past LRAM claim	Current LRAM claim			
2007 programs		Past LRAM claim	Past LRAM claim	Past LRAM claim	Current LRAM claim			
2008 programs			Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim
2009 programs				Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim
2010 programs					Current LRAM claim	Current LRAM claim	Current LRAM claim	Current LRAM claim

VECC Question # 2

Reference 1: Appendix J, IndEco Report, LRAM Claim, Page 3

Reference 2: Guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037), Page 18

Preamble: Page 3 of the IndEco Report indicates “As part of its 2010 Cost of Service application, HCH incorporated load reductions associated with its entire CDM portfolio into its load forecast.”

- a) Please discuss the rationale for seeking a claim for savings beyond April 30, 2010 when the Board’s Guideline (EB-2008-0037) indicates “Lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the savings would be assumed to be incorporated in the load forecast at that time.”

Response

A claim for savings beyond April 30, 2010 is being sought for 2008, 2009, and 2010 programs in order to keep HCHI revenue neutral with respect to these programs. When HCHI prepared its 2010 load forecast final results for 2008, 2009, and 2010 programs were not available. Consequently, HCHI had to estimate the impact of these programs on the 2010 load forecast.

Once final OPA-verified program results were available for 2008, 2009, and 2010 programs, the energy savings were compared to the estimated energy savings included in the 2010 load forecast. The energy savings in final OPA-verified results were greater than the estimated energy savings that HCHI included in its 2010 load forecast. As a result, HCHI would not be revenue neutral with respect to these programs. LRAM for 2008, 2009, and 2010 programs is being requested on the difference between the estimated savings included in the 2010 load forecast and the final OPA-verified program savings.

The intent of LRAM is to protect Local Distribution Companies (“LDCs”) from lost revenue associated with participation in CDM programs. Not allowing for a collection of LRAM on programs whose final results are unavailable at the time that new rates are being set by the Board would act as a major disincentive towards CDM for LDCs. LDCs would be in a position where they would be first unable to accurately account for the impacts of such programs when preparing a load forecast and then

denied the ability to claim LRAM on any differences between estimated and final program results. LDCs would no longer be guaranteed protection from lost revenues from these programs.

- b) Please provide an updated LRAM exclusive of estimated lost revenues past April 30, 2010.

Response

An LRAM amount exclusive of estimated lost revenues past April 30, 2010 is provided in Table 2 below. HCHI feels that this LRAM amount of \$215,266 including carrying charges would not be the appropriate amount. HCHI's requested LRAM claim is \$249,145, including carrying charges. The difference of \$33,879 (\$249,145 - \$215,266), representing revenues lost between May 1, 2010 and April 30, 2012 from programs delivered in 2008, 2009, and 2010, would be unaccounted for.

Table 2 - LRAM Claim up to April 30, 2010 Only

Rate class	LRAM up to April 30, 2010	Carrying Charges	Total LRAM Claim
Residential	\$138,688	\$5,651	\$144,339
G/S Less than 50 kW	\$38,659	\$1,187	\$39,846
G/S 50 to 4,999 kW	\$30,123	\$958	\$31,081
Total	\$207,470	\$7,796	\$215,266

The reason that the LRAM amount for G/S Less than 50 kW rate class up to April 30, 2010 is higher than the LRAM claim for the G/S Less than 50 kW rate class up to April 30, 2012 is that HCHI overestimated the impacts of 2008, 2009, and 2010 G/S Less than 50 kW programs in its 2010 load forecast. This is similar to response to Board Staff IR #4 c).

VECC Question # 3

Reference: Appendix J, IndEco Report, LRAM Claim

- a) List and confirm OPA's input assumptions for Every Kilowatt Counts (EKC) 2006 including the measure life, unit kWh savings and free ridership for Compact Fluorescent Lights (CFLs) and Seasonal Light Emitting Diodes (LED). Confirm some of these assumptions were changed in 2007 and again in 2009 and compare the values.

