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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE VOLUNTARY REQUEST OF ROCKY MOUNTAIN POWER FOR APPROVAL OF RESOURCE DECISION TO REPPOWER WIND FACILITIES

Docket No. 17-035-39

PREFILED DIRECT TESTIMONY AND EXHIBITS OF KEVIN C. HIGGINS

The Utah Association of Energy Users (“UAE”) hereby submits the Prefiled Direct Testimony of Kevin C. Higgins in this docket

DATED this 20th day of September 2017.

HATCH, JAMES & DODGE

/s/
Gary A. Dodge
Attorneys for UAE
Certificate of Service

Docket No. 17-035-39

I hereby certify that a true and correct copy of the foregoing was served by email this day 20th day of September 2017 on the following:

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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Voluntary Request of
Rocky Mountain Power for Approval of
Resource Decision to Repower Wind Facilities

Docket No. 17-035-39

Direct Testimony of Kevin C. Higgins

On Behalf of the
Utah Association of Energy Users

September 20, 2017
I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.
A. My name is Kevin C. Higgins. My business address is 215 South State Street, Suite 200, Salt Lake City, Utah, 84111.

Q. By whom are you employed and in what capacity?
A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying in this proceeding?
A. My testimony is being sponsored by the Utah Association of Energy Users ("UAE").

Q. Please summarize your qualifications.
A. My academic background is in economics, and I have completed all coursework and field examinations toward a Ph.D. in Economics at the University of Utah. In addition, I have served on the adjunct faculties of both the University of Utah and Westminster College, where I taught undergraduate and graduate courses in economics. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy-related economic and policy analysis, including evaluation of electric and gas utility rate matters.

Prior to joining Energy Strategies, I held policy positions in state and local government. From 1983 to 1990, I was economist, then assistant director, for the Utah Energy Office, where I helped develop and implement state energy policy.
From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County Commission, where I was responsible for development and implementation of a broad spectrum of public policy at the local government level.

Q. **Have you previously testified before the Utah Public Service Commission (“Commission”)?**

A. Yes. Since 1984, I have testified in thirty-eight dockets before the Utah Public Service Commission on electricity and natural gas matters.

Q. **Have you testified previously before any other state utility regulatory commissions?**

A. Yes, I have testified in approximately 180 other proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arkansas, Arizona, Colorado, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Virginia, Washington, West Virginia, and Wyoming. I have also filed affidavits in proceedings before the Federal Energy Regulatory Commission and prepared expert reports in state and federal court proceedings involving utility matters.

Q. **What is the purpose of your testimony in this case?**

A. My testimony addresses the Voluntary Request by Rocky Mountain Power (“RMP” or “Company”) for approval to upgrade or repower wind facilities. RMP is requesting that the Commission: (a) determine that the Company’s decision to
upgrade or repower most of its existing wind facilities is prudent; (b) approve the
Company’s continued recovery of the replaced wind plant equipment; and (c)
approve the Company’s proposed ratemaking treatment.

Q. Please provide a summary of your conclusions and recommendations.

A. UAE has not taken a position at this time for or against approval of RMP’s
wind repowering proposal or tracking mechanism per se. Although the
Company’s analysis shows a range of potential benefits (and costs) to customers
under certain natural gas and CO2 pricing risks, the magnitude of these benefits in
relation to the benefits to RMP over the next 20 years do not make a compelling
case for UAE’s endorsement in light of other uncertainties that may impair the
realization of any projected customer benefits. However, if the Commission
considers approval of RMP’s proposals, I offer some recommendations for better
aligning risks and benefits of the proposal as between RMP and its ratepayers.

RMP’s wind repowering proposal is not a typical utility investment
proposition. The wind repowering project might best described as an
“opportunity” investment in that it seeks to take advantage of the availability of
Production Tax Credits (“PTCs”) before the federal tax credit program expires per
the current statutory phase out. Since it is an opportunity investment, the relative
benefits to customers, taking account of the range of risks to customers, in
relation to the benefits to RMP, should be considered as part of the Commission’s
review.
I am concerned that when measured over the 20-year period used in the Company’s 2017 Integrated Resource Plan (“IRP”), the benefits from this opportunity investment are significantly weighted in favor of the Company, even though when measured over the life of the new assets, 2017-2050, the net present value of the projected benefits to customers and to the Company are reasonably comparable. Since 30 years is a long time for the equities in this proposition to even out, and in light of the fact that there is a range of risk associated with the realization and the amount of customer benefits, I believe it is reasonable to consider an adjustment in the terms of the repowering proposal.

