BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Approval of a Significant Energy Resource Decision and Voluntary Request for Approval of Resource Decision	: : : : :	Docket No. 17-035-40 DPU Exhibit 1.0 Direct

DIRECT TESTIMONY

OF

DR. JONI S. ZENGER

UTAH DIVISION OF PUBLIC UTILITIES

December 5, 2017

Q. Please state your name, occupation, and business address.

A. My name is Dr. Joni S. Zenger. I am a Technical Consultant for the Utah Division of Public Utilities (Division). My business address is 160 East 300 South, Salt Lake City, Utah 84111.

Q. On whose behalf are you testifying?

A. The Division.

Q. Please summarize your background for the record.

A. I have been working for the Division for 17 years as a Technical Consultant. During that time, I have filed testimony and memoranda with the Utah Public Service Commission (Commission) involving a variety of economic, regulatory compliance, and policy topics. Most recently I testified in the case addressing Rocky Mountain Power's (Company) voluntary request for approval of its resource decision to repower most of its wind facilities in Docket No. 17-035-39. I have a Ph.D. and M.S. in Economics, both from the University of Utah.

Q. What is the purpose of your testimony?

A. I introduce the Division witnesses who conducted analysis and will provide testimony in this case. Then, I provide the Division's overall policy recommendation to the Commission regarding the Company's Application for Approval of a Significant Energy Resource Decision and Voluntary Request for Approval of Resource Decision (Application). The Division recommends that the Commission deny approval of the Application. The Company requests approval of a significant resource decision for projects that are not proposed to meet a resource need, but instead are an economic opportunity that the Company would like to pursue. As an economic opportunity, the projects in the Company's Application should be evaluated with the understanding that the traditional regulatory compact generally imposes risks on ratepayers when a utility invests to meet customer loads, not when the utility makes a speculative decision hoping for an economic benefit. As such, ratepayers must have reasonable assurance that they will be better off if the Company's projects are approved. This is especially true in this proceeding where the benefit to the Company and its shareholders appears much larger and certain than the benefit to ratepayers.

I also present several factors that warrant significant consideration before any public interest finding can be determined with respect to the Company's pending Application.

Q. Are there other witnesses testifying on behalf of the Division in this proceeding?

A. Yes. The Division is sponsoring testimony from the following witnesses: Mr. Daniel E. Peaco, with the firm Daymark Energy Advisors (Daymark), provides the Division's assessment of the economic analysis presented by the Company to justify its Application (DPU witness 2.0). Mr. Peaco's testimony discusses significant concerns with the Company's 20-year and 30-year economic analyses. In addition, Mr. Peaco points out attendant risks associated with the Company's proposal that, when taken into consideration, result in customer benefits less than what the Company puts forth in its analysis. In fact, the projects may very well end up costing ratepayers more in the long-run.

Mr. Robert A. Davis testifies about the transmission projects on behalf of the Division and specifically addresses the question of the need for the Company's proposed transmission projects in this case (DPU witness 3.0). He concludes they are not needed and are not prudent.

Mr. Dave Thomson addresses the Company's requested ratemaking treatment of the costs and benefits of the wind and transmission projects (DPU witness 4.0). Mr. Thomson also testifies on the requirements necessary for the Company to qualify for the production tax credit (PTC) benefits.

Mr. Charles E. Peterson will discuss an evaluation, pursuant to UCA § 54-17-402(3)(b)(v), of the financial impacts of the Company's proposed Application, including the wind repowering proposals being litigated in Docket No. 17-035-39 (DPU witness 5.0).

To the extent that my testimony or the testimony of the Division's other witnesses does not address an issue, it should not be interpreted as acceptance or rejection of that issue.

In addition, according the Scheduling Order in this matter, the Company will file Supplemental Direct Testimony on January 16, 2018, based on the results of a Request for Proposal (RFP) it issued related to this case in Docket No. 17-035-23. The Division will file responsive testimony to the Company's Supplemental Testimony, as well as rebuttal testimony on any updates the

Company files in this case based on pending tax legislation or other changes to its filing.

