Policy Document

for the

Illinois Statewide

Technical Reference Manual

for Energy Efficiency

Version 3.0

Final

As of September 19, 2019

Effective: January 1, 2020

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1 Purpose of the TRM

The purpose of the Illinois Statewide Technical Reference Manual (TRM) is to provide a transparent and consistent basis for calculating energy (electric kilowatt-hours (kWh) and natural gas therms) and capacity (electric kilowatts (kW)) savings generated by the State of Illinois' energy efficiency programs[1] which are administered by the state's largest electric and gas Utilities[2] (collectively, Program Administrators).

The TRM is a technical document that is filed with the Illinois Commerce Commission (Commission or ICC) and is intended to fulfill a series of objectives, including:

- "Serve as a common reference document for all… stakeholders, [Program Administrators], and the Commission, so as to provide transparency to all parties regarding savings assumptions and calculations and the underlying sources of those assumptions and calculations.

- Support the calculation of the Illinois Total Resource Cost test[3] ("TRC"), as well as other cost-benefit tests in support of program design, evaluation and regulatory compliance. Actual cost-benefit calculations and the calculation of avoided costs will not be part of this TRM.

- Identify gaps in robust, primary data for Illinois, that can be addressed via evaluation efforts and/or other targeted end-use studies.

- [Provide] a process for periodically updating and maintaining records, and preserve a clear record of what deemed parameters are/were in effect at what times to facilitate evaluation and data accuracy reviews.

- …[S]upport coincident peak capacity (for electric) savings estimates and calculations for electric utilities in a manner consistent with the methodologies employed by the utility's Regional Transmission Organization ("RTO"), as well as those necessary for statewide Illinois tracking of coincident peak capacity impacts."[4]

1.1 Objectives and Purpose of the TRM Policy Document

The TRM Policy Document addresses several areas related to the updating and applicability of the TRM, including:

1. The TRM Update Process;
2. Applying the TRM in implementation, evaluation, and planning; and
3. Glossary with evaluation terms defined.

The purpose of the TRM Policy Document is to provide transparency of and consistency in the applicability of TRM values so that all stakeholders have a common reference document for measure, program and portfolio savings. This common reference document enables meaningful cross-program comparisons, provides a consistent basis for savings calculations, and creates stability and certainty for Program Administrators as they make program design and implementation decisions. In addition, a common and transparent reference document for the use and applicability of the TRM may reduce costs to Program Administrators and stakeholders in preparing and reviewing energy efficiency Plan filings and reporting and reviewing energy savings as review of savings occurs in a single,

[1] 220 ILCS 5/8-103, 220 ILCS 5/8-103B and 220 ILCS 5/8-104.

[2] The Program Administrators include: Ameren Illinois, ComEd, Peoples Gas, North Shore Gas, and Nicor Gas (collectively, the Utilities). In addition, Program Administrators included DCEO through 2017.

[3] The Illinois TRC test is defined in 220 ILCS 5/8-104(b) and 20 ILCS 3855/1-10.

[4] Illinois Statewide Technical Reference Manual Request for Proposals, August 22, 2011, pages 3-4, http://ilsagfiles.org/SAG_files/Meeting_Materials/2011/September%2027,%202011%20Meeting/IL_Statewide_TRM_RFP_Part_1.pdf

coordinated process rather than separately and independently for each of the Illinois Program Administrators.

1.2 Changes Incorporated in TRM Policy Document Version 3.0

The changes memorialized within this version of the TRM Policy Document (1) modify how non-consensus issues are addressed through the TRM update process, (2) clarify that the TRM Administrator may limit participation in the event a TAC participant (except for Program Administrators or an entity acting on the Program Administrator's behalf) has a financial conflict of interest, becomes disruptive, and/or is hindering complete and frank discussions, and (3) eliminate dual reporting for Errata.

