EB-2008-0346

Revised Draft Demand Side Management Guidelines for Natural Gas Utilities

Feb 14, 2011

Toronto and Region Conservation Authority (TRCA) Comments

Section 1: Overview

TRCA has no comment.

Section 1.1: Background

TRCA has no comment.

Section 1.2: Overview of the Revised Draft DSM Guidelines

TRCA supports having the DSM Guidelines be consistent with elements of the Ontario electricity CDM framework provided to encourage a streamlined approach to delivering effective programs.

Section 2: Term of the Plan

TRCA disagrees that the initial term of the multi-year plans should be three years. This timeframe would appear to be too short for proper planning and stakeholder engagement. A longer period of 4-5 years would address this as well as provide a longer-term orientation to DSM programming by the gas utilities, thereby allowing the longer-term engagement of customers for deeper savings and the establishment of a culture of continuous improvement.

TRCA agrees that if the Board is satisfied that the natural gas DSM framework remains appropriate, the Board could extend its term.

Section 3: Program and Portfolio Design

TRCA agrees with the four objectives and that the guidelines should ensure that adequate flexibility in DSM program and portfolio design is maintained.

TRCA agrees with allowing fuel-switching away from natural gas where these activities align with the DSM objectives and contribute to a net reduction in greenhouse gases. TRCA also agrees that fuel switching to natural gas is not a DSM activity and DSM funds should not be used for this purpose, **except** where the switch is to methane from bio-gas derived from anaerobic digestion of organic matter in landfills or constructed digesters. Fuel-switching to natural gas derived from biogas facilities and operations should be considered a DSM activity and funds should be used for this purpose.

TRCA disagrees that the natural gas utilities should be required to seek approval to re-allocate funds to new or existing programs if the total budget does not change. Such a requirement unnecessarily decreases flexibility for management.

TRCA agrees that approval would be required to increase its budget beyond that allowed by the variance account.

Section 4: Program Types

TRCA suggests that the limitation of three types of programs over the DSM Plan period may be unnecessarily constraining and can prevent adaptation to changing market conditions over the DSM Plan period. TRCA suggests that a gas utility should be able to create a new initiative such as a fund for pilots or R&D and have it discussed with stakeholders and brought forward to the Board for approval.

Section 4.1: Resource Acquisition Programs

TRCA suggests that there is another approach that is not reflected in the resource acquisition program and which is not only complementary but is also fast becoming adopted by the market as the approach for finding deeper savings at a lower cost. The performance based approach harvests the considerable potential for low cost, high total resource cost (TRC) savings resulting from operational improvements, re-commissioning of building systems, and upgraded controls and automation. By continuously monitoring and reporting on actual energy use and savings achieved, it helps verify that prescriptive measures are properly installed and operated and do indeed realize the estimated savings upon which prescriptive incentives are calculated.

Performance-based conservation is transforming the market in Ontario and beyond. In September, 2009 Real Property Association of Canada (REALpac) launched its “20 by ’15” target which aims to lower median energy for office buildings by up to one half by 2015. “20 by ’15” is derived from the performance metrics developed through the national performance based GREEN UP program, and is receiving worldwide attention as a model for deep conservation and emissions reductions. The Government of Canada is considering the results of these performance based conservation programs in its development of Energy Star for buildings in Canada.

What TRCA has learned is that:

- performance based conservation delivers far greater energy savings than had been expected,
- the larger part of the savings is found in low/no cost improvements,
- successful and sustainable conservation has more to do with good management than with technology,
- conservation programs have to support building managers with information, tools and resources so that they can recognize the unique set of conservation opportunities in their facilities,
- benchmarking can identify buildings with high conservation potential, inform target-setting and point to where savings are to be found in each building, and monthly savings reporting flags variances in predicted savings, identifies measures which do not perform as intended, verifies savings which have been achieved and guides continuous improvement.

TRCA suggests that resource acquisition programs that use actual data should be encouraged and preferred over those which use calculated estimates.

TRCA strongly recommends that the Board Staff recognize non-technology operational measures, which can be monitored for verified savings and persistence, as part of the mix for resource acquisition programs. Customized projects should go beyond specialized equipment or technology to include operational measures that are verified by actual consumption data.

Section 4.2: Low-Income Programs

TRCA supports the comments of LIEN with respect to low-income programs.

Section 4.3: Market Transformation Programs

TRCA agrees that market transformation programs should be assessed on their own merits based on the specific objectives of the program.

TRCA agrees that market transformation programs should be outcome-based e.g., selected and designed to achieve measurable impacts on the market but not necessarily technology focused.

Section 4.4: "R&D" and Pilot Programs

TRCA disagrees that R&D and pilot programs should be reviewed on a case-by-case basis if this slows down the ability of the gas utility to respond to new developments in the market when it needs to learn more about the effectiveness of its existing technologies, programs and their performance.

TRCA disagrees that funding for these activities be supported by the budgets associated with one or more of the three generic types of natural gas DSM program (i.e., resource acquisition, low-income, and market transformation programs). They should be evaluated on their own merits as they contribute to better effectiveness of the existing programs.

TRCA disagrees that a pilot program is one that involves the installation, testing and/or evaluation of technologies that are not already in use in Ontario, or in limited use, and that serves as a tentative model for future development. A pilot should also allow the testing and evaluation of actual performance of technologies that may already be in existence in Ontario. There is still much to learn about the actual performance and efficiencies of current technologies and processes that pilots and R&D can be very valuable to uncover.

