TRM Background Documents July 30, 2012

<u>Overview</u>:

This document provides language from ICC orders, and the Request for Proposal (RFP) and Contract language to help provide context for what should be included in the TRM, and who should decide what is included or excluded from the TRM.

I. Commission Directives Regarding TRM

A. Ameren Illinois (Decision No. 10-0568, as amended by 10-0568)

TRM Development (mimeo p. 70)

<u>Work with Other Utilities</u>: The Commission directs that Ameren will work with other utilities subject to the requirements of Section 8-103 and 8-104 of the PUA and the SAG to develop a statement TRM for use in the upcoming three-year plan cycle. This will allow a consistent format to be developed for a TRM.

<u>Understanding Differences in Results</u> (mimeo p. 70): The Commission also accepts Ameren's recommendation that Ameren, as well as ComEd, and the independent evaluators, strive to understand differences in evaluation results and to reconcile differences not driven by differences in weather, market and customers. Illinois

Joint Development with SAG: With regard to any suggestion that the SAG should have ultimate responsibility for development of the TRM, Ameren and the SAG should work toward the development of the TRM together.

<u>Annual Review of TRM:</u> Ameren is also directed to provide its annual TRM for stakeholder review.

B. Commonwealth Edison (Decision No. 10-0570)

TRM Development (mimeo p. 59)

We agree that a TRM can provide substantial benefits to the EEP going forward, and the Commission directs that ComEd will work with other utilities subject to the requirements of Section 8-103 and 8-104 of the PUA and the SAG to develop a statewide TRM in the future. This will allow a consistent format to be developed for a TRM.

C. Peoples/North Shore (Decision No. 10-0564)

<u>Deemed Parameters: Reconsider Annually with SAG</u> (mimeo p. 54, 55)

[T]he best approach to ensuring cost-effective programs is to reconsider deemed parameters at least annually in collaboration with the Stakeholder Advisory Group ("SAG")...Commission deemed parameters need to be reconsidered at least annually in collaboration with the SAG.

Development of a TRM (mimeo p. 75)

[T]he facts in this proceeding and the lack of continuity between Nicor and Peoples/North Shore assumptions support the need for development of a statewide TRM.

TRM Manual (mimeo p. 76)

Also consistent with our rulings in other recent dockets, the Commission agrees that the development of a TRM will be valuable. We direct the Utilities to coordinate with other utilities, DCEO and SAG participants to develop a statewide manual.

D. Nicor (Decision No. 10-0562)

Technical Reference Manual (mimeo p. 30)

The Commission ordered that Ameren and ComEd work together and with other Illinois utilities to develop a statewide TRM in the future. (ICC Docket 10-0568 Final Order at 70; ICC Docket 10-0570 Final Order at 59-60). Consistent with those Orders, the Commission requires Nicor to participate in the statewide TRM development. The Commission also recommends that the newly-created natural gas SAG participate in developing a statewide TRM.

II. Project Goals/Objectives/Oversight from TRM RFP/Contract

A. Project Goals and Anticipated Results

The TRM should serve the following objectives:

- Provide a basis for reliable deeming of prescriptive measure-level gross and net energy savings for electric and gas programs for use in determining savings under P.A. 95-0481 and P.A. 96-0033.
- Serve as a common reference document for all utilities, stakeholders, implementers, 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 test¹ ("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.
- Recommend 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.
- Provide standard protocols for determining energy savings for some common custom projects, as appropriate.
- The TRM should support 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

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

Organization ("RTO"), as well as those necessary for statewide Illinois tracking of coincident peak capacity impacts.

The TRM will exist as part of the evaluation framework in Illinois, serving to inform the evaluation efforts as well as being updated periodically by evaluation results.

