

IOWA UTILITIES BOARD
Energy Section

Docket No.: RPU-2014-0002
Utility: MidAmerican Energy Company
File Date: October 10, 2014
Memo Date: January 12, 2015

TO: The Board

FROM: Dan Fritz (Team Leader), Leslie Cleveland, Bob LaRocca, Ellen Shaw, Gary Stump, Mack Thompson, Jane Whetstone

SUBJECT: Staff's Post Hearing Analysis

BACKGROUND

On October 10, 2014, MidAmerican Energy Company (MidAmerican) filed with the Utilities Board (Board) a request for advance ratemaking principles that would apply to up to 162 MW of wind generation. MidAmerican calls the project Wind IX.

On October 16, 2014, the Board issued an order docketing MidAmerican's filing, setting a procedural schedule and intervention deadline, and shortening the data response time. The Board set an expedited procedural schedule in response to MidAmerican's request. The only other party to this proceeding is the Consumer Advocate Division of the Department of Justice (Consumer Advocate).

On November 14, 2014, Consumer Advocate filed its direct testimony. On the same date, the Board issued an order requiring MidAmerican to provide additional information on or before November 21, 2014.

On November 19, 2014, MidAmerican and Consumer Advocate filed a "Motion to Suspend Procedural Schedule and Approve Stipulation and Agreement." MidAmerican and Consumer Advocate agreed to a proposed settlement which adopts MidAmerican's ratemaking principles as proposed, except for modifications to the return on equity and allowance for funds used during construction (AFUDC) principles.

MidAmerican filed additional information on November 20, 2014. A hearing was held on December 17, 2014, for Board questions regarding the proposed settlement and any cross-examination of prefiled testimony.

LEGAL STANDARDS

Iowa Code § 476.53 provides that a rate-regulated electric utility may request ratemaking principles that will apply when the costs of certain new defined generation, which encompasses Wind IX, are included in electric rates. The ratemaking principles established by the Board in this proceeding are binding (if accepted by the utility) with regard to the specific electric power generating facility in any subsequent rate proceeding. In making its ratemaking principles determination, the Board is not limited to traditional ratemaking principles or cost recovery mechanisms. Iowa Code § 476.53(3)"b." The General Assembly said that the advance ratemaking principles were designed to:

[A]ttract the development of electric power generating and transmission facilities within the state in sufficient quantity to ensure reliable electric service to Iowa consumers and provide economic benefits to the state. Iowa Code § 476.53(1).

The Board has said that if a facility does not meet the needs of Iowa consumers, it is not eligible for ratemaking treatment. However, the Board has said that need does not mean an immediate need, such as a showing that the lights would go out if a facility is not built, because that would not be a prudent planning criterion. MidAmerican Energy Company, "Order Approving Stipulation and Agreement," Docket No. RPU-05-4 (April 18, 2006), p. 6. The Board has also said that the ratemaking principles do not refer to the least-cost alternative or least-cost planning, so the proposed facility need only be reasonable when compared to other sources of supply. MidAmerican Energy Company, "Order," Docket No. RPU-01-9 (May 29, 2002), p. 6.

CONDITIONS PRECEDENT

The Board must make two findings before it can award ratemaking principles.

Condition 1: Does the rate-regulated public utility have in effect a Board-approved energy efficiency plan? (Gary)

The utility must have a Board-approved energy efficiency plan pursuant to Iowa Code § 476.6(16). There is no dispute that MidAmerican has a Board-approved energy efficiency plan in place.

Condition 2: Has the utility considered other sources for long-term electric supply and determined that the proposed facility is reasonable when compared to the other feasible alternative sources of supply? (Iowa Code § 476.53(3)"c"(1-2)). (Ellen)

MidAmerican

Hammer: Tr. 148-160, 166-172, 202

Wright: Tr. 49-50

MidAmerican compared Wind IX to conventional generation and to other renewable resources. (Tr. 202). Wind generation compares favorably to conventional generation alternatives primarily due to the facts that wind has no emissions, has no fuel price volatility, provides significant economic benefits (including lease payments to landowners), is abundant in Iowa, supports Iowa's energy policy, improves fuel diversity, contributes towards energy and capacity needs, and generally receives positive acceptance by the public. (Tr. 148-160, 202). Additionally, MidAmerican projected that Wind IX will result in no net cost to customers. (Tr. 160). Wind does not rank as well for resource availability because of its intermittent nature, and wind turbines are not adaptable to other fuels or conversion to other technologies. (Tr. 160).

MidAmerican compared wind with other renewable generation based on availability, economics, and maturity of technology. The other renewable generation included utility-scale solar, biomass, hydroelectric, and geothermal. (Tr. 166-172, 203). MidAmerican concluded that wind-based generation is the only renewable resource in Iowa that is mature, economically viable, and in sufficient supply. Improvements to the technology over the past two decades have made wind one of the leading renewable resources. (Tr. 174). MidAmerican commented that purchased power is not considered an alternative to wind power projects because MidAmerican has a better ability to deliver wind projects in a lower-cost, least-risk fashion than is typically available from other developers. (Tr. 49-50). However, if MidAmerican had an opportunity to enter into a purchased power agreement that would bring value to its customers, MidAmerican would not oppose consideration of such an agreement. (Tr. 50).

Consumer Advocate

Consumer Advocate commented that MidAmerican has established that the proposed Wind IX project will be beneficial to MidAmerican's customers and to the state as a whole because it increases fuel diversity and the utility's reliance on a renewable energy resource which is not carbon-based. MidAmerican's evidence also shows that the Wind IX project compares favorably to other long-term options for meeting customer needs. (Tr. 377-378).

Staff Analysis

Staff believes that the proposed Wind IX project may provide benefits to customers and is reasonable when considering other long-term electric supply options. MidAmerican's projection that Wind IX will result in no net cost to the customer is addressed by staff in the Economic Analysis section of the memo. Wind

generation thus far has contributed to Iowa's fuel generation diversity and is consistent with emerging emissions policies. The benefits of wind generation to local economies pertain not only in the lease payments to landowners, but also the property taxes in counties where the turbines are located.

Staff does however have some concerns regarding MidAmerican's resource planning analysis that it would like the Board and MidAmerican to note for future filings. MidAmerican stated it looked at the interaction of this addition in combination with other future resource additions. Staff believes that in future proceedings MidAmerican should be required to provide additional analysis regarding interaction of generating resources which could be added within reasonably short time frames. Staff is also concerned that MidAmerican has not fully addressed the issue of whether there is an upper limit to the amount of wind needed in MidAmerican's resource portfolio.