Q. Will you briefly summarize what the Company is requesting in its Application?

A. Yes. At a high level, the Company proposes to invest $2 billion in new wind and transmission facilities to be operational by December 31, 2020, in order to take advantage of and realize the full benefits of the federal PTCs that are set to expire over the next four years citation.[1] The Company's Application includes a request for an order under Utah Code Ann. § 54-17-302 approving the Company's "significant energy resource decision" to construct or procure new Wyoming wind resources with a total capacity of 860 megawatts (collectively, the Wind Projects).

The Application also includes a request for an order under Utah Code Ann. § 54-17-402 approving the Company's "resource decision" to construct transmission upgrades including the Aeolus-to-Bridger/Anticline Line and the 230 kV Network Upgrades (collectively, the Transmission Projects).

The Company has stated that the Wind and Transmission Projects (Combined Projects) are mutually dependent on one another,[2] and the Company believes the Combined Projects are prudent and in the public interest.[3] The

[1] The "Protecting Americans from Tax Hikes (PATH) Act of 2015 extended the availability of the PTC wind facilities under construction before January 1, 2020, but provides for a phase down (based on when construction of the project begins) eventually reaching zero for projects which begin construction after 2019.
[2] See the Company's Application, June 30, 2017, p. 9.
[3] Direct Testimony of Cindy A. Crane, June 30, 2017, pp. 12-13.

Division's witnesses Mr. Peaco and Mr. Davis will describe the Wind Projects and Transmission Projects in further detail in their respective testimonies.

According to the Company, the Combined Projects offer benefits to customers through added zero cost fuel generating resources, the PTCs resulting from the generation, transmission connectivity, reduced congestion, and voltage support, in addition to other purported benefits. However, the favorable economic benefits are heavily dependent on receiving PTCs. The wind projects must achieve commercial operation by the end of 2020 to qualify for the full PTCs.[4]

The Company is also seeking approval to establish a new resource tracking mechanism (RTM) to match costs and benefits of the wind and transmission projects that are not captured in the Energy Balancing Account (EBA) until these costs and benefits can be incorporated in base rates through a general rate case sometime in the future. The Company proposes to continue the RTM through the life of the PTCs in order to track the actual PTC value verses the base level value to ensure ratepayers and shareholders are treated fairly.

Q. Please summarize the Division's overall recommendation concerning the Company's Application.

A. The Division recommends denying approval of the Application. The Company has not sufficiently demonstrated that the Combined Projects provide clear net benefits to ratepayers, and it is the Company's burden to do so. A significant

[4] https://www.irs.gov/newsroom/path-act-tax-related-provisions.

resource decision of this magnitude and scope should not be approved based on the speculative hope that far distant projections will prove sufficiently correct.

There are substantial risks involved with the Wind Projects and the Transmission Projects, individually and collectively, that the Company has not adequately addressed that could very well yield net costs to customers. Furthermore, the Company is asking that virtually all of the risks be borne by ratepayers, despite the lack of operational need for the projects.

The Transmission Projects present potential risk in terms of construction delays, permit delays, and construction cost risks as a result of incomplete or deficient transmission system studies. Each of these risks are real and while uncertain, the reasonable probability of occurrence combined with the magnitude of impact on the financial projections, means that they must be evaluated as part of the overall risk weighted evaluation of the Combined Projects.

The incentive for the Company to pursue the Combined Projects is clear—it will add hundreds of millions of dollars to its rate base, upon which it has the opportunity to earn a relatively predictable return, at little risk to shareholders. The benefits to ratepayers are far less certain.

As the Division's witnesses will point out, the Company has not adequately demonstrated that the resource decision to pursue the Combined Projects is in the public interest, because the Company has not mitigated the potential risks associated with the Combined Projects that are significant and can harm Utah ratepayers. The Company's economic analysis is flawed and not likely to result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers in Utah.

