IOWA UTILITIES BOARD
General Counsel and Policy Sections

Docket No.: WRU-2014-0013-0004
Utility: Altoona Tower Condominiums, LLC f/k/a Ironwood Development, LC and Professional Property Management, Inc.
File Date/Due Date: January 9, 2015-N/A
Memo Date: April 1, 2015

TO: The Board

FROM: Parveen Baig, Cecil Wright

SUBJECT: Revised Memo Addressing March 20, 2015, Filing

I. Background

On September 11, 2014, Ironwood Development, LC (n/k/a Altoona Tower Condominiums, LCC), and Professional Property Management, Inc. (collectively, Applicants), filed with the Utilities Board (Board) a request to waive the individual metering requirements in 199 IAC 20.3(1)(b) to allow master metering at an apartment complex with two multioccupancy buildings in Altoona, Iowa. Applicants state that they have a long track record of designing and managing energy efficient and cost effective residential rental properties and Applicants want to utilize energy saving strategies at the apartment buildings in Altoona. According to Applicants, for the energy saving strategies at the two apartment buildings to be economical, the buildings will require master metering.

On November 13, 2014, a conference was held between Board staff, Applicants, MidAmerican Energy Company (MidAmerican), and the Office of Consumer Advocate (OCA), a division of the Iowa Department of Justice, staff. At the conference, it was agreed that Applicants would submit a proposal for master metering as a pilot project which would include a special rate developed by MidAmerican for the two apartment buildings. On January 9, 2015, Applicants filed a preliminary proposal for the Altoona Towers Master Meter Pilot Project (Pilot Project). On January 30, 2015, the Board issued an order addressing the preliminary proposal for the Pilot Project. In the order, the Board stated that the Pilot Project should have well defined goals "so that data collection and analysis strategies can be defined clearly to deliver credible results." The Board then addressed several issues with the preliminary proposal and set out issues the parties needed to address in the February 27, 2015, filing.

On February 27, 2015, Applicants filed a request for waiver with a revised Pilot Project proposal and responses to the Board's January 30, 2015, order. In the

response, Applicants stated that the parties had not reached agreement on the rate to be charged for electric service. Applicants' filings supported using MidAmerican's LS Large Electric Service rate for billing the apartment buildings' usage.

On February 27, 2015, MidAmerican filed a response to the January 30, 2015, order, and on March 4, 2015, MidAmerican filed a response addressing the issue of the rate to be charged for master-meter service at the apartment buildings. In the March 4, 2015, filing, MidAmerican proposed a revised residential rate specially developed for the apartment buildings.

On March 5, 2015, OCA filed a response addressing the rate to be charged for service at the apartment buildings. OCA states that there is no dispute that the Pilot Project will result in efficiencies of operation and reduced risk to MidAmerican and if the apartment buildings' load profile and usage more closely resemble a large commercial customer, the Pilot Project will result in energy efficiencies benefitting ratepayers. OCA strongly urges the Board to consider applying rates with lower usage charges than those proposed by MidAmerican.

On March 20, 2015, Applicants filed a reply to MidAmerican's response regarding the rate that should be charged for the master meter during the Pilot Project. On March 27, 2015, OCA filed a response to Applicants' March 20, 2015, reply. MidAmerican did not file a response to the March 20, 2015, reply.

II. Master Meter Rate for the Pilot Project

The one issue not agreed upon between MidAmerican and Applicants is the rate that MidAmerican should charge for the master-metered electric service. Applicants argue that the commercial LS Large Electric Service rate is the appropriate rate to be charged for the Pilot Project. Applicants state that the predicted energy use and demand profile for the apartment buildings is a reduced summer demand peak and an increased winter use, which according to Applicants, is a desirable utility load.

Applicants conducted rate analysis using MidAmerican's standard electric rate schedules, Rate RS-Special Residential Service, Rate GE-General Energy Service, Rate GD-General Demand Service, and Rate LS-Large Electric Service. Applicants state that the Pilot Project Residential Rate proposed by MidAmerican has the second highest cost of the master meter rate options, while the Standard Residential RS Rate has the lowest cost of the master meter rate options. Applicants state that the LS Large Electric Service rate is the most appropriate rate for the Pilot Project since the projected load at the apartment buildings is characteristic of a commercial load, and not a residential load. According to Applicants, the consolidated electric load presented at the single master meter is disallowed as a standard residential service due to exceeding the 50,000 kWh per year limit for the residential rate; therefore, a commercial rate should be used.