ECONOMIC ANALYSIS

(Mack)

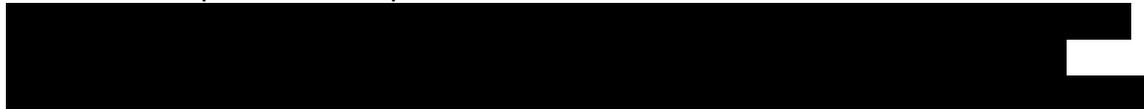
MidAmerican

It is a goal of MidAmerican that customers not be adversely affected by an incremental investment in wind capacity over the depreciable life (30 years in this case) of the investment. (Tr. 240). MidAmerican witness Wright stated that MidAmerican sees the project as "a great benefit for customers". (Tr. 47). When asked if the goal of the project was to provide no harm to customers or a benefit to customers, MidAmerican witness Specketer said "we want to provide a benefit to customers, but we set the cost cap at a level that would be no harm". (Tr. 111).

In its initial filing MidAmerican presented the results of a levelized cost analysis in support of the project's economic benefit. In its Order dated December 2, 2014, the Board had MidAmerican run its economic analysis using alternative assumptions. These were:

- a) Using the settlement Return on Equity (ROE).
- b) Using the settlement ROE and using the requested cap amounts as the investment assumption.
- c) Using the settlement ROE, excluding Green House Gas (GHG) benefits, and excluding forecast error benefits.
- d) Using the settlement ROE, excluding GHG benefits, excluding forecast error benefits, and using the requested cap amounts as the investment assumption.

MidAmerican provided its updated results in the table below and stated that





Staff Analysis

Staff's analysis addresses two issues, the economic impact of Wind IX from both a customer and MidAmerican perspective, and the impact of adding Wind IX to base rates in combination with other possible rate base additions.

Economic Impact of Wind IX on Customers and MidAmerican

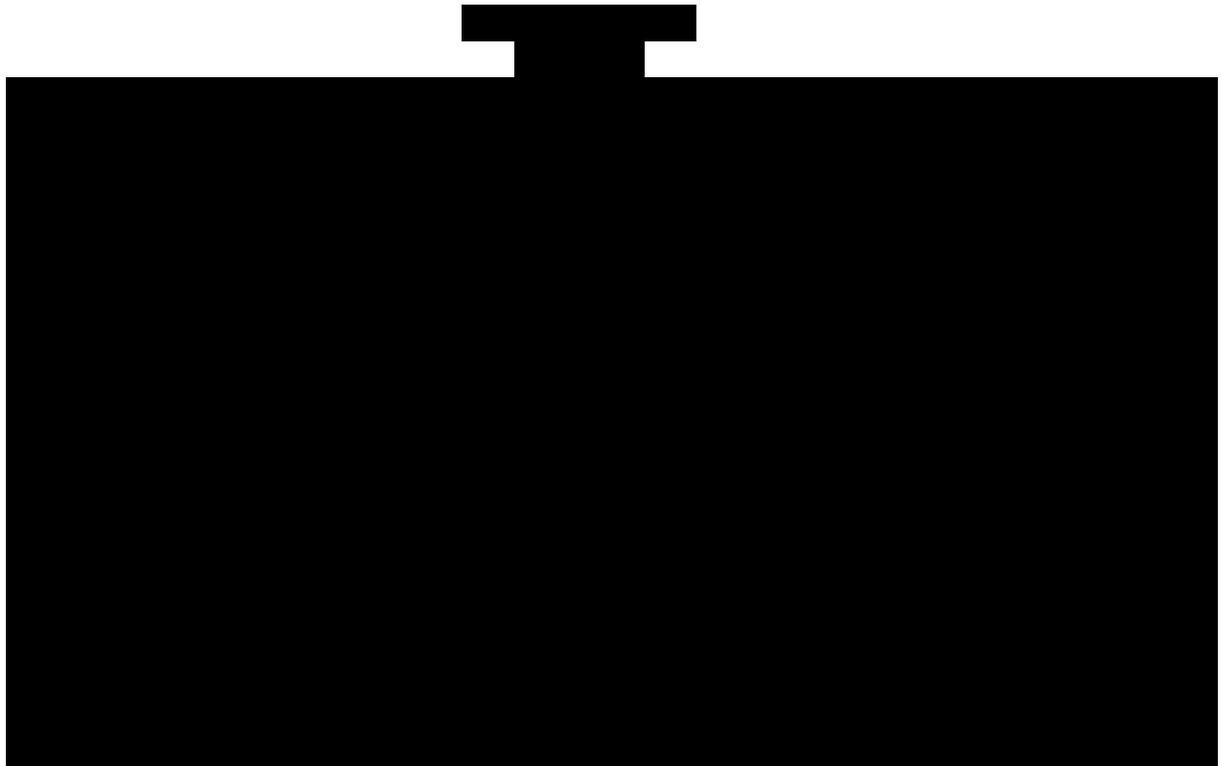
MidAmerican presented the results of a levelized cost analysis. The analysis reflected traditional rate treatment, i.e., the assumption that the project would be recovered in rates immediately upon completion and all costs and benefits associated with the project would flow to customers. In reality, if the settlement is approved, the economic impact that customers will experience prior to a future rate case will be the result of two factors:

1. A reduction in fuel costs that will flow through the EAC.
(MidAmerican response to Question 2b of the Board's December 2, 2014, Order)

2. The impact of including Wind IX in the revenue sharing calculation that was approved in Docket No. RPU-2013-0004. (MidAmerican response to Question 1a of the Board's December 2, 2014, Order)

From a customer perspective the impact of the fuel cost reduction is positive [REDACTED]
[REDACTED]
[REDACTED]¹ (MidAmerican response to Question 2 of the Board's December 11, 2014, Order)

The following graphs illustrate the projected impact of Wind IX on customers using the annual economic impact information that MidAmerican provided. The first graph shows the annual nominal dollar impact on customers that would occur if the project were recovered through rates immediately upon completion.² These annual numbers are the basis for MidAmerican's levelized cost estimate.