2 TRM Update Process

Because technology is constantly improving, and markets are constantly changing, a TRM must be a living document to keep pace with change. Otherwise, the TRM will quickly become obsolete and the savings estimates may be perceived to be less reliable. The need to update the TRM can be driven by a number of events, including but not limited to, the following:

- Addition of new measure algorithms perceived to be reliable for TRM inclusion
- Impact of code or legislative changes to specific measures
- Introduction of new technologies and technology advancements
- Discovery of errors in existing TRM measure characterizations
- Changes to industry standard practice
- Changes to program designs and measure eligibility criteria
- Improved TRM input values developed through evaluations

The following sections outline the annual TRM Update Process, including roles and responsibilities for stakeholders in the TRM Update Process and a timeline for updating the TRM that is in sequence with the regulatory milestones that have already been set for future efficiency Plan filings. In addition to this process, the Illinois Energy Efficiency Stakeholder Advisory Group (SAG) Technical Advisory Committee (TAC) will continue to meet routinely as needed to discuss:

1. Any situations where a stakeholder believes that a TRM value should not apply as a condition set forth in Section 3.2 exists,
2. Any TRM mistakes,
3. Any TRM Update recommendations, or
4. Any other matters relating to the TRM.

2.1 Stakeholder Roles and Responsibilities

Formal recommendations for TRM Updates shall be submitted along with all supporting work papers consistent with the approved work paper format (as specified by the TRM Administrator) to the TAC. Although any party is free to recommend TRM Updates, the following stakeholders have ongoing responsibilities that can be specified.

1. **Evaluators** (Evaluation Teams, Independent Consultants) – The Evaluators have primary responsibility pursuant to 220 ILCS 5/8-103(f)(7), 220 ILCS 5/8-103B(g)(6) and 220 ILCS 5/8-104(f)(8) to provide independent evaluations of the performance of the Program Administrators' energy efficiency portfolios. To support this responsibility in the context of the TRM, Evaluators will use the Commission-approved TRM to perform *savings verification* (see glossary section) for prescriptive measures covered by the TRM, and, where warranted and budget allows, conduct *measure* and *program level research* (see glossary section) to inform future TRM Updates. The Evaluators shall collaborate with the Program Administrators and the TAC to determine appropriate data collection and analysis that supports TRM savings verification and TRM

Updates while considering the administrative cost and participant burden associated with such data collection. The Evaluators make recommendations for TRM Updates and participate in the SAG and the TAC.

2. **ICC Staff** – The ICC Staff has primary responsibilities to make recommendations to the Commission, participate in the development of the annual TRM Update filing, make recommendations for TRM Updates, and participate in the SAG and the TAC. On or about October 1st of each program year, the ICC Staff shall submit a Staff Report (with the Updated TRM attached) to the Commission to initiate the TRM Update proceeding, wherein the Commission would consider officially approving the Updated TRM.

3. **Illinois Energy Efficiency Stakeholder Advisory Group**[5] (SAG) – The SAG is advised of and given the opportunity to comment on the TRM Administrator's recommended TRM Updates prior to the Updated TRM being filed with the ICC. However, technical issues regarding the TRM are usually addressed substantively through the TAC, which is open to any SAG participant. SAG participants can make recommendations for TRM Updates.

4. **Program Administrators** (Utilities) – The Program Administrators have primary responsibility to cost-effectively meet the energy savings targets defined by Illinois statute by implementing energy efficiency programs. The Program Administrators are also responsible for tracking program participation, reporting estimates of energy savings using TRM values (where such values exist), estimating cost effectiveness, and implementing the TRM savings values, including TRM Measure Codes and other information necessary to apply the TRM, through their tracking systems. The Program Administrators and the TAC collaborate with the Evaluators prior to the start of each program year to determine an appropriate balance of data collection necessary to update and implement the TRM in the upcoming program year while considering the administrative cost and participant burden associated with such data collection. The Program Administrators and the TAC make recommendations for TRM Updates. The Program Administrators may present to the SAG prior to the annual TRM Update proceeding, information explaining how the proposed TRM Updates impact their energy efficiency portfolios.

