

September 18, 2013

IOWA UTILITIES BOARD

STATE OF IOWA

BEFORE THE IOWA UTILITIES BOARD

IN RE:)	
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MIDAMERICAN ENERGY)	DOCKET NO. EEP-2012-0002
COMPANY)	
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BRIEF OF ENVIRONMENTAL INTERVENORS

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The Environmental Law & Policy Center, Iowa Environmental Council and Iowa Policy Project (Environmental Intervenors) file this brief pursuant to 199 Iowa Administrative Code Chapter 35 regarding MidAmerican Energy Company's (MidAmerican) request to the Iowa Utilities Board for approval of its 2014-2018 Energy Efficiency Plan. Prior to the hearing and following negotiations, the parties filed a non-unanimous partial settlement agreement that narrowed the disputed issues in this case. Several important issues remain in dispute, including: (1) whether or not the Board should require MidAmerican to set targets based on the Cadmus Assessment of Potential and if so whether MidAmerican should target a higher proportion of the achievable market potential identified in the Cadmus Assessment of Potential study than the current targets reflect; 2) whether or not the Board should require MidAmerican to apply net-to-gross ratios in reporting energy and capacity savings; and 3) whether or not the Board should approve various proposals advanced by a coalition of industrial companies. The Environmental Intervenors also attach an appendix with our comments on the Non-unanimous Partial Settlement Agreement filed in this case and request the Board's approval of parts of the settlement with other issues resolved as advocated in this brief.

STATEMENT OF THE CASE

Energy efficiency is the least cost way to meet consumer demand for energy. MidAmerican has submitted a plan to the Iowa Utilities Board that fails to deliver as much cost-effective energy efficiency to its customers as the Assessment of Capacity and Energy Savings Potential in Iowa (Assessment of Potential) conducted by the Cadmus Group indicated it could. While the MidAmerican Plan reflects a continuation of some good programs, the proposed Plan's savings targets ranging from 1.16 to 1.21% of forecasted sales are based on program participation rates during the recent economic downturn and do not even target the savings

achieved during that period. MidAmerican's proposed targets take a step backward and are lower than the 2.06% in 2014 to 1.68% in 2018 of market potential identified in the Assessment of Potential. MidAmerican's low savings targets are actually inflated because the savings do not apply net-to-gross ratios and therefore take credit for energy efficiency savings that would have occurred without MidAmerican's programs. The record indicates that MidAmerican could provide its customers with significantly higher energy efficiency savings targets while still maintaining the cost-effectiveness of the plan. MidAmerican could do more to implement exemplary program design and practices and include additional technologies in its plan, and applying net-to-gross ratios will more accurately count savings and enable MidAmerican to more efficiently allocate resources to the most effective programs and measures. MidAmerican's failure to aggressively pursue more cost-effective and achievable energy efficiency hurts MidAmerican customers, particularly when MidAmerican will need to meet customer demand by purchasing energy from the wholesale market or build new generation at greater cost.

STATEMENT OF THE LAW

The Iowa Code recognizes the critical role that energy efficiency plays in meeting consumer demand and requires Iowa's rate regulated utilities to file energy efficiency plans. Iowa Code § 476.6; 199 Iowa Administrative Code § 35.1. Iowa law emphasizes the importance of energy efficiency by including "programs for customers to encourage the use of energy efficiency and renewable energy sources" as part of the definition of reasonably adequate service. Iowa Code §476.8. Supporting the policy priorities in the Iowa Code, the IUB rules declare that "the implementation of effective energy efficiency plans by utilities and the opportunity of the utilities' customers to participate in and benefit from the energy efficiency plans to be of the highest priority." 199 Iowa Administrative Code § 35.1.

As part of the process for creating energy efficiency plans, the law requires utilities to assess the potential for energy efficiency, but the Board is ultimately responsible for setting the savings targets for the utilities to meet based on the assessment of energy efficiency potential. Iowa Code § 476.6(16)(b). The utilities must submit plans designed to meet the targets set by the Board. *Id.* Additionally, as part of the Efficiency Plan, the rules require “[t]he utility shall estimate gross and net capacity and energy savings, accounting for free-riders, take-back effects, and measure degradation.” 199 Iowa Administrative Code § 35.8(2)(c).

As part of the plan, IUB rules require utilities to include information about their anticipated load, including the need for additional power and if that additional power will be met through new generation or purchases from the market. 199 Iowa Administrative Code § 35.9. This allows the Board and the public to compare energy efficiency to the other steps the utility could take to meet customer demand and to ensure that energy efficiency is given “the highest priority.”

STATEMENT OF THE FACTS

Energy efficiency is the lowest cost alternative for providing customers service. By definition, cost-effective energy efficiency meets energy needs at lower costs than building new power plants. The energy efficiency resource is most valuable when new generation will be needed in the near term or the utility is buying expensive peak power from the wholesale market that could be displaced by energy efficiency. In MidAmerican’s case both are occurring. During the 2014-2018 Plan period, MidAmerican will need to buy power from the market, and it plans to build additional wind generation. Given its looming resource deficiency, MidAmerican’s failure to aggressively pursue more cost-effective and achievable energy efficiency hurts MidAmerican’s customers.

MidAmerican's proposed 2014-2018 energy efficiency plan includes electric savings targets ranging from 1.16 to 1.21% of total forecasted sales. (MidAmerican Non-unanimous Partial Settlement, Appendix 3 at 1.) This represents 1281 GWh of electric savings. (*Id.*) MidAmerican's total five-year plan budget for the electric and gas energy efficiency portfolios, outreach, education and training, demand response and other programs is \$512 million.¹ (MidAmerican Plan, Vol. II, App. B.)

MidAmerican's proposed plan sets savings targets significantly lower than the energy efficiency potential identified for the 2014-2018 plan cycle in the Iowa Utility Association commissioned statewide Assessment of Energy and Capacity Savings Potential in Iowa (Assessment of Potential) conducted by the Cadmus Group. The Assessment of Potential identified 4,602 GWh of technical energy efficiency potential and 3,570 GWh of economic energy efficiency potential in MidAmerican's service territory through 2023. (MidAmerican Plan, IUA Joint Assessment Part 1 at 32.) A conservative estimate of market potential for MidAmerican's service territory ranges from a high of 2.06% of sales in 2014 to a low of 1.68% of sales in 2018², (Crandall Direct at 28.) while the proposed plan savings go from 2014's 1.16% to a high of 1.21% in 2015 back down to 1.19% in plan years 2016-2018. (MidAmerican Non-unanimous Partial Settlement, Appendix 3 at 1.)

¹ MidAmerican's changes to the upstream lighting program pursuant to Settlement Term 11.F are projected to increase the budget by approximately \$7 million. (Yoder Rebuttal, Schedule 3.) Other settlement terms are also likely to have budget impacts, but we have not seen revised budgets that reflect this.

² MidAmerican provided a higher estimate of market potential to the Board that assumed market potential is 91% of economic potential identified in the Cadmus Assessment of Potential. *See* (Response to Request for Additional Information, Attachment 4 (March 19, 2013). Witness Crandall's conservative estimate of market potential is based on 85% of the economic potential identified in the Assessment of Potential.

