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IOWA UTILITIES BOARD

STATE OF IOWA
DEPARTMENT OF COMMERCE
BEFORE THE IOWA UTILITIES BOARD

IN RE: PURPA STANDARDS IN THE ENERGY INDEPENDENCE AND SECURITY ACT OF 2007	DOCKET NO. NOI-08-3

ADDITIONAL COMMENTS OF
THE OFFICE OF CONSUMER ADVOCATE

The Office of Consumer Advocate (OCA), a division of the Iowa Department of Justice, is charged with representing the interests of the consumers and the public generally in matters before the Iowa Utilities Board (IUB or Board). Iowa Code § 475A.2 (2009). OCA previously filed comments in the above-captioned Docket and the IUB's "*Inquiry into Advanced Metering and Time-Based Rates,*" Docket No. NOI-06-3,[1] and participated in IUB sponsored Smart Grid workshops on August 24, 2009 and April16, 2010. OCA appreciates having the opportunity to participate in the Smart Grid dialogue that has been facilitated through these proceedings, and incorporates by reference its comments previously submitted in aforementioned dockets which touch on

[1] On March 6, 2007, the IUB issued an Order Declining to Adopt Standard, Closing Docket, and Commencing Pilot Project Discussions.

some of the issues presented for the April 16, 2010 workshop. In accordance with the Board's Order allowing additional comments, OCA responds as follows:

General topics for Board workshop on Smart Grid development

1. **Describe the Smart Grid related project or projects your organization or company is planning or implementing in Iowa, including details of scope, goals, features, technology, timeline, cost, and benefits.**

Interstate Power and Light Company (IPL or Interstate) conveyed its belief that Smart Grid technology will provide many customer benefits in the future and that IPL is committed to a transition to Smart Grid. IPL is developing plans that are designed to provide the most cost-effective transition to Smart Grid as possible, which includes collaborating with outside vendors as well as IPL's key stakeholders in Iowa. (Response p. 1; Att. A, (Apr. 1, 2010)). The only Smart Grid related project planned by IPL for Iowa in 2010 is the installation of between 250 and 1000 AMI smart meters in the City of Dubuque in support the city's "Sustainable Dubuque" initiative. IPL explains that the scope of this project is subject to change and refinement by the City of Dubuque, and therefore, so are the expected goals, features, timeline, costs and benefits.

MidAmerican Energy Company (MEC or MidAmerican) indicated it will carefully monitor Smart Grid deployment throughout the country to assess its value to MEC customers and will initiate pilot projects when smart Grid technologies or rate designs require demonstration within MidAmerican's service territory. MEC's smart meter plan includes developing strategies to take full advantage of the automated meter reading ("AMR") technology that was recently installed throughout its service territory.

(MEC Comments, p. 2). MEC planned to address these issues more fully at the April 16 workshop.

OCA agrees with MEC that Smart Grid is a concept that encompasses a myriad of technologies throughout the electric system. The Smart Grid possibilities addressed by IPL and MEC, however, seem to focus on smart meter technologies that include activity on the customer side of the meter, which in turn generate issues about time-differentiated pricing, customer privacy and access to information, third-party access to information, customer education, minimum technology functions, and terms for customer participation. While this focus is understandable because of recent smart meter deployments, like those noted in MEC's presentation slide 11and in OCA's August 3, 2009 comments p. 9, OCA would reiterate its earlier point (OCA Aug. 3, 2009 comments, pp. 6-9) and urge that more consideration should be given to smart grid improvements to electric delivery system reliability and efficiency that will help support the integration of more renewable distributed generation. (OCA Aug. 3, 2009 comments, pp. 6-9). These opportunities can be pursued independent of smart meter deployments and the numerous issues that accompany smart meters. Another important reason to focus analysis and resources on Smart Grid investments to improve delivery system reliability and efficiency is that such investments will be useful to support concurrent initiatives to integrate more renewable energy resources.

Given the competition for capital resources that will influence whether Smart Grid projects are pursued (MEC Apr. 1 comments, p. 2) and a seeming tendency among the utilities, as evidenced through described their described smart grid plans, to focus on

meter technologies and programs that provide operating efficiencies to the utility and critical peak period load reductions, it will be important to evaluate the utilities' comprehensive plan and prioritization of various Smart Grid components.