5. **SAG Technical Advisory Committee** (TAC) – The TAC is a subcommittee of the SAG whose primary responsibility is to provide a forum to allow all interested parties to recommend TRM Updates and facilitate consensus for TRM Updates among the Evaluators, ICC Staff, Program Administrators, environmental organizations, interested stakeholders (e.g., other SAG participants), and the TRM Administrator prior to the annual TRM Update proceeding. All recommendations for TRM Updates shall be submitted to the TAC. Where consensus does not emerge in the TAC regarding a particular TRM Update, the SAG provides a forum where experts on all sides of the contested issue can present their expert opinions in an effort to inform parties of the contested issue and to also facilitate consensus.

6. **TRM Administrator** (Independent Consultant) – The TRM Administrator has primary responsibilities to manage updates to the TRM document, present TRM Updates to the SAG and the TAC, coordinate with the SAG, serve as an independent technical resource, and—if desired by the SAG—manage a publicly accessible TRM website that contains TRM-related documents such as references, recommendations, responses, and versions of the TRM. The TRM Administrator reviews and responds[6] to all formal TRM Update recommendations by a date specified in advance by the TRM Administrator, when updating the TRM for a

[5] The Commission first defined the SAG in the electric utilities' first energy efficiency Plan Orders to include "… the Utility, DCEO, Staff, the Attorney General, BOMA and CUB and representation from a variety of interests, including residential consumers, business consumers, environmental and energy advocacy organizations, trades and local government... [and] a representative from the ARES (alternative retail electric supplier) community should be included." Docket No. 07-0540, Final Order at 33, February 6, 2008. http://www.ilsag.info/

[6] The TRM Administrator's "response" to a formal recommendation for a TRM Update shall explain whether the TRM Administrator agrees with the formal TRM Update recommendation (either in its entirety or as modified by the TRM Administrator) and the justification for the TRM Administrator's recommendation.

specific program year. The TRM Administrator prepares the Updated TRM document (redlined and clean versions) each year for filing with the ICC based on recommended TRM Updates vetted through the TAC and the SAG. The TRM Administrator prepares a list of all the changes incorporated in the redlined Updated TRM document with rationale for each change. The TRM Administrator shall make any necessary revisions to the TRM to reflect the Commission Order from the annual TRM Update proceeding. Efforts will be made to ensure that all interested parties have equal and equally timely access to information related to the TRM. To ensure independence of the TRM Administrator and transparency in the TRM Update Process, the TRM Administrator shall ensure that all requesting parties are copied on all correspondence between the TRM Administrator and any other party related to the Illinois Statewide TRM development and TRM Update Process and other activities associated with the TRM Administrator's role. The TRM Administrator shall provide detailed meeting notes after each TRM meeting to the TAC that includes a list of meeting attendees. The TRM Administrator shall keep a user-friendly log of all TRM recommendations, clarifications, errors, corrections, and typos submitted that may be organized at least by TRM Measure Code, commenter, and date of submission in a location accessible by TAC participants. As noted above, the TRM Administrator is an independent entity who has primary responsibility for managing the update process to the TRM. As part of the TRM Administrator's management responsibilities, to the extent the TRM Administrator has a reasonable basis to determine that a TAC participant (that is not a Program Administrator or an entity acting on the Program Administrator's behalf) has a financial conflict of interest, becomes disruptive, and/or is hindering complete and frank discussions, the TRM Administrator may manage and limit participation in discussions as appropriate.

2.2 The Regulatory Schedule for Energy Efficiency Programs

Because technology and markets are so dynamic, a structured and ongoing TRM Update Process is necessary. The TRM Update Process needs to be aligned with Illinois' existing program planning, evaluation, and implementation cycles. These cycles are summarized in the following two tables. TRM implementation cycles could continue indefinitely absent a revision of this document approved by the Commission.