Specifically, if the repowering project is granted preapproval, I recommend that it be made conditional on a reduction of 200 basis points to the authorized rate of return on common equity applicable to the un-depreciated balance of the retired plant (inclusive of associated accumulated deferred income taxes [“ADIT”]). This adjustment would have the effect of better balancing the benefits between customers and the Company over the first 20 years of the repowering project.

The Resource Tracking Mechanism (“RTM”) proposed by RMP to defer and recover project costs is fairly complex, and I am not convinced it is necessary to adopt this approach in lieu of RMP simply filing a general rate case at the appropriate time. That said, in its own terms, the RTM appears to be logically constructed and reasonably balances the interests of the Company and customers, with exception of the proposed long-term continuation of the RTM as a PTC
tracking mechanism. PTCs are not tracked today in the manner proposed by the Company, nor is it necessary to track PTCs going forward to ensure just and reasonable rates. Therefore I recommend that if the RTM is approved, the Company’s proposal for a long-term PTC tracker be rejected.

II. RMP’s WIND REPOWERING PROPOSAL

Q. What does RMP propose in its filing?

A. RMP is proposing to repower a significant portion of its wind fleet at a projected cost of $1.13 billion. In total, the repowering project will consist of 1096.8 MW of new nameplate capacity that will replace 999.1 MW of existing nameplate capacity. On average, the repowering project is expected to increase wind energy production at the repowered sites by around 19.2%. The Company provides analysis intended to demonstrate that this undertaking will provide net benefits to customers over a range of potential scenarios, although certain scenarios project net costs to customers.

Q. What is the statutory basis cited by the Company for its filing?

A. RMP is making this filing under Utah’s “Energy Procurement Act,” (Utah Code Ann. § 54-17-402), through which the Company is seeking preapproval for the project. This statute states that:

“(1) Beginning on February 25, 2005, before implementing a resource decision, an energy utility may request that the commission approve all or part of a resource decision in accordance with this part.

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1 See Direct testimony of Rick T. Link, Exhibit RMP__(RTL-1), p. 1.
2 Id., p. 13, lines 297-299.
3 Utah Revised Code, Title 54, Chapter 17, Part 4, Section 402.
(2) (a) To obtain the approval permitted by Subsection (1), the energy utility shall file a request for approval with the commission; and, (b) The request for approval required by this section shall include any information required by the commission by the rule made in accordance with Title 63G, Utah Administrative Rulemaking Act.”

Q. **What are the benefits of the proposal as identified by RMP?**

A. The Company contends in its Application that customers will benefit from the repowering due to the potential for increased energy production, a reduction in operating costs, and the ability to receive additional federal PTCs that will expire ten years after a facility’s original commercial operation date.⁴

RMP witness Rick T. Link has prepared detailed analyses of projected customer benefits for both the 2017 IRP time horizon (2017-2036) and for the depreciable life of the new assets (2017-2050). Mr. Link’s analyses consider a range of potential outcomes that take into account deviations in future natural gas pricing and CO₂ costs.

A summary of Mr. Link’s results for the 20-year time horizon is presented in Table KCH-1, below. Mr. Link’s 20 year calculations use the same valuation metrics as the 2017 IRP in which capital costs are translated into real levelized values.

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⁴ RMP Application for Approval of Resource Decision to Repower Wind Facilities, pages 1-2.
Table KCH-1
Net Benefits of Wind Repowering Projected by RMP ($ millions)
2017-2036

<table>
<thead>
<tr>
<th>Price-Policy Scenario</th>
<th>SO Model PVRR(d)</th>
<th>PaR Stochastic-Mean PVRR(d)</th>
<th>PaR Risk Adjusted PVRR(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Gas, Zero CO2</td>
<td>$33</td>
<td>$43</td>
<td>$44</td>
</tr>
<tr>
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<td>$8</td>
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<tr>
<td>Medium Gas, High CO2</td>
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<td>($34)</td>
<td>($37)</td>
</tr>
<tr>
<td>High Gas, High CO2</td>
<td>($103)</td>
<td>($80)</td>
<td>($85)</td>
</tr>
</tbody>
</table>

* Data Source: Direct Testimony of Rick T. Link - REDACTED, p. 28, Table 2, Utah PSC Docket No. 17-035-39. Note: Projected customer benefits are shown as negative entries.

