# STATE OF IOWA

## DEPARTMENT OF COMMERCE

# UTILITIES BOARD

IN RE:

INTERSTATE POWER AND LIGHT COMPANY, MIDAMERICAN ENERGY COMPANY, AND BLACK HILLS/IOWA GAS UTILITY COMPANY, LLC, d/b/a BLACK HILLS ENERGY DOCKET NOS. EEP-2012-0001, EEP-2012-0002, EEP-2013-0001

### ORDER REGARDING IMPLEMENTATION OF TECHNICAL REFERENCE MANUAL

(Issued March 22, 2017)

# BACKGROUND

In 2013, the Utilities Board (Board) issued orders approving the 2014-2018

energy efficiency plans (Plans) for Interstate Power and Light Company (IPL),

MidAmerican Energy Company (MidAmerican), and Black Hills/Iowa Gas Utility

Company, LLC, d/b/a Black Hills Energy (Black Hills).<sup>1</sup> In those orders, the Board

concluded that a collaborative process to develop and maintain a statewide technical

reference manual (TRM)<sup>2</sup> would be a worthwhile endeavor and approved those

portions of settlement agreements in these dockets in which the utilities agreed to

participate in a collaborative process involving stakeholder development of a

statewide TRM. The Board anticipated that development of a statewide TRM would

improve precision, ensure more rigorous and frequent review of the savings

<sup>&</sup>lt;sup>1</sup> *In re: Black Hills/Iowa Gas Utility, LLC, d/b/a Black Hills Energy*, Docket No. EEP-2013-0001, "Order Approving Settlement" (IUB, Dec. 17, 2013); *In re: Interstate Power and Light Company*, Docket No. EEP-2012-0001, "Final Order" (IUB, Dec. 2, 2013); *In re: MidAmerican Energy Company*, Docket No. EEP-2012-0002, "Final Order" (IUB, Dec. 16, 2013).

See December 2, 2016, December 16, 2016, and December 17, 2013.

<sup>&</sup>lt;sup>2</sup> A TRM provides a standard methodology for estimating savings for energy efficiency measures that are common among the utilities.

algorithms used to estimate measure and program savings, and provide structure for program planning and goal setting. Additionally, it was expected that the TRM would provide standard and defensible protocols for calculating savings, including useful life and baseline assumptions for various energy efficiency offerings.

Based on the settlement agreements, a planning committee was formed to develop a request for proposals for an independent, third-party contractor to be selected through a competitive bidding process. Ultimately, Vermont Energy Investment Corporation (VEIC) was selected as the contractor. A TRM Oversight Committee<sup>3</sup> was formed to work with VEIC, which oversaw the development of the TRM, and designated appropriate individuals to participate on the Technical Advisory Committee. The individuals on the Technical Advisory Committee provided data and technical input, reviewed draft savings calculations, and attended teleconferences to review, comment on, and participate in the development of the TRM.

On September 30, 2016, the Office of Consumer Advocate (OCA), a division of the Iowa Department of Justice, filed the TRM on behalf of the parties with a "Motion for Approval and Implementation of Technical Reference Manual and Update Process" (Motion for Approval). The TRM documentation included Volume1: Overview and User Guide; Volume 2: Residential Measures; Volume 3: Nonresidential Measures; and additional data files and explanation for Residential and Nonresidential high- and low-impact measures.

On December 2, 2016, the Board issued an order requesting responses to seven questions intended to assist the Board in understanding how the procedures

<sup>&</sup>lt;sup>3</sup> The TRM Oversight Committee includes representatives from Iowa utilities, Iowa utility organizations, and interested stakeholders (primarily the parties to the settlements, i.e., IPL, MidAmerican, Black Hills, Environmental Law and Policy Center, Iowa Environmental Council, and OCA).

for implementing and updating the TRM would affect the current energy efficiency plan process and the Board-approved plans. The TRM Oversight Committee, IPL, MidAmerican, Black Hills, and OCA filed responses on January 3, 2017. The Board has considered those responses and will now address the issues raised by the Motion for Approval.

### DISCUSSION

### A. Use of the TRM Assumptions for the 2017-2018 Plan Years

The Motion for Approval indicates that, based on the terms of the Settlement Agreements, it was anticipated that the TRM would be completed and used in the assessment of potential for the upcoming energy efficiency plans for 2019 - 2023 and may be implemented during the current plan cycle for 2014 - 2018. The supporting documentation filed with the TRM also indicated that the utilities planned to make an effort to reflect the TRM measure characterizations for the high-impact measures<sup>4</sup> in the reporting for the 2017 and 2018 Plan years but may also choose to incorporate other measure characterizations from the TRM. During the 2016 Fall Operations Meeting<sup>5</sup>, the utilities indicated which of the TRM's high-impact measures were expected to be incorporated into the 2017 Plan and also estimated the impact to the utility's energy savings from adopting (or not adopting) the TRM assumptions.