Table 2.1: Efficiency Plan Periods

Cycle	Electric Plan Filing Date	Electric Plan Approval	Applicable Electric Program Year (EPY)	Applicable Gas Program Year (GPY)
1	Nov-07	Feb-08	EPY1 – EPY3	
2	Oct-10	Dec-10	EPY4 – EPY6	GPY1 – GPY3
3	Sep-13	Feb-14	EPY7 – EPY9	GPY4 – GPY6
4	Jul-17	Sep-17	2018 – 2021	2018 – 2021
5	Mar-21	Sep-21	2022 – 2025	2022 – 2025
6	Mar-25	Sep-25	2026 – 2030	2026 – 2029

Table 2.2: TRM Implementation Cycles

Cycle	EPY	GPY	Begins	Ends	Application in Evaluation and Implementation	Application in Plan Filings
1	1		6/1/2008	5/31/2009	TRM does not apply to this cycle	TRM not used in this cycle
1	2		6/1/2009	5/31/2010		
1	3		6/1/2010	5/31/2011		
2	4	1	6/1/2011	5/31/2012	1st ICC-approved TRM applies to GPY1[7]	TRM not used in this cycle
2	5	2	6/1/2012	5/31/2013	1st ICC-approved TRM applies	
2	6	3	6/1/2013	5/31/2014	2nd ICC-approved TRM applies	
3	7	4	6/1/2014	5/31/2015	3rd ICC-approved TRM applies	2nd ICC-approved TRM shall be used in Plan filing
3	8	5	6/1/2015	5/31/2016	4th ICC-approved TRM applies	
3	9	6	6/1/2016	12/31/2017	5th ICC-approved TRM applies	
4	2018		1/1/2018	12/31/2018	6th ICC-approved TRM applies	6th ICC-approved TRM shall be used in Plan filing
4	2019		1/1/2019	12/31/2019	2019 ICC-approved TRM applies	
4	2020		1/1/2020	12/31/2020	2020 ICC-approved TRM applies	
4	2021		1/1/2021	12/31/2021	2021 ICC-approved TRM applies	
5	2022		1/1/2022	12/31/2022	2022 ICC-approved TRM applies	2021 ICC-approved TRM shall be used in Plan filing
5	2023		1/1/2023	12/31/2023	2023 ICC-approved TRM applies	
5	2024		1/1/2024	12/31/2024	2024 ICC-approved TRM applies	
5	2025		1/1/2025	12/31/2025	2025 ICC-approved TRM applies	
6	2026		1/1/2026	12/31/2026	2026 ICC-approved TRM applies	2025 ICC-approved TRM shall be used in Plan filing
6	2027		1/1/2027	12/31/2027	2027 ICC-approved TRM applies	
6	2028		1/1/2028	12/31/2028	2028 ICC-approved TRM applies	
6	2029		1/1/2029	12/31/2029	2029 ICC-approved TRM applies	
6	2030		1/1/2030	12/31/2030	2030 ICC-approved TRM applies	2029 ICC-approved TRM shall be used in Gas Plan filing

2.3 Update Timeline and Process

The process of incorporating new and better information into the TRM occurs annually. Prior to the start of the program year for which the Updated TRM will be in effect, the Program Administrators will make portfolio adjustments and tracking system updates based in part on changes reflected in the Updated TRM. In order to provide the Program Administrators adequate time for making these pre-program year changes, the Updated TRM shall be transmitted to the ICC Staff and SAG in advance of October 1st. The ICC Staff will then submit a Staff Report (with the Updated TRM attached) to the Commission with a request for expedited review and approval. In the event that non-consensus TRM Updates exist, the process outlined in Section 2.4 of this document shall be followed.

The evaluation research findings from one program year will be put into effect for the first time at the beginning of the program year following their incorporation (as determined by the TRM Update Process) into the TRM. However, it should be noted that it is appropriate and expected that any completed evaluation be considered for incorporation into the TRM as they become available. Evaluation research findings relevant to updating the TRM will be filed in

[7] The 1st ICC-approved TRM is not required to be applied for DCEO and Ameren in GPY1 and Ameren, ComEd, and DCEO in EPY4. For Nicor Gas and Peoples Gas/North Shore Gas in GPY1, the 1st ICC-approved TRM is applicable in evaluation and not implementation.

the closed ICC docket in which the first TRM was approved (Docket No. 12-0528[8]), within fifteen (15) days of the initial draft, and within fifteen (15) days of the final evaluation research findings being submitted to the Program Administrator.

