# Discussion and Recommendations on MT Policy Issues Raised by Comments on the IL TRM MT Savings Framework

# Purpose

An attachment to the IL TRM was developed in 2019 to delineate a framework for counting Market Transformation (MT) Savings. During public comment on the draft, a few policy issues surfaced that need resolution to inform utility energy efficiency portfolio planning and to count savings from individual MT initiatives. The recommendation was that the IL MT SAG Working Group discuss and decide on how these policy issues could be treated in order to create more certainty for counting savings from MT.

This paper discusses the policy issues raised during public comment and provides recommendations/options.

# Key Considerations: Nature of MT, and its Size in the IL EE Portfolio

It’s important to note that MT initiatives require a long term horizon (often 10-20 years) to be fully successful and usually require the majority of the expenditures in the early years while significant savings accrue predominantly in the later years – after the market has changed or code/standards are adopted. This situation has implications for how to weave MT into a regulatory system that was set up to count annual costs and savings that mostly occur simultaneously.

Implementation of MT programs has the potential to pose regulatory challenges within Illinois’ existing EE planning review framework because as stated above, MT requires long-term investment over multiple plan cycles before savings are achieved. Accordingly, some of the options discussed below will have to be evaluated in relationship to the need for possible regulatory change to implement them.

Another factor in considering the options below is that the proportion of MT investments in the context of the overall EE portfolio for utilities in IL will be small in the near-term, so the force or size of the impact – at least for the first 5-7 years of MT initiatives – is minimal. However, the best framework going forward is one that accommodates the presently small and potentially larger MT activities in the future.

Recommendations included in this paper try to provide a simple path forward, especially considering that the financial impact is fairly small in the near-term. Identifying and agreeing to a single path as a guide will allow IL to get some experience with MT and its effects on portfolio cost-effectiveness, goals and incentives while MT stakeholders, utilities and regulators develop a better understanding and trust in MT efforts. Learnings during this period can then be applied to future iterations as MT initiatives evolve over time.

# Question 1:

How will MT savings and costs be treated in calculating portfolio cost-effectiveness (C/E)?

Each MT initiative’s Business Plan (BP) will estimate the cost-effectiveness[[1]](#footnote-1) of that initiative over its expected duration, which is likely to stretch over multiple 4-year planning cycles. However, since costs usually occur up front and savings occur later, there may be a problem incorporating the “life cycle” metric of initiative C/E into a given four-year planning cycle since costs could happen in one planning cycle and energy savings in a subsequent one(s). In this case, how should MT costs and energy savings be incorporated into portfolio cost-effectiveness? In considering options, it might be good to ask: what will encourage MT investments but not create too large a risk to any one party? Put another way, which method should we use to manage MT’s inherent uncertainty while still motivating action to implement MT?

Option 1: **Treat MT initiatives as part of the EE portfolio**, as part of a programmatic or administrative expense category of the portfolio that **is required to demonstrate energy savings**.

Since costs occur in early years and savings are primarily produced in later years after a market has changed, this will make the utility portfolio less C/E in near-term planning cycles or in need of balancing through the use of other highly cost-effective measures. This option also means that MT costs will have to compete with funding for programs that produce savings in the near term which could be a problem as the utility plans to meet annual and plan cycle savings goals.

* This option means utilities bear the full costs/risk of an MT initiative before the transformation occurs. And depending on the size of the MT costs and the level of overall portfolio cost-effectiveness, it could cause ripples in the overall portfolio C/E, especially if the portfolio C/E is already on the margin.
* Additionally, if meeting savings goals is a struggle, MT options could lose out to other programs such as resource acquisition offerings that may carry more certainty for more immediate savings.
* On the other hand, this option will also enhance the portfolio cost-effectiveness and goals achievement in out-years when significant savings are accruing, and little to no cost is needed.

Option 2: Design a way that **the first few years of an MT initiative’s costs can be deferred to being included in portfolio C/E calculations at a time when savings are larger**. This would probably be calculated by adding up the early costs and dividing the total over a 3-4 year period to develop an “adder”. This adder would then be added to portfolio costs in future years. The intended timing of when the “deferred” costs are applied to the initiative would need to be described in the Business Plan.

* If savings never materialize, then the initiative is a failure, but the deferral mechanism would ensure it does not count against the portfolio C/E requirements, and it removes the near-term disincentive discussed in Option 1.
* This method will likely require detailed “bookkeeping” to ensure that all costs and benefits are eventually included. Most of these options will require the same, but this option in particular will need to be clearly tracked.

Option 3: **Shield early costs from portfolio calculations by ensuring they are budgeted in R&D/ET/BED** budgets in the near-term because these categories **are not required** **to demonstrate energy savings**. Once savings become large, they can be verified and the total program costs and benefits would be moved to the programmatic or other portion of the portfolio (similar to option 1).