Q. What potential customer benefits are shown in Table KCH-1?
A. As shown in Table KCH-1, RMP’s estimate of customer benefits over the 20-year-period of the IRP ranges from a net cost to customers of $44 million under the “low gas price, zero CO2 price” scenario to a net benefit of $103 million under the “high gas price, high CO2 price” scenario. The middle case, the “medium gas price, medium CO2 price” scenario, yields a range of projected net benefits under different risk assessment metrics ranging from $13 million to $22 million. Unless otherwise indicated, all measurements of benefits discussed in my testimony are on a total Company basis.

Q. What customer benefits did Mr. Link estimate in his longer-term analysis?
A. The range of customer benefits in Mr. Link’s longer-term analysis, 2017-2050, using the PaR Stochastic-Mean PVRR(d) metric, are presented in Table KCH-2, below.
Table KCH-2
Net Benefits of Wind Repowering Projected by RMP ($ millions)
2017-2050

<table>
<thead>
<tr>
<th>Price-Policy Scenario</th>
<th>PaR Stochastic-Mean PVRR(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Gas, Zero CO2</td>
<td>($41)</td>
</tr>
<tr>
<td>Low Gas, Medium CO2</td>
<td>($245)</td>
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<tr>
<td>Low Gas, High CO2</td>
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<td>($400)</td>
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<tr>
<td>High Gas, Medium CO2</td>
<td>($274)</td>
</tr>
<tr>
<td>High Gas, High CO2</td>
<td>($589)</td>
</tr>
</tbody>
</table>

* Data Source: Direct Testimony of Rick T. Link - REDACTED, p. 32, Table 3 Utah PSC Docket No.17-035-39. Note: Projected customer benefits are shown as negative entries.

Q. What potential customer benefits are shown in Table KCH-2?

A. Over the period 2017-2050, Mr. Link calculates projected benefits ranging from $41 million to $589 million using the PaR Stochastic-Mean PVRR(d) metric. In the “medium gas price, medium CO₂ price” scenario, Mr. Link calculates a net customer benefit of $359 million.

Q. What is causing the significant increase in projected customer benefits in the longer-term analysis compared to the 20-year analysis?

A. The primary driver of the incremental customer benefits in the longer-term analysis is the assumption that the existing wind assets would otherwise be retired after 30 years of useful life. The additional 10 years of usefulness from the wind assets as a result of the repowering significantly reduces projected net power costs during the 2037-2050 measurement period, as the life-extended wind output
displaces market purchases and thermal generation. Of course, the substantial
benefits projected during this period depend on the assumption that the original
wind assets actually would have been retired at the end of their projected lives
rather than kept in operation. If instead, the existing assets would have remained
in operation longer, the net benefits to customers projected for this period would
be lower. At the same time, even if the lives of the original assets would have
been extended, it is not unreasonable to assume that the repowering would add 10
years or so of additional life to the facilities at some point in the future, albeit in a
later period – and at a lower net present value of benefits due to discounting.

Q. **What time constraints impact the scheduling of the repowering project?**

A. In order to achieve the full PTC benefits, RMP indicates in its Application
that it must complete the wind repowering project by the end of 2020.\(^5\)

Q. **What ratemaking treatment is RMP proposing?**

A. The Company is proposing a new deferral and cost recovery mechanism,
called the Resource Tracking Mechanism, requested under Utah Code Ann. § 54-
4-1, 54-4-23, 54-17-402, and 54-17-403.\(^6\) As explained by RMP witness Jeffrey
K. Larsen, the Company believes the RTM is the appropriate ratemaking
treatment for matching the annual costs and benefits of the wind repowering
project.\(^7\)

Q. **What time frame does RMP propose for implementing the RTM?**

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\(^5\) Id., p. 2, paragraph 1.
\(^6\) Id., p 7, Section 15 “Proposed Ratemaking Treatment”.
\(^7\) Direct Testimony of Jeffrey K. Larsen, p. 5, lines 89-98.
A. The Company is asking for the RTM to be in place until the incremental costs and benefits of the repowering project are fully reflected in base rates.\(^8\)

Once the full costs are reflected in base rates in a general rate case, RMP proposes that the RTM stay in place for the purpose of tracking year-to-year changes in the new PTCs.