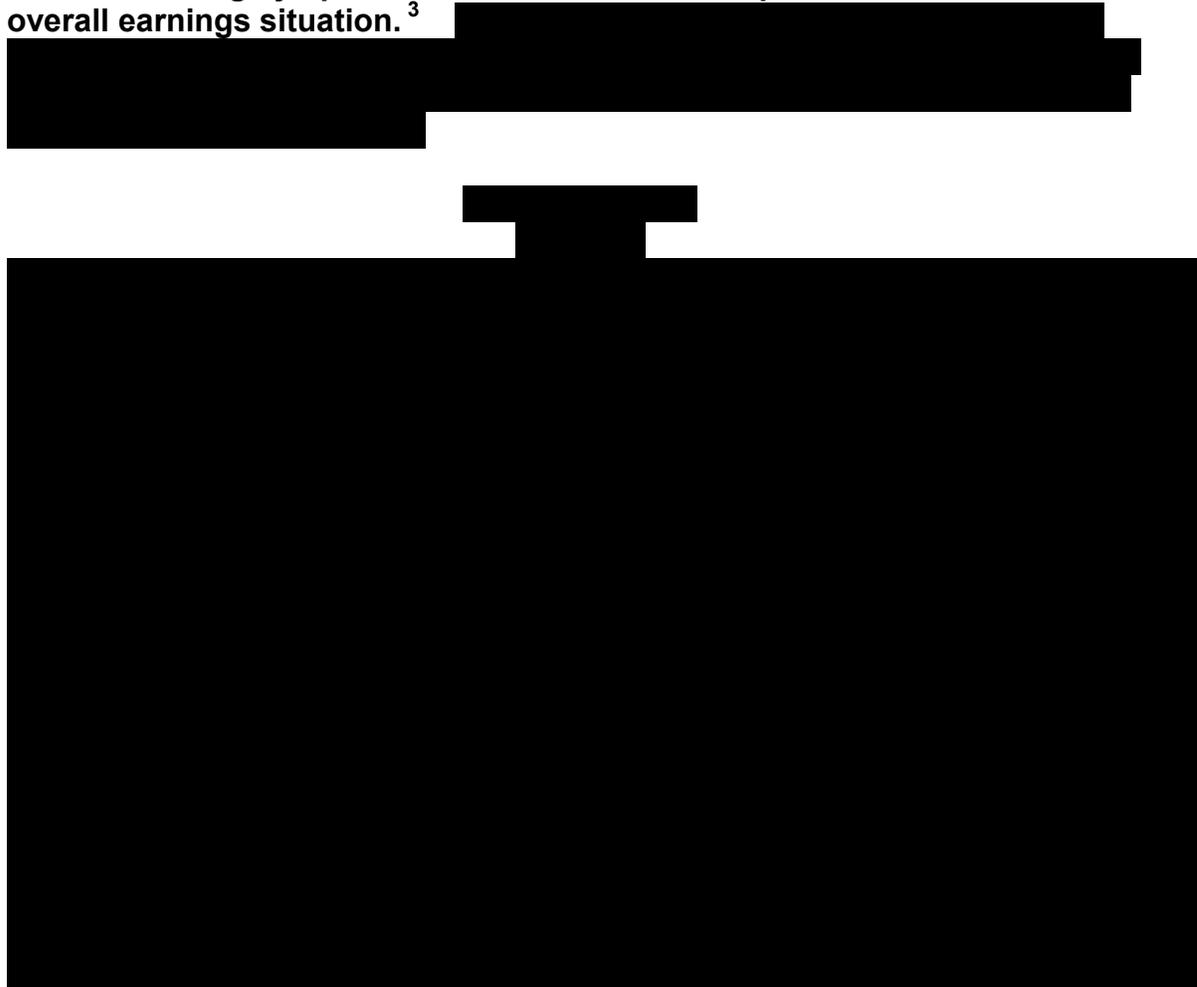


The next graph compares the customer impact of traditional rate treatment to the impact customers would see under the Settlement. **Staff notes that the settlement values shown in the remaining graphs are based on an assumption that the project would go into rates once the PTCs end. This is**

¹ [REDACTED]

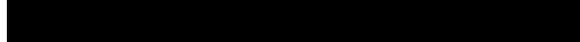
² MidAmerican provided the annual net revenue requirement values in response to Question 3 of the Board's December 2, 2014, Order.

a staff assumption used for illustration purposes. The timing of the next rate case is largely up to MidAmerican and will depend on MidAmerican's overall earnings situation.³