MidAmerican did not use the Assessment of Potential to develop its savings targets. Instead, MidAmerican relied heavily on past participation. (Rea Direct at 7; Crandall Direct, Ex. GCC-4 at 1.) MidAmerican used program participation numbers primarily from 2009-2011 to project future participation. (Crandall Direct, GCC-7.) MidAmerican's 2009-2011 program years were characterized by low participation due to poor economic conditions. (MidAmerican 2009 Annual Report at 9; MidAmerican 2010 Annual Report at 1; MidAmerican 2011 Annual Report at 1.)

MidAmerican's low savings targets developed based on historic data that reflects depressed participation rates actually are inflated because they fail to account for net-to-gross ratios and, therefore, give MidAmerican's programs credit for savings that would have occurred even in the absence of the energy efficiency program. MidAmerican calculated net-to-gross ratios for several programs included in the current plan in its evaluation for the 2009-2013 plan. (Environmental Intervenors Exhibit 211.) MidAmerican has energy efficiency programs in Illinois that are largely based on the Iowa programs in this docket. (Rea Cross, Hearing Transcript at 295) MidAmerican has developed and applied net-to-gross ratios for calculating savings in the Illinois program. (Rea Cross, Hearing Transcript at 296.)

ARGUMENT

The Environmental Intervenors submit that the Board should 1) require MidAmerican to modify its plan to achieve higher savings targets identified in the Assessment of Potential; 2) require MidAmerican to calculate savings using net-to-gross ratios; 3) require MidAmerican to market Combined Heat and Power (CHP) measures in its plan and include topping cycle CHP in its plan; and 4) reject certain positions advanced by the Iowa Customers for Energy Efficiency (ICEE).

I. The Board Should Require MidAmerican to Set and Reach Higher Energy Efficiency Savings Targets.

MidAmerican's Plan fails to deliver as much cost-effective energy efficiency to its customers as the Assessment of Potential indicated is achievable. The proposed plan savings targets ranging from 1.16 to 1.21% are significantly lower than the 1.68 to 2.06% range of conservatively estimated achievable market potential. In fact, despite Iowa law requiring the savings targets to be developed from the Assessment of Potential, *see* Iowa Code § 476.6(16)(b), MidAmerican discarded the Assessment of Potential in developing its savings targets. The Assessment of Potential identifies significantly more energy efficiency potential in MidAmerican's service territory, and the Board should use the Assessment of Potential to set MidAmerican's savings targets. Even if the Board follows MidAmerican's methodology and bases MidAmerican's savings targets on past participation, the Board should adjust MidAmerican's targets to reflect that plan years 2009-2011 occurred during a significant economic downturn. If MidAmerican has program participation that is in line with the economic recovery, takes additional steps toward exemplary program design including expanding successful cost-effective programs like its behavioral program, and aggressively pursues combined heat and power, significantly higher savings goals are reasonable and attainable. MidAmerican's failure to aggressively pursue more cost-effective and achievable energy efficiency hurts MidAmerican's customers, particularly when MidAmerican is planning to meet customer demand by purchasing energy from the market and building new generation at greater cost. The Board should order MidAmerican to revise its plan to include higher savings targets for each year of the plan.

A. MidAmerican’s Savings Targets Do Not Comply with Iowa Law Because MidAmerican Did Not Base Its Savings Targets on the Assessment of Potential.

MidAmerican’s approach to developing its savings targets does not comply with the requirements of Iowa law. The Iowa Code requires the assessment of potential and that the Board develop utility savings targets based on the assessment of potential:

A gas and electric utility required to be rate-regulated under this chapter shall assess potential energy and capacity savings available from the actual and projected customer usage by applying commercially available technology and improved operating practices to energy-using equipment and buildings. The utility shall submit the assessment to the board. Upon receipt of the assessment, the board shall consult with the economic development authority to develop specific capacity and energy savings performance standards for each utility.

Iowa Code § 476.6(16)(b) (emphasis added).

MidAmerican’s proposed plan does not provide the Board with a roadmap for how to use the Assessment of Potential to develop savings targets for MidAmerican’s programs because MidAmerican did not use the Assessment of Potential to develop its savings targets. MidAmerican developed its savings targets by using historic participation for some programs and program manager estimates for other programs and then multiplied the participation levels by estimated savings developed through the savings algorithms. (Rea Direct at 7; Crandall Direct Testimony, Ex. GCC-4 at 1.)

MidAmerican dismissed out of hand the usefulness of the Assessment of Potential in developing savings targets. In his rebuttal testimony, Chuck Rea stated “[t]here is nothing in the Assessment that suggests that the market potential study should serve as a guideline for setting program savings goals.” (Rea Rebuttal at 5; *see also* Crandall Direct Testimony, Ex. GCC-2 at 1 (“MidAmerican does not believe that moving incentives and savings targets to reflect the full energy efficiency market potential as reported in the 2014-2023 Assessment of Energy and Capacity Savings Potential in Iowa prepared by The Cadmus Group is a tenable scenario in

which to operate an energy efficiency program.”.) MidAmerican’s outside consultant echoed this sentiment: “The ‘market potential’ as derived in the Cadmus report and cited by Ms. Foster as being greater than the savings proposed by MidAmerican is not an appropriate basis for establishing energy savings targets.” (Pickles Rebuttal Testimony at 16.)

Iowa law requires the assessment of potential. The law goes a step beyond just conducting the assessment by requiring the Board to set savings targets based on the assessment of potential by stating “[u]pon receipt of the assessment, the board shall consult with the economic development authority to develop specific capacity and energy savings performance standards for each utility.” Iowa Code § 476.6(16)(b). The requirement for the Board to set targets after receiving the assessment would be pointless if the assessment did not have to be used to set targets. MidAmerican’s approach treats the requirements of the law to conduct an assessment of potential as an arbitrary exercise and a box to check instead of as an exercise to inform the development of the energy efficiency plans that come after it. The Board cannot rely on MidAmerican’s plan to set the savings targets because MidAmerican did not use the Assessment of Potential as required by Iowa law.

B. The Assessment of Potential Demonstrates that There is Significantly more Cost-Effective Market Potential Energy Efficiency in MidAmerican’s Service Territory.

The Iowa Utility Association commissioned a statewide Assessment of Energy and Capacity Savings Potential in Iowa (Assessment of Potential) conducted by the Cadmus Group. The Assessment of Potential is required by law as a precursor to the utility energy efficiency plans. Iowa Code § 476.6(16)(b). The Assessment of Potential identified three types of energy efficiency potential: 1) technical potential, the energy efficiency available using technologies and practices widely available commercially within existing technical limitations; 2) economic potential, all of the technical potential that passes the societal cost test; and 3) market potential,

“a realistic upper bound to potential savings from cost effective efficiency programs that could be achieved.” (MidAmerican Plan, IUA Joint Assessment Part 1 at 18.) Market potential is an aggressive acquisition scenario that assumes exemplary program design and implementation practices, emergence of new technologies, currently not widely available in the marketplace, incentive payments up to 100% of incremental costs and financing availability. (*Id.* at 49.)