Q. When would the deferral of the items listed above begin?

A. RMP proposes that the deferral start with the on-line date of the first repowered facility. On March 15 each year, the Company would file the RTM deferral balance from the prior calendar year, to be included in rates beginning May 1, on an interim basis.\(^9\)

Q. What costs and revenues would be included in the RTM deferral?

A. RMP proposes that the deferral for each of the repowered wind resources include the following revenue requirement components:

- Plant revenue requirement, consisting of:
  - Capital investment
  - Accumulated Depreciation Reserve ("ADR")
  - Accumulated Deferred Income Tax ("ADIT")
  - Operations and Maintenance Expense
  - Depreciation expense
  - Property taxes
  - Wyoming Wind Tax
  - Net Power Cost savings
  - PTCs

RMP proposes to calculate the RTM deferral as the difference between the

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\(^8\) RMP Application for Approval of Resource Decision to Repower Wind Facilities, p. 8, paragraph 1.  
value included in base rates for these items and the new value, taking into account the costs and benefits of repowered wind facilities as they come into service.

Q. **How would net power cost savings attributable to incremental wind production be captured in rates?**

A. Net power cost savings are currently captured in the EBA. To the extent that the EBA is either modified or eliminated in a future review of the sharing mechanism, the Company would use the RTM to pass back any incremental net power cost savings that are not captured in the EBA. Mr. Larsen states that under this approach, customers will receive the “full net benefits” from the repowering project, while “shareholders receive appropriate cost recovery of the prudent investment.”

Q. **How does RMP propose to treat the existing wind assets that will be replaced by the new wind investment?**

A. RMP plans to retire the replaced assets, but still recover the cost of these assets while earning the Company’s authorized rate of return on the undepreciated balance. RMP proposes to implement this by removing these assets from plant in service and rebooking them into the ADR. Additionally, the Company intends to file new depreciation rates in 2019. In its Application, the Company states that it intends to reset the 30-year depreciable life of the repowered wind facilities, which will effectively extend the depreciable life of the

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10 Id., page 5, lines 95-97.
facilities by 10 to 13 years.\textsuperscript{11} It is my understanding that as part of this extension, the recovery of the retired assets would also be extended through this time frame.

III. \textbf{ASSESSMENT OF RMP PROPOSAL}

\textbf{Q.} What is UAE’s position regarding the repowering proposal?

\textbf{A.} UAE has not taken a position at this time for or against approval of RMP’s wind repowering proposal or tracking mechanism per se. Although the Company’s analysis shows a range of potential benefits (and costs) to customers given certain natural gas and CO\textsubscript{2} pricing risks, the magnitude of the benefits in relation to the benefits to RMP over the next 20 years do not make a compelling case for UAE’s endorsement in light of additional uncertainties that may impair the realization of the projected customer benefits. However, if the Commission considers approval of RMP’s proposals, I offer some recommendations for better aligning risks and benefits of the proposal as between RMP and its ratepayers.

\textbf{Q.} What are your general observations regarding RMP’s wind repowering proposal?

\textbf{A.} RMP’s wind repowering proposal is not a typical utility investment proposition. Utility generation projects are typically driven by the need to meet reliability requirements, load growth, and/or to replace retired plant that has come to the end of its useful life. That is not the case here. The wind re-powering

\footnote{RMP “Application for Approval of Resource Decision to Repower Wind Facilities”, p. 8, Docket 17-035-39.}
project might best described as an “opportunity” investment in that it seeks to take advantage of the availability of PTCs before the federal tax credit program expires per the current statutory phase out. The PTCs are so remunerative that they can produce positive economic results for an investment that otherwise would not make economic sense, in this case, prematurely replacing 10-year-old wind generating equipment that has 20 years remaining on its useful life.

In advocating for this opportunity investment, RMP makes the case that the project will reduce rates for customers on a net present value basis. The reduction in rates comes about primarily because the benefits of the PTCs are flowed-through to customers, and additionally, the new wind generating assets will produce 19.2% more energy than the assets they are replacing, thereby reducing net power costs.