2.4 SAG Consensus on TRM Development and Updates

The Illinois Statewide Technical Reference Manual was developed to comply with the Commission's Final Orders from the electric and gas Utilities' energy efficiency Plan dockets. In the Final Orders, the ICC required the Utilities to work with DCEO and the SAG to develop a statewide TRM. *See, e.g.,* ComEd's Final Order *(Docket No. 10-0570, Final Order[9] at 59-60, December 21, 2010);* Ameren's Final Order *(Docket No. 10-0568, Order on Rehearing[10] at 19, May 24, 2011);* Peoples Gas/North Shore Gas' Final Order *(Docket No. 10-0564, Final Order[11]at 76, May 24, 2011),* and Nicor Gas' Final Order *(Docket No. 10-0562, Final Order[12] at 30, May 24, 2011).* Each Utility's Order enables it to implement energy efficiency programs and also provides guidance concerning the TRM. Generally speaking, these Orders describe the TRM's creation and maintenance as being a collaborative process between the Program Administrators and the SAG. As a result and as a document that applies statewide, the TRM has been and will continue to be developed through a collaborative using the SAG process. In practice, this means that the TAC will work toward consensus on the issue first, and then bring the result to the SAG for its review and comment. Through the annual TRM Update Process, SAG participants shall make good faith efforts to reach consensus on all TRM Updates. Once consensus develops at the SAG level, the TRM Administrator will include the changes in the Updated TRM that is submitted to the Commission for approval. To the extent a consensus among Program Administrators and non-financially interested stakeholders cannot be reached regarding issues related to specific TRM updates, the TRM Administrator shall have the authority to use its best judgment to propose a resolution of the issue and include such in the updated TRM that gets submitted to the ICC for approval. For transparency and informational purposes, the ICC Staff will document such dispute and include a link to a "Comparison Exhibit of Non-Consensus TRM Update Issues" developed by the TRM Administrator in the Staff Report submitted to the Commission. The "Comparison Exhibit of Non-Consensus TRM Update Issues" will document, with input from the parties, the various parties' positions concerning a non-consensus TRM update as well as the TRM Administrator's rationale for its decision to resolve the issue.

Nothing in this language shall preclude Program Administrators and stakeholders from challenging the TRM Administrator's proposed resolution by petitioning the Commission. Until the Commission resolves the petition, the Commission-approved TRM value shall be the default pending the issuance of a Commission Order. The applicable date for the Commission-resolved value will be the latter of January 1 of the year the TRM was designed to go into effect, or the first day of the next month following the Commission order. In the petition, the filing party should note all Program Administrators affected by the TRM dispute, and request that the Commission join each affected Program Administrator to the docket.

3 Applying the TRM

This section defines the policies various stakeholders will follow to apply the TRM in the implementation, evaluation, and planning of Illinois energy efficiency programs.

3.1 Applicability of the TRM

Consistent with Commission policy, the Program Administrators have the flexibility to add or retire measures from their programs unilaterally as markets, technology and evaluation results change. Therefore, Program

[8] http://www.icc.illinois.gov/docket/Documents.aspx?no=12-0528
[9] http://www.icc.illinois.gov/docket/files.aspx?no=10-0570&docId=159809
[10] http://www.icc.illinois.gov/docket/files.aspx?no=10-0568&docId=167031
[11] http://www.icc.illinois.gov/docket/files.aspx?no=10-0564&docId=167023
[12] http://www.icc.illinois.gov/docket/files.aspx?no=10-0562&docId=167027

Administrators are free to implement prescriptive measures that are not included in the TRM as long as such measures are submitted to the TRM Update Process as soon as practicable. Similarly, Program Administrators are not required to implement every measure that is included in the TRM.