The Assessment of Potential identified 4,601 GWh of technical energy efficiency potential and 3,570 GWh of economic energy efficiency potential in MidAmerican’s service territory through 2023. (*Id.* at 32.) MidAmerican estimated the market potential to be 91% of the economic potential identified in the Cadmus Assessment of Potential. (Response to Request for Additional Information, Attachment 4 (March 19, 2013).) ELPC Witness Crandall used a more conservative estimate of market potential at 85% of the economic potential identified in the Assessment of Potential. (Crandall Direct at 26.) MidAmerican failed to set savings targets that will accomplish large portions of the conservatively estimated cost-effective achievable market potential. MidAmerican’s targets represent 67% of the market potential identified by Witness Crandall (62.7% of the market potential identified by MidAmerican) for the entire five years of the plan. (Crandall Direct at 27.)³

The Iowa Code requires that the Board “develop specific capacity and energy savings performance standards for each utility” based upon the assessment of potential. Iowa Code § 476.6(16)(b). In order for the Board to give energy efficiency the highest priority, the Board should set targets that are consistent with the results of the Assessment of Potential and capture as much of the achievable cost-effective market potential identified in the Assessment of Potential as possible.

³ These percentages are adjusted to reflect the new savings targets MidAmerican provided as Appendix 3 to the Non-unanimous Partial Settlement.

MidAmerican did not follow the law and use the Assessment of Potential to set its targets. Instead, MidAmerican set its initial targets well below the achievable market potential. The difference between MidAmerican's proposed targets and the achievable market potential is the effort MidAmerican puts into acquiring savings (program design and implementation) and the amount of budget allocated to achieving the targets or in other words, artificial budget and planning constraints imposed on the energy efficiency plan by MidAmerican itself. (Crandall Direct at 27.) As will be highlighted below, MidAmerican's planning constraints included setting participation targets based on participation rates during an economic downturn. Witness Crandall recommended a 1.77% savings target to give MidAmerican flexibility to meet all of the conservatively estimated achievable market potential over the course of the five year plan. (Crandall Direct at 29.) The Board should require MidAmerican to set savings targets that include all of the conservatively estimated achievable market potential identified in the Assessment of Potential.

C. MidAmerican Developed Savings Targets Based on Program Participation Rates During an Economic Downturn Resulting in Artificially Low Targets.

Even if the Board chooses to use MidAmerican's methodology for developing savings targets instead of the Assessment of Potential, the Board should make adjustments to the savings targets because MidAmerican's methodology and assumptions created artificially low targets. MidAmerican developed its savings targets by using historic participation for some programs and program manager estimates for other programs and then multiplying the participation levels by estimated savings developed through the savings algorithms. (Rea Direct at 7; Crandall Direct, Ex. GCC-4 at 1.) This type of methodology makes the past participation rates crucial in estimating the future targets.

MidAmerican used historic participation data and information from MidAmerican's program managers and implementation contractors to develop projected participation for the 2014-2018 plan. (Rea Direct at 7; Crandall Direct at GCC-4.) Upon closer examination of MidAmerican's participation estimates, it is clear that MidAmerican developed its savings targets using historical participation rates that relied heavily on data from 2009-2011 program years. Of the 235 measures that MidAmerican is implementing as part of the 2014-2018 plan, 194, or 83%, used participation data from only 2009 to the present. (Crandall Direct at 20 (citing MidAmerican Response to EI Data Request 32, GCC-7).) Furthermore, MidAmerican did not attempt to calculate saturation levels or maximum participation for its programs. (*See* Crandall Direct, Ex. GCC-4.)

The reliance on data from 2009-2011 program years to develop participation for the 2014-2018 plan means that the participation from 2009-2011 will determine the aggressiveness of the 2014-2018 plan. If it is inappropriate to assume that 2014-2018 will be like 2009-2011, then MidAmerican's savings targets for the 2014-2018 plan are also inappropriate. As Environmental Intervenor witness Crandall noted "[w]ith the difficult economic conditions that existed during the period that MidAmerican used to set most of its participation rates, it is possible that the historical experience during that period would understate the participation rates that could be expected as the economy recovers." (Crandall Direct at 21.) The participation rates in MidAmerican's energy efficiency programs from 2009-2011 were low because of the economic downturn. MidAmerican's 2009 Annual Report described the following challenge it faced during the year:

Impacts of the continuing economic slowdown on programs. While MidAmerican experienced lower customer participation in some programs, especially residential new construction and low income, other programs or parts of programs

experienced increased participation caused by customers wanting to reduce energy costs. For example:

- Participation in MidAmerican's residential new construction program declined for the second year in a row. The total number of new homes in the program declined about 4 percent from 3,302 participants in 2008 to 3,175 participants in 2009.
- Electric energy savings for the nonresidential equipment program declined about 6 percent from about 82 million kWh in 2008 to about 77 million kWh in 2009. Electric capacity savings also declined from about 14 MW in 2008 to about 12 MW in 2009.

(MidAmerican 2009 Annual Report at 9 (May 1, 2010).) The economic downturn hurt MidAmerican's participation levels in 2010, as it explained in the 2010 Annual Report:

Overall savings achieved by MidAmerican's Iowa energy efficiency programs in 2010 were less than anticipated, largely due to a significant drop in nonresidential participation. The economic downturn adversely affected MidAmerican's nonresidential programs, as businesses continued to be reluctant to make new investments.

(MidAmerican 2010 Annual Report at 1 (May 1, 2011).) The participation problems continued in 2011:

Overall savings achieved by MidAmerican's Iowa energy efficiency programs in 2011 were less than projected, largely due to continued issues in the nonresidential sector with participation and size of projects. The nonresidential equipment program, which delivers the majority of nonresidential savings, experienced a further significant drop in participation from 2010 levels. While commercial new construction posted a record number of projects in 2011, projects were smaller and less intensive than projected in the plan. . . . around seventy percent of the total program electric savings are projected to be achieved through nonresidential electric programs.

(MidAmerican 2011 Annual Report at 1 (May 1, 2012).) MidAmerican's past participation was low because of the economic downturn. MidAmerican Witness Yoder explained: "the nonresidential sector level of achieved electric and gas savings, 52 percent and 85 percent, respectively, was severely impacted by the economic downturn, which was not anticipated when the extremely aggressive savings goals were established for MidAmerican's nonresidential programs." (Yoder Direct at 4.) MidAmerican does not assume the economic downturn will

continue. MidAmerican witness Yoder stated that economic conditions “have significantly changed from 2008, 2010 [to today]. We are seeing upturn in activity and completed projects and [] equipment purchased, and I will say we will have a better performance for this plan year.” (Yoder Cross, Hearing Transcript at 176.) Nevertheless, MidAmerican based savings targets on past performance during the economic downturn:

- Q. Does MidAmerican assume a continued economic downturn that will keep nonresidential sector achieved savings low going forward?
- A. We don’t necessarily assume that it will continue. What we’ve done is looked at past history in regards to our savings targets to use that as a parameter for establishing our future goals.

(Yoder Cross, Hearing Transcript at 154.)