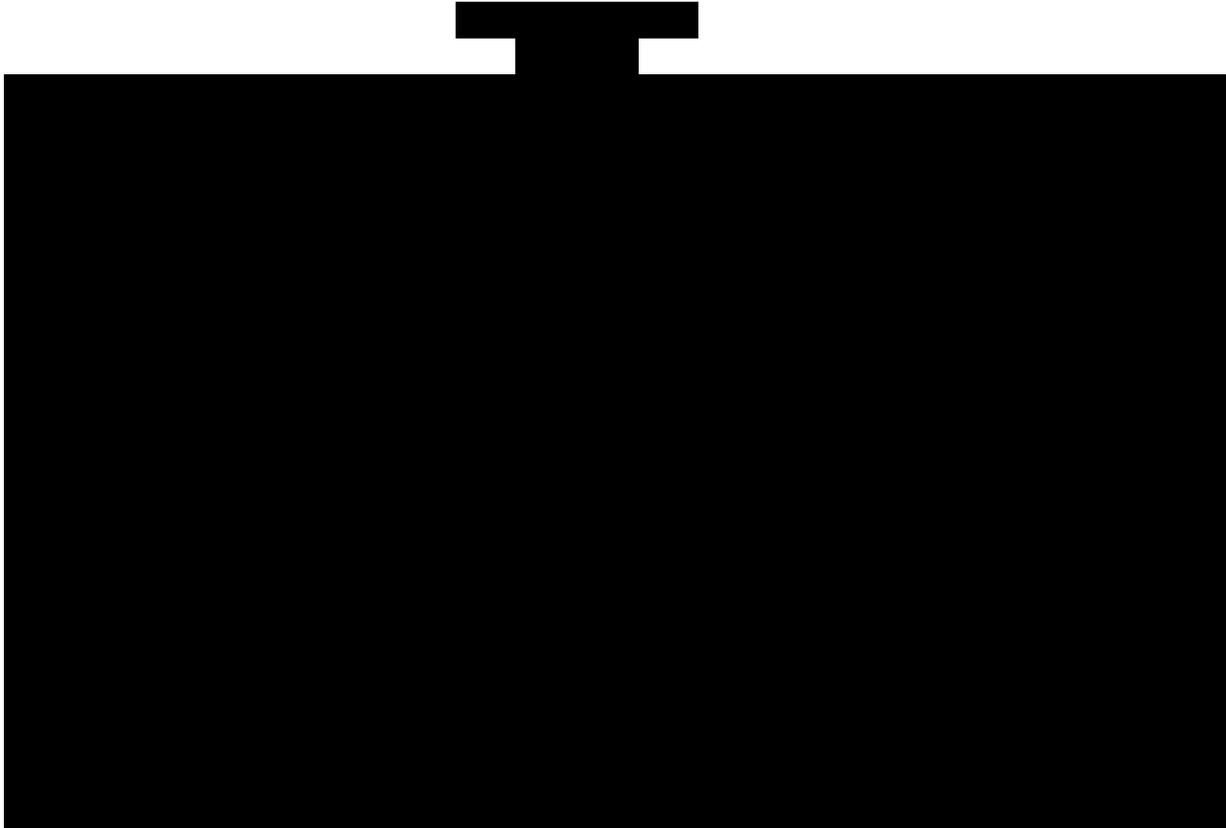


The next graph compares the customer impact of traditional rate treatment to the impact customers would see under the Settlement on an accumulated net present value (NPV) basis.⁴



³ Projections provided by MidAmerican indicate that, assuming no future rate case 
 (MidAmerican response to Question 3 of the Board's December 2, 2014, Order) It should be noted that the PTCs for Wind VIII would also be expiring in the same general timeframe.

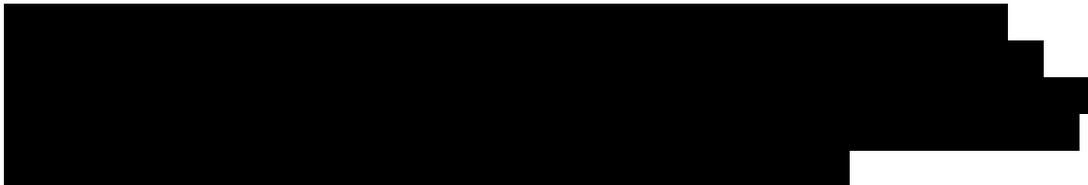
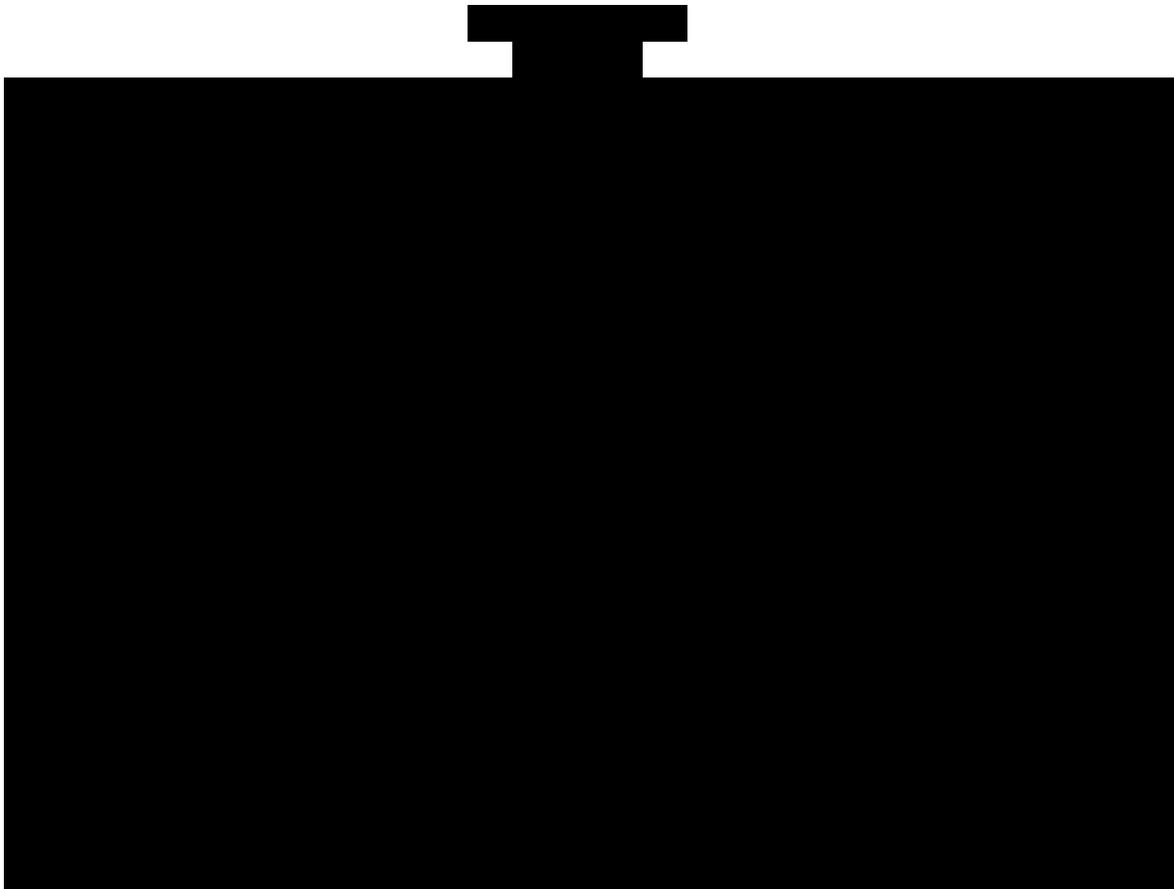
⁴ A discount rate of 7.21 percent was used based on MidAmerican's weighted after tax cost of capital assuming an ROE of 11.5 percent (per the Settlement), debt cost of 5.00 percent and a 50 percent equity capital structure (Tr. 242), and a tax rate of 41.57 percent. (Section 2.12, Page 1 of MidAmerican's Application).



The preceding three graphs illustrate that the levelized cost analysis overstates the benefit to customers and, from a customer perspective, the attractiveness of the project:

- Varies over time. Customer benefits vary significantly over [REDACTED]
- Is very dependent on projected values and events many years into the future. Staff notes that this will be true for most long lived generation projects.

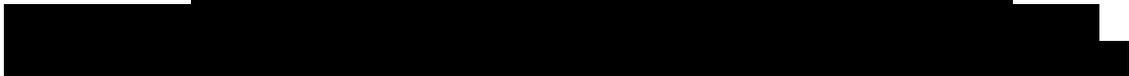
The next graph illustrates the sensitivity of the customer impact analysis to the alternative assumptions the Board identified in its Order dated December 2, 2014. The results are presented on an accumulated NPV basis.