OCA agrees with MEC that full deployment of Smart Grid technologies should be driven by economics and value to customers. (MEC Comments p. 2). OCA also agrees with IPL that Smart Grid investments should be guided by a thorough planning analysis, including collaboration with key stakeholders, with the objective of developing a plan that will provide the most cost-effective transition to Smart Grid possible. (IPL Comments, p. 1). It does not appear, however, that this collaborative process has been incorporated in IPL's Smart Grid Strategy Development 2010 Timeline. (IPL Presentation, p. 4). The advantages of utilizing a collaborative process for this purpose is that it allows evaluation of all aspects of Smart Grid, including potential regulatory treatment, and provides a common understanding among all stakeholders about how Smart Grid projects are to be evaluated. (MEC Presentation, p. 12). Given the uncertainty of costs and benefits of certain Smart Grid investments, Iowa utilities should be carefully studying smart grid options and the results of recent Smart Grid deployments.

2. **Describe Smart Grid related projects your organization or company (including affiliated companies) is currently implementing in other jurisdictions. Do these projects include data collection on the effects of the changes, and if so, are the data or reports readily available?**

IPL described four Smart Grid related projects that its affiliate Wisconsin Power and Light Company is implementing or planning to implement and the data collection plans associated with these projects.

MidAmerican described the Smart Grid technical conferences underway in Illinois, but did not indicate any Smart Grid related projects by MidAmerican or its affiliates.

3. **What information is your organization collecting about its Smart Grid projects and how do you plan to share information with others?**

IPL recognizes the need to put forth a more definitive plan and business case for its pending Smart Grid pilot, and proposes a collaborative planning approach to ensure the Board and other stakeholders understand and support IPL's AMI/Smart Grid comprehensive strategy and how customers will benefit. (IPL Comments, p. 2). OCA expects this process would include a sharing of information about Smart Grid projects and plans by IPL and its affiliates. As indicated above, the timeline proposed in IPL's presentation seems unrealistic for a comprehensive collaborative process.

MEC indicates that utilities should continue to monitor demonstration pilots throughout the country to assess the value of strategic deployments, utilities should continue to inform the IUB on Smart Grid deployment in lieu of filing formal plans, and that the IUB should continue to have periodic workshop to discuss Smart Grid policy issues and for utilities to provide updates on Smart Grid projects.

OCA finds the ongoing discussion of policy and information about Smart Grid technologies through these workshops to be valuable, particularly given the various

Smart Grid options, significant associated capital commitment, the uncertain costs and benefits of certain Smart Grid components, and the many issues that arise in connection with Smart Grid including, but not limited to, cyber-security, customer privacy, customer education, and customer access to data.

4. **Will your organization's project or projects involve redesigned electric rates or pricing proposals, such as critical peak pricing or other forms of dynamic pricing? If possible, provide details on how your proposed pricing compares with existing time-differentiated pricing, what changes in revenue may occur due to customer participation, and whether potential new or experimental pricing would require waivers of the Board's existing rules.**

IPL indicates that it does not have any currently-planned Iowa projects that would require redesigned rates, but acknowledges that such redesign may be very possible in the future. In accordance with direction from the Wisconsin Public Service Commission, IPL's Wisconsin affiliate, Wisconsin Power and Light Company (WPL), is evaluating splitting its current time of day pricing into additional pricing periods. This analysis will be completed later this year.

While it may be too early to know specific pricing details and revenue impacts, OCA maintains that it is not too early to begin discussing in a collaborative format the general framework of pricing and program design elements that would be needed to support and enhance the potential benefits of Smart Grid plans that are under development or consideration.

5. **If Iowa utilities are beginning to implement Smart Grid projects, even on a pilot basis, should the Board establish basic principles for Smart Grid implementation? If yes, explain which, if any, of the following should be considered:**

- **A Board-approved collaborative process for the development of projects;**
- **Minimum functional service requirements;**
- **Use of commonly-accepted open standards or protocols;**
- **A mandate for consumer access to information and privacy;**
- **A mandate for automated, customer-initiated control of loads;**
- **A mandate for third-party access to data and provision of services;**
- **Information requirements for project proposals ("business cases") to be reviewed by the Board; and**
- **A comprehensive smart grid plan.**

OCA favors the establishment of a collaborative process to comprehensively evaluate Smart Grid, particularly given the many technologies that comprise Smart Grid, the significant cost of full deployment of Smart Grid components, the potential for meter selections to be made primarily on the basis of business operational efficiencies and without adequate consideration of desired customer-side functions and benefits, the possibility of such investments becoming obsolete due to technological developments, and the need to consider issues such as cyber-security, customer education and customer privacy considerations.

It would be beneficial to use the collaborative to engage in a comprehensive evaluation of Smart Grid technology and desired features and functionality, and achieve through the process a common understanding of how Smart Grid projects will be planned and evaluated. While Iowa must decide many of these issues for itself, it can and should take advantage of the information and conclusions reached by other jurisdictions, organizations, and collaborative efforts. A collaborative forum on the state level would be useful to monitor and guide progress on these issues, to evaluate new information and

stakeholder views on these issues, and to evaluate progress on initiatives that will likely be needed in conjunction with Smart Grid investment.

