Rocky Mountain Power
Docket No. 17-035-40
Witness: Cindy A. Crane

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Supplemental Direct and Rebuttal Testimony of Cindy A. Crane

January 2018

Q. Are you the same Cindy A. Crane who previously provided direct testimony in this case on behalf of Rocky Mountain Power ("Company"), a division of PacifiCorp?

A. Yes.

PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your supplemental direct and rebuttal testimony?

A. I support the Company's request that the Public Service Commission of Utah ("Commission") approve its significant energy resource decision to construct and acquire new wind resources ("Wind Projects") and voluntary energy resource decision for construction of the Aeolus-to-Bridger/Anticline line and network upgrades ("Transmission Projects") (collectively, the "Combined Projects"). I provide overall policy support for the Company's supplemental testimony describing the results of the Company's 2017R request for proposals ("2017R RFP"). I also provide the policy rebuttal to the testimony filed by the Division of Public Utilities ("DPU"), Office of Consumer Services ("OCS"), the Utah Association of Energy Users ("UAE") and Utah Industrial Energy Consumers ("UIEC").

Q. Please summarize your testimony.

A. The results of the 2017R RFP make the Combined Projects an increasingly attractive resource opportunity for customers. The benefits are now greater and more certain, and the risks have decreased. The Combined Projects will provide substantial near-term and long-term customer benefits and represent the least-cost, least-risk strategy for meeting the needs of Utah customers. The Company's supplemental testimony demonstrates the Company has recognized and mitigated all potential risks and concerns.

In rebuttal testimony, the Company shows the Combined Projects are necessary to meet an identified resource need and present no more risk than typical utility investments. The Company will manage future potential risks either through the off-ramps built into the projects or by seeking additional direction from the Commission before or during project implementation.

SUPPLEMENTAL DIRECT TESTIMONY

Q. Based on the results of the 2017R RFP and the Company's updated analysis of benefits, costs, and risks, do the Combined Projects satisfy the public interest standard?

A. Yes. The Combined Projects are the least-cost, least-risk path available to serve the Company's customers by meeting both near-term and long-term needs for additional resources. Mr. Rick T. Link's supplemental direct testimony and updated economic analysis demonstrates increased customer benefits of $177 million in the medium case through 2050 (as compared to $137 million in the original filing), and a range of $311 million to $343 million in the medium case through 2036. As described further by Mr. Link, the treatment of production tax credits ("PTCs") in the system modeling scenarios extending out through 2036 has been changed to better reflect how the PTCs will flow through to customers, which makes the treatment consistent with the nominal revenue requirement results that extend out through 2050. Moreover, the updated economic analysis demonstrates the Combined Projects provide net customer benefits under all scenarios studied through 2036, and in seven of the nine scenarios through 2050.

The fact that the Combined Projects will provide customer benefits significantly in excess of their costs is extraordinary. Customers will gain access to significant new wind and transmission resources, with important environmental and system reliability attributes, and still enjoy lower overall costs as a result of this investment.

Q. What evidence is the Company including in the supplemental direct filing to demonstrate that the Combined Projects are in the public interest?

A. In addition to updating the Company's economic analysis, Mr. Link provides information on the 2017R RFP, which generated robust and competitive responses from market participants. Mr. Chad A. Teply describes the four Wind Projects, totaling 1,170 megawatts ("MW"), which were selected for the final shortlist through this solicitation process: TB Flats I and II; McFadden Ridge II; Cedar Springs; and Uinta. He also details the Company's extensive and ongoing efforts to minimize technical and construction risk associated with the Wind Projects. Mr. Rick A. Vail updates the status of the development of the Aeolus-to-Bridger/Anticline 500 kV transmission line, and confirms that the costs of the line (which represents roughly 85 percent of the costs of the Transmission Projects) remain unchanged. Mr. Vail also updates the network upgrade and interconnection facilities based on the outcome of the 2017R RFP. Ms. Nikki L. Kobliha describes the outcome of federal tax reform, and discusses how tax-related risks have been resolved. Together, this evidence shows that the Combined Projects satisfy the Commission's public interest standard.

Q. Is the Company's supplemental direct filing consistent with the procedure proposed in the Company's request for resource approval and in the schedule approved by the Commission?

A. Yes. The supplemental direct filing allows the Company to update its pending request for resource approval to reflect the results of the 2017R RFP. This process allows for full review of the Combined Projects, including review of the results of the 2017R RFP, by April 2018, a schedule necessary to preserve for customers the time-sensitive resource opportunity presented by the availability of PTCs for the Wind Projects.

