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Lakefront Utilities Inc.

LRAM and SSM Support

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1. Introduction

Lakefront Utilities Inc. (Lakefront Utilities) initiated four Conservation and Demand Management (CDM) programs since Third Tranche CDM funding commenced in 2005, and augmented those local programs through direct support and involvement with Ontario Power Authority (OPA) provincial programs. The summaries of the programs that have been executed from 2005 to 2008 are outlined in the Appendices under Lakefront Utilities' OEB CDM Annual Report attached to this report.

By the end of 2008, Lakefront Utilities had completed the CDM programs in the residential, commercial/industrial segments from its Third Tranche funding of \$165,688. This commitment to CDM and the overall expenditures per kWh saved is 0.01 and has made over 22,500 contacts with users of electricity in the Town of Cobourg (as reported by Lakefront Utilities in their 2008 CDM Annual Report).

With success in its CDM activities, Lakefront Utilities has lost revenues that need to be addressed as part of its 2008 rates submission to the Ontario Energy Board (OEB). This process will ensure that future CDM investments are sustainable in the long term by becoming a standard element in future rate filings.

The Ontario Energy Board (OEB) introduced a process outlined in the March 28, 2008 Guidelines for Electricity Distributor Conservation and Demand Management EB-2008-0037) ("CDM Guidelines") for rate-based applications to recover revenues lost to customer energy conservation, and to share in gains from effective CDM programs prior to the completion of Third Tranche CDM programs. The mechanism developed by the OEB to calculate lost revenue for savings is the Lost Revenue Adjustment Mechanism (LRAM).

LRAM calculations are made from the energy savings data from measured CDM program results, or other documented results as applied to the affected rate class. Results from OEB-approved (third tranche) CDM programs, OPA CDM programs and Lakefront Utilities funded programs represent the potential for lost revenue to the LDC, and will be included in calculations under LRAM.

The application for LRAM compensation is part of Lakefront Utilities' 2011 IRM filing and is based on its 2005 to 2008 inclusive CDM results.

2. Required

Lakefront Utilities requested that Burman Energy Consultants Group Inc. (BECGI) review the LDC's preliminary LRAM and SSM and supporting information and assist in producing finalized calculations and report suitable to support an LRAM and SSM claim as part of its 2011 rates submission. In completing the scope of work related to LRAM and SSM, BECGI committed to:

- 1. Review LRAM, SSM and Third Trance Total Resource Cost (TRC) calculations and underlying data prepared by Lakefront Utilities for annual year end CDM reports, and assess compliance with the CDM Guidelines, identifying variances and reconciliations.
- 2. Prepare and finalize LRAM and SSM calculations and assumptions consistent with CDM Guidelines and suitable for inclusion in Lakefront Utilities 2011 IRM/rates application, with supporting details.
- 3. Produce a report, recommendations, and supporting Attachments related to LRAM and SSM assessments/findings.

In performing the above tasks, BECGI's involvement is intended to constitute a third party review as specified in the OEB's CDM Guidelines.

3. About LRAM/SSM

The OEB issued GUIDELINES FOR ELECTRICITY DISTRIBUTOR CONSERVATION AND DEMAND MANAGEMENT, EB-2008-0037 were applied to the preparation of this LRAM application.

LRAM was calculated as the product of the demand/energy savings by customer class and the Board-approved variable distribution charge appropriate to each respective class (net of Regulatory Asset Recovery rate riders). Both Third Tranche and OPA sponsored program kW/kWhs savings were deemed eligible for consideration capacity of the LRAM claim.

For SSM, a distributor may seek to recover 5% of the net benefits (TRC) created by CDM portfolio investments. An SSM claim applies only to customer focused initiatives that reduce the demand for electricity and/or the amount of energy used. Programs designed to improve Distribution System efficiency (eg. loss reduction) and OPA sponsored programs (eg., Every Kilowatt Counts) are excluded from SSM considerations.

4. Methodology

To optimize the calculation of LRAM and SSM amounts, BECGI:

- Reviewed existing LRAM and SSM CDM Guidelines and precedents set through LDC submissions to the OEB, to identify the most prudent course for Lakefront Utilities LRAM and SSM application.
- 2. Sought counsel within OEB staff to validate assumptions and processes to complete LRAM submission consistent with other LDC submissions. Validation by each specific technology employed is included in the accompanying documentation.
- 3. Reviewed Lakefront Utilities CDM program results and TRC calculations, verified assumptions and calculations, identified variances with reported values, and recommended adjustments as appropriate to maintain consistency with the CDM Guidelines. Actual program results were provided by Lakefront Utilities, including CDM Annual Reports, OPA program results reports, and supplemental information relevant to LRAM and SSM calculations.
- 4. Prepared report and recommendations related to LRAM and SSM calculations consistent with OEB CDM Guidelines which are in the accompanying documentation.

5. Results

A review of LDC CDM programs with Lakefront Utilities verified that documentation exists to support participation levels associated with the LRAM or SSM for Third Tranche and Lakefront Utilities funded programs.

The OPA has validated the results allocated to Lakefront Utilities for OPA sponsored programs through Third Party Verification. Program results were confirmed to begin the year after program implementation.

The timing of results used in LRAM calculations for OPA sponsored programs are contained in the accompanying documentation under OPA Conservation Results, issued November 10, 2009.