6. **If the Board were to require utilities to file plans describing potential Smart Grid projects or programs, when should such plans be due, and what should the plans contain?**

MidAmerican responds that it will keep the Board informed as to its assessment of potential for Smart Grid technology deployment without a formal plan requirement. IPL plans to utilize a collaborative process to develop its Smart Grid plan.

OCA supports using the above-referenced collaborative process to facilitate information sharing among stakeholders on Smart Grid issues, analysis, and plans. In addition, to the extent applicable, utilities should be filing Smart Grid and demand response related assessments in pertinent IUB venues, such as dockets evaluating resource needs and adequacy, including energy efficiency plans.

MISO and ARC related-questions

1. **What are the differences in applicability of FERC orders and MISO tariffs and rules with respect to utilities that distribute more than or less than 4 million megawatt-hours (MWh) per year of electricity in Iowa?**

OCA agrees with responses to this question provided by Interstate and MidAmerican.

2. **Will Iowa statutes, Board rules, or Board orders conflict or otherwise interact with FERC orders or MISO tariffs and rules regarding ARCs in Iowa?**

Because the proposed MISO tariff and underlying FERC directive is conditioned on ARC participation being allowed by state commissions, (IUB Order, p. 1 (Mar. 29,

2010)),[2] OCA believes there is no irreconcilable conflict between Iowa law and proposed MISO tariffs to allow ARCs to offer demand response resources into wholesale energy and ancillary services markets. State regulatory bodies apparently retain the authority to determine whether ARC participation in markets is consistent with state law and the terms under which such participation is allowable. Under this arrangement, the participation of ARCs in the Midwest ISO market would not violate regulated service requirements under § 476.8 or antidiscrimination provisions in chapter 476 because the Iowa Board retains full authority to price demand resource and assure that ARC participation, if allowed, occurs on terms that are consistent with Iowa's policy on energy efficiency and demand response and are unfair or unduly discriminatory to retail ratepayers. If the Board finds that ARC participation in Iowa would undermine these objectives or requirements, the Board can determine that ARC participation in the Midwest ISO market utilizing Iowa retail demand response is not allowed.

While Iowa electric utilities provide service pursuant to exclusive service territories and are charged with delivering cost-effective energy efficiency programs that meet the needs of all customer classes, these provisions do not necessarily preclude other providers of energy efficiency and demand response from entering the market. Indeed, there are currently many such market participants (including, for example, retailers of energy efficient products and distributed generation resources), that are wholly independent of utility sponsored energy efficiency programs. The key difference is that

[2] The Board Order cites FERC Orders 719 and 719-A as directing regional transmission organizations, such as the Midwest ISO, to amend their rules to allow ARCs to participate in markets, *if allowed by state commissions*.

ARCs would be marketing retail demand response enabled by utility-supplied retail service (that is delivered pursuant to an exclusive grant of authority in a given service territory) in the wholesale market. The Board is charged with setting just and reasonable rates of rate regulated electric utilities in Iowa, overseeing the utilities' provision of energy efficiency and demand response programs, and preventing unreasonable discrimination in Iowa retail electric rates. Iowa Code §§ 476.6(16), 476.8, 476.5. The Board is, therefore, justified in determining the terms under which ARC can engage Iowa retail load reductions for transactions in the wholesale market. At least until there is certainty as to the resolution of federal pricing terms governing ARC participation in markets, the Board should extend its current prohibition on ARC operations in Iowa but clarify that ARCs are not precluded from operating in Iowa as an agent to the utilities under the umbrella of regulated demand response programs.

3. **Would the operation of ARCs in Iowa create problems of rate discrimination or conflicts with Iowa statutes and Board rules regarding utility service territories?**

Please see response to Question 2.

The possibility for unfair rate discrimination exists and OCA's concerns in this regard are heightened by the one-size-fits all approach for pricing demand response among the RTOs in FERC's proposed rulemaking RM10-17. OCA favors the approach set forth in the Midwest ISO's October 2, 2009 tariff proposal to facilitate ARC market participation, which calls for compensating ARCs at (locational marginal price (LMP) minus "Marginal Foregone Retail Rate" (MFRR)) * revenue reduction. The Midwest

ISO pricing approach is expected to have a neutral impact on vertically integrated utilities and retail customers and, if approved, would mitigate OCA's concerns about unfair rate discrimination resulting from ARC participation in Iowa.