The TRM should have the following characteristics:

- 1. Utilize the best available data from evaluations, baseline and end-use studies, and other available sources to develop measure savings estimates.
- 2. Provide, for each prescriptive measure, an equation or equations that are used to calculate the electric energy savings, natural gas energy savings, coincident peak electric demand reduction, water savings and other non-energy benefits as appropriate, associated with the measure.
- 3. For each prescriptive measure, identify each parameter that is used in the calculation of energy savings. For each parameter, determine the most appropriate data to be used. These data may reflect customer-specific data and/or default values, and should reflect reliable data that is on average representative of the applicable utility service territories in Illinois.
- 4. Also, identify each additional measure-specific parameter that is needed to support each utility's efforts to conduct measure-level TRC calculations, including incremental costs, measure lives, load shape profiles, persistence, and net-to-gross ratios by program or initiative strategy. For each parameter, determine the most appropriate current value to be used or the formula or source of data to be relied on. These values should reflect reliable data that is on average representative of the applicable utility service territories in Illinois. Note: Net-to-gross ratios shall be determined by independent evaluators in accordance with the Net-to-gross framework developed by SAG, and shall be provided to the consultant to include in the TRM as a reference document and an explanation of how it applies to determining net savings.
- 5. Present standardized equations for calculating energy savings, demand reduction, water savings and other quantifiable costs and benefits, as appropriate.
- 6. Provide a process, mechanism or approach for ensuring that interactive effects between efficiency measures are factored into savings estimates, where appropriate.
- 7. Establish and define appropriate baselines for each measure entry. Where appropriate (e.g., market-driven measures) incorporate Federal and Illinois State building and equipment efficiency codes and standards where appropriate, in establishment of baseline efficiency for measures.
- 8. Provide load-shape profiles for each measure or measure category, as appropriate. Profiles for gas measures should have monthly factors; profiles for electric measures should have factors by rating periods

corresponding to the avoided costs, as well as coincident factors for summer and winter peak kW.

 Document the basis of assumptions and data sources. Preference should be given to publicly available data. All data sources should be made available to the oversight committee and ICC for review and verification, and documented in the TRM. Include links to sources that are publicly available.

B. Consultant's Role

The Consultant shall develop a TRM that satisfies the objectives, timelines and characteristics listed above. In doing so, the Consultant should review existing technical reference materials, market assessment and potential studies, and program evaluations from participating Illinois utilities which will be served by the statewide TRM. The TRM should reflect geographic and demographic distinctions between different parts of the state, where appropriate and supported by available data. High-impact measures, which provide the majority of the annual energy savings for the programs in Illinois, should be given first priority and targeted for accelerated completion as contemplated in the above timeline. A list of all electric and gas measures is provided in Appendix C; these measures are ranked by contribution to portfolio savings. Further, High-impact measures are identified in these tables.

The Consultant shall work with utilities and SAG to determine which weather stations and weather data sets should be used for weathersensitive measure calculations.

The Consultant shall also identify assumptions underlying initial TRM savings estimates in which it may not have as much confidence – due to data or other limitations – as would ideally be desirable given the Illinois regulatory context, the desire to potentially bid peak demand savings into capacity markets with their associated accuracy requirements and/or other factors. Those assumptions, along with an explanation for any concerns, should be documented in a memo. The memo should also provide some recommendations as to which assumptions would benefit the most from additional study, with such recommendations based on both the importance of the measures in the utilities' DSM portfolios, their potential importance it utility bids into capacity markets, the degree of current uncertainty regarding the assumptions, and the likely cost of studies to achieve greater accuracy.

In addition to the TRM document, the Consultant shall provide an electronic file containing measure-level savings formulas and all parameter default values, costs (or formulas and default parameters),

measure lives and load shape types. This file should be in a format that can be imported into the various utility tracking systems. In addition, we are interested in Consultant proposals on the best format of a TRM (e.g., word document, database, spreadsheet) to facilitate future maintenance and updates.

The Consultant shall propose a TRM update process that encompasses the annual evaluation process and ensures timely updates to the TRM document. This process should address relevant topics including emergent changes in building and equipment efficiency standards and commercialization of new measure technologies.

C. Oversight Group

The TRM development process will include an Oversight Group that will provide information to the consultant and comment on its work products. The Group will consist of representatives of affected utilities, and DCEO and SAG participants.