3.2 Using the TRM to Calculate Savings

The TRM is intended to bring a high level of standardization to the prescriptive measure savings that each Program Administrator uses across the state. To accomplish the goal of statewide standardization, Program Administrators are required to use the prescriptive savings algorithms and inputs that are specified in the TRM, subject to the following conditions for the three exceptions outlined below. For Cases 1 – 2 below, the Program Administrators are subject to retrospective evaluation risk (retroactive adjustments to savings based on evaluation findings) when deviating from the TRM. For Cases 1 – 3 below, the Program Administrators will present for comment to the TAC prior to using a value, approach or assumption that is not in the TRM. At least ten (10) business days prior to presenting Cases 1 – 2 to the TAC, the Program Administrator shall submit to the TAC the measure characterization and work papers in the approved work paper format so that the TAC has adequate time to meaningfully review and comment on the proposed variation to the TRM applicability. Furthermore, the Program Administrators bear retrospective risk if the ICC does not agree with measure values, including prescriptive savings inputs, used by the Program Administrators that differ from what is in the TRM. In situations that fall under Case 2, where consensus is reached in the TAC that the proposed variation to the TRM applicability is appropriate, then the TRM Administrator shall inform the Evaluators that they should evaluate savings for the applicable measure(s) using both the original ICC-approved TRM as well as under that new TAC agreed to approach. If such proposed variation to the TRM applicability is stipulated for acceptance by all the parties in the Program Administrator's savings docket, the evaluation under this alternative approach may be used in measuring savings toward compliance with the Program Administrator's savings goals.

1. The measure savings are being calculated on a customized basis.

A Program Administrator can choose to count savings for a TRM measure on a customized basis using actual or on-site parameter values. However, for the duration of a program year, once a measure savings calculation path is chosen—either on a customized or a prescriptive basis within a particular program—all instances of the measure within that program must be treated consistently. Also, prior to treating a TRM measure as a customized measure in a particular program, the Program Administrator will notify the TAC, and the treatment of the measure as a customized versus a prescriptively deemed measure will be discussed during the TRM Update Process. The Program Administrator is at risk for retroactive evaluation adjustments to savings in this case. Evaluators are not prohibited from using the Commission-approved TRM when evaluating a TRM measure that a Program Administrator has chosen to implement as a customized measure.

2. The TRM measure definition or prescriptive savings inputs do not correctly characterize a measure that is already implemented in an existing program.

Through the TRM development process, the TAC attempted to identify all of the measures that are currently being implemented in programs. The TAC also worked to ensure that the prescriptive savings inputs describe how the measure is being implemented in all of the current programs. However, the measures or prescriptive savings inputs in the TRM may not be appropriate given how the measure is actually implemented in a particular program, especially over time as programs and markets evolve. If the TRM measure or prescriptive savings inputs are no longer appropriate to how a measure is implemented in an existing program, the Program Administrator may modify savings inputs as long as the TAC is notified of the change prior to the Program Administrator using the modified savings inputs, and the measure definition change and/or modified prescriptive inputs are submitted to the TRM Update Process. Program Administrators should provide sufficient justification for using the modified savings inputs within a memo to the TAC for comment prior to using the alternative measure definition or prescriptive savings assumption. This documentation will also be used for the TRM Update Process. The Program Administrator is at risk for retroactive evaluation adjustments to savings in this case. In the event consensus is reached in the TAC that this

modified savings approach is appropriate, the TRM Administrator shall inform the Evaluators to perform savings verification using both the original Commission-approved TRM measure savings as well as using the new modified savings approach. If the modified savings approach is stipulated for acceptance by all the parties in the Program Administrator's savings docket, the savings verification values from this modified savings approach may be used in measuring savings toward compliance with the Program Administrator's savings goals.

If a SAG or TAC participant believes that the TRM measure characterization does not adequately reflect savings of a measure, then it should inform the TAC of its concern and present an alternative. If consensus is reached that the alternative is more appropriate, then the TRM Administrator shall inform the Evaluators to also calculate savings under this alternative, in addition to performing savings verification using the Commission-approved TRM. If such alternative calculation is stipulated for acceptance by all the parties in the Program Administrator's savings docket, this alternative value may be used in measuring savings toward compliance with the Program Administrator's savings goals.