Staff notes that, as with the analysis of any long-lived generation asset, there are numerous other assumptions that must be made, lending additional uncertainty as to the attractiveness of the project from a customer perspective



The next graph compares Wind IX's impact on customers to the impact on MidAmerican's earnings for the first ten years of the project's life assuming MidAmerican does not file a rate case.⁵ The comparison is on an annual nominal dollar basis.



⁵ Earnings estimates were provided in response to the Board's December 11, 2014, Order.



It appears to staff that the Settlement does not appropriately balance risk and reward between MidAmerican and its customers. MidAmerican's risk in this project appears to be well hedged per the provisions of the Settlement. The PTC benefits that will flow to MidAmerican prior to the next rate case appear to be relatively certain (Tr. 126-127), Wind IX will be included in the revenue sharing calculation [REDACTED], and MidAmerican has the option of initiating a rate case if the project becomes too much of a drag on earnings. Customer benefits, as discussed above, are projected to vary significantly over time, [REDACTED] and are far less certain.

The Board could consider the following modifications to the Settlement (individually or in combination) if it wants to shift the balance of risk/reward more in the customers' favor:

1. Set the cost cap at or near the investment level used in MidAmerican's economic projections.

Information provided by MidAmerican indicates that approximately [REDACTED] percent of the cost of the project has been contractually fixed⁶ and that the remaining [REDACTED] percent of the estimated project cost, including interconnection costs, has a relative estimated accuracy of [REDACTED] percent. (MidAmerican response to Question 13 of the Board's November 14,

⁶ Subject to "scope changes related to site conditions, delivery schedules, permitting requirements, turbine technology enhancements prior to delivery, infrastructure upgrades, etc."

2014, Order Requiring Additional Information) This implies a [REDACTED] percent total project contingency [REDACTED] would cover MidAmerican's expected uncertainty. In addition, MidAmerican witness Wright testified that a recently completed MISO study indicates that the costs for interconnection are coming in where MidAmerican expected them to be, and that off-site transmission upgrades included in the estimate (estimated at [REDACTED] would not be needed. (Tr. 59).

The requested cap of \$1725/kW is [REDACTED]
[REDACTED]

MidAmerican would only be impacted by a reduced cap if actual costs exceed the approved cap. If the cap is exceeded MidAmerican will have an opportunity to prove that the additional costs were prudently incurred.

2. Require additional payments to customers prior to the next rate case.

In the Wind VIII settlement MidAmerican included a rate making principle that flowed an additional \$10 million per year to customers prior to the Wind VIII units being put into base rates.⁷ MidAmerican witness Specketer stated that the benefit was not proposed for Wind IX for two reasons: First, in the Wind VIII case, the payments were indirectly tied to the rate case that was underway at that time. Second, MidAmerican thought that Wind IX provided enough customer benefit without providing additional benefits on top of the EAC benefit.⁸ (Tr. 125).

If the Board required a similar benefit for Wind IX and made it proportional to the Wind VIII benefit, the benefit would be approximately \$1.54 million per year.⁹ However, if the Board decided to require such a benefit in Wind IX, it need not be proportional to the Wind VIII benefit.

Referring back to Graph 5, the comparison of Wind IX's impact on customers vs. MidAmerican's earnings, an additional customer benefit of \$1.54 million per year would increase customers' projected nominal benefit over ten years to [REDACTED]
[REDACTED]

The provision could take the following form:

⁷ The payment is contingent upon MidAmerican reaching certain Wind VIII installed capacity amounts and is phased-in over 3 years.

⁸ Specketer also mentioned the "smaller size of 162 megawatts".

⁹ Based on project size ratio of 162 MW for Wind IX to 1050 MW for Wind VIII, or 15.4 percent of \$10 million.

Upon completion of at least ___ MW of the Wind IX project and in addition to all other benefits that will flow to customers, prior to a future rate case customers will received \$___ per year in energy adjustment clause credits.

3. Require a "no-harm" or "limited-harm" provision.

Requiring an additional payment to customers as discussed above would provide a known benefit stream prior to the next rate case which would improve the overall expected customer impact. It would not fully insulate customers from all sources of uncertainty. A no-harm or limited-harm provision would place all or part of the assumption related risk on the party (MidAmerican) that is making the assumptions.

Conceptually, a "no harm" or "limited harm" provision builds on MidAmerican's stated goal of not adversely affecting customers over the depreciable life of the investment. As noted earlier, Specketer stated that the cost cap was set at a level that would result in no harm, however the impact on customers depends on more than just the installed cost of the project. A no-harm provision would place the assumption related risk on the party (MidAmerican) that is making the assumptions.

Implementation of a no-harm or limited-harm provision would involve the calculation of Wind IX's customer impact on an after-the-fact basis¹⁰ coupled with potential cash flows to customers if needed to implement a no-harm or limited-harm result.

Potential drawbacks are that the ongoing analysis could become complicated and/or contentious and its implementation could lead to accusations of Board micromanagement. Parties might also object that this project is being treated differently than other projects; however the primary driver of Wind IX appears to be economics, not reliability and therefore an economic benefit provision could be justified. Parties could also argue that an after-the-fact calculation is directly in conflict with the statute's intent, which is to provide the utility certainty if it is building generation.

This provision could be applied on either an annual or a cumulative basis.¹¹ However, staff believes that if pursued it would be preferable to implement it on a cumulative basis. It does not seem reasonable to staff to protect customers from negative results in every year of a long-lived asset's life. While an annual application would ensure that customers in

¹⁰ This would involve a comparison of actual customer impacts with the project, to estimated customer impacts without the project.

¹¹ If applied annually, customer benefits could not fall below a specified level (e.g. zero) in any one year. If applied on a cumulative basis, customer benefits could fall below a specified level in a year if the cumulative benefits to that point were sufficiently positive to offset that year's negative result.

all periods are hedged, the annual application would shift significantly more expected benefit to customers¹² and more risk to MidAmerican. An annual application would go well beyond MidAmerican's goal that customers not be adversely affected over the depreciable life (30 years in this case) of the investment.

Limits could be applied on either a nominal dollar or PV basis.

The provision could take the following form:

Each year MidAmerican will file with the Board an analysis of the net benefits that customers have received due to Wind IX. If cumulative (present value or nominal) customer benefits to-date fall below \$____ customers will be provided additional cash benefits via the energy adjustment clause to reach the \$____ level.

4. Lower the allowed ROE.

The selection of an approved ROE often requires that the Board use its judgment when evaluating a range of estimates or multiple ranges of estimate. While MidAmerican and OCA settled on an ROE, each party presented its own cost of capital analysis which could be used as the basis for an alternative.