At this time, the Division recommends the Commission deny approval of the Company's Application. The Division cannot recommend that the Commission find it prudent or in the public interest.

Q. Please provide more details on Utah's standard for resource decisions.

A. As I understand Utah Code Ann. § 54-17-402, this statute affords the Company an opportunity to seek preapproval of a resource decision, subject to certain public interest requirements that the Commission must consider. Therefore, among other elements, the Division considered the following factors in its review in this proceeding:

- Whether the decision will most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers of the utility
- Long-term and short-term impacts
- Risk
- Reliability
- Financial impacts on the utility
- Other factors determined by the Commission to be relevant

The Division's witnesses address these factors, as well as other relevant aspects and elements, in their respective testimonies in arriving at the Division's conclusions and findings.

Q. Are there factors the Division believes are especially relevant to this proceeding?

A. Yes. As I briefly mentioned earlier in my testimony, one of the primary factors this case hinges on is risk. In particular, the inordinate amount of risk associated with the Combined Projects as well as the asymmetry of the risk shared between ratepayers and the Company's shareholders are critical factors to consider in this proceeding. As such, Mr. Peaco will discuss each of these risks in depth in his testimony.

Q. Why is risk especially important in this case?

A. The reason that risk is such a key factor in this case is because the Company does not need to construct any of the Combined Projects to ensure system reliability or to serve projected customer load.[5] Whereas in a typical major plant addition the Company is adding or replacing resources in order to provide the primary benefit of safe and reliable energy, per its obligation to serve. That benefit is not generally given a specific value, but it is typically the primary driver of new resource acquisitions. The secondary question is whether the proposed plant is the lowest cost, lowest risk resource necessary.

Because the resources are not needed, the projects are only beneficial if they provide net economic benefits to customers. The Company's Application is more similar to approval of a hedge or financial transaction than it is to a typical

[5] See e.g., Docket No. 17-035-16, PacifiCorp's 2017 IRP, April 2, 2017, pp. 1-2. The Company indicates that its existing generation resources and demand side management programs are sufficient to serve projected loads reliably over the next ten years of operation.

plant addition approval request. If the Company's projections of a host of price, load, generation, and other scenarios are inaccurate (as forecasts usually are), economic benefits could easily disappear. The Combined Projects must be carefully evaluated to determine whether there is a high probability that customers will be better off with the Combined Projects than without them.

The Company does not have a Commission-approved Integrated Resource Plan (IRP) or Action Plan identifying the Combined Projects as needed. This suggests the economic decision to pursue the Combined Projects for a potential economic opportunity is not an ordinary resource acquisition. In light of this, making a speculative investment for economic reasons in the absence of a truly required generation resource is risky.

Q. How did you determine that the Combined Projects are not needed?

A. While the Company included the Combined Projects in its 2017 IRP preferred portfolio,[6] the Company's 2017 IRP load and resource balance states the following:

> With continued load growth and assumed coal retirements, summer margins drop over time, but remain higher than the 13 percent target planning margin through the first 10 years of the planning horizon. [7]

Regarding the winter load and resource balance, the 2017 IRP similarly states the following:

[6] On August 2, 2017, approximately four months after the March 31 IRP filing due date, the Company filed its economic analysis of the new wind and transmission coupled with the wind repowering and called the projects its Energy Vision 2020 Informational filing.
[7] Docket No. 17-035-16, PacifiCorp's 2017 IRP, April 2, 2017, p. 10.