3. The measure does not yet exist in the TRM.

In this case, the Program Administrator is free to use algorithms and/or input values that do not yet appear in the TRM after discussing the new prescriptive measure with the TAC. At least ten (10) business days prior to presenting this case to the TAC, the Program Administrator shall provide to the TAC the "Components of the TRM Measure Characterization" for the new measure, and work papers in the approved format, so that the TAC has adequate time to meaningfully review and comment on the new prescriptive measure. This documentation will also be used for the TRM Update Process. The Program Administrator is at risk for retroactive evaluation adjustments to savings in this case. If consensus is reached regarding the components for the new measure characterization, then the TRM Administrator shall inform the Evaluators to also calculate savings using the agreed new measure characterization components, in addition to performing an evaluation of the new prescriptive measure. If such components are stipulated for acceptance by all the parties in the Program Administrator's savings docket, the Evaluator's savings calculations performed using the new measure characterization components may be used in measuring savings toward compliance with the Program Administrator's savings goals.

3.2.1 TRM Mistakes and Omissions

TAC participants should notify the TAC when a TRM mistake or omission is found. If a significant mistake or omission is found in the TRM that results in an unreasonable savings estimate, the Program Administrators, Evaluators, TRM Administrator, and TAC will strive to reach consensus on a solution that will result in a reasonable savings estimate. For example, an unreasonable savings estimate may result from an error or omission in the TRM.

In these limited cases where consensus is reached, the TRM Administrator shall inform the Evaluators to use corrected TRM algorithms and inputs to calculate energy and capacity savings. These corrected TRM savings verification values will be used for the purpose of measuring savings toward compliance with the Program Administrator's energy savings goals. Errors and omissions found in the TRM will be officially corrected through the annual TRM Update proceeding and will be identified as 'Errata'.

3.3 The TRM's Relationship to Portfolio Evaluation

Evaluators shall perform *savings verification* (see glossary section) and present savings estimates based on the Commission-approved TRM (subject to any consensus deviations set forth in Section 3.2 and dual reporting that may apply) within the evaluation reports of the Program Administrators' energy efficiency portfolios that are filed in the Program Administrators' savings dockets (and/or other dockets as applicable). These savings verification values shall be used for the purpose of measuring savings toward compliance with Program Administrators' energy savings goals for those measures.

Evaluators may also perform *measure* and/or *program level research* (see glossary section). Program Administrators

shall file measure and/or program level evaluation research findings relevant to updating the TRM in the initial TRM approval docket (ICC Docket No. 12-0528) within fifteen (15) days of receiving the initial draft, and within fifteen (15) days of receiving the final evaluation research findings. This filing shall not preclude the measure and/or program level research findings from also being filed in other dockets.

Program Administrators are subject to retrospective evaluation risk (retroactive adjustments to savings based on evaluation findings) for any measures not included in the TRM, including custom measures, prescriptive measures not yet incorporated into the TRM, behavioral-based programs, and prescriptive measures Program Administrators choose to implement using customized savings calculations. Evaluators shall present savings estimates for any measures and/or programs not covered by the TRM or areas where the TRM is diverged from in the evaluation reports that will be filed in the Program Administrators' savings dockets.

3.4 The TRM's Relationship to Portfolio Planning

The most current TRM that is approved by the Commission shall be used in the preparation of the Program Administrators' energy efficiency Plan filings. The Program Administrators will use the TRM Measure Codes in their Plan filings to allow for easy review and transparency across programs and portfolios. The Program Administrators are permitted to use additional assumptions other than those contained within the TRM in their Plan filings (including incremental costs if better values are available), provided they include a description of why they believe the deviation from the TRM is appropriate (e.g., a particular measure may be in the process of getting updated in the TRM at that time) and notify the TAC of the choice. However, Program Administrators must also show planning estimates from using TRM assumptions for comparison purposes within their Plan filings.

