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 Confidential Exhibit 1.0 R-SUP, 1.0 SR

Confidential Supplemental Rebuttal Testimony and Surrebuttal Testimony

OF

Dr. Joni S. Zenger

Utah Division of Public Utilities

April 17, 2018

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INTRODUCTION AND SUMMARY

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. Have you previously provided testimony in this proceeding?

A. Yes. I submitted Direct Testimony on December 5, 2017, stating that Rocky Mountain Power (the Company) had not demonstrated that the resource decision to pursue the new wind and transmission projects (Combined Projects) was in the public interest. I also submitted Rebuttal Testimony on January 16, 2018, addressing the need to update the cost and benefits of the Combined Projects based on the federal tax legislation that went into effect on January 1, 2018.

Q. What is the purpose of this supplemental rebuttal and surrebuttal testimony?

A. In my supplemental rebuttal testimony, I provide a policy response to the Company's supplemental testimony on the results of the Company's 2017 request for proposals (RFP) filed on January 16, 2018, and supplemented on February 16, 2018. The Company's supplemental testimony updates its proposal to construct or procure four new Wyoming wind resources (Wind Projects) with a total capacity of 1,131 megawatts (MWs), and the Company's proposal to construct the Aeolus to Bridger/Anticline Transmission Line (Segment D or Transmission Line) and 230 kV Network Upgrades, (together the Transmission Projects). The Wind Projects and the Transmission Projects combined are termed the Combined Projects.

In my surrebuttal testimony, I rebut statements made in the Company's rebuttal testimonies of Ms. Cindy A. Crane, Mr. Chad A. Teply, Mr. Rick T. Link, and Ms. Joelle R. Steward, filed on January 16, 2018.

In addition to my supplemental rebuttal and surrebuttal testimony, the Division will be sponsoring supplemental rebuttal and surrebuttal testimony by its other witnesses: Mr. Dan Peaco, Mr. Dave Thomson, and Mr. Charles E. Peterson, respectively.

The Division's silence on any particular issue should not be interpreted as an endorsement of that position. To the extent that the Company files any additional discovery or updates in this proceeding, the Division reserves the right to address those findings in surrebuttal testimony or at the time of the hearing in this matter.

Q. Please summarize your supplemental rebuttal testimony.

A. The Division continues to recommend that the Commission not approve the Company's Application in this matter. The Company's supplemental and second supplemental testimony fails to demonstrate that the Combined Projects are in the

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public interest. It is not evident that the Combined Projects will most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers. The Company's economic analysis shows that the projected economic benefits have declined relative to the Company's rebuttal filing, and there is a great deal of uncertainty surrounding the Company's cost assumptions. The projected benefits of the Combined Projects that the Company has put forth are tenuous and heavily dependent on assumptions, including assumptions that are in the distant future. Minor changes could cause customers to pay higher costs than they would without the Combined Projects.

The Combined Projects are not required to meet the Company's capacity or energy needs over the next ten years.[1] The status quo, in other words, requires no additions of the type the Company is advocating. Because the Company can continue to meet its capacity or energy needs reliably over the next ten years with a combination of demand-side management resources and front office transactions, there is no need to commit Utah ratepayers now to a $2.245 billion long-term resource that puts an unacceptable amount of risk on ratepayers with uncertain and marginal benefit projections.

In its supplemental testimony, the Company has attempted to mitigate some of the risk as it has moved forward with the Combined Projects. However, most of the same risks the Division identified earlier remain, including the

[1] Docket No. 17-035-16, PacifiCorp's 2017 IRP, April 2, 2017, p. 10.

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overarching risk of completing the projects in time to meet the December 31, 2020 production tax credit (PTC) deadline. Given the risk that ratepayers are being asked to bear, as well as consideration of the short and long-term impacts presented in this case, the Division cannot recommend that the Commission find the Company's resource decision prudent or in the public interest.[2] In fact, it appears not to be in the public interest.

Q. Please summarize your surrebuttal testimony.

A. My surrebuttal testimony addresses the following items:

- I address claims by the Company that it has mitigated the risk associated with the critical requirement that the Wind Projects be operational by December 31, 2020 in order to qualify for the full PTC-credits. I show that many regulatory and construction risks addressed in my direct testimony remain. The Company has not obtained the necessary rights-of-way and permitting for the Transmission Line. It does not know who will construct the Ebola Flats project, and the engineer, procure, and construct (EPC) contracts for the other Wind Projects and Transmission Projects have not been finalized.
- I address the unique risk and uncertainty that the Combined Projects present as a resource decision. This is a different risk than a typical resource acquisition, even with the similar need to rely on projections.

[2] See Utah Code Ann. §54-17-402(3)(b).

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- I distinguish between the "early acquisition" of the Combined Projects and an energy resource that is truly needed in the context of providing power when energy is insufficient.

SUPPLEMENTAL REBUTTAL TESTIMONY

Q. What led to the filing of the Company's supplemental and second supplemental filings in this proceeding?

A. When the Company filed its initial application on June 30, 2017, the Company notified the Commission that it would be issuing an RFP (the 2017R RFP) to solicit up to 1,270 MW of new wind located in Wyoming. Because the 2017R RFP was issued after the Company's original application was filed, the Company explained that it would be necessary to supplement its original filing with the results of the 2017R RFP when the results became known.

On January 16, 2018, the Company filed its supplemental direct testimony to provide the 2017R RFP results and to account for changes resulting from the Tax Cuts and Jobs Act passed in December of 2017. In that testimony, the Company announced that the final shortlist of Wind Projects included the TB Flats I and II project, McFadden Ridge II, Cedar Springs, and the Uinta project.

On February 16, 2018, the Company filed its second supplemental testimony to reflect changes in the interconnection restudy process and new system impact studies that were necessary to integrate the final bid selections