Q. As a general proposition, would a projected reduction in customer rates justify approval of an opportunity investment such as this?

A. While I believe that a projected reduction in customer rates should be given significant weight in determining whether a project such as this should be approved, it is also reasonable to consider the overall equities and risks involved.

Consider an extreme hypothetical example to illustrate this point. Assume an opportunity investment would produce $1 in benefits in the form of reduced rates for customers, while at the same time producing $100 million in returns for the utility. Would such a proposition be reasonable? Intuitively, the extreme asymmetry in upside benefits between customers and shareholders in this example
makes this proposition unappealing. It becomes even more so if there are risks associated with achieving the customer benefits.

Moving beyond this extreme example, suppose customer benefits were projected to be $1 million, while the return to the utility remained $100 million. While the benefits to customers are clearly more significant in this second example, the equities are still lopsided, and it is far from clear that a regulator would consider such an opportunity investment to be a reasonable package. However, if the benefits to customers were to continue to be increased, presumably at some point they would reach a level at which the arrangement would be appealing to most regulators and determined to be in the public interest.

What these illustrative examples demonstrate is that in the case of an opportunity investment – one in which there is a “deal” to be had – the relative benefits among the parties that stand to gain from the deal matter. This should not be surprising. In working out the terms of any business arrangement between two principals, what each party would hope to gain from the arrangement will be a function of the attributes each party brings to the table, the relative risks they assume, and their bargaining positions, among other things.

Q. What is the relevance of this discussion for the wind repowering project?

A. Since it is an opportunity investment, the relative equities for both parties should be taken into account as part of the Commission’s review. Specifically, the relative benefits to customers, taking account of the range of risks to
customers, in relation to the benefits to RMP, should be considered as part of the Commission’s review.

Q. **How do the relative equities stack up under RMP’s proposal?**

A. There is a significant difference in the relative equities depending on the time period of analysis. For a 20-year analysis, we can begin with RMP’s projection of the benefits to customers summarized in Table KCH-1, above. As I discussed above, RMP’s estimate of customer benefits over this period ranges from a net *cost* to customers of $44 million to a net benefit of $103 million. The middle case, the “medium gas price, medium CO₂ price” scenario, yields a range of net benefits under different risk assessment metrics ranging from $13 million to $22 million.

Yet over this same period, the net present value of the projected return to the Company on the repowering investment is $289 million, measured on a real levelized basis (the same basis used to value customer benefits). If, conservatively, we only consider the after-tax equity return over this period, the benefit to the Company is projected to be $192 million. This calculation is shown in UAE Exhibit 1.1.¹² Thus, over the 20-year measurement period, the benefits from this opportunity investment are significantly weighted in favor of the Company.

Q. **Are the projected benefits to customers subject to risk?**

¹² See the last row of the “20 Year NPV” column on page 1 of UAE Exhibit 1.1.
A. Yes. As reflected in Mr. Link’s analysis, there are risks to customers (with respect to the economics of this investment) associated with natural gas prices and CO₂ prices. And of course there are other risks as well that are more difficult to quantify, such as increased construction costs or unanticipated deviations in the performance, maintenance costs, or durability of the new assets. There are also unknown impacts on the economics from potential changes to the U.S. tax code – which appears to be a priority of the President and the Congress.

Q. **What are the relative equities between the parties over the longer measurement period?**

A. Over the longer measurement period, 2017-2050, the net present value of the projected benefits to customers and to the Company are more comparable, although this does not consider the additional risks to customers that I just enumerated. As I discussed above, over the longer time period, RMP calculates projected benefits to customers ranging from $41 million to $589 million, with a net customer benefit of $359 million in the “medium gas price, medium CO₂ price” scenario. Over this same period, the net present value of the projected return to the Company on the repowering investment is $382 million. If, conservatively, we only consider the after-tax equity return over this period, the benefit to the Company is projected to be $254 million. This calculation is also shown in UAE Exhibit 1.1.¹³

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¹³ See the last row of the “Lifecycle NPV” column on page 1 of UAE Exhibit 1.1.
Q. In lines 289-291 of his Direct Testimony, Mr. Larsen indicates that as current PTCs expire, RMP will absorb those costs until the next general rate case. Have you subtracted the cost of expired PTCs from your calculation of the net benefits to the Company?