If MidAmerican projected a continued economic downturn during the 2014-2018 plan period and the Board agreed, basing MidAmerican’s savings targets on participation numbers from 2009-2011 might be appropriate. MidAmerican is not predicting such a downturn, and the fundamental assumption underlying its savings targets is faulty. The Board should not accept MidAmerican’s savings targets.

D. Exemplary Program Design and Implementation Will Allow MidAmerican to Achieve Greater Savings at Less Cost and Reach Higher Savings Targets.

The Assessment of Potential identified exemplary program design and implementation practices as one of four factors necessary to attain the aggressive acquisition scenario in the achievable market potential analysis. Exemplary program design and implementation practices communicate information to customers effectively and allows those customers to make optimal energy efficiency decisions. Exemplary program design and implementation practices play a major role in the success of energy efficiency programs. (Crandall Surrebuttal at 5 and 6.) The Assessment of Potential explained the impact of a portion of exemplary program design and implementation:

Non-incentive expenditures, such as marketing, outreach, planning, and administration, have traditionally been assumed to be relatively fixed. This study's findings indicate this might not be the case. Indeed, the 0.57 estimated elasticity for non-incentive expenditures suggests a positive and statistically significant correlation between non-expenditures and market penetration, and that these expenditures may even be more effective in expanding the market potential than incentives.

(MidAmerican Plan, IUA Joint Assessment Part 1 at 51.)

Exemplary program design and implementation is a shift from MidAmerican's current approach that largely continues its solid energy efficiency programs but does little to improve upon them. As OCA witness Foster explained "the focus must shift from acquiring savings from the "low-hanging fruit" to program approaches that can gain higher customer participation and achieve high savings per customer – particularly through support for new technologies and new approaches to program design, delivery, and marketing." (Foster Direct at 23.)

OCA witness Foster notes that "It is possible that more aggressive goals could be achieved by re-structuring of the incentive-focused approach to a market-driven one without substantial change in proposed program budgets." (Foster Direct at 26.) Nevertheless, MidAmerican could increase its program administration and implementation budget significantly while still maintaining overall cost-effectiveness of the plan. Environmental Intervenors witness Geoff Crandall offered testimony demonstrating that the plan would still be cost effective if expenditures on program administration and implementation increased seven-fold. (Crandall Direct at 35-39; Crandall Surrebuttal at 8.) The Crandall testimony was merely a hypothetical to demonstrate how much more spending would still be cost effective and not his recommendation or reflective of what he believed was necessary to achieve exemplary program design and implementation. (See Crandall Surrebuttal at 8.) Crandall's projections demonstrate that

exemplary program design and implementation is achievable while maintaining the overall cost-effectiveness of the program.

As MidAmerican starts to implement exemplary program designs and implementation practices, MidAmerican should shift resources to these programs as the strongest programs most capable of achieving savings. This is another way that exemplary program design could help MidAmerican achieve higher savings without leading to as significant a cost increase as predicted by MidAmerican. If MidAmerican improves its program design and implementation practices across a range of programs, MidAmerican could significantly improve its savings and reach higher targets while maintaining or improving the cost-effectiveness of its programs.

E. Cost-Effective Energy Efficiency Provides Significant Benefits to MidAmerican’s Customers, Allowing Them to Avoid or Delay the Higher Costs of Buying Additional Power from the Market and Building New Generation.

Cost-effective energy efficiency is the lowest cost way to meet customer energy demand. The Iowa Code and Iowa Utilities Board rules recognize the critical role that energy efficiency plays in meeting consumer demand and requires Iowa’s rate regulated utilities to file energy efficiency plans. Iowa Code § 476.6; 199 Iowa Administrative Code § 35.1. The IUB rules emphasize the importance of energy efficiency by declaring upfront that “the implementation of effective energy efficiency plans by utilities and the opportunity of the utilities’ customers to participate in and benefit from the energy efficiency plans to be of *the highest priority*.” 199 Iowa Administrative Code § 35.1 (emphasis added). The Board rules prioritize implementation of cost-effective energy efficiency over other more costly generating options.

The Iowa Code identifies four tests to help determine cost effectiveness of energy efficiency programs: the societal test, utility cost test, rate-payer impact test, and participant test. Iowa Code § 476.6(14). The Iowa Utilities Board has found that the societal test is the most

critical cost effectiveness test because it “combines the perspectives of the utility, the program participants and all utility customers in general.” IUB Report: The Status of Energy Efficiency Programs in Iowa at p.21 (January 1, 2008). If a program or plan passes the societal cost test, “it means that the benefits of the energy efficiency savings in future utility avoided costs are greater than the extra costs of energy efficiency equipment paid by the participants who install the measures. All customers benefit from lower future utility costs, even if they do not participate in a program in a particular year.” *Id.* As long as the energy efficiency resource that is being implemented is cost effective, the benefits received from the energy efficiency resource will exceed the cost of implementing it.

The IUB rules require energy efficiency plans to include information about the utilities need for additional power and if that additional power will be met through new generation or purchases from the market. 199 Iowa Administrative Code § 35.9. The rule requires energy efficiency plans to include detailed information about utility supply options including:

35.9(3) *Existing capacity and firm commitments.* Information specifying the existing generating and firm commitments to provide service. . . .

35.9(6) *Future supply options and costs.* Information about the new supply options and their costs identified by the utility as the most effective means of satisfying all projected capacity shortfalls in the 20-year planning horizon

199 Iowa Administrative Code § 35.9. This allows the Board and the public to compare energy efficiency to the other steps the utility could take to meet customer demand. Every option to meet customer demand has a cost, and the Board should consider how implementing energy efficiency compares to buying power from the market, running existing power plants (some of which are old, dirty and expensive to run) or building new generation. While investing in energy efficiency has a cost and will have an impact on rates, Board rules require an evaluation of that cost in context and comparison to other energy decisions and not in isolation.

MidAmerican's testimony in this case implies that spending on energy efficiency programs will lead to rate hikes. However, MidAmerican's discussion of costs crucially omits reference to the costs Iowa ratepayers will avoid by allocating more of its revenue to energy efficiency. Moreover, the Board's focus should be on customer bills not rates. The correct comparison is not whether bills will go up over current levels, it is whether spending money on cost-effective energy efficiency will cause bills to go up more or less than if MidAmerican had to meet load growth some other way. Energy efficiency impacts both participants and non-participants' bills. Both participants and non-participants benefit because MidAmerican will need to buy less electricity on the wholesale market, particularly at peak hours when market prices are high. Participants benefit additionally from using less electricity, and given the ease of participating in the lighting program virtually all customers can avail themselves of the participant benefits.

MidAmerican should have compared the cost of saved energy to the costs of buying power on the market or the costs of building and operating a new generation. The Board rules recognize that this is the appropriate comparison and place these decisions in that context. As witness Crandall explained:

By definition, the total cost of cost-effective energy resources is less than the cost of the power plants that will be built if the resource is not fully implemented. MidAmerican's customers will on average, and in aggregate, pay more for their electrical energy services if all achievable cost effective energy efficiency is not fully implemented. The goal of the IUB, and of MidAmerican, should be to reduce the aggregate customer cost for electrical energy services.

(Crandall Direct at 8.)