Response

Table 3 below compares final OPA-verified 2006 Every Kilowatt Counts ("EKC") results for 2006 EKC Compact Fluorescent Lights ("CFLs") and Seasonal Light Emitting Diodes ("SLEDs") to the final OPA-verified 2007 EKC results and the 2009 OPA Measures and Assumptions list. Input assumptions for CFLs and SLEDs have changed periodically, including most recently in 2009, as reflected in updates to the generic OPA Measures and Assumptions list.

Table 3 - Comparison of Inputs from Different Sources for CFLs & SLEDs

	OPA-Verified Final 2006 EKC Results			OPA-Verified Final 2007 EKC Results			2009 OPA Measures & Assumptions List		
Measure	Measure Life	Gross Savings (kWh/a)	Free Rider Rate	Measure Life	Gross savings (kWh/a)	Free Rider Rate	Measure Life	Gross savings (kWh/a)	Free Rider Rate
Energy Star® CFL	4	104	10%	8	43	22%	8	43	30%
SLEDs	30	31	10%	5	14	51%	5	14	30%

The inputs in the Table 3 for 2006 and 2007 EKC are from final OPA-verified program specific evaluations. OPA advises that these program results are prepared in a manner consistent with OPA current practice and are the same values used to report progress against provincial conservation targets.

Where there are program specific evaluations, as there are for the 2006 and 2007 EKC programs, that information provides more specific and appropriate input values than the generic ones in the OPA Measures and Assumptions lists. The use of program-specific evaluations of

OPA-funded Residential programs for LRAM calculations is appropriate and has been accepted by both Board Staff in its submissions and the Board itself in several Decisions, including the following:

- ***Burlington Hydro Inc.’s EB-2010-0067, Decision and Order dated March 17, 2011;***
- ***Norfolk Power Distribution Inc.’s EB-2011-0049, Decision and Order dated May 6, 2011; and***
- ***Hydro One Brampton Network Inc.’s EB-2010-0132, Decision and Order dated April 4, 2011.***

In each of these Decisions, the use of program-specific evaluations of OPA-funded programs for the calculation of LRAM is explicitly addressed and approved.

- b) Demonstrate that savings for 2005 Mass Market Measures and EKC 2006 Mass Market measures 13-15 W Energy Star CFLs have been removed from the LRAM claim in 2010.

Response

2005 Mass Market CFLs and 2006 EKC Mass Market CFLs that belong to HCHI’s CDM portfolio are provided in Table 4 below.

Table 4 - 2005 and 2006 Mass Market CFLs within HCHI’s CDM Portfolio

Program	Measure	Units	Annul Energy Savings (kWh)	Measure Life	Source of Input Assumptions
2005 Lighten your Electricity Bill	15 W CFLs	1,535	44.4	8	2011 Measures and Assumptions list
2006 EKC	CFLs – Spring campaign	5,721	104.4	4	Final OPA-verified program evaluation
2006 EKC	CFLs – Autumn campaign	8,483	104.4	4	Final OPA-verified program evaluation

Note: The “2005 Lighten your Electricity Bill” program did not have a program-specific verified evaluation. As such, the best available input assumptions for the LRAM claim were the 2011 OPA Measures & Assumptions list.

The 2006 EKC CFLs have measure lives of 4 years. As such they would expire as of the end of 2009. Since HCHI's proposed LRAM claim only included energy savings from 2005, 2006, and 2007 programs between January 1, 2010 and April 30, 2010, HCHI confirms that no LRAM was claimed for 2006 EKC CFLs in 2010. This can be seen by examining Table 8 of the IndEco report found as "Appendix J" of HCHI's application. This table is a measure-by-measure breakdown of the LRAM claim; the 2006 EKC CFLs are not found within this table.

The "2005 Lighten your Electricity Bill" CFLs have measure lives of 8 years (as specified in the 2011 OPA Measures & Assumptions list). As such, a LRAM was claimed for these CFLs for the period between January 1, 2010 and April 30, 2010. The calculation of this LRAM claim is shown in Table 5 below.