> In response to stakeholder feedback from the 2015 IRP planning cycle, PacifiCorp developed a winter load and resource balance for the 2017 IRP. Table 1.3 shows PacifiCorp's annual winter capacity position from 2017 through 2026, with coal unit retirement assumptions and incremental energy efficiency savings from the 2017 IRP preferred portfolio before adding any incremental new generating resources. Accounting for available market purchases, PacifiCorp substantially exceeds its 13 percent target planning reserve margin over the winter peak through this period. With continued load growth and assumed coal unit retirements, winter margins drop over time, but remain significantly higher than the 13 percent target planning margin.[8]

In addition, according to the 2017 IRP, the next need for a major generating resource is not until 2029, a year later when compared to the Company's 2015 IRP preferred portfolio.[9] The 2015 IRP shows the first major new generation resource coming online in 2028.[10] Though the 2017 IRP has not yet been fully adjudicated, it does show that load growth is down, and the Company is successfully implementing DSM and energy efficiency projects.[11] This is reasonably consistent with the Company's 2015 IRP, which was acknowledged by the Commission.[12]

On August 2, 2017, the Company filed its 2017 IRP Information Filing, titled "Energy Vision 2020 Update." The Energy Vision 2020 Informational Filing includes the Combed Projects plus the Company's proposal to repower

[8] Id. at p. 11.
[9] Id. at p. 2.
[10] Docket No. 15-035-04, PacifiCorp's 2015 IRP, March 31, 2015, Vol. I, p. 196.
[11] Docket No. 17-035-16, PacifiCorp's 2017 IRP, April 2, 2017, pp. 1-2.
[12] Docket No. 15-035-04, Report and Order, September 16, 2016.

most of its wind facilities. The Company's August 2, 2017 cover letter to the Commission, signed by Jeffrey K. Larsen states the following:

> The enclosed informational filing provides an updated economic analysis and related discussion on the wind repowering and new transmission and wind projects included in the 2017 IRP. This economic analysis is consistent with the Company's filing with the Public Service Commission of Utah in Docket Nos. 17-035-39 and 17-035-40. This informational filing is concurrently being provided in pending IRP dockets in other PacifiCorp states.[13]

Q. Based on the above, these facts suggest the resource decision to invest $2 billion in new wind and transmission facilities is not an ordinary or necessary resource acquisition. Do you agree?

A. Absolutely. The Company characterizes its resource decision in its Application as a *time limited opportunity* to invest in generation resources that will ensure customers will receive the least cost, least risk service over the next 20 years consistent with the Company's preferred portfolio contained in its 2017 IRP. The reason that the opportunity is *time limited* or time sensitive is because the economics of the projects depend entirely on the federal PTCs. In its 2017 IRP analysis and in this case, the Division has conclusively determined that the primary driver of these projects is the potential economic opportunity, not resource need as traditionally understood.[14] In light of this, making a speculative investment for economic reasons in the absence of a truly required generation

[13] Docket No. 17-035-16, PacifiCorp's 2017 IRP, Energy Vision 2020 Informational Filing, August 2, 2017.
[14] Docket No. 17-035-16, PacifiCorp's 2017 IRP, Division Comments dated October 24, 2017.

resource is risky. To make matters worse, the Company is requesting that ratepayers be liable for the $2 billion investment, while emphasizing that since these are time limited opportunities, they have to be acted upon quickly. Therefore it is imperative that the Commission recognize that this is not an ordinary resource decision, but given its size and magnitude and the Company's need to rush it through, it is more of an extraordinary resource decision.

The mere fact that the Company did not propose the Combined Projects until the end of its stakeholder-driven IRP process is worrisome. The Company's late addition of the projects defeats the very purpose of having a long-term planning tool such as the IRP with stakeholder input throughout the process. The fact that the Company put forth projects worth billions of dollars to this Commission for approval without having an acknowledged IRP and IRP action plan should concern the Commission and warrant skepticism. Furthermore, the Company's conduct in adding these projects so late in the IRP process threatens to diminish stakeholders' participation in the two-year process.

Q. Are there other risks of approving these projects that concern you?

A. Yes. The Division encourages the Commission to consider the precedent that would be set if the Commission were to approve the Company's resource decision that is based on a purely economic opportunity. Allowing the Company to invest capital in speculative projects in the absence of operational need misaligns utility incentives. Also, it would likely lead to unwanted future utility actions.