The benefits of energy efficiency as the least cost alternative take on greater significance in a period where new generation is imminent. MidAmerican is projected to become capacity deficient by 31 MWs in 2015 and 221 MWs by 2018. (Crandall Direct at 9 (citing Stevens

Direct, Ex. ODS-1).) MidAmerican has identified a range of supply side options to address this capacity deficiency including building new gas turbines and wind generation. As Crandall notes: “Each of these alternatives has a cost that can be avoided through aggressive implementation of energy efficiency during the 2014-2018 timeframe.” (Crandall Direct at 11). There are still benefits to maximizing MidAmerican’s energy efficiency even if MidAmerican builds new wind generation during this plan period. The point of this comparison to the generating alternatives is not to challenge a particular generating decision, it is to demonstrate the benefits of energy efficiency in comparison to other options to meet consumer demand. As Crandall notes, “When a supply resource is utilized, it is reasonable to first wring out energy waste by utilizing all of the cost effective energy efficiency that can be achieved.” (Crandall Direct 12-13.) Greater energy efficiency would help MidAmerican more effectively transition away from its older, more polluting plants easier and quicker. Energy efficiency could avoid the need to buy capacity on the wholesale market, and it may, in some cases, allow MidAmerican to sell more expensive capacity on the wholesale market to the benefit of its ratepayers. The Board should require that MidAmerican maximize the benefits to its customers by requiring MidAmerican to aggressively pursue energy efficiency in the 2014-2018 plan period.

II. The Board Should Require MidAmerican to Calculate its Savings Using Net-to-Gross Ratios.

Net-to-gross (NTG) assessments determine the energy savings attributable to energy efficiency programs. (MidAmerican Plan, IUA Joint Assessment Part 1 at 51.) NTG ratios account for freeridership, energy savings likely to have occurred in the program’s absence, and spillover, energy savings induced but not subsidized by the program. (*Id.*) As MidAmerican’s evaluator Tetra Tech explained, “[a] higher net-to-gross indicates program influence on customers’ decisions, and high attribution toward customers’ behaviors. A lower net-to-gross

factor indicates low level of influence, which may be further indicative of market transformation, poorly set incentive levels, etc.” (Environmental Intervenors Exhibit 211, Attachment at 1.) Applying net-to-gross ratios will more accurately count savings and enable MidAmerican to more efficiently allocate resources to the most effective programs and measures.

The Iowa Utilities Board Rules recognize the value of net-to-gross assessments by requiring that “[t]he utility shall estimate gross and net capacity and energy savings, accounting for free riders, take-back effects, and measure degradation.” 199 Iowa Administrative Code § 35.8(2)(c). In the past, the Iowa utilities have complied with this rule by assuming free-ridership and spillover cancel each other out and deeming the net-to-gross ratio to be 1.0 for all programs. (Rea Cross, Hearing Transcript at 343.) The utilities based this approach on the premise that determining net-to-gross poses challenges and that free-ridership and spillover cancel each other out. This rationale is no longer appropriate for MidAmerican because MidAmerican has done NTG analysis for Iowa programs and found ratios significantly below 1.0; MidAmerican has done a more extensive NTG analysis for its Illinois energy efficiency programs; and MidAmerican initially proposed to do NTG analysis for its 2014-2018 energy efficiency plan.

MidAmerican states its position on net-to-gross:

MidAmerican is not opposed to measuring freeridership and spillover based on the best available practices in the industry and intends to incorporate more aspects of NTG analysis in its EM&V activities for the 2014-2018 plan. However, MidAmerican is opposed to reporting actual and targeted savings on a gross and net basis unilaterally, independent of other utilities’ reporting and without a clear understanding among all Iowa stakeholders of what the NTG ratios mean, how they were arrived at, and how they should be used retroactively and going forward.

(Rea Rebuttal at 20.) MidAmerican’s insistence on waiting for the other Iowa utilities to implement net-to-gross does not make sense. MidAmerican is further advanced than the other Iowa utilities both in the quality of its programs and its sophistication in Evaluation,

Measurement and Verification. In fact, MidAmerican has brought more of its energy efficiency efforts in house rather than rely on outside consultants. This has allowed MidAmerican to develop knowledge and expertise to more effectively implement energy efficiency programs. (Rea Cross, Hearing Transcript at 282.) MidAmerican has conducted net-to-gross analysis for its energy efficiency programs in Iowa and Illinois. MidAmerican's customers should benefit from the net-to-gross analysis that MidAmerican has already done and that it is capable of doing in the future.

MidAmerican witness Rea acknowledged that free-ridership and spillover do not balance out for every measure. (Rea Cross, Hearing Transcript at 283.) MidAmerican has calculated net-to-gross ratios in its evaluation, measurement and verification of the 2009-2013 energy efficiency programs. (Environmental Intervenors Ex. 211.) MidAmerican did net-to-gross analysis for its Iowa HomeCheck program, residential equipment program and appliance recycling program. (*Id.*)

MidAmerican did even more extensive net-to-gross analysis for its Illinois energy efficiency programs. In the Illinois energy efficiency plan filing, Mr. Rea testified that net-to-gross ratios have been included in MidAmerican's proposed Illinois plan on a measure by measure basis. (Illinois Commerce Commission Docket 13-0423, Rea Direct at 9.)⁴ On cross examination in this docket, Mr. Rea agreed that: "Net-to-gross values are used in MidAmerican's proposed 2014-2018 Illinois energy efficiency plan to report savings targets on both a gross and net basis." (Rea Cross, Hearing Transcript at 296.) MidAmerican's Illinois experience with net-to-gross is directly applicable to its ability to do net-to-gross analysis in Iowa. MidAmerican's

⁴ The Board took administrative notice of Illinois Commerce Commission Docket No. 13-0423. (Hearing Transcript at 342.) In that docket, NTG ratios are provided by measure in the measure level statistics found in Exhibit MEC 2.4, and the effect of NTG at a program level for both net savings and cost-effectiveness at a net savings level is provided in Exhibit MEC 2.5.

Illinois energy efficiency plan is largely based on its Iowa energy efficiency programs. (Rea Cross, Hearing Transcript at 295.) In fact, in preparing its Illinois plans, MidAmerican took steps “so that consistency can be achieved in energy efficiency offerings between the Illinois Quad Cities and Iowa Quad Cities.” (Illinois Commerce Commission Docket 13-0423, Rea Direct at 8.) The net-to-gross analysis done for MidAmerican’s Illinois programs was completed by Tetra Tech, the same company that conducted MidAmerican’s measurement and verification in Iowa. (Rea Cross, Hearing Transcript at 341.) In fact, the same methodology used to develop net-to-gross ratios in Illinois could be used in Iowa. (*Id.*) MidAmerican used the net-to-gross analysis done on the Illinois programs to inform its Iowa evaluation. (Environmental Intervenors Exhibit 211, Attachment at 1 (“We conducted a net-to-gross study of both the direct installation and insulation measures as a part of the Illinois impact evaluation. . . . Because net-to-gross was estimated so high for the direct installation measures in particular that group was excluded from this study in Iowa.”).)