If the Board decided to modify the ROE, the modification would not have an impact until the project is included in base rates.¹³ The revenue sharing calculation would not incorporate the allowed ROE for Wind IX.

To staff's knowledge the Board has not made an explicit adjustment to an allowed ROE in order to shift the risk/reward allocation between a utility and its customers.

Staff notes that adopting some of the other options presented here would likely affect the actual earned ROE without the need to adjust the allowed ROE.

Impact of Adding Wind IX to Base Rates in Combination with Other Possible Rate Base Additions

During the next rate case the following could all be eligible for inclusion in base rates:

¹² Based on the projected values presented in Graph 2, an annual application of a no-harm limit would shift [REDACTED] (nominal dollars) to customers over 30 years. A cumulative application of a no-harm limit would shift [REDACTED] (nominal dollars) to customers over 30 years.

¹³ The assets would be added to base rates at their depreciated value, further reducing the impact of a modified ROE.

- Undepreciated amount of Wind VIII: \$1.9 billion less depreciation
 - Roughly \$1.25 billion upon expiration of PTCs in 10 years
- Undepreciated amount of Wind IX: \$ 279 million (\$1.725 million per MW times 162 MW) less depreciation
 - Roughly \$186 million upon expiration of PTCs in 10 years
- The amount in the depreciation deferral account established in the last rate case: up to \$300 million.
- Generation which may need to be added to address MidAmerican's projected capacity shortfall (the 600 MW IPL MGS unit is projected to cost about \$1 billion).
- Capital additions associated with maintenance and upgrade of MidAmerican's distribution, transmission, and generating systems.

Under this scenario a total of \$2.7 billion or more could potentially be added to rate base in approximately ten years. This amount of capital added to rate base at one time could introduce the risk of rate shock or a need for rate phase-in or other form of mitigation.

Potentially mitigating part of this concern is the fact that existing rate base will be depreciating and MidAmerican's projections indicate that revenue sharing should offset depreciation deferral over the next ten years.

In response to Board questions, Specketer stated that MidAmerican constantly evaluates a variety of impacts associated with projects, including rate impacts. He also stated that MidAmerican believes that Wind VIII and Wind IX will mitigate rate shock, not increase it. (Tr. 122-124). Staff's analysis of MidAmerican's Wind IX projections suggest otherwise. Referring to Graph 2, if Wind IX were added to rate base once the PTCs expire customers could see a [REDACTED] impact.¹⁴ While this is not significant enough to result in a staff recommendation to reject the project, the Board may want to consider requiring MidAmerican to provide an analysis of the rate issues identified here in a separate filing.

Additional Staff Comments

Staff would like to make some additional comments regarding the analysis presented by MidAmerican:

MidAmerican filed its case on October 10, 2014, and asked for a decision by January 15, 2015. This short timeframe challenges staff's ability to fully analyze the case.

MidAmerican indicated that it has been evaluating this project for a significant period of time. (Tr. 123) MidAmerican also requested a

¹⁴ Before the assumed rate case customers see [REDACTED] per year. After the rate case customers see [REDACTED] per year.

similarly short timeline for the Wind VIII project. MidAmerican filed the Wind VIII case on May 10, 2013, and asked for a decision no later than September 1, 2013.

As noted previously, the levelized cost analysis presented by MidAmerican has limited value because it does not accurately reflect how customers will be impacted prior to the next rate case.

MidAmerican emphasized the fuel cost savings that would flow through the EAC but did not provide projections of the revenue sharing impacts until it was responding to a Board Order regarding earnings.

MidAmerican presented no sensitivity results which would provide the Board with a better understanding of the uncertainty and risk associated with the project.

Staff requests that the Board consider including in its Final Order an expectation that future filings will:

Include analysis which accurately reflects all customer economic impacts.

Include analysis of sensitivity to key assumptions, including the interaction of generating resources which was mentioned in an earlier section of this memo.

Provide sufficient time for Board analysis.

RATEMAKING PRINCIPLES

Ratemaking Principle 1 - Iowa Jurisdictional Allocation (Gary)

The Wind IX Iowa Project will be allocated to Iowa in the same manner as the Greater Des Moines Energy Center, Walter Scott Jr. Energy Center Unit No. 4, and prior wind projects.

Staff Analysis

MidAmerican proposes to allocate Wind IX in the same manner as it has other new generation (Greater Des Moines Energy Center, Walter Scott Jr. Energy Center Unit No. 4, and all previous MidAmerican wind projects) built since the passage of the ratemaking principles statute, and in the same manner as the Board approved in ratemaking principles dockets for such new generation. There is no dispute with respect to this principle and additional analysis is contained in the attached pre-hearing memorandum.

Ratemaking Principle 2 - Cost Cap (Dan)

The cost cap for the Wind IX Iowa Project (including AFUDC) is:

1.725m per MW (including AFUDC) for the completed Project as a whole.

In the event that the actual capital costs for the Wind IX Project are lower than the projected capital costs, rate base shall consist of actual costs. In the event actual capital costs exceed the cost cap, MidAmerican shall be required to establish the prudence and reasonableness of such excess before it can be included in rates.

Staff Analysis

MidAmerican is proposing a cost cap of \$1,725/kW. On average the requested cost cap for prior MidAmerican wind projects has been 20 percent above the actual cost. (MidAmerican's response to Question 1 of the Board's November 14, 2014, Order Requiring Additional Information) This can be viewed in two ways. On the one hand, it shows that MidAmerican has consistently been below its allowed cap. On the other hand, while this is a positive result, staff believes it is also important to consider that the caps requested by MidAmerican have purposely been set well above expected costs. MidAmerican stated that approximately [REDACTED] percent of the cost of the Wind IX project is contractually fixed and the remaining percentage of the project has a plus or minus [REDACTED] percent accuracy. (MidAmerican response to Question 13 of the Board's November 14, 2014 Order)

Staff believes that a cost cap should be based on MidAmerican's best efforts to keep costs at a reasonable level. The cap requested by MidAmerican is [REDACTED] than what was used in the economic analysis and provides a substantial cushion should MidAmerican incur additional costs, regardless of whether or not the additional costs are prudently incurred.

Confidential Table 2.1-1c provides an economic analysis that is based on an assumed investment of [REDACTED]. This is [REDACTED] the \$1,725 kW requested as a cost cap. The total difference is approximately [REDACTED].