**Table 5 - Calculation of LRAM Claim Associated with
"2005 Lighten your Electricity Bill" 15W CFLs**

Measure	Annual net energy savings							
	Included in previous LRAM claim	Included in previous LRAM claim	Included in previous LRAM claim	Included in previous LRAM claim	Included in proposed LRAM claim	Included in load forecast	Included in load forecast	Included in load forecast
	2006	2007	2008	2009	Jan 1 2010 - Apr 30 2010	May 1 2010 - Dec 31 2010	2011	2012
2005 Lighten your Electricity Bill 15 W CFLs	47,708 kWh	47,708 kWh	47,708 kWh	47,708 kWh	15,903 kWh	31,805 kWh	47,708 kWh	47,708 kWh
					×			
Residential electricity rate					0.0334			
LRAM pre-carrying charges					\$531			
					+			
carrying charges					\$15			
Total LRAM					\$546			

Table 8 of the IndEco report found as "Appendix J" of HCHI's application confirms that the LRAM being claimed for "2005 Lighten your Electricity Bill" 15W CFLs is \$546.

- c) Adjust the LRAM claim as necessary to reflect the measure lives and unit savings for any/all measures that have expired in 2010.

Response

No adjustments to the current LRAM claim are needed in order to reflect measure lives (and unit savings) for measures that have expired starting in 2010.

The requested LRAM claim already accounts for any measures that have expired before the full span of the LRAM claim. The LRAM claim is based on lost revenue over the span of the LRAM claim, or until the end of each measure's respective measure life, whichever is shorter. For example, if a measure installed in 2009 had a measure life of 1 year, LRAM was only claimed for that measure between January 1, 2009 and December 31, 2009.

- d) Identify all Mass Market Measures (CFLS etc) installed in 2005 and 2006 with measure lives of 4 years or less for which savings have been claimed in any prior claim.

Response

The only Mass Market measures installed in 2005 and 2006 with measures lives of 4 years or less are the 2006 EKC CFLs. No LRAM is included for these measures in HCHI's LRAM claim.

- e) Adjust the current Third Tranche LRAM claim as necessary to reflect the measure lives (and unit savings) for any/all measures that have expired.

Response

Consistent with response to VECC IR #3 c), no adjustments to the current LRAM claim are needed in order to reflect measure lives (and unit savings) for Third Tranche measures that have expired.

VECC Question # 4

Reference: Appendix J, IndEco Report, LRAM Claim, Appendix A, Page 28

Preamble: For the 2009 Every Kilowatt Counts Power Savings Event, under the Installed CFLs – Spring Campaign – Participant Spillover measure, the input assumptions are a measure life of 8 years, energy savings of 101 kWh/yr and a free ridership of 87%.

Please explain these input assumptions in the context of Haldimand's response to VECC #3a.

Response

The measure life and energy savings inputs for the measure identified by the OPA as the “2009 Every Kilowatt Counts Power Savings Event Installed CFLs, Spring Campaign, Participant Spillover” were provided in the Ontario Power Authority’s evaluation results. These results come from an evaluation conducted on behalf of the OPA. OPA advises that these estimates are prepared in a manner consistent with OPA current practice and are the same values used to report progress against provincial conservation targets. HCHI has no information on how the OPA developed these energy savings and measure life inputs and has no reason to reject these values that were developed through the OPA’s evaluation of the EKC programs.

VECC IR #3 a) refers to 15W CFLs that were installed as part of the 2006 EKC program. Results for 2006 EKC measures also come from an evaluation conducted on behalf of the OPA and again, HCHI has no reason to reject these values that were developed through the OPA’s evaluation of the EKC programs.

While HCHI has no information on how the OPA developed energy savings, measure lives, or free rider rates for the “2009 Every Kilowatt Counts Power Savings Event Installed CFLs, Spring Campaign, Participant Spillover”, the measure description implies that they refer to spillover savings from the EKC program. Furthermore, the measure description offers no indication that these bulbs are strictly 15W CFLs. The 2009 EKC measure does not appear to be equivalent to the 2006 EKC 15W CFLs with no spillover.