MidAmerican states that it has designed a new rate for the Pilot Project master-metered facilities. MidAmerican does not intend to offer this rate to any other customer. MidAmerican proposed Rate RMS-Residential Master-Metered Service (Rate RMS) for the Altoona Apartments. The rate assumes that the Pilot Project buildings' tenant loads will still have the same load shape as other residential customers, but that with their overall reduced usage levels, the buildings should qualify for the lower second step of the winter rate. MidAmerican states that phase in, equalization, and transmission cost adjustment factors will also apply.

In its March 5, 2015, filing, MidAmerican states that it still considers the residential rate to be appropriate for the Pilot Project facilities. Allowing master-metering addresses the split incentive identified by Applicants. MidAmerican states that the implementation of energy efficiency measures reduces overall usage but does not change the usage pattern for the Pilot Project facilities. MidAmerican points out that the average monthly load factor for the Pilot Project facilities before energy efficiency improvements, as projected by Applicants, is 44 percent. The average monthly load factor of the Pilot Project facilities after energy efficiency improvements is 37 percent. MidAmerican's load research shows that a typical residential aggregated multifamily monthly load factor is 55 percent. A typical MidAmerican residential customer, non-aggregated, monthly load factor is 25 percent and a typical MidAmerican large commercial/small industrial monthly load factor is 60-70 percent. MidAmerican states that this evidence does not support Applicants' requests for a commercial rate.

MidAmerican revised the Rate RMS rate structure by adding a lower-priced winter step for the Pilot Project facilities usage over 100,000 kWh. MidAmerican states that this would approximate the pricing for residential heat customers on an individualized basis, based upon 103 units. This revision was made based upon Applicants' usage data for each apartment. The Rate RMS rates, as revised, are as follows:

Basic Service Charge	$20.00	
Energy Charge	Summer	Winter
First 100,000 kWh	$0.10575	$0.08044
All over 100,000 kWh	$0.10575	$0.04536

III. Applicants' March 20, 2015, Filing

In the March 20, 2015, filing, Applicants make some additional arguments in support of the commercial rate and state that "if MidAmerican's proposed rate is approved for the Pilot Project, Applicants will have no choice but to regretfully forego the Pilot Project and install individual meters at the Pilot Project facilities." Applicants state that although they have already purchased and installed the energy efficiency strategies discussed in the Pilot Project, they will still incur costs and expenses in developing data and the report discussed for the Pilot Project. Without the possibility of recovering some of those costs, the Pilot Project does not make

economic sense for the Applicants since they will bear all of the economic risks of the Pilot Project. Applicants request a hearing to answer any questions the Board may have about the Pilot Project.

Applicants argue that MidAmerican's position with regard to the applicable rate to be charged for the master meter is misplaced. According to Applicants, the purpose of allowing the master metering of the apartment buildings is to make it practical and cost effective for the developer to install energy efficiency strategies in a multifamily facility and to address the split-incentive problem. Applicants state that the energy efficiency strategies "only make economic business sense when the developer is allowed to both receive the incentives provided through MidAmerican's energy efficiency programs and master meter at a commercial, or other appropriate rate."

Applicants suggest that the Rate RMS proposed by MidAmerican has a projected annual energy cost of only $2,000 less than if Applicants implemented individual meters. Applicants state that this savings does not even allow for the recovery of the almost $11,000 that MidAmerican will save from not having to read individual meters. According to Applicants, the commercial rate would result in an energy cost that would be $32,854 less than if individual meters were used. This rate would allow Applicants to receive the energy savings achieved as a result of the energy efficiency strategies and the electric cost savings that result from use of a master meter.

Applicants state that the apartment electric load is more akin to a commercial load than to a residential load. The peak demand ranges from 259 kW to 845 kW under winter heat operation and monthly energy use ranges from 62 mega-watt hours to 220 mega-watt hours for winter electric heat use. This load presented at a single meter is similar to a commercial load. Applicants state that under MidAmerican's current tariffs a residential rate would be disallowed because it exceeded the 50,000 kWh per year limit. In addition, Applicants point out that service to the apartment buildings is 3,000 Ampere, 120/208 Volt, three-phase. A typical residential service is 200 Ampere, 240 Volt, single-phase.