Consistent with this experience assessing and applying net-to-gross, MidAmerican initially included language in its draft Monitoring and Verification plan to include an estimation of net savings:

Estimation of net savings will involve estimation of net-to-gross factors, which will be applied to the adjusted or verified gross savings to estimate net program savings for participants in the programs. Net-to-gross factors will be estimated by program and for major measure groups within each program. These factors reflect the effect of estimated program free-ridership.

(Environmental Intervenors Exhibit 215 at 3.) However, MidAmerican took this language out of its Measurement and Verification plan in the filed version of the plan. MidAmerican offered the following explanation for removing the language:

MidAmerican removed the referenced language in the final filing because the Iowa Utilities Board may reject the consideration of net savings in future energy

efficiency M & V activities. If the Board orders that net-to-gross analyses be conducted going forward and that net savings be calculated and reported as a part of M & V activities for MidAmerican and other Iowa IOUs, MidAmerican will comply with the Board's directive and revises its M & V plan accordingly.

(Environmental Intervenors Exhibit 214.) The Board already has a rule that provides the direction that MidAmerican indicated it needed. 199 Iowa Administrative Code § 35.8(2)(c).

MidAmerican can, and has, developed net-to-gross ratios for its energy efficiency programs. It has applied those ratios in its programs in Illinois and will report net savings for a similar set of energy efficiency programs and measures in Illinois. The Iowa Utilities Board rules require utilities to report net savings. MidAmerican is capable of conducting informative and useful net-to-gross analysis now. In addition, that analysis can be used to inform collaborative efforts that help the other utilities in Iowa add accuracy and sophistication to their Evaluation, Measurement and Verification. MidAmerican has invested in making its programs and its EM&V better than other utilities. MidAmerican's customers should get the benefit of this investment and should not be forced to wait until other utilities catch up to MidAmerican. MidAmerican should estimate and report net savings as it initially indicated it would as part of the 2014-2018 energy efficiency plan. To do otherwise would be inconsistent with IUB rules.

III. The Board Should Require MidAmerican to More Aggressively Market Combined Heat and Power and to Expand its Combined Heat and Power Offerings.

Combined heat and power (CHP) technologies meet the definition of an energy efficiency measure found in the Board rules in that they are "activities on the customers' side of the meter which reduce the customers' energy use or demand" for energy. 199 Iowa Administrative Code § 35.2. Moreover, CHP is consistent with the Iowa Code requirement to include a range of programs tailored to the needs of all customer classes including industrial customers. Iowa Code § 476.16(a). Furthermore, including CHP in utility energy efficiency plans advances the efforts

of the Iowa NGA Policy Academy Action Plan submitted to the Governor and Lt. Governor on June 25, 2013. (Iowa NGA Policy Academy (Iowa CHP Team) Action Plan on Enhancing Industry through Combined Heat and Power in Iowa, June 25, 2013.)

CHP technologies provide both electricity and thermal energy at an efficiency of 65% to 75% versus the conventional method of using electricity produced at central station power plants and burning fuel at furnaces or boilers on-site, which is approximately 45% efficient. (Miller Direct at 4.) In topping cycle CHP, fuel is used to generate electricity and thermal energy that “would otherwise be lost ... is recovered to provide process or space heating, cooling, and/or dehumidification.” (*Id.* at 5.) In bottoming cycle CHP or waste heat recovery, “heat that is generated as part of the industrial process and is normally vented to the atmosphere” is recovered to produce electricity or thermal energy. (*Id.*) Topping cycle could be analogized to a new construction program where the goal is to maximize efficiency in a new project, while bottom cycling projects could be analogized to retrofits where the goal is to make the existing system as efficient as possible. In all of these applications, CHP reduces the amount of energy customers will need to meet their demands.

MidAmerican includes waste heat recovery, or bottoming cycle CHP as a measure in its custom rebate program. MidAmerican does not currently include topping cycle CHP in its programs, but in Witness Czachura’s testimony, MidAmerican provides a roadmap for how a reasonable, focused topping cycle CHP measure could be included in its energy efficiency program:

The Board should consider limiting the total amount of energy efficiency funding that can be dedicated to such projects, either through use of a direct cap or by limiting eligibility only to those projects with significant efficiency gains. In addition, if topping cycle CHP is to be included in MidAmerican’s energy efficiency programs, it should not be on a stand-alone basis. Assistance with topping cycle CHP should only be offered to customers who are pursuing other

cost-effective energy efficiency options as well, and the effect of those additional efficiencies should be considered in evaluating the cost-effectiveness of the CHP project.

(Czachura Rebuttal at 5.) Including a topping cycle CHP measure that requires customers to implement cost-effective energy efficiency measures first is an effective way to increase industrial customer participation in MidAmerican's programs and will lead to efficiency savings above and beyond what have been projected from the industrial sector even without accounting for the additional savings from the CHP projects.

The Board should require MidAmerican to do a better job marketing its CHP offerings, regardless of whether it requires MidAmerican to include topping cycle CHP in its Plan. MidAmerican does not currently have a separate webpage for CHP or a separate fact sheet or brochure for CHP. (Czachura Cross, Hearing Transcript at 94.) MidAmerican has not done any seminars or programs for customers and trade allies related to MidAmerican's CHP offerings. (Yoder Cross, Hearing Transcript at 157.) As part of the follow-up activities from the NGA CHP Policy Academy, the Iowa Economic Development Authority will serve as a point of contact within state government for parties that want to discuss CHP and will host information on its website that industrial energy users and developers pursuing CHP would need. (Iowa NGA Policy Academy Action Plan at 2.) MidAmerican witness Czachura indicated that both a website page addressing MidAmerican's CHP offerings would be useful in the NGA Policy Academy follow up in addition to being useful for MidAmerican's own marketing of CHP. (See Czachura Cross, Hearing Transcript at 95.)

The increased marketing of CHP and the inclusion of topping cycle CHP as a measure presents significant savings opportunities for MidAmerican that should be part of its plan and savings targets. The Board has recognized that "CHP may have the potential for significant

savings.” Docket No. EEP-2008-0001, Final Order (June 24, 2009). There is significant technical potential for CHP in MidAmerican’s service territory. The Energy Resources Center working with ICF International analyzed the technical potential for CHP in MidAmerican’s service territory:

We estimate approximately 630 MW of technical potential of which roughly 312 MW reside in the industrial sector and 318 MW reside in the commercial sector. Incorporating load factors specific to each SIC code and facility type, this translates into 3,624,772 MWh of energy technical potential, of which 2,206,701 MWh comes from the industrial sector and 1,418,070 MWh from the commercial sector. The 3,624,772 MWh of technical potential from CHP is significant when compared to the technical potential of other efficiency measures for MidAmerican of 4,601,610 MWh that Cadmus identified in the Assessment of Energy and Capacity Savings Potential in Iowa. Even if a fraction of this potential is captured it represents a significant increase in potential from MidAmerican’s current efficiency portfolio.