Q. Based on the results of the 2017R RFP, what modification is the Company making to its request for significant energy resource approval?

A. The Company's original request sought approval for the construction or acquisition of four new wind resources--three 250 MW facilities (Ekola Flats and TB Flats I and II), and a fourth 100 MW facility (McFadden Ridge II)—for a total of 860 MW. These were the benchmark facilities for the 2017R RFP.

Based on the results of the 2017R RFP, the Company is now seeking approval of the significant energy resource decision to construct or procure four new Wyoming wind projects with a total capacity of 1,170 MW, including three of the benchmark facilities (TB Flats I and II, now combined as a single project, and McFadden Ridge II), and two new facilities (Cedar Springs and Uinta). Uinta is a build-transfer agreement ("BTA"), totaling 161 MW, Cedar Springs is one-half BTA and one-half power purchase agreement ("PPA"), for a total of 400 MW, and TB Flats I and II and McFadden Ridge II are Company-built facilities, totaling 500 MW and 109 MW, respectively. Thus, the 2017R RFP will result in 970 MW of Company-owned facilities, and a 200 MW PPA.

Q. Has any aspect of the Aeolus-to-Bridger/Anticline transmission line changed as a result of the 2017R RFP?

A. No. The proposed route and facilities required for the construction of the Aeolus-to-

Bridger/Anticline line have not changed. The only change related to the line is the fact that the costs are now more certain.

Q. Are there any modifications to the network upgrades included in the Company's initial filing?

A. Yes, in addition to the network upgrades included in the Company's initial filing, there are additional network upgrades required to interconnect McFadden Ridge II, Cedar Springs, and Uinta. Mr. Vail provides a detailed description of these network upgrades in his supplemental direct testimony.

Q. The Company's original filing contained a capital cost estimate of approximately $2 billion for the Combined Projects. With additional wind resources and network upgrades, have the total costs of the Combined Projects changed?

A. No. The overall capital cost of the Combined Projects remains the same–approximately $2 billion. This is true even though the supplemental filing reflects 970 MW of Company-owned resources, 110 MW more than the original filing. As Mr. Link explains, the per-unit capital cost for the benchmark wind projects in the initial filing was $1,590/kW. As a result of the 2017R RFP, the costs of the Company-owned wind projects decreased by roughly 17 percent to $1,320/kW.

Q. Please explain how the Company was able to acquire significant additional wind resources for approximately the same overall cost.

A. The robust response to the 2017R RFP process reduced costs and enabled the Company to select the most optimal projects to maximize customer benefits, as described by Mr. Link. The Company received 49 bid alternatives for 13 wind projects in Wyoming, totaling 4,624 MW. The Company also received 15 bid alternatives for six non-

Wyoming wind projects, totaling 595 MW.

Q. Has the Company further mitigated customer risks associated with the Combined Projects?

A. Yes. Three key risks associated with the Combined Projects have been either entirely or substantially mitigated. First, as described by Ms. Kobliha, the uncertainty surrounding federal tax reform has been resolved. The economic analysis in Mr. Link's testimony accounts for the lower federal corporate income tax rate and demonstrates that the overall cost reduction resulting from the 2017R RFP more than offsets the impact of the lower tax rate. Moreover, the policy discussions surrounding tax reform indicate that it is highly unlikely that PTCs will be extended beyond 2020—meaning that the time to act is now or customers will lose out on substantial savings.

Second, the Company has addressed the price risk associated with long-term forecasting by demonstrating the Combined Projects are expected to provide robust customer benefits under all scenarios in the economic analysis through 2036, including the scenario with low natural-gas prices and a zero carbon-dioxide price.

Third, the costs and schedule of the Combined Projects are now more certain. Based on the results of the 2017R RFP and the continued development efforts related to the Transmission Projects, the Company is confident that it can deliver the expected customer benefits.

Q. Based on the Company's updated economic analysis, has the Company updated its forecast of the near-term rate impact to Utah customers?

A. Yes. As explained in the testimony of Ms. Steward, the first year revenue requirement of the Combined Projects is reduced 20 percent from the initial filing. The near-term rate impact of the Combined Projects is now less than 1.6 percent in 2021, the first full year of operation.

REBUTTAL TESTIMONY

Q. Parties question whether there is a need for the Aeolus-to-Bridger/Anticline transmission line independent of the Wind Projects. How do you respond to this concern?