If the Board modified the Settlement to reduce the cost cap and Wind IX costs exceeded the cap, rates would not be affected until the project was included in rates in a future rate case. However, since the lower cap would be used in the calculation of the revenue requirement for revenue sharing purposes, sharing levels could be affected. Based on the February 2014 revenue sharing filing a

reduction to rate base of [REDACTED] would lower the 11 percent earnings threshold by approximately [REDACTED]. (Staff Calculation)¹⁵

Further discussion of the cost cap is included in the Economic Analysis section of this memo.

Ratemaking Principle 3 - Size Cap (Dan)

The ratemaking principles shall be applicable to all new MidAmerican wind capacity, up to 162 MW, built as a part of the Wind IX Iowa Project.

Staff Analysis

There is no dispute about the size of the project and staff has no concerns regarding the size of the project.

Ratemaking Principle 4 - Depreciation (Dan)

The depreciation life of the Wind IX Iowa Project for ratemaking purposes shall be 30 years.

Staff Analysis

MidAmerican's argument for a 30-year depreciation life is identical to what was proposed in Wind VIII. MidAmerican includes the same letters from GE Energy and Siemens Energy that support a 30-year depreciation life. (Tr. 81) MidAmerican states that the capacity factor will not significantly affect the life of the unit. Rather, higher running rates will lead to additional maintenance but should not reduce the overall life of the unit. (Tr. 82-86)

Ratemaking Principle 5 – Return on Equity (ROE) (Leslie)

The allowed return on the common equity portion of the wind projects, constructed pursuant to this Ratemaking Principles Application, that is included in Iowa electric rate base shall be 11.5 percent. An AFUDC rate that recognizes a return on common equity rate of 10.0 percent shall be applied to construction work in progress for Wind IX generation.

Staff Analysis

Three changes were made to the ROE principle as a result of the Settlement. First, the ROE was changed from 11.75 percent to 11.5 percent, which reflects a compromise between MidAmerican's proposed 11.75 percent ROE for Wind IX

¹⁵ Staff's calculation is based on a reduction of \$50 million to MidAmerican's 2014 rate base. Staff used the excel spreadsheet MidAmerican filed January 31, 2014, to support its revenue sharing calculation (Docket No. RPU-03-1).

and Consumer Advocate's recommended ROE of 11.3 percent. (See staff's Prehearing Memo, dated December 4, 2014, Attachment 1 for details of how the witnesses determined their proposed ROE) As mentioned in the Prehearing Memo, the Board recently approved MidAmerican's Wind VIII (Order Approving the Settlement Issued August 9, 2013), where it approved an ROE of 11.625 percent, which is 125 basis points higher than the ROE for Wind IX. To note, the witnesses in that case are the same witnesses in this case providing similar testimony.

The settled ROE appears to be reasonable for the following reasons: 1) it is 125 basis points lower than the ROE recently approved for Wind VIII; 2) it is below the 12.01 percent average ROE allowed on the nine advance ratemaking projects that were built by MidAmerican; 3) it reflects a compromise between the parties as part of a settlement; and 4) it is set at a level that can be considered consistent with the legislative intent of Iowa Code § 476.53(1) that mandates in Iowa "to attract the development of electric power generating and transmission facilities within the state in sufficient quantity to ensure reliable electric service to Iowa consumers and provide economic benefits to the state..." Current capital costs are at historic lows.

If the Board is considering adjusting the Settlement, it may wish to find other ways than adjusting the ROE. The ROE on this project will not be reflected in rates until MidAmerican comes in again for a rate case proceeding. This could be a number of years away given that MidAmerican includes the PTCs in revenue sharing for the next ten years and not through the EAC. Therefore, the effective ROE will be lower since Wind IX rate base will be reduced through depreciation over that time. Therefore, the impact will be less. Additionally, reducing the ROE to a level that has any significant impact on the results of the Settlement could create a negative reaction by the rating agencies.

The second change to the ROE Principle is that language was added to set the ROE rate that would be included in the AFUDC calculation for Wind IX. MidAmerican initially used its requested 11.75 percent ROE, while Consumer Advocate explained that a 10 percent ROE is the appropriate ROE to use. The Settlement included Consumer Advocate's proposed ROE of 10 percent for AFUDC calculations. This is consistent with the Settlement approved in Wind VIII.

The last change to the ROE Principle was removing the language "50% of the capital invested" to eliminate confusion this language created with the parties. This too is consistent with the Settlement approved in Wind VIII.

Ratemaking Principle 6 – Cancellation Cost Recovery (Ellen)

In the event MidAmerican cancels any Wind IX site for good cause, MidAmerican's prudently incurred and unreimbursed (staff recommended addition) costs shall be amortized over a period of ten years beginning no later than six months after cancellation. The annual amortization shall be recorded above-the-line and included in MidAmerican's revenue sharing or revenue requirement calculations, but the unamortized balance shall not be included in rate base in any such calculations.

Staff Analysis

MidAmerican and Consumer Advocate agreed that the Cancellation Cost Recovery ratemaking principle could be modified to specify that the ratemaking principle pertains to MidAmerican's unreimbursed cancellation costs. Both parties indicated the modification would be consistent with the intent of the ratemaking principle. (Tr. 78, 383-384).

The cancellation cost recovery principle is similar to the principle approved in prior wind generation dockets. The addition of the language "unreimbursed costs" clearly states the principle's intent. If the project were cancelled, the prudence of the unreimbursed costs would be determined in a future proceeding. MidAmerican would record the prudent costs above the line and include them in the revenue sharing calculation that was approved in Docket No. RPU-2013-0004.¹⁶ The principle is reasonable for Wind IX and staff recommends the Board approve the principle with the proposed modification.

Ratemaking Principle 7 – Renewable Energy and CO2 Credits (Ellen)

The Iowa portion of any revenues from the sale of renewable energy credits, carbon dioxide credits or other environmental related benefits associated with Wind IX will be recorded above-the-line in FERC accounts 456, 411.8 and 411.9, or any successor accounts for recording such revenues. However, the Iowa jurisdictional portion of any revenues from the sale of renewable energy credits, carbon credits or other environmentally related benefits associated with Wind IX will be excluded from the Iowa Energy Adjustment Clause until included in the Electric Adjustment Clause in a subsequent MidAmerican Iowa electric rate case. For subsequent rate cases, the Iowa jurisdictional portion of the investment and all other costs and benefits of the Wind IX project shall be included in base rates, and the Iowa jurisdictional portion of any revenues from the sale of renewable energy credits, carbon credits or other environmentally related benefits associated with Wind IX shall be included in an Iowa Energy Adjustment Clause.