(Miller Direct at 9.) However, despite requests by intervenors, the Assessment of Potential did not include CHP as a measure.⁵

The Board should use the assessment of potential provided in the Miller testimony to develop a CHP savings target. (*See* Miller Direct Exhibit GHM-3.). In order to set the most appropriate and effective CHP target and to build upon the work of the Iowa NGA Policy Academy team, the Board should consult with IEDA to develop a CHP savings target for MidAmerican’s service territory. The CHP savings target should increase MidAmerican’s low CHP measure savings target that accounts for a small amount of waste heat recovery CHP based

⁵ Two of the organizations comprising the Environmental Intervenors, Iowa Environmental Council and Environmental Law & Policy Center, sent two letters to the Iowa Utility Association in May 2011 prior to the IUA issuing an RFP for the Assessment of Potential Study. Both letters requested that the RFP require the consultant to include combined heat and power in the final Assessment. After the IUA resisted including CHP in the RFP, on June 15, 2011, IEC and ELPC filed a complaint with the Board in the hopes of resolving the dispute before work on the Assessment began. On July 22, 2011, the Board staff issued a Proposed Resolution allowing the IUA to continue with the existing RFP without CHP as a measure and preserving this issue for resolution in the contested case proceedings.

on a program with limited to no marketing. Board consultation with IEDA should also address what type of marketing and details MidAmerican should share related to its CHP program to most effectively market the program to its customers and realize participation levels to meet the CHP targets. The Board should order MidAmerican to incorporate those recommendations and the CHP savings target into its plan.

IV. The Board Should Reject ICEE’s Opt-Out Proposal for Both Legal and Public Policy Reasons.

ICEE has proposed that the Board enact a significant policy change and initiate a rulemaking to allow large customers to opt out of utility energy efficiency programs. This policy change is beyond the scope of the Board’s authority regarding energy efficiency, contradicts the legislative policy favoring energy efficiency and legislative requirements that energy efficiency plan include programs to meet the needs of industrial customers, and would leave significant amounts of industrial energy efficiency unrealized. Therefore, the Board should reject ICEE’s proposal for an opt-out.

A. An Opt-Out Process for Industrial Customers Does Not Constitute a Utility Effort to Promote the Use of Energy Efficiency.

The Iowa Code does not give the Iowa Utilities Board authority to allow an opt-out process for industrial customers. The Iowa Public Utilities Act states “[t]he jurisdiction of the board under this chapter shall include efforts designed to promote the use of energy efficiency strategies by rate or service-regulated gas and electric utilities.” Iowa Code § 476.1(7). An opt-out process would allow an industrial customer to choose not to participate in utility energy efficiency efforts at all. An opt-out process is not an energy efficiency program or a service provided by a utility, rather it constitutes a way to avoid the energy efficiency services of a utility. The legislature did not allow for such a choice by a group of customers.

B. Energy Efficiency Plans Must Include Industrial Energy Efficiency Programs.

The legislature made its intent to include all customer classes in energy efficiency plans clear by requiring the utilities to file a plan that “shall include a range of programs, tailored to the needs of all customer classes, including residential, commercial, and industrial customers, for energy efficiency opportunities.” Iowa Code § 476.6(16)(a). In the construction of statutes under Iowa Code, “[t]he word *shall* imposes a duty.” Iowa Code § 4.1(30). The legislature gave the Board authority over rate or service-regulated utilities’ energy efficiency efforts and required those efforts to include programs tailored to industrial customers. Creating a mechanism for industrial customers to opt-out of utility energy efficiency programs flatly contradicts the legislative requirements of Chapter 476 to develop a plan to meet the needs of all customer classes.

C. No Other State with Energy Efficiency Plans Required by Statute Has Created an Opt-Out or Self-Directed Program Through a Commission Order.

Iowa law requires mandatory energy efficiency plans by its utilities and does not provide an opportunity for any customer to opt-out of the programs. While there are states with a statutorily mandated energy efficiency program that includes an opt-out or self-direct program in the energy efficiency legislation, no utility commission from a state with a statutorily mandated energy efficiency program has simply created such a provision through a rulemaking or Commission Order.⁶

The examples provided by ICEE witness Brubaker follow this pattern. For example, Minnesota has clear statutory language allowing for large industrial customers to opt-out of mandatory energy efficiency programs. *See* MINN. STAT. § 216B.241(1a)(b) (allowing a large

⁶ Public utility commissions in several states that have voluntary or commission created energy efficiency programs, as opposed to legislatively mandated energy efficiency programs, have allowed for industrial customers to opt-out of the voluntary or commission created programs.

customer to petition the public utility commission to be exempted from the utility energy efficiency program); *see also* N.C. GEN. STAT. § 62-133.9(f) and (g). He also referenced Maine which is a deregulated state where a state agency administers energy efficiency programs and the statute excludes large electricity users. 35-A ME REV. STAT. § 10110(6). Witness Brubaker included examples from a number of states where energy efficiency programs are not required by state law. Even though those states do not mandate energy efficiency programs, they still provide statutory language specifically allowing for large customer or industrial opt-out. *See* MO. REV. STAT. § 393.1075(7-10); VA. CODE ANN. § 56-585.1(A)(5)(c); KY. REV. STAT. ANN. § 278.285(3).

Other examples include Texas, where the statute makes energy efficiency voluntary by making it a goal of the legislature and gives the commission authority to implement it. TEX. UTIL. CODE § 39.905(a) and (b). In Oklahoma and Louisiana, the public utility commission created the energy efficiency programs on their own volition by rule and included an opt-out provision. *See* Oklahoma Administrative Code § 165:35-41-4; Louisiana Public Service Commission, General Order, Docket No. R-31106 (adopting energy efficiency rules and including an opt-out. Similarly, in South Carolina, where it is optional for a utility to create an energy efficiency program, S.C. CODE ANN § 58-37-20, the South Carolina Public Service Commission has approved utility energy efficiency plans that include allowing for an industrial opt-out of that plan. *Re* Carolina Power & Light Company dba Progress Energy Carolinas, Inc., Order No. 2009-373, at 10 (S.C. Public Service Commission, June 26, 2009).

In contrast to Mr. Brubaker's examples, Iowa statute requires rate regulated utilities to file energy efficiency plans with the Board. IOWA CODE § 476.16(a). States that have approached energy efficiency in the same manner as Iowa with a legislative requirement have

not allowed for an opt-out of the energy efficiency programs unless it was authorized by the legislature in statute. No other state with mandatory energy efficiency plans has created opt-out program through a public utility commission rule or order.

D. Allowing Industrial Customers to Opt-Out of Energy Efficiency Programs Would Undermine an Important Legislative Public Policy Goal.

The legislature has identified energy efficiency as a public policy priority and allowing customers to opt-out of efficiency programs would undermine this important public policy goal. In the Final Order in IPL's energy efficiency plan docket in 2009, the Board stated "Iowa has a strong public policy supporting and developing energy efficiency and the Board will not undermine that public policy by exempting certain customers from the energy efficiency paradigm." Docket No. EEP-08-01, Final Order at 33 (June 9, 2009).

Allowing an opt-out undermines energy efficiency public policy with respect to free ridership and cross-subsidization. A customer that opts out of contributing to energy efficiency programs still benefits from the many indirect benefits from Iowa's efficiency programs, such as lower rates from deferred or delayed forms of more expensive new generation, cleaner air and other environmental benefits from reduced reliance on fossil fuels, and local economic benefits generated by implementation programs. However, an opt-out customer would no longer pay for these benefits, essentially creating a group of free riders or a class of customers that are subsidized by all other customers.