When asked how the TRM would affect the remaining years of the current Plan (2017-2018), the parties said that if the assumptions in the TRM were applied to the current programs, there would be an impact to the Plan savings and cost-

<sup>&</sup>lt;sup>4</sup> High-impact measures are defined as those energy efficiency measures that together contribute to ninety percent of the utilities' Plan savings (impact) goal. This includes 40 measures that deliver electric savings and 24 measures that deliver natural gas savings.

<sup>&</sup>lt;sup>5</sup> The Fall Operations meeting was held Wednesday, November 2, 2016.

effectiveness goals. Black Hills provided a side-by-side comparison of measure savings using the Plan's original measure assumptions and the TRM assumptions for the high-impact measures. This information showed that Black Hills' natural gas savings would decrease by eight percent in 2017 and seven percent in 2018 if participation assumptions are constant. Additionally, Black Hills expects the societal benefit cost ratio would decrease from 1.07 to 1.06 for 2017 and 2018 Plan years. Likewise, IPL estimated the electric savings would be three to five percent higher than currently calculated for 2017 and 2018, and natural gas savings would be 11 to 13 percent lower than currently calculated for 2017 and 2018 when applying the TRM assumptions to the high-impact measures. MidAmerican did not calculate the impact expected for 2017 and 2018, but calculated the impact of the TRM assumptions for the high-impact measures based on the 2015 Plan year results. MidAmerican's electric kWh savings would be approximately 13 percent lower, natural gas therm savings would be approximately 28 percent lower, peak kW savings would be about 1 percent lower, and peak therm savings nearly 29 percent lower. The TRM Oversight Committee expects future updates to the TRM to have a more modest annual impact on the utilities' planned and reported savings.

The Board also asked how implementation of the TRM would affect the Board's approval of the five-year plans. The TRM Oversight Committee, IPL, and MidAmerican explained that during the course of a five-year plan, savings assumptions may be updated to accommodate new information such as increasing codes and standards. The utilities communicate these changes to the energy efficiency stakeholders through various meetings or reports. OCA suggested that changes in assumptions, especially those that may have a material impact on

expected savings, should be explicitly identified in a plan modification filing. OCA argued that the Iowa Code does not give a utility the authority to unilaterally change Board-approved Plans or the underlying basis and assumptions for the Board-approved Plan.

Black Hills noted that if the TRM assumptions are applied to the 2017 and 2018 Plan years, there would be a mismatch of information since the current fiveyear plans were designed based on information available in 2012-2013. Black Hills suggested that the programs would have been designed differently if the programs were designed based on the assumptions in the proposed TRM. Black Hills also recommended that the prudency and cost-effectiveness of the utility's Plan should be based on the assumptions at the time of the development of the Plan and only after a modification should the TRM changes be used for cost-effectiveness (or prudency).

According to the TRM Oversight Committee, the utilities are expected to provide sufficient information about changes in TRM values and assumptions so that the Board can effectively evaluate the Plan performance for 2017 and 2018 relative to the Board-approved goals. OCA argued that a modification is not necessary if the utility implements the TRM but continues to report impacts based on savings assumptions that were originally approved as the basis for the Plan. The TRM Oversight Committee believes that any formal review resulting from a TRM or updates should be relatively straightforward and uncontentious since stakeholders have been involved in the development of the TRM.

The Board commends the parties for working together to develop the TRM. The Board anticipates that adopting the TRM will ultimately improve the transparency and consistency in the measure assumptions used by the utilities. In the orders

approving the settlement agreements for IPL's and MidAmerican's current Plans,<sup>6</sup> the Board said it expected that the TRM would be completed in time for use in the Statewide Assessment for the 2019-2023 energy efficiency plans.<sup>7</sup> The orders did not require that the TRM be used in the 2014-2018 plan cycle.<sup>8</sup> The Board is concerned that adopting the TRM assumptions mid-Plan may create confusion and uncertainty about what assumptions will be used to determine prudency of the utilities' Plans and could create a mismatch between the Board-approved Plan goals and the Plan results for 2017 and 2018.

The Board will approve the TRM to be used by utilities in the development of the 2019-2023 Plans. The Board will not require utilities to use the TRM high-impact measure assumptions for the 2017 and 2018 Plan years. However, if a utility chooses to formally implement the TRM assumptions for high-impact measures for the 2017 and 2018 Plan years, the utility should file a Plan modification with updated savings goals to reflect the adoption of the TRM. A Plan modification will ensure that the savings goals and results for the 2017 and 2018 Plan years are based on the same assumptions that were used to develop the Plan savings goals as approved by the Board, allowing actual results to be compared to Plan savings goals.

In the event a utility chooses not to implement the TRM assumptions for the 2017 and 2018 Plan years, the Board requests that the utility track the impact that

<sup>&</sup>lt;sup>6</sup> "Final Order," Docket No. EEP-2012-0001, December 2, 2016, p. 63 and "Final Order," Docket No. EEP-2012-0002, December 16, 2013, pp. 60-61.

<sup>&</sup>lt;sup>7</sup> The "Order Approving Settlement," (Docket No. EEP-2013-0001, December 17, 2013, pp. 6, 15, and 18) acknowledged Black Hills' agreement to participate in a process to develop and maintain a TRM but did not specify when the TRM was expected to be complete or used.