4. **How might the participation of ARCs in Iowa affect the cost of electricity for retail customers of utilities?**

It would depend on the applicable terms for ARC participation, an issue currently pending before the FERC in RM10-17 and in MISO's October 2, 2009 revision to the Open Access Transmission, Energy and Operating Reserve markets Tariff. For reasons provided in OCA's response to Question 3, it is more likely that ARCs would be allowed to participate in Iowa under the MISO pricing approach than under the approach in RM10-17. Assuming ARC participation in Iowa would generate more demand response participation in the market under the compensation terms proposed by MISO, this should produce a generally good outcome of placing additional downward pressure on market prices and thereby extracting additional value from demand response resources. To the extent Iowa utilities rely on the market to sell or purchase energy, this could have differing impacts on the cost of electricity for retail customers.

5. **Do the MISO revisions to tariffs filed with FERC on October 2, 2009 provide adequate compensation to LSEs if ARC are allowed to operate in Iowa?**

Yes.

6. **How might the participation of ARCs in Iowa affect system reliability, participation in MISO markets, or the cost to LSE customers?**

If ARCs participate in the market at the rate proposed by MISO, this should not result in adverse impacts to system reliability or cost to the LSE customer. It is possible

that ARC participation in Iowa could result in more demand response resources than currently exist and positively impact system reliability and retail rate impacts. OCA agrees with IPL that any new DR programs implemented under MISO's ARC rules should be designed to assure that demand response resources are utilized appropriately in relation to market energy prices order to assure lower system costs.

7. **How might the operation of ARCs in Iowa affect the participation of utility customers in demand response tariffs or programs, such as interruptible, time-of-use, or direct load control programs?**

If allowed to operate independent of current utility administered demand response programs, ARCs could attract existing demand response participants which would reduce participation in utility programs. ARCs could also attract new demand response participation or greater value from current demand response load in Iowa.

8. **How might the operation of ARCs in Iowa affect the forecasts of Iowa utilities with respect to peak load, reserve margins, energy sales, and other parameters?**

OCA agrees with MidAmerican's response to this question.

9. **If ARCs are allowed to operate in Iowa, would utilities seek to alter the goals in their energy efficiency plans for capacity and energy savings?**

This would be a utility decision. OCA does not know enough about the potential ARC operations in Iowa to draw any conclusions about how these operations might impact the utilities' capacity and energy goals.

10. **If the Board takes no action with respect to ARCs, what effect will that have on Iowa LSEs in the short term and long term?**

If the Board takes no further action beyond its current prohibition on ARC operations in Iowa, there will likely be no short term impacts on Iowa LSEs. The current prohibition is broad enough that it might interfere with the long term ability of LSEs to work with ARCs to implement new and innovative demand response opportunities. Even if ARCs are not allowed to operate directly in Iowa's retail demand response market, the OCA recommends the Board clarify that this prohibition does not preclude LSE's from using ARCs as agents in developing, implementing, or administering new demand response products within regulated demand side management programs.

11. Should the Board prohibit demand response resources from retail customers of utilities that distribute more than 4 million MWh in Iowa from being bid into the MISO markets?

For the time being and until the applicable compensation system for demand response participation in the market is determined by FERC, the Board should continue its prohibition on retail customers bidding demand response resources directly into the Midwest ISO markets. Iowa's utilities should, however, continue integrating retail demand response resources in the Midwest ISO markets under terms that are consistent with the DSM program purposes and that should be acceptable to demand response program participants.

12. Should the Board suspend approval of ARCs in Iowa, pending further information about the effects of ARCs, the evolution of MISO tariffs and rules, and FERC rulings on MISO filings?

On March 29, 2010, the Board issued an order temporarily suspending and prohibiting ARCs from operating in Iowa and temporarily suspending and prohibiting the

transfer of demand response load reductions to Midwest ISO markets directly by retail customers or by third-party ARCs. For the time being and until it is determined with reasonable certainty the terms under which ARCs will be allowed to participate in the Midwest ISO markets, the Board should continue to prohibit aggregators of retail customers from contracting directly with Iowa retail customers and to prohibit the transfer of demand response load reductions to Midwest ISO markets directly by retail customers or by third-party ARCs.

OCA agrees with the Board there are potential benefits to allowing ARCs to operate in Iowa, including that ARCs could encourage implementation of innovative demand response programs and greater use of existing programs. The Board should clarify that the current prohibitions do not prevent ARCs from operating in Iowa pursuant to service contracts with Iowa utilities involving, for example, demand response program design, implementation, or administration. In this way, utilities can consider implementing the innovative demand response programs and approaches that ARCs have developed even if ARCs are not allowed to provide this service directly to retail customers.

Respectfully submitted,

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