E. There Are Significant Industrial Sector Savings Available in MidAmerican's Service Territory and There is No Evidence that Allowing an Opt-Out Will Help Achieve Those Savings.

A significant basis for ICEE's proposal for an opt-out rulemaking is that industrial customers are more effective at energy efficiency on their own and have already implemented a significant percentage of energy efficiency available. (*See* Brubaker Direct at 4, 6 and 9.)

However, the record does not support ICEE's assertion, and there is significant energy efficiency that would not be realized if large industrial customers opt out of IPL's programs.

The Assessment of Potential identified 1,038,971 MWh of industrial economic potential in MidAmerican's service territory. (MidAmerican Plan, IUA Joint Assessment Part 1 at 44.) MidAmerican witness Yoder agreed that the industrial sector has not exhausted its opportunity to save energy through energy efficiency efforts. (Yoder Cross, Hearing Transcript at 184.)

Witness Crandall notes the false premise in ICEE's proposal that large customers have necessarily done a better job of implementing energy efficiency:

Being large does not mean that the industrial customer has implemented all of the energy efficiency potential available to it. Similarly having an energy efficiency program does not mean that an industrial customer has implemented all of the energy efficiency potential available to it.

(Crandall Rebuttal at 5.) Mr. Crandall noted that large industrial customers were less likely to implement energy efficiency measures without a very short payback period and cited testimony of an industrial consultant in Ohio who noted of the "firm's 300 industrial clients only three have ever done an energy efficiency project that had a simple payback period of more than two years without utility assistance." (Crandall Rebuttal at 7.) This would result in significant energy efficiency opportunities being unrealized in the absence of participation in utility programs.

ICEE members could not provide a straight answer to whether or not they would implement energy efficiency measures with a range of payback periods from under a year to 10 years. (See DR 7 Responses in Environmental Intervenor Exhibits 217 to 230.) MidAmerican witness Yoder stated that based on her experience as a key account manager with several industrial customers any project with a payback of more than two years would not be implemented by those industrial customers in MidAmerican's service territory. (Yoder Cross,

ICEE members have not demonstrated that they have exhausted energy efficiency opportunities or that they would continue to implement energy efficiency on their own if they were not participants in the utility program. While ICEE members are not a comprehensive sample of industrial customers, they represent some of the largest customers and are the group of customers who have proposed an opt-out program. The ICEE members are among the most likely participants in any potential opt out proposal.

There are significant industrial energy efficiency savings still available in IPL's service territory. There is no evidence that an opt-out would help attain those savings. In fact, the very customers advocating for an opt-out have failed to assess and implement energy efficiency opportunities at their facility. If they have failed to do so when they have utility incentives to help pay to implement energy efficiency, they are even less likely to implement energy efficiency without those incentives. The opt-out will lead to less savings and not more, and the Board should reject ICEE's proposal to create a rulemaking for an opt-out program.

V. The Board Should Reject ICEE's Proposal to Show Energy Efficiency Plan Costs as a Separate Line Item on the Customer's Bill.

ICEE has proposed that the Board order energy efficiency costs to be reported as a separate line item on a customer's bill in order to increase transparency. (Brubaker Direct at 20-21.) Iowa law has a presumption against separating energy efficiency from a customer's bill. Iowa Code § 476.6(g) states "The utility shall not represent energy efficiency in customer billings as a separate cost or expense unless the board otherwise approves." Nothing in the record supports such a change.

Customer bills consist of charges to cover numerous costs incurred by a utility. The charges include paying for capital costs for generation from multiple sources, operations and maintenance costs, transmission and distribution costs, legal, billing, customer assistance, meter

reading and many other costs. These costs are all included in the bill and are not listed separately. Furthermore, MidAmerican has been operating and including energy efficiency as part of its programs for many years, and the costs have been reflected in customer bills but not listed separately. To suddenly shift policy and list energy efficiency costs alone on customer bills would distort and misrepresent information to customers. It would make it appear that energy efficiency was a new item, and it would not place energy efficiency in the proper context of utility programs. The legislature had good reason to create a presumption not to list the energy efficiency portion of the bill separately, and there is no evidence of any benefits to overcome that presumption. Therefore, the Board should reject ICEE's proposal to show energy efficiency plan costs as a separate line item on customer bills.

VI. The Board Should Address LED Streetlights in Docket RPU-2013-0004.

During the hearing, the Board raised concern about addressing the streetlight tariff in this docket. (Czachura Cross, Hearing Transcript at 91.) Environmental Intervenors think that it is appropriate to address LED streetlights in Docket RPU-2013-0004. Environmental Intervenors are encouraged by MidAmerican's testimony in this docket and believe there may be areas of common ground for effectively and comprehensively moving LED streetlighting forward in RPU-2013-0004. Environmental Intervenors note that there may be some streetlights that are not covered by the tariff that are customer owned and on the customer's side of the meter. It may be appropriate to use any approach approved in RPU-2013-0004 to develop an energy efficiency program targeting these limited number of streetlights.

CONCLUSION

Energy efficiency is the least cost way to meet consumer demand for energy, and Iowa law and the Board rules have made implementing cost-effective energy efficiency "the highest

priority.” MidAmerican’s Plan fails to target as much cost-effective energy efficiency market potential as the Assessment of Potential identifies. MidAmerican’s Plan fails to follow Iowa law and use the assessment of potential to set its targets. In addition, MidAmerican based its proposed targets on participation levels during the economic downturn and consequently sets targets that are too low and leave significant amounts of achievable market potential on the table. In order to achieve higher savings, MidAmerican should do more to incorporate exemplary program design and implementation practices; MidAmerican should include Combined Heat and Power as part of the plan and should look to expand its successful behavioral modification program to additional eligible customers. MidAmerican’s failure to aggressively pursue more cost-effective and achievable energy efficiency hurts MidAmerican customers, particularly when MidAmerican will need to meet customer demand by purchasing energy from the wholesale market at greater cost. Therefore, the Board should require MidAmerican to increase its savings targets and implement energy efficiency programs to meet those targets.

DATE: September 18, 2013

Respectfully submitted,

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APPENDIX
ENVIRONMENTAL INTERVENORS COMMENTS ON THE
NON-UNANIMOUS PARTIAL SETTLEMENT AGREEMENT

Pursuant to 199 Iowa Administrative Code § 7.18(3) and the Board Order issued July 31, 2013, the Environmental Intervenors make the following comments related to the portion of the settlement that they contest:

1. Environmental Intervenors object to settlement terms 3-6. These settlement terms address the appropriateness of MidAmerican's savings targets, budget and the appropriateness of the programs to reach those targets and budgets. Environmental Intervenors reasons for objecting to those terms are included in Argument Section I of its brief.
2. Environmental Intervenors object to settlement term 2 and part of settlement term 7. 199 IAC 35.8(2)(c) requires that MidAmerican estimate gross and net capacity and energy savings, accounting for free riders, take-back effects, and measure degradation. Environmental Intervenors object to MidAmerican's net-to-gross approach as explained in Argument Section II of Environmental Intervenors brief.