A. There is an independent need for the Aeolus-to-Bridger/Anticline line even if the new Wind Projects are not constructed because the line will improve system performance and reliability and directly serve customers. As explained by Mr. Vail, even without the Wind Projects, the Company plans to construct the Aeolus-to-Bridger/Anticline line in 2024 because it is an integral component of both the Company's and the region's long-term transmission plan. Thus, the issue is not *if* the Aeolus-to-Bridger/Anticline line will be constructed, but *when*. Under the proposal here, the Company can construct the line by 2020 and provide all-in net benefits to customers, rather than waiting until 2024 when PTC-eligible wind is no longer available to subsidize the line.

The results of the 2017R RFP provide further evidence of high demand for the Aeolus-to-Bridger/Anticline line. Over 4,500 MW of new high-capacity-factor wind projects that bid into the 2017R RFP are behind the existing constraint, showing the need for new transmission capacity in southeast Wyoming to give these potential resources a chance to move forward. The construction of the Aeolus-to-Bridger/Anticline line is a critical step to allow high-capacity-factor wind resource development in this area.

Q. Parties argue that the forecasted benefits of the Combined Projects are speculative and, even in the best scenarios, are insufficient in comparison to the overall project costs. Do you agree?

A. No. The parties' criticisms are largely premised on their claim that the Combined Projects are discretionary and therefore subject to a higher standard for approval than a project intended to meet customer need. However, as described by Mr. Link, the Combined Projects are not merely an economic opportunity. Instead, the projects are part of the Company's least-cost, least-risk plan for meeting resource needs. The innovation in the Company's plan is the opportunity to bring near-term and long-term benefits—in system reliability and flexibility as well as financial benefits—to our customers by capitalizing on the continued (but short-lived) availability of federal PTCs to acquire new resources without substantial increases in rates.

Q. The parties argue there is a significant risk that benefits will not materialize as claimed by the Company and the Combined Projects may prove uneconomic in the long run for reasons beyond the Company's control. Do you agree?

A. No, I do not agree. Mr. Link's sensitivity modeling is designed to capture a wide range of conditions and circumstances that could impact the economics of the Combined Projects. The Company's economic analysis shows that the Combined Projects deliver substantial benefits under all sensitivities in the analysis through 2036.

While all resource decisions inherently include some risk, the Company has demonstrated a high likelihood that the Combined Projects will be beneficial to customers. Moreover, the risks associated with the Combined Projects are typical of all utility investments and, as Mr. Link explains in his rebuttal testimony, there are risks associated with foregoing the time-limited opportunity to secure PTC-eligible resources.

Q. If circumstances arise that make the Combined Projects uneconomic, has the Company structured off-ramps to allow it to stop project development?

A. Yes. The Company recognizes that changing circumstances require that the Company continually reassess the project economics and establish off-ramps before development occurs. As addressed by Mr. Vail, the Company will soon negotiate and finalize most of the construction contracts for the Transmission Projects, which will lock in pricing. The Company will also prudently negotiate precautionary off-ramps in the contracts to allow it to exit the Transmission Projects if they become uneconomic. As addressed by Mr. Teply, the timing and terms of the execution of the contracts necessary to procure or construct the Wind Projects will also provide flexibility to allow the Company to reassess project economics, if necessary, before executing the contracts.

Q. How will the Company respond if it receives approval of the Combined Projects in this docket and a subsequent event occurs that adversely affects the economics of the Combined Projects during implementation?

A. If an adverse change of circumstances materially affects the Combined Projects' economics, the Company will seek additional Commission review of whether to proceed with implementation, as allowed under Utah Code Ann. § 54-17-404.[1]

[1] Utah Code Ann. §54-17-404(1)(a) ("In the event of a change in circumstances or projected costs, an energy utility may seek a commission review and determination of whether the energy utility should proceed with the implementation of an approved resource decision.").

Q. If significant portions of the Wind Projects do not ultimately qualify for PTCs due to delays or because they incur unanticipated cost increases within the Company's control, is the Company prepared to bear those risks?

A. Yes. The Company will take every precaution to ensure that the Wind Projects meet the requirements and timelines to qualify for full PTC benefits. While we do not believe it is appropriate for the Company to absorb risks beyond its control, we are prepared to accept risks associated with our performance. We are confident that we will complete the Combined Projects before the 2020 deadline.

Q. What happens if the actual costs of the Combined Projects exceed the estimated costs included in the supplemental filing?

A. As discussed by Ms. Steward, the Company agrees to a soft cap based on the cost estimate included in the Company's supplemental filing. If the actual costs are greater than the final estimate here, the Company agrees that it must demonstrate the prudence of the additional costs in a later ratemaking proceeding.

Q. Does this conclude your supplemental direct and rebuttal testimony?

A. Yes.