A. No. The costs of expiring PTCs should not be subtracted from the benefits of the repowering investment to the Company, as the expiration of current PTCs will occur independently of the proposed repowering project. Moreover, the timing of the next general rate case – when RMP can incorporate the expiration of the current PTCs in its revenue requirement – is largely at the Company’s discretion.

Q. In light of the benefits to the Company from the repowering investment, do you have any concerns about the equities of RMP’s proposal?

A. Yes, I do. Notwithstanding the fact that the projected benefits for the Company and customers are in a relatively comparable range over the 2017-2050 period, I am concerned that over the 20-year measurement period the benefits are considerably more heavily weighted in favor of the Company. Thirty years is a long time to wait for the equities to even out – a lot of unexpected things can happen between now and then. I am also concerned with the disparity in relative risks borne by the parties.

Q. Do you have any recommendations to address this concern?

A. Yes. In these circumstances it is reasonable to consider an adjustment in the terms of the proposition. There is nothing unusual about this. One expects
that an opportunity investment should require some negotiations between the principals to reach a fair balance in the projected benefits.

One area that I believe a reasonable adjustment can be made is in the allowed return on the retired plant. As I discussed above, RMP plans to retire the replaced assets, but still recover the cost of these assets while earning the Company’s authorized rate of return on the un-depreciated balance. In its Application, RMP has made it clear that recovering the cost (and earning a return) on the retired assets is an integral part of its proposal. Indeed, I believe a significant reason for the Company seeking preapproval for the repowering project is to ensure that this will occur. And certainly, it would not make sense for the Company to present an opportunity investment designed to reduce long-term rates for customers, if in exchange, the Company was susceptible to an after-the-fact disallowance on its retired plant. But I believe that a modest adjustment to the allowed earnings on the retired plant is a reasonable means to improve the 20-year relative benefits between the Company and customers if the adjustment is part of the preapproval package.

**Q. What specific adjustment do you believe is reasonable?**

**A.** I recommend a reduction of 200 basis points to the authorized rate of return on common equity applied to the un-depreciated balance of the retired plant (taking into account associated ADIT). This would increase the benefits to customers in the 20-year measurement period, 2017-2036, by $42 million, while reducing the projected benefits to the Company by $26 million. These
calculations are shown in UAE Exhibit 1.2.\textsuperscript{14} The reason for the difference between these two values is that customer benefits are measured on a pre-tax basis (i.e., the measurement takes into account income tax expense paid by customers) whereas Company benefits are measured on an after-tax basis. If this 200 basis point adjustment to the return on common equity is made, the resulting 20-year benefit for the Company would be reduced to $166 million,\textsuperscript{15} while the projected benefits to customers would range from a cost of $2 million to a net benefit of $145 million,\textsuperscript{16} using the same assumptions incorporated in the summary in Table KCH-1. I note that my recommended 200 basis point adjustment generally offsets the $33 million to $44 million loss to customers that is projected to occur under the Company’s “low gas price, zero CO\textsubscript{2} price” scenario.

Over the 2017-2050 period, a reduction of 200 basis points to the return on common equity on the retired plant would increase the projected benefits to customers by $56 million, while reducing the benefits to the Company by $35 million. These calculations are also shown in UAE Exhibit 1.2.\textsuperscript{17} The resulting benefit from the project for the Company would be reduced to $219 million,\textsuperscript{18} while the projected benefits to customers would range from $97 million to $645 million,\textsuperscript{19} using the same assumptions embedded in the summary in Table KCH-1.

\textsuperscript{14} See UAE Exhibit 1.2, p. 1, column b, lines 14-15.
\textsuperscript{15} Derivation: $191.567\text{ million} - $25.913\text{ million} = $165.654\text{ million}.
\textsuperscript{16} This is derived by adding $42 million in customer benefits to the RMP projected range of $44 million in net costs to $103 million in net benefits shown in Table KCH-1.
\textsuperscript{17} See UAE Exhibit 1.2, p. 1, column d, lines 14-15.
\textsuperscript{18} Derivation: $253.585\text{ million} - $34.715\text{ million} = $218.87\text{ million}.
\textsuperscript{19} This is derived by adding $56 million in customer benefits to the RMP projected range of $41 million to
2. I believe that an adjustment in the terms of the proposal along these lines produces a more reasonable balancing of the benefits between customers and the Company.