There may be other time-limited opportunities that arise that add significant capacity and energy to the Company's generating resources as well as expenses to rate base. With precedent from this docket, the Company would be better equipped to argue for approval of more resources customers simply do not need. Each additional rate-based speculative resource would impose costs on customers, and the Company would receive virtually risk-free returns, counter to the regulatory compact and basic cost of service construct.

Q. Because the Combined Projects are highly dependent on the PTCs, what do you see as the most important PTC-related factors to be considered in this proceeding?

A. The most important risk factor is the pending tax reform that has been passed by the U.S. House of Representatives, and the Senate just passed its version of the bill.[15] The two houses will now try to agree upon one set of changes. There is still a great deal of uncertainty surrounding the future of the PTCs and effects of new tax rates on the ability to fully utilize them. The savings included in the Company's analysis may not materialize if a cut in the corporate tax rate below 25 percent occurs, which is likely since the current version of the House and Senate bills both include a reduction in the corporate tax rate from 35 percent to 20 percent. Similarly, elimination of inflation adjustments to PTC calculations, or changes to continuity requirements will have significant negative effects on the

[15] The Tax Cuts and Jobs Act was passed by the U. S. House of Representatives on November 16, 2017. The Senate passed its version of the bill on December 1, 2017.

financial benefits for customers.[16] These all pose great risks that could undermine any possible customer benefits from the PTCs and zero fuel cost generation. Mr. Peaco provides an in-depth analysis on the corporate tax effects on this case in his testimony.

The Company is asking the Commission to gamble with ratepayers' money, imposing a large risk that the PTC savings and other benefits will not be realized in this case.

Besides the currently passed corporate tax laws, a second PTC-related risk is construction timing. The Combined Projects must be placed into commercial service by December 31, 2020 to take full advantage of the PTCs under current law. Therefore, any factors that might impede the Company's ability to place the Combined Projects into commercial service by that date pose a significant risk. The Division's witnesses will elaborate on these considerations in their respective testimonies. The construction timing factors include the following:

- Delays in permitting. The Company states it will not file for its conditional use permit with the Wyoming Industrial Siting Board until 2018; yet the Company estimates that all construction on the Transmission Projects will be completed by August of the year 2020. This leaves little

[16] The Tax Cuts and Jobs Act, as released on November 2, 2017, includes Section 3501 – Modifications to Credit for Electricity Produced from Certain Renewable Resources. Under the provision the inflation adjustment for PTCs would be repealed. Also, the provision would add a new statutory requirement that a taxpayer must demonstrate that the construction of any facility may not be treated as beginning before any date unless there is a continuous program of construction that begins before such date and ends on the date that such property is placed in service.

extra time for contingencies and to complete testing and certification for the December 31, 2020 in service date, upon which the critical tax credits hinge.

- Obtaining land and rights-of-ways. It is not uncommon for landowners to strongly oppose granting of a right-of-way across their property, and many landowners will go to great lengths to protect their property rights.[17] If acquiring the necessary rights-of-way requires the Company to undertake eminent domain proceedings, the project construction schedule could be delayed considerably.
- Weather-related delays to construction schedules. Extreme Wyoming weather may impede the ability to place tall structures, like wind turbine towers and blades, or to construct tall and remote transmission structures that require the use of heavy overhead cranes that do not operate well in heavy winds.[18] Cold temperatures might delay the construction of concrete foundations for the wind turbines or transmission structures.
- Delays in equipment deliveries. This could be due to weather, transportation, or other factors.
- Difficulty finding skilled labor. The Company will be competing for labor against other utilities who are racing to build wind before the PTCs expire.

[17] See e.g., see Wyoming Docket No. 20000-520-EA-17, Testimony of Joshiwa T. Peterson on behalf of Intervenor Peterson Outfitters, LLC, November 20, 2017.
[18] I lived in Wyoming for approximately three years, and my fondest memories are the numerous times that school was cancelled due to wind and snow drifts piled higher than the front door to our family home.