¹⁶ The revenue sharing mechanism in Docket No. RPU-2013-0004 provides that customers receive the benefit of 80 percent of all earnings over 11 percent and 100 percent of all earnings above 14 percent. The customer share of the earnings would be used to reduce the regulatory asset created by the depreciation deferral referenced in Article VII of the Settlement.

Staff Analysis

There is no dispute about the treatment of renewable energy credits, CO2 credits, or other environmental related benefits associated with Wind IX. The principle is similar to principles approved in prior ratemaking principles dockets and staff has no concerns.

Ratemaking Principle 8 – Federal Production Tax Credit (Ellen)

The Iowa jurisdictional portion of any federal production tax credits associated with Wind IX will be recorded above-the-line in FERC account 409.1, or any successor account for recording such credits. However, the Iowa jurisdictional portion of any federal production tax credits associated with Wind IX will be excluded from the Iowa Energy Adjustment Clause approved in MidAmerican's 2013 Iowa electric rate case. For subsequent rate cases, the Iowa jurisdictional portion of the investment and all other costs and benefits of the Wind IX Project shall be included in base rates, and the Iowa jurisdictional portion of any federal production tax credits associated with Wind IX shall be included in the Iowa Energy Adjustment Clause.

Staff Analysis

There is no dispute about the treatment of the federal production tax credits associated with Wind IX. The principle is similar to principles approved in prior ratemaking principles dockets and staff has no concerns.

IV. Recommendation

There are three options that the Board could consider in regards to the proposed Settlement in this docket.

Option One

Direct General Counsel to draft for the Board's consideration an Order Approving Settlement Without Modification.

OPTION APPROVED

IOWA UTILITIES BOARD

Date

Date

Date

Option Two

Direct General Counsel to draft for the Board's consideration an Order Rejecting Settlement Without Prejudice.

OPTION APPROVED

IOWA UTILITIES BOARD

/dwf

Date

Date

Date

Option Three

Staff note: At the bottom of this option each Board member can circle either "Y" or "N" to either approve or not approve the modification. In some instances blanks are provided for each Board member to indicate her/his desired value.

Direct General Counsel to draft for the Board's consideration an Order approving the Settlement with the following modifications. Note that the modifications listed below can be applied separately or in any combination.

Modification A

Modify ratemaking principle 6 to apply to "prudently incurred and unreimbursed costs."

Modification B

Set the cost cap at \$____/kW.

Modification C

Add the following ratemaking principle:

Upon completion of at least 100 MW of the Wind IX project and in addition to all other benefits that will flow to customers, prior to a future rate case customers will receive \$__ million per year in energy adjustment clause credits.

Modification D

Add the following ratemaking principle:

Each year MidAmerican will file with the Board an analysis of the net benefits that customers have received due to Wind IX. If cumulative present value customer benefits to-date fall below \$__million customers will be provided additional cash benefits via the energy adjustment clause to reach the \$[same] level.

Modification E

Modify the approved ROE from 11.5 percent to ____ percent.

OPTION APPROVED

IOWA UTILITIES BOARD

- Modification A **Y** / N
- Modification B **Y** / N @ a level of \$ 1,500 /kW or below
- Modification C **Y** / N @ a level of \$ 2 million per year
- Modification D Y / **N** @ a level of \$ _____ million *I do not support making this modification.*
- Modification E Y / **N** @ a level of _____ percent *Settlement ROE is appropriate.*

/s/ Elizabeth S. Jacobs 1-15-15

Date

The order should require MidAmerican to file an analysis of the rate issues as noted on p. 14. In addition, the order needs to communicate that MidAmerican gives the Board sufficient time to review future rate case/wind filings. ESJ 1-15-15

See attached for additional comments. ESJ 1-15-15

- Modification A **Y** / N
- Modification B **Y** / N @ a level of \$ 1,565 /kW **█** % contingency on remaining % of costs
- Modification C **Y** / N @ a level of \$ 1.5 million per year *Would change completion to 50 MW from 100 MW*
- Modification D Y / **N** @ a level of \$ _____ million
- Modification E Y / **N** @ a level of _____ percent *Settlement ROE is reasonable*

/s/ Nick Wagner

1/15/15

Date

- Modification A **Y** / N
- Modification B **Y** / N @ a level of \$ 1,500 /kW
- Modification C **Y** / N @ a level of \$ 2 million per year
- Modification D Y / **N** @ a level of \$ _____ million *I don't believe such a requirement comports with the intent to the applicable ratemaking principle statute, i.e. reasonable certainty. Also, too complex.*
- Modification E Y / **N** @ a level of _____ percent *Settlement ROE is a reasonable compromise.*

/s/ Sheila K. Tipton

1/13/2015

Date

I also favor requiring MidAmerican to separately analyze the rate issues identified at p. 14 of this memo and to specify in this order the need for future filings to give the IUB a sufficient and reasonable time to review the filings. SKT 1/13/2015

Additional comments:

- 1. A clarification to my comment on Modification B. The order should state that the cap is \$1500 per kW or below. It shouldn't state that the cap is strictly \$1500 per kW.*
- 2. The order should note that in future filings, MidAmerican should be required to provide additional analysis regarding interaction of generating resources which could be added within reasonably short time frames. In addition, in a future filing, a discussion around the issue of whether there is an upper limit to the amount of wind needed in MidAmerican's resource portfolio would be helpful.*
- 3. The order should note that in future filings, MidAmerican is expected to include analysis which accurately reflects all customer economic impacts. It should also be noted in the other that when the Board asks questions in orders, it is expected that the questions are to be answered fully.*

Elizabeth S. Jacobs 1/15/15

- 1. I agree with Board Member Jacobs' suggestions as to additional substantive points to be made in the Order.*
- 2. I agree with Board Member Wagner that the MW trigger for the additional contribution to customers (i.e., Modification C) should be 50 MW rather than 100 MW, but still believe that the additional contribution should be \$2 million.*

Otherwise, I reiterate my original comments.

Sheila K. Tipton 01-15-2015

I concur with Board Member Tipton and Wagner that the MW trigger for the additional contribution to customers should be 50 MW rather than 100 MW (Modification C). I agree with Board Member Tipton that the additional contribution should be \$2 million.

Elizabeth S. Jacobs 1-15-15

I concur with Board Members Jacobs and Tipton on the additional contributions to customers at \$2 million.

Nick Wagner 1-15-15

****Selected answers are highlighted in yellow.***