The accompanying table below sets out the calculated amounts for LRAM and SSM for Lakefront Utilities Third Tranche and OPA CDM programming. The calculation of the results, by program and customer class as applicable, are explained in the text below, and detailed in the appended attachment.

Rate Class

	LRAM \$	SSM \$	TOTAL \$
Third Tranche RESIDENTIAL	\$10,442.52	\$8,590.41	\$19,032.93
OPA Programs RESIDENTIAL GENERAL SERVICE <50KW	\$58,410.88 \$7,374.89		\$58,410.88 \$7,374.89
General Service>50kW to 2,999kW GENERAL SERVICE (3,000- 4,999kW)	\$72,742.99 \$33,091.28		\$72,742.99 \$33,091.28
Lakefront Funded Programs Street Lighting	\$14,451.26	\$29,707.38	\$44,158.63
	\$196,513.82	\$38,297.79	\$234,811.60

6. Determination of SSM Amount

For SSM, a distributor may recover 5% of the net benefits (TRC) created by CDM portfolio investments. As set out in the CDM Guidelines, program net benefits are determined by the present value of the avoided electricity costs over the technology's/program's life minus the present value of program costs. All results are net of free ridership. Incentive payments identified by Lakefront Utilities are excluded from these calculations. For all programs/projects, the OEB Total Resource Cost Guide, Section 5, Assumptions and Measures List September 8, 2005 were used in TRC calculations in accordance with OEB's direction letter, Conservation and Demand Management ("CDM") Input Assumptions Board File No.: EB-2008-0352, January 27, 2009.

BECGI has validated applied TRC methodology against the CDM Guidelines (included in documentation) and calculated net TRC benefits for each CDM program. CDM incremental general administrative costs were included as part of overall portfolio TRC costs. BECGI's TRC Calculator © was used to ensure appropriate application of avoided costs, free ridership, discounted future benefits, and energy efficiency technology life.

Utility-side programs, such as Loss Reduction on the Distribution System and Smart Metering Pilot Project are not eligible for SSM treatment and were excluded from these calculations. Also excluded were results from OPA sponsored programs (e.g., Every Kilowatt Counts).

Programs considered for this application are described in annually submitted year-end CDM reports for 2006, 2007 and 2008. For each eligible program, net load reductions were calculated (net of free ridership) for both SSM and LRAM calculations. Attachment A summarizes these load reductions.

For the purpose of TRC calculation to derive SSM, the applied discount rates for Lakefront Utilities (approved Weighted Average Cost of Capital) were 8.565% (2005), 8.125% (2006), 7.4091% (2007) and 7.4832% (2008). The sum of all program NPVs, is \$765,955.77 resulting in the SSM claim of \$38,297.79. Attachment C summarizes the calculation of the SSM amounts by program, technology and in total. The supporting source data and TRC calculations are set out in detail in the documentation accompanying this report.

7. Determination of LRAM Amount

LRAM amounts were identified by rate class consistent with the CDM Guidelines for programs that impacted revenues from 2006 to 2009, for both Third Tranche and OPA CDM programs. No forecast or other adjustment for the effects of CDM programs was made to the load quantities used in the preparation of Lakefront Utilities rate cases in prior years. The entire actual load reduction achieved by the eligible Third Tranche CDM programs is subject to LRAM treatment. All results are net of free ridership. For all programs/projects, the most recently published OPA assumptions and measures list were used in LRAM calculations in accordance with OEB's direction letter, Conservation and Demand Management ("CDM") Input Assumptions Board File No.: EB-2008-0352, January 27, 2009 and consistent with recent Decision and Order EB-2009-0192 for Horizon Utilities Corporation that directed LRAM calculations use the most current available input assumptions for all CDM programs.

OPA sponsored programs also represent lost revenue through their successful implementation and are included in LRAM calculations. Lost revenue from results attributable to Lakefront Utilities funded programs were also included in the LRAM calculations. Although not specifically addressed in the CDM Guidelines, this assessment was considered to be consistent with the CDM Guideline intention of removing the disincentive of eroding distributor revenues due to lower than forecast revenues.

The sum of all program LRAM calculations, including OPA sponsored programs is \$196,513.82

Attachment A summarizes load impacts by class and program. Attachment B (Foregone Revenue By Class and Program) summarizes the CDM load impacts by program and rate class and the resultant revenue impacts.

8. Allocation and Manner of Recovery for LRAM Amounts

The LRAM and SSM amounts arising from CDM programs in each respective rate class are allocated to that class for recovery. LRAM and SSM rate riders should be combined and expressed as a single rate rider for each class, based on approaches taken by other LDCs

9. Recommendations

BECGI recommends the following:

- 1. LRAM/SSM amounts arising from CDM programs in each rate class be allocated to that class for recovery.
- 2. Incorporate impacts of CDM programming which occurred during the period 2005 to 2008 In future Cost of Service rate applications inclusive. This recognizes CDM as an established customer service element in the years ahead, with identifiable costs and benefits.
- 3. Use TRC/SSM calculation as one of the methods to assess the potential value of CDM programs considered for implementation.
- 4. Monitor savings attributed to 2009 OPA program implementation. LRAM calculations include preliminary 2009 results for programs implemented in 2009 as well as final results for programs implemented between 2006 to 2008. This report did not consider any OPA programs implemented or operated during 2010, as the results for these programs will not be available until sometime in 2011.