A summary of these results is presented in Table KCH-3, below.

**Table KCH-3**

**Summary of Benefits After 200 BP Adjustment to ROE on Retired Plant**

**Total Company**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Customer Benefit Range (Millions)</th>
<th>RMP Benefit (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2036</td>
<td>$44</td>
<td>($103)</td>
</tr>
<tr>
<td>2017-2050</td>
<td>($41)</td>
<td>($589)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$192</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$254</td>
</tr>
</tbody>
</table>

**Projected Net Benefits to Customers and RMP Based on 200 BP Adjustment to ROE on Retired Plant**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Customer Benefit Range (Millions)</th>
<th>RMP Benefit (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2036</td>
<td>$2</td>
<td>($145)</td>
</tr>
<tr>
<td>2017-2050</td>
<td>($97)</td>
<td>($645)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$166</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$219</td>
</tr>
</tbody>
</table>

Note: Projected customer benefits are shown as negative entries. RMP benefits are shown as positive entries.

Q. Your comparison of net benefits to customers and the Company is on a total Company basis. Have you prepared any calculations on a Utah-allocated basis?

$589 million in net benefits shown in Table KCH-2.
Yes. I convert the benefit measurements shown in Table KCH-3 into a Utah-allocated basis in Table KCH-4, below.

Table KCH-4

Summary of Benefits After 200 BP Adjustment to ROE on Retired Plant
Utah Allocated

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Customer Benefit Range (Millions)</th>
<th>RMP Benefit (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-2036</td>
<td>$19 ($45)</td>
<td>$84</td>
</tr>
<tr>
<td>2017-2050</td>
<td>($18) ($257)</td>
<td>$111</td>
</tr>
</tbody>
</table>

Note: Projected customer benefits are shown as negative entries. RMP benefits are shown as positive entries.

Q. If an adjustment is made to the terms of the Company’s proposal, why is the allowed return on the retired plant a reasonable item to adjust?

A. Since the retired plant is no longer used and useful, there is a greater degree of discretion that can be applied to the allowed return on it compared to the allowed return on plant in service; this can range all the way from no return on the retired plant to a full return, depending on the merits of the situation. As I discussed above, RMP has made it clear that recovering the cost (and earning a
return) on the retired assets is an integral part of its proposal. Further, I
acknowledge that it would not make sense for the Company to present an
opportunity investment designed to reduce long-term rates for customers, if in
exchange, the Company were susceptible to an after-the-fact disallowance or a
punitive disallowance on its retired plant. The adjustment I am recommending is
not intended to be after-the-fact or punitive to RMP, but rather is intended to
better balance, upfront, the benefits from this opportunity proposition for both
customers and the Company.

Q. What is your recommendation to the Commission on this issue?
A. If the repowering project is granted preapproval, I recommend that it be
made conditional on a reduction of 200 basis points to the authorized rate of
return on common equity applied to the un-depreciated balance of the retired plant
(inclusive of associated ADIT). Since the Company’s cost of capital will change
over time, the allowed return on the retired plant should be reset as a part of
subsequent general rate cases by maintaining this differential relative to the return
on equity approved in those cases, applied to the unamortized balance of the
retired assets. Further, because the retired assets would be subject to a lower rate
of return under my proposal, it may be more appropriate to convert them to a
regulatory asset, to better track them over time, rather than simply rebooking them
into the ADR as proposed by RMP.

Q. What is your assessment of the RTM proposed by the Company?
The RTM is a fairly complex mechanism and I am not convinced it is necessary to adopt this approach in lieu of RMP simply filing a general rate case at the appropriate time. That said, in its own terms, and with one exception, the RTM appears to be logically constructed and reasonably balances the interests of the Company and customers. The one exception is the proposed long-term continuation of the RTM as a PTC tracking mechanism. This component strikes me as unnecessary and unrelated to the RTM’s underlying function in this case as a transitional deferral of project costs and revenues until the next general rate case. PTCs are not tracked today in the manner proposed by the Company, nor is it necessary to track PTCs going forward to ensure just and reasonable rates. Therefore I recommend that if the RTM is approved, the Company’s proposal for a long-term PTC tracker be rejected.

Q. **Does this conclude your direct testimony?**

A. Yes, it does.