Finally, Applicants argue that the monthly usage pattern calculated by MidAmerican is likely based upon system load for electric services where natural gas is used for heat, not electric heating that will be used in the apartment buildings. Applicants argue that MidAmerican's analysis punishes Applicants for implementing the energy efficiency strategies at the apartment buildings. The lower load factor referenced by MidAmerican is partially due to the energy efficiency strategies installed at the apartment buildings. This defeats the purpose of the Pilot Project. Applicants suggest that use of the commercial rate should be used for the Pilot Project and as the Pilot Project becomes fully operational and actual energy use, demand profiles, and reactive demand become known, the parties will have a chance to evaluate the data and, if necessary, develop a special rate schedule for future projects based upon the actual data from the Pilot Project.

IV. OCA's Response to March 20, 2015, Reply

In its response, OCA states that the Pilot Project will test the hypothesis and provide valuable data to the Board, parties, and public. OCA states that Applicants have provided projected load profile information indicating that the two apartment buildings will have a load profile similar to that of a typical commercial customer served by MidAmerican. OCA states that it would be proper for the Board to set the rates for service at the master meter for the two apartment buildings at, or near to, MidAmerican's LS Large Electric Rates for the duration of the Pilot Project.

OCA states that, in the alternative, the Board could apply rates equal or similar to MidAmerican's LS Large Electric Rates for some shorter initial period, such as the first year of reasonable full occupancy, and then set a rate based upon actual usage and the load profile data.

V. Legal Standards

199 IAC 20.3(1)(b)(4) provides:

> b. The amount of all electricity delivered to multioccupancy premises within a single building, where units are separately rented or owned, shall be measured on the basis of individual meter measurement for each unit, except in the following instances:
> (4) Where individual metering is impractical. "Impractical" means: (1) where conditions or structural barriers exist in the multioccupancy building that would make individual meters unsafe or physically impossible to install; (2) where the cost of providing individual metering exceeds the long-term benefits of individual metering; or (3) where the benefits of individual metering (reduced and controlled energy consumption) are more effectively accomplished through a master meter arrangement.
> If a multioccupancy building is master-metered, the end-user occupants may be charged for electricity as an unidentified portion of the rent, condominium fee, or similar payment, or, if some other method of allocating the cost of the electric service is used, the total charge for electric service shall not exceed the total electric bill charged by the utility for the same period.

VI. Staff Analysis

On March 17, 2015, staff circulated a gold memorandum to the Board recommending that the Board approve the Pilot Project with certain specific requirements. In the memorandum, staff recommended that the Board: (1) approve

the Pilot Project for three years; (2) approve use of the energy efficiency funds as proposed by MidAmerican; (3) require a full 12-months of data be collected prior to the filing of an annual report; and (4) require MidAmerican to file the data for the annual report with the Board and OCA at the time the data is provided to Applicants.

On March 21, 2015, the Board approved staff's recommendations in the gold memorandum with certain revisions. The Board directed that the cost of collecting and analyzing the data for the Pilot Project should be taken from administrative budget dollars from the residential electric energy efficiency budget instead of the nonresidential energy efficiency budget. The Board also required that the baseline between the Pilot Project buildings and the control group buildings be established prior to the commencement of data collection to ensure that the data accurately reflects the benefits of the results of the Pilot Project.

Since the gold memorandum was circulated by Board staff before the March 20, 2015, filing by Applicants, staff did not include the arguments and statements made by Applicants in that filing in the analysis in the memorandum. In their March 20, 2015, filings, Applicants repeat the arguments and statements made in earlier filings. Upon closer review, it appears that Applicants are now stating that without a commercial rate to be charged for electric service at master meter, the Applicants will not pursue the Pilot Project. In addition, Applicants request a hearing to answer questions from the Board.

Although Applicants and MidAmerican have described several objectives of the Pilot Project, staff believes the primary objective is a determination of whether one or more multifamily buildings, with energy efficiency strategies similar to those in the Pilot Project buildings, meet the requirements in 199 IAC 20.3(1)(b)(4) to be allowed to take electric service through a master meter. To reach this determination, the data will have to demonstrate that the use of the energy efficiency strategies significantly reduces the overall electric usage for the two master metered apartment buildings as compared to similar apartment buildings that are individually metered and which have not been constructed with similar energy efficient technologies and strategies.

Paragraph 20.3(1)(b) states that the amount of all electricity delivered to multioccupancy premises within a single building, where units are separately rented or owned, shall be measured on the basis of individual meter measurement for each unit, except in certain circumstances. Subparagraph 20.3(1)(b)(4) establishes that a master meter may be installed where individual metering is impractical. The subparagraph then lists four circumstances where individual metering could be impractical. The relevant circumstance applicable to the two apartment buildings in Altoona is 20.3(1)(b)(4)(3) which provides that "where the benefits of individual metering (reduced and controlled energy consumption) are more effectively accomplished through a master meter arrangement."