TRCA agrees that a properly structured pilot should provide an opportunity to gain experience in business processes, installation procedures, logistics, deployment, integration issues, customer communications, and customer impacts but would add performance verification to the list.

TRCA agrees that the natural gas utilities should be prepared to share the results and knowledge gained through the R&D or pilot program with the Board and other utilities.

Section 5: Screening and Prioritization

TRCA has no comment.

Section 5.1: Screening Test

TRCA has no comment.

Section 5.1.1 Net Equipment Costs

TRCA has no comment.

Section 5.1.2: Program Costs

TRCA has no comment.

Section 5.1.3: Modified TRC Test Calculation

TRCA has no comment.

Section 5.2: Market Transformation Programs

TRCA agrees that market transformation programs should be assessed on their own merits based on the specific objectives of the program.

Section 5.3: R&D and Pilot Programs

TRCA agrees that R&D and pilot programs are not amenable to a mechanistic screening approach and should be assessed on their own merits based on the specific objectives of the program.

Section 5.4: Prioritization

TRCA has no comment.

Section 6: Development Updating and Use of Assumptions

TRCA has no comment.

Section: 6.1: Input Assumptions

TRCA agrees.

Section: 6.1.1: Base Case Assumptions

TRCA has no comment.

Section 6.1.2: Updates to Input Assumptions during the DSM Plan

TRCA has no comment.

Section 6.1.3: Use of Input Assumptions

TRCA agrees that the natural gas utilities should design and screen DSM programs using the best available information known to them at the relevant time and that they should continuously monitor new information.

TRCA agrees that the natural gas utilities should determine if and when a program needs to be adjusted based on new information.

Section 6.2: Avoided Costs

TRCA has no comment.

Section 6.2.1: Updating Avoided Costs

TRCA agrees that natural gas utilities should submit avoided costs for approval as part of their multi-year DSM plan, with the commodity costs to be updated annually (i.e., for natural gas and, if applicable, for other resources such as electricity, water, heating fuel oil and propane) but all other avoided costs (e.g., avoided distribution system costs such as pipes, storage, etc.) to remain fixed for the duration of the plan.

Section 6.2.2: Costs of Carbon Dioxide Equivalent Emissions

TRCA suggests that the value for avoided CO_2 emissions should be at a minimum $18 per tonne based on the National Round Table on the Environment and the Economy latest report "Achieving 2050: A Carbon Pricing Policy for Canada" for the timeframe of the DSM Guidelines.

Section 6.2.3: Discount Rate

TRCA suggests using Ontario Energy Board's Deemed Long-Term Debt Rate: 5.5%

Section 7: Adjustment Factors for Screening and Result Evaluation

TRCA has no comment.

Section 7.1: Free Ridership and Spillover effects

TRCA agrees.

Section 7.2: Attribution

TRCA agrees.

Section 7.2.1: Attribution: Electric Utilities

TRCA agrees.

Section 7.2.2: Attribution: Other Parties

TRCA disagrees that attribution be based on share of costs incurred. TRCA recommends attribution of benefits to both parties based on the centrality principal in order to discourage replication of efforts and encourage leverage of gas (and electric) utilities' efforts.

Section 7.3: Persistence

TRCA agrees that the natural gas utilities should provide a rationale for the persistence factor it is using for each of its programs. The natural gas utilities should seek guidance through its stakeholder engagement process to determine the extent to which persistence factors should be developed for each program.

TRCA believes that a performance based approach can provide a better means of managing persistence as it relies on actual monthly billing data to determine conservation savings over multi-year programs. This lends itself to better tracking of implemented conservation measures and their persistence.

Section 8: Budgets

TRCA agrees that DSM budgets should be established at the outset of the multi-year DSM plan term.

Section 9: Metrics

TRCA has no comment.

Section 9.1: Metrics for Resource Acquisition Programs

TRCA agrees that DSM metrics should be straightforward and verifiable to the extent possible. TRCA suggests using a scorecard approach for evaluation of each program where the scorecard metrics and their relative weights be determined by the gas utility in consultation with stakeholders.

Section 9.2: Low-Income Programs

TRCA agrees that low-income programs should be evaluated using a scorecard approach. TRCA suggests that the scorecard metrics and their relative weights be determined by the gas utility in consultation with stakeholders.

Section 9.3: Market Transformation Program Metrics

TRCA agrees that market transformation programs should be evaluated using a scorecard approach. TRCA suggests that the scorecard metrics and their relative weights be determined by the gas utility in consultation with stakeholders.

Section 10: DSM Targets

TRCA agrees with the target levels and that annual targets should be set for each year of each program.

Section 11: Incentive Payments

TRCA has no comment.

Section 12: Lost revenue Adjustment Mechanism

TRCA has no comment.

Section 13: Accounting Treatment

TRCA has no comment.

Section 14: Program Evaluation

TRCA has no comment.

Section 15.1: Evaluation Plan

TRCA suggests that for custom resource acquisition projects, which usually involve specialized equipment, savings figures based on actual utility consumption data be the primary documentation rather than the suggested engineering estimates as this data is not only accessible but is more reliable and accurate.

Similarly, TRCA suggests that the assessment should focus on verifying the equipment installation, and actual savings rather than estimated savings and equipment costs.

Sections 15.2 - 18

TRCA has no comments on these sections.