* There are limits to R&E/ET/BED investments, so this would limit MT spending, especially since generally these budgets are already fully allocated.[[2]](#footnote-2)
* If savings never materialize, then the initiative is a failure, but it does not count against the portfolio C/E requirements, and it removes the near-term disincentive discussed in Option 1.
* Option 3 Hybrid Note: There might be an R&D/portfolio hybrid option that recognizes the variety of activities[[3]](#footnote-3) in any one MT initiative. Such an option recognizes the possibility that a given MT initiative would include less risky RA-like measures as well as upstream/midstream/code adoption activities that require different initiative components to be separated and placed in the portfolio or in R&D, respectively. This variety of activity could come into play for any of these options.

Option 4: **Exclude MT from the portfolio C/E calculation**. The modified IL TRC already has exclusions and MT could be similar. There are policies that could be adopted to support this idea (eg: Low Income programs need not pass the TRC and is instead deemed to have a TRC score of 1.0). For informational purposes, the C/E calculation could also show results if the MT were included.

* One caution on this option is that legislative change would be required, otherwise, it might be hard to claim savings without counting the costs.

Option 5: **Exclude MT from the portfolio C/E calculation for the first 4-year planning cycle** in which the initiative operates (or if the last year of a cycle, for that year and the subsequent cycle). In subsequent 4-yr portfolios, MT costs and savings would add to the C/E calculations. This method provides a natural “break” where these calculations can be applied across the entire portfolio.

* This grace period provides an avenue for utilities to safely take risks to get initiatives off the ground that will produce long-lasting benefits to Illinois customers.

Option 6: **Apply an initiative-specific projected cost-effectiveness score to each year of the initiative's time horizon across EE planning cycles**. To develop the applied score, this option requires spreading the expected/projected investments and energy savings equally across the entire initiative time horizon by determining the proportional investment and savings values, rather than actual individual year investment activities or resulting savings which can vary over the course of the initiative.

* This option seeks to significantly limit the risk and uncertainty of all stakeholders by assigning an agreed upon cost-effectiveness score to the initiative each year that it is active (being invested in or producing energy savings within agreed upon timeline).
* This option requires an initiative-specific agreement as to expected overall investment and energy savings that will be used to proactively generate an educated guess as to the TRC cost-effectiveness of the initiative.
* This option will require periodic evaluation with some period of prorated savings up front and a schedule of discounted/depreciated savings as the initiative matures to its completion.
* To weight the initiative appropriately in the context of the overall portfolio, you would estimate the total investment required (per Business Plan) and divide it by the number of years proposed for the initiative. This way the investment is spread out evenly even though it will be spent in early years. In addition to the costs, some agreed upon authorized savings value (static across the initiatives or inclining/declining if desired) would also be applied, consistent with the identified cost-effectiveness score applied on an annual basis.
  + Alternatively, you could do the above and then further weight early years with slightly more cost and later years with slightly more benefit while ensuring you maintain marginal adherence to TRC 1.0 (.90 to 1.10) for the initiative. This alternative recognizes the early costs and later savings while applying a protective approach given the uncertainty.
* This option could require a post-initiative costs and energy savings calculation with potential savings true up (with some agreed-upon guardrail/bookend limits – similar to a decoupling mechanism true up procedure) applied to the utility’s CPAS (rather than a specific planning cycle).
* This option would potentially negate one of MT’s biggest benefits – large savings in the long term. Utilities might be relying on these large long-term savings to fill anticipated holes resulting from diminishing RA opportunities.
* In the case of MT initiative failure, this option could present a number of concerns. Accordingly, a specific course of action should be developed to better understand how to further mitigate the potential impacts to the customer base and utility portfolio in the case of MT initiative failure.

Option 7: Use one of the options as the default but allow utilities to make a case to the SAG for using other options during review of the initiative’s business plan parameters.

Hypothetical MT Initiative: Efficient Widget Initiative (EWI)

The following parameters for a “hypothetical MT initiative” were used to develop an example of how MT savings and costs would vary across the options.

* 20 year time horizon, first 10 years include investments, business plan anticipates marginal savings to accrue beginning year 5 of initiative with substantial savings expected beginning in year 7, maximizing in year 12 and tapering back down to marginal by year 20.
* Projected benefit/cost analysis (not TRC) is 2.5 for completed initiative. For our purposes here, consider it equivalent to a 2.0 TRC score.
* Assume Initiative years 1-5 are not cost-effective, 6-20 are cost effective (7-12 very cost effective)

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| **C/E Options** | **MT Initiative**  **Year 1 TRC treatment** | **MT Initiative**  **Future TRC treatment** | **When does utility begin to claim/report verified savings?** | **Allowed by existing statute?** |
| Option 1 | 0 | Years 1-5: <1 to 0  Years 6-20: >1 | Beginning the year they occur | Yes |
| Option 2 | Not reported | Costs are reported when some threshold level of savings are achieved | Beginning the year they occur | No/Unclear |
| Option 3 | Not reported | Report verified cost-effectiveness score if saving occur and utility decides to include them | Whenever utility verifies them and includes them | Yes |
| Option 3hybrid | >1.0  Less risky cost-effective initiative elements (RA, etc.) included | Depending on performance, verified savings from R&D can be included otherwise cost-effective RA MT components are the only things represented | Year 1 potentially | Yes |
| Option 4 | Not included | Not included | When they occur | No/Unclear |
| Option 5 | Not included | Include cost-effectiveness score in the second 4-year planning cycle only | When they occur | No/Unclear |
| Option 6 | >1.0, weighted by one year’s proportion of the overall initiative cost | >1.0, each year weighted by one year’s proportion of the overall initiative cost | Year 1 | Unclear |
| Option 7 | Variable depending on chosen option | Variable | Variable | Depends on selected option, see above |

# Question 2

How will MT savings be incorporated into gas & electric utility EE goals?