The Pilot Project was being discussed and developed to address whether multifamily facilities where the developer installed energy efficiency strategies and facilities and charged for electric usage as an unidentified portion of the rent would reduce energy usage significantly as compared to multifamily facilities where the tenant was charged for electric service and the developer did not install the energy efficiency strategies and facilities. The only issue not resolved in developing the Pilot Project is the rate to be charged for electric service at the master meter.

In the prior memorandum, staff recommended that the Board approve the rate developed by MidAmerican and then a different rate could be approved if the actual Pilot Project data supported a different rate. Applicants argue that MidAmerican's proposed rate makes the Pilot Project uneconomical and only the commercial rate will allow them to go forward with the Pilot Project. The argument is that the commercial rate should be approved for the Pilot Project and then a different rate can be approved based upon the data from the Pilot Project. In the March 20, 2015, filing, Applicants state that they will install individual meters if MidAmerican's proposed rate is approved for the Pilot Project.

Staff believes that the question before the Board is whether the Pilot Project is of sufficient value to warrant approving a commercial rate. Neither of the arguments concerning which rate should be applied can be verified until the data is collected and analyzed. As recommended in the earlier memorandum, staff considers the residential rate developed by MidAmerican to be more appropriate for the Pilot Project because the tenants are residential tenants and the aggregated load profile for the total apartment building will most likely be similar to other residential load profiles. Staff understands Applicants' position that there may not be sufficient economic benefits on a permanent basis for them to take service through a master meter; however, there was no guarantee that the data would support the use of a master meter at the end of the Pilot Project.

Staff believes that section 20.3(1)(b)(4)(3) puts the burden on Applicants to show that the two apartments meet the requirement to allow a master meter. The presumption is that individual metering is the best way to ensure reduced and controlled energy consumption and Applicants are required to show that the installation of energy efficiency strategies and facilities more effectively accomplish this goal. Since the burden is on Applicants to meet the requirement for a master meter, staff believes it is more reasonable to approve MidAmerican's rate for purposes of the Pilot Project with the recognition that a commercial rate could be supported by the data. If the data supports a commercial rate, then a commercial rate could be approved after the data is analyzed. This could occur after the first year data is analyzed.

Staff is not sure that a hearing will provide any more information regarding the Pilot Project proposal that has not already been provided by the parties. Staff recommends the Board direct General Counsel to draft an order for the Board's consideration, consistent with the earlier memorandum, and that addresses the use

of MidAmerican's proposed rate as the most appropriate rate and denies the request for a hearing, with the explanation that once the first year's load data is analyzed a different rate could be approved, if supported by the data.

VII. Alternative Recommendation

Since Applicants have indicated that, without the commercial rate, they will not participate in the Pilot Project, if the Board decides that the Pilot Project is of sufficient value that it should be approved, and the Board wants to ensure that the Pilot Project is undertaken, then the Board can approve the commercial rate proposed by Applicants and supported by OCA. Staff notes that the commercial rate provides deep discounts to Applicants. Applicants are receiving monies from MidAmerican's energy efficiency programs. If the Board makes this decision, staff recommends that the order state that the load profile data will be analyzed at the end of the first 12-month period to determine if the data supports the commercial rate. Staff recommends the order state that the rate charged for service at the master meter may be changed based upon the results of the load profile data.

VIII. Recommendation

Staff recommends that the Board direct General Counsel to prepare an order for Board review that: (1) approves the Pilot Project for a three-year period; (2) approves use of the energy efficiency funds as described; (3) directs MidAmerican to file the annual report with the Board at the same time the report is provided to Applicants; (4) directs that the annual filing include full 12 months of data; and (5) denies a hearing.

In addition, the Board has two alternatives for the rate to be charged for electric service at the two apartment buildings.

Alternative 1: Residential Rate

APPROVED

/s/ Elizabeth S. Jacobs *4-9-15*
Date

/ciw

/s/ Nick Wagner *4/13/15*
Date

/s/ Sheila K. Tipton *4-9-2015*
Date

Alternative 2: Commercial Rate

APPROVED

/ciw

Date

Date

Date

The order needs to note that immediately after the 1st 12-month analysis of data, if the data supports a move to the commercial rate, then that will be the rate going forward. ESJ 4-9-15

I agree with Chair Jacobs' comment. SKT 4-9-2015

The Board should still be required to approve a change to commercial rates. NAW 4/13/15