Q. Is the Division's testimony here consistent with your testimony in Docket No. 17-035-39 related to the Company's request to repower its wind facilities?

A. Yes. The Division's witnesses all arrive at similar conclusions in this case as in the wind repowering docket. The Company failed to demonstrate that the Combined Projects provide net benefits to ratepayers, the risks greatly outweigh what modest benefits appear in limited price-policy scenarios, and the Company's proposed rate tracking mechanism should be rejected.

When the Division filed testimony in the wind repowering docket,[19] Congress was on the brink of passing an overhaul of the corporate tax code. Since then the House and Senate have both passed bills. Each respective piece of legislation reduces the corporate tax rate from 35 percent to 20 percent.[20] The pending federal tax legislation seems even more likely now to greatly reduce economic benefits derived from PTCs issued for wind repowering and for new wind generating resources.

Furthermore, consistent with the Company's wind repowering proposal, the Company's request for a resource decision in this docket for new wind and transmission is not based on a reliability need, but rather an economic opportunity for the Company to recover its proposed $2 billion investment and earn a return on that sizeable investment for its shareholders, even if there is no benefit or if

[19] In Docket No. 17-035-39, the Division filed direct testimony on September 20, 2017 and surrebuttal testimony on November 15, 2017.

[20] The Tax Cuts and Jobs Act, released on November 2, 2017 was passed by the U. S. House of Representatives on November 16, 2017. The Senate passed its version of the Bill on December 1, 2017.

there is a net cost to ratepayers. Because of this fact and the circumstances that have developed since the Company filed its Application on June 30, 2017, there is absolutely no reason that ratepayers should bear the asymmetrical risk as proposed by the Company in this proceeding.

Q. Will you please summarize the main points you wish to stress in your testimony today?

A. Yes. The Company requests the Commission's approval of its large resource decision for new wind and transmission facilities for which much important information is not known at this time. The Combined Projects are both large in size and scope.

- The Company does not need the Combined Projects to meet reliability standards or to serve expected future loads in the front ten years of the Company's 20-year planning horizon.
- The Combined Projects do not provide sufficient certainty of economic benefits to the Company's ratepayers, but if approved, certainly guarantee shareholders a large rate base infusion on which they will earn a return.
- The Company does not have a Commission-vetted IRP acknowledging the Combined Projects in the Company's long-term resource plan. There is not a reasonable likelihood that the projects are least cost, least risk resources.
- The pending tax legislation poses an additional, greater layer of doubt and risk on the economics of the Combined Projects in this proceeding and

may require the Company to file updates to its case pending the final passage of the tax legislation.

- For the reasons contained herein and in other Division witnesses' testimony an even greater focus needs to be on risk exposure to ratepayers who have no choice in this matter. The proposed Combined Projects present clear and potential ratepayer risks that are not outweighed by a reasonable probability of significant savings when compared to the no action option. Without significant risk mitigation assurances the Division recommends that the Application should not be approved.

Q. Please summarize the Division's recommendation to the Commission regarding the Company's Application.

A. The Company's Application should not be approved because the projects have not been demonstrated to be in the public interest as set out in Utah Code Ann. § 54-17-402. I have identified several key factors, such as tax changes, timing and construction delays, as well as other factors that need to be considered in making a public interest determination in this Application.

The Company failed to demonstrate that the Combined Projects provide net benefits to ratepayers, the risks greatly outweigh what modest benefits appear in limited price-policy scenarios, and the Company's proposed rate tracking mechanism should be rejected.

The Company has not sufficiently demonstrated that the Combined Projects provide a reliability or load-based need, especially in light of the fact that the Company's resource decision is a time limited economic investment. The Division recommends the Commission not approve the Company's Application.

Q. Does this conclude your Testimony?

A. Yes.