

ILLINOIS ENERGY STAR RETAIL PRODUCTS PLATFORM COORDINATION

IL-TRM Attachment C Overview

IL-TRM Attachment C

- High-level framework for estimating MT savings
- Does not provide specific protocols for estimating savings for ESRPP
- Two core sections
 - Section 1: Market Transformation Context
 - Section 2: Estimating Savings for MT Initiatives



Differences Between RA and MT

"Historically, the differences between the two approaches have created challenges for MT initiatives to thrive in states where policy frameworks are strongly focused on resource acquisition. The much longer time frame for MT initiatives and the lesser degree of program administrator control can be difficult to reconcile with policy rules that are focused largely on the precise quantification of annual savings.

Evaluation of net savings can be fraught in jurisdictions where financial incentives or penalties are determined based on evaluated results, and can be particularly challenging for MT initiatives, which require market analyses that introduce additional uncertainty. Operating MT initiatives in this scenario requires upfront negotiation on evaluation processes to set clear expectations on measurement approaches."

[Section 1.2, Market Transformation and Resource Acquisition]



Attribution

"It is important to note this does not imply that quantitative estimates of net savings should not be made for MT initiatives. Fundamentally, all Illinois efficiency programs will need to quantitatively estimate savings so long as counting the savings toward goals and estimating cost-effectiveness is adopted policy. It simply means that net savings for MT initiatives will be significantly less certain by nature than those for pure RA programs. Defensible methods for dealing with the limits to quantifying attribution for MT initiatives are discussed at length in the second half of this paper."

[Section 1.3, Market Transformation and Attribution]



Evaluation

"Attributing savings to MT initiatives requires the assumption that some portion of the observed changes in market adoption are the direct result of a targeted, strategic market intervention that was designed and implemented to achieve that result. The MT framework requires both validation of the MT initiative logic and an evaluation of program implementation and progress towards specific market progress indicators before savings can be estimated."

[Section 1.5, Evaluation and Measurement of Savings in MT Initiatives]

"A preponderance of evidence approach, rather than proof is most often required. It is important to note that "preponderance of evidence" does not require that all indicators show overwhelming evidence of programmatic influence, but rather that multiple indicators show consistent direction. This information can be qualitative (based on in-depth interviews or observational data collection) or quantitative (based on market share or production data)."

[Section 1.5.1 Evaluation Approach – Theory-based Evaluation]



Evaluation Approach

- Tends to rely heavily on theory-based evaluation
 - Attempts to understand if observed changes in the market are consistent with those that would be expected if the initiative was successful
 - Seeks to understand an initiative's contribution to those market changes
- "MT evaluations tend to require numerous pieces of evidence that
 - 1) Change is occurring; and
 - 2) The program is influential in that change."
- Important that evaluations-assess consistency of changes over time
- Important to have a mix of leading and lagging indicators

[Section 1.5.1, Evaluation Approach - Theory-based Evaluation]



Uncertainty and Risk

- "MT interventions typically operate with a different level of uncertainty than many RA programs"
- "Tight error bounds on realized energy savings are not realistic expectations"
- "Establishing energy savings methods associated with the proposed intervention and gaining acceptance for the proposed baseline often requires multiple rounds of review and refinement as data and assumptions are vetted."
- "It is anticipated that the Illinois Stakeholder Advisory Group Working Group on Market Transformation Savings will serve as a forum to effectively plan MT initiatives and navigate unexpected market events."

[Section 1.6, Uncertainty and Risk in MT Savings Estimates]



Section 2.1, Overall approach contains:

MT Energy Savings = Unit Energy Savings (UES) * MT Units UES = Unit Energy Consumption (UEC) of baseline product — UEC of EE Product MT Units = Total Market Units — Natural Market Baseline Units

Natural market baseline development is critical

"The Natural Market Baseline is probably the most challenging piece of estimating savings from MT because it is a prediction of the future that will never actually exist and therefore can't be measured. As a result, it is important to involve evaluators and stakeholders in advance to ensure transparency, alignment and understanding of the data and judgement that will ultimately be used to estimate savings."

[Section 2.2.2.1, Natural Market Baseline Theory]



Accounting for RA Savings

- RA programs are being simultaneously operated
- Goal is to avoid double counting MT savings with RA program
- "The default approach is to subtract all non-Market Transformation verified savings within the same market being targeted by the MT initiative from the estimated MT savings."

[Section 2.3, Accounting for RA Savings]



Need to determine allocation of savings to sponsors

"Market boundaries rarely, if ever, align nicely with the geographic boundaries of utility service territories. While it is possible for an individual utility to operate a market transformation program that is limited in scope to the boundaries of their own service territory, it is more likely that utilities will be implementing MT initiatives in collaboration with other entities at a state, regional, or even nationwide level."

[Section 2.4 Allocating Energy Savings to Individual Utility Sponsors, Page 126]

Need to determine codes & standards savings

"Best practice in MT initiative design will identify applicable codes or standards early on and design interventions over the life of the initiative to accelerate early adoption of more efficient energy codes and standards when possible."

[Section 2.6 Energy Codes and Appliance Standards]



Need to establish timeline for savings credit

"It is important to establish the length of time that savings will be credited to the utility post-active-market engagement. This time period is separate from the lifetime of the measures embodied in savings measures. Instead it reflects the amount of time that a utility will receive credit for having changed the market even when it has no or minimal engagement. In some circumstances, the Natural Market Baseline will be expected to increase over time until some point where it essentially overtakes the Total Market. This provides a natural ending point for claiming savings from the MT initiative."

[Section 2.5.1 Duration of Savings Post Active Market Engagement in Markets without Codes or Standards as an Endpoint, Page 128]





Zach Ross

zross@opiniondynamics.com

Todd Malinick

tmalinick@opiniondynamics.com

Paul Wasmund

pwasmund@opiniondynamics.com