In IL, utilities lay out an energy efficiency plan that describes how they will reach their legislatively-defined goals for the next four-year planning cycle and at what cost.

Recommendation: As noted above, savings from MT are expected to be a small proportion of EE portfolios in the next 6-10 years (2020 to 2026-2030). As a result, the recommendation is to incorporate any MT savings into goal achievement using the same method as used for current resource acquisition programs. MT savings will be a very small piece of near-term portfolios, but possibly a significant contributor in future portfolios. Utility goal planning will rely heavily on whatever option(s) is selected for cost-effectiveness treatment of MT initiatives to arrive at when savings will be/become claimable.

# Question 3

How will MT savings be incorporated into electric utility financial incentives?

Recommendation: Similar to the answer for Question 2, the recommendation is to fold MT savings into the calculations currently used for traditional RA programs when calculating any incentive payment. Savings are anticipated to be small in the near-term and this seems like a straightforward approach for the near-term.

Note that since savings are small overall in the near term, this will not likely be a motivating factor to cause utilities to conduct MT initiatives, especially if achievement of annual goals is difficult. Given CPAS and incentives will continue for the next 10-plus years, there is ample motivation to invest in MT, given the energy savings potential could guarantee incentives for several cycles to come. If a stronger motivator were desired, the financial incentive would need to be re-designed around MT characteristics or a longer-term frame, rather than the current emphasis on near-term savings achievement.

# Question 4

If adjustments to the Natural Market Baseline (NMB) are needed during initiative implementation will the adjustment be applied retrospectively or prospectively to estimates of savings for that initiative?

A best estimate of NMB will be developed and documented in the initiative’s Business Plan. This NMB will be reviewed by any pertinent evaluation teams at the time of development and will be based on the best information available for the resources committed. It will also be presented to SAG MT Working Group.

As the initiative progresses, new information/data could become available that would cause a shift in the NMB. If this shift is large enough to be consequential, it is recommended that a new NMB be documented and developed, and savings estimates adjusted. Ideally, initial estimates of NMB are sufficiently accurate that revisiting is infrequent.

For example, imagine new information/data becomes available in year 4 of the initiative, and it’s consequential enough to change the savings estimated. Should the new data be incorporated into a new NMB (and therefore savings estimates) going forward -- so starting in year 5? This is applying the change “prospectively”. Or should any adjustments also be made to change savings estimated in years 1-4? This is applying the change “retrospectively”. Savings in years 1-4 may have already been part of goals or incentives calculations, especially if those years cross plan cycles.

Recommendation: The recommendation is that adjustments only be applied prospectively. Best data was used and reviewed to develop the initial estimates and as new information becomes available it should not benefit or penalize actions taken when the new data was unavailable. This is similar to the practice codified in the IL Energy Efficiency Policy Manual, section 7.2 where new net-to-gross ratios are applied prospectively to subsequent program years.

# Question 5:

How will savings and costs be dealt with across filing periods?

At the November 2019 meeting of the SAG MT savings group, there was consensus that savings and costs needed to be counted across filing periods. The issue is more about *how* they will be counted, especially as they appear in utilities’ EE plans, portfolio cost-effectiveness or apply toward goals and incentives. These are the subject of other questions already addressed above.

During the SAG Market Transformation Savings Working Group meeting on November 20, 2019 meeting, there was a request to draft and circulate proposed resolution on whether savings from market transformation initiatives in one EE Plan cycle may be counted in a future EE Plan cycle.

The SAG Facilitator circulated proposed policy resolution for review on December 13, 2019: *Savings from market transformation measure(s) counted in one Energy Efficiency Plan cycle that last beyond the end of that approved cycle may be counted by Program Administrators in a future Energy Efficiency Plan cycle.*

The SAG Facilitator received one suggested edit, indicated in red: *Savings from market transformation measure(s) with approved savings protocols counted in one Energy Efficiency Plan cycle that last beyond the end of that approved cycle may be counted by Program Administrators in a future Energy Efficiency Plan cycle.*

Question for discussion: Do any Working Group participants have additional suggestions on the proposed resolution?

1. The Business Plans include the estimate of annual savings and cost over the life of the initiative, and also the savings-weighted average lifetime of the measures included in the initiative. This is not an IL TRC calculation, but rather a simple cost/benefit analysis. [↑](#footnote-ref-1)
2. 3% for BED/ETP for gas companies and 6% for “R&D” (also ET) for electric companies. [↑](#footnote-ref-2)
3. MT serves as a ‘Theory Umbrella” for multiple activities. [↑](#footnote-ref-3)