

BOMA INTERROGATORY #8

INTERROGATORY

1. Ref: Exhibit B, Tab 1, Schedule 6

- (a) To what extent are the measures that are the contained in this application updated measures for which prescribed calculation of savings have already been made, and if so, how do they update those calculations, as opposed to calculations for new measures for which savings calculations are being made for the first time? Please be specific in your answer, in other words, address each of the measures listed and for which savings calculation formulae are already being provided, in your answer.
- (b) How do the savings calculation formulae for the residential measures compare to the calculation prescribed for the Ontario MOEEC Total Home Retrofit Program?
- (c) Preamble - EB-2014-0134 Guidelines, p25:

*"Where feasible and economically practical, the preference to determine LRAM and shareholder incentive amounts should be to use measured actual results, instead of input assumptions. For example, it may be feasible and economically practical to measure the natural gas savings of weatherization programs based on the results of the pre- and post-energy audits conducted by certified energy auditors on a custom basis, as opposed to input assumptions associated with the individual measures installed."*

Please provide copies of any studies (in particular, more recent studies) undertaken by either the utilities, third parties contracted by the utilities, auditors, the Board staff, the TEC, or any other player in the DSM measure creation/approval process which, since the use of prescriptive or quasi-prescriptive savings determination began, that assess the accuracy of the engineering forecast equations, by measuring the before and after gas consumption of the structure, or facility. Please identify which of those studies were done of Ontario installations and structures.

Witnesses: D. Bullock  
L. Kulperger

## RESPONSE

- a) Other than Adaptive Thermostats, all prescriptive measures updated in the Technical Reference Manual (“TRM”) are measures for which prescribed calculation of savings had already been developed and outlined in pre-existing substantiation documents.

Consideration of input assumptions, calculations and baselines for both new and existing measures were assessed per a Technical Evaluation Committee (“TEC”) endorsed TRM work plan. Energy and Resource Solutions Inc. (“ERS”) was directed to review, validate / update existing measure assumptions, enhance the content of existing substantiation documents and develop assumptions for new measures based on industry best practice and best available information.

- b) The Utilities interpret this to refer to a residential retrofit program funded by Ministry of the Environment and Climate Change through the Green Investment Fund. The program in question calculates energy savings using energy consumption modelling software. Based on energy audits, this software compares the energy consumption previous to and following energy efficiency upgrades. In contrast, the residential prescriptive Demand Side Management (“DSM”) measures apply a deemed value for energy savings determined with standardized assumptions and algorithms.
- c) The Utilities include programs that rely on pre and post energy audits in their respective DSM portfolios, specifically, the weatherization programs. Inclusion of TRM prescriptive and quasi-prescriptive measures allows the Utilities to address key priorities and guiding principles of the Board. These priorities include: increasing customer participation; pursuing long-term energy savings; and minimizing lost opportunities. This is done while balancing program cost-effectiveness and Board guidelines for rate impacts.

*“The efficiency measures addressed by the TRM are prescriptive and quasi-prescriptive measures that lend themselves to standardized assumptions and algorithms, and for which estimated average savings can be determined to be reasonably accurate.”* (Exhibit B, Tab 1, Schedule 3, p.18). However, all savings claimed by the Utilities are subject to verification and audit.

Witnesses: D. Bullock  
L. Kulperger