Program Administrators adding new prescriptive measures to their portfolios must submit these measures to the TRM Update Process for possible inclusion in future TRM Updates as soon as practicable. The TAC will identify appropriate measures to include in future TRM Updates, using the process identified in Section 2 of this document.

3.4.1 Applying Deemed Incremental Costs to Measure Screening

The TRM includes at least one deemed incremental cost(s) as a default value(s) for most measures. However, in instances such as Direct Install programs, Program Administrators may have better information on the true incremental cost of the measures. In instances like this, the Program Administrator may use its own, Program Administrator-specific incremental cost value for the purposes of measure screening subject to the requirement that it document the decision in its reporting, describe and seek comment from the TAC on the Program Administrator-specific incremental measure cost prior to its use, and submit to the TRM Update Process.

4 Glossary

Evaluation: Evaluation is an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions about the state of affairs, accomplishments, value, merit, worth, significance, or quality of a program, product, person, policy, proposal, or plan. Impact evaluation in the energy efficiency arena is an investigation process to determine energy or demand impacts achieved through the program activities, encompassing, but not limited to: *savings verification*, *measure level research*, and *program level research*. Additionally, evaluation may occur outside of the bounds of this TRM structure to assess the design and implementation of the program.

Synonym: **Evaluation, Measurement and Verification (EM&V)**

> **Measure Level Research**: An evaluation process that takes a deeper look into measure level savings achieved through program activities driven by the goal of providing Illinois-specific research to facilitate updating measure specific TRM input values or algorithms. The focus of this process will primarily be driven by measures with high savings within Program Administrator portfolios, measures with high uncertainty in

TRM input values or algorithms (typically informed by previous savings verification activities or program level research), or measures where the TRM is lacking Illinois-specific, current or relevant data.

Program Level Research: An evaluation process that takes an alternate look into achieved program level savings across multiple measures. This type of research may or may not be specific enough to inform future TRM updates because it is done at the program level rather than measure level. An example of such research would be a program billing analysis.

Savings Verification: An evaluation process that independently verifies program savings achieved through prescriptive measures. This process verifies that the TRM was applied correctly and consistently by the program being investigated, that the measure level inputs to the algorithm were correct, and that the quantity of measures claimed through the program are correct and in place and operating. The results of savings verification may be expressed as a program savings realization rate (verified ex post savings / ex ante savings). Savings verification may also result in recommendations for further evaluation research and/or field (metering) studies to increase the accuracy of the TRM savings estimate going forward.

Measure Type: Measures are categorized into two subcategories: custom and prescriptive.

Custom: Custom measures are not covered by the TRM and a Program Administrator's savings estimates are subject to retrospective evaluation risk (retroactive adjustments to savings based on evaluation findings). Custom measures refer to undefined measures that are site specific and not offered through energy efficiency programs in a prescriptive way with standardized rebates. Custom measures are often processed through a Program Administrator's business custom energy efficiency program. Because any efficiency technology can apply, savings calculations are generally dependent on site-specific conditions.

Prescriptive: The TRM is intended to define all prescriptive measures. Prescriptive measures refer to measures offered through a standard offering within programs. The TRM establishes energy savings algorithm and inputs that are defined within the TRM and may not be changed by the Program Administrator, except as indicated within the TRM. Two main subcategories of prescriptive measures included in the TRM:

Fully Deemed: Measures whose savings are expressed on a per unit basis in the TRM and are not subject to change or choice by the Program Administrator.

Partially Deemed: Measures whose energy savings algorithms are deemed in the TRM, with input values that may be selected to some degree by the Program Administrator, typically based on a customer-specific input.

In addition, a third category is allowed as a deviation from the prescriptive TRM in certain circumstances, as indicated in Section 3.2:

Customized basis: Measures where a prescriptive algorithm exists in the TRM but a Program Administrator chooses to use a customized basis in lieu of the partially or fully deemed inputs. These measures reflect more customized, site-specific calculations (e.g., through a simulation model) to estimate savings, consistent with Section 3.2.