<sup>&</sup>lt;sup>8</sup> IPL's Settlement Agreement (Appendix 1, p. 11) stated, "IPL expects to have the TRM completed in time for use in the Joint Assessment of Potential study for the 2019-2023 EEP targeting the start of the third quarter 2016 for completion, and will review as program/measure level appropriate adjusting impacts collected in the 2014-2018 EEP." The Settlement Agreements for MidAmerican and Black Hills did not mention the use of the TRM in the 2014-2018 EEP.

the TRM high-impact measure assumptions would have on the utility's savings based on the actual participation for 2017 and 2018. This information should be filed in the utility's energy efficiency annual report, but reported separately from the savings results based on the assumptions used to develop the Plan savings goals approved by the Board.

#### B. Use of the TRM Assumptions for Future Plan Cycles

Regardless of how the TRM is used for the remainder of the current Plan (years 2017 and 2018), the utilities expect to use the TRM in the development of the 2019-2023 Plan and most likely in future energy efficiency plans. The parties propose that the TRM be updated annually with the updated version delivered to the TRM Oversight Committee by June 30 of each year and filed with the Board on or about September 30 of each year. The updated TRM would have a proposed effective date of January 1. In the Fall Operations meeting and January Plan Update filings, the utilities will estimate the impacts that the revised TRM assumptions will have on the Board-approved Plans.

The Board's December 2, 2016, order asked the parties whether the TRM could be adopted for the entire five-year plan rather than updating annually and also whether the five-year plan cycle should be shortened to account for updates to the TRM. In response, the parties indicated that it was possible to adopt the TRM for the five-year plan cycle, but suggested that updating the TRM on a regular basis would help ensure the accuracy and consistency of the utilities' energy efficiency plans during the five-year period. Also, the TRM Oversight Committee, IPL, and MidAmerican noted that the regular updates would resemble the current process used to react to changes in codes, standards, and the market. OCA agreed and

noted that the proposed TRM process will provide greater transparency than the update processes the utilities currently use. OCA suggested that eliminating the annual updates would hinder these purposes. None of the parties believe shortening the length of the plan cycle is necessary to accommodate the adoption of the TRM.

The Board believes that the TRM was not intended to be a static document. The Board will approve the annual update process proposed by the parties so that the TRM assumptions will remain current and provide the transparency necessary for the Board and stakeholders.

The Board approves of the TRM and its implementation and update processes as developed and recommended by the parties in the Motion for Approval with supporting documentation. By doing so, the Board accepts the use of the standard formulas contained in the TRM, as prepared by the TRM developer and reviewed by the TRM Oversight Committee, as the basis for determining savings and costeffectiveness of energy efficiency programs.

#### C. Miscellaneous Issues

The Board agrees with the TRM's Oversight Committee's suggestion that the Board's energy efficiency Web page (<u>https://iub.iowa.gov/energy-efficiency</u>) should contain links to the various components of the TRM and subsequent updates. The Board will prepare appropriate content for the Web page regarding the adoption of the TRM. That content will provide that questions about the TRM should be directed to the TRM Administrator at <u>jatrmadministrator@veic.org</u>.

The Board also asked in its December 2, 2016, order whether the Board's rules at 199 Iowa Admin. Code chapter 35 should be revised to accommodate the proposed TRM process. The TRM Oversight Committee, IPL, and MidAmerican said

that revisions are not necessary to accommodate the TRM since the proposed TRM mirrors the current process but provides greater transparency and consistency. Black Hills believes that there are several TRM issues that need to be discussed relative to the chapter 35 rules. OCA supports revisions to chapter 35 to clarify when a utility should request a plan modification as it relates to changes in a program or an energy efficiency plan and suggests that such updates should be justified and transparent to the stakeholders.

The Board's review of its chapter 35 rules is ongoing in a proceeding identified as Docket No. RMU-2016-0018, *In Re: Review of Energy Efficiency Planning and Cost Review Rules [199 IAC Chapter 35]*. A workshop on the chapter 35 rules was held on March 9, 2017. The Board expects to consider possible revisions to the chapter 35 rules to reflect implementation of the TRM and the update process. The TRM implementation and update process approved in this order may be changed by any amendments adopted in Docket No. RMU-2016-0018.

#### **ORDERING CLAUSE**

#### **IT IS THEREFORE ORDERED:**

The "Motion for Approval and Implementation of Technical Reference Manual and Update Process" filed on September 30, 2016, by the Office of Consumer Advocate, a division of the Iowa Department of Justice, on behalf of the Office of Consumer Advocate, Black Hills Energy, Interstate Power and Light Company,

MidAmerican Energy Company, Environmental Law and Policy Center, and the Iowa

Environmental Council is granted as discussed in the body of this order.

# UTILITIES BOARD

/s/ Geri D. Huser

ATTEST:

/s/ Elizabeth S. Jacobs

<u>/s/ Trisha M. Quijano</u> Executive Secretary, Designee

/s/ Nick Wagner

Dated at Des Moines, Iowa, this 22<sup>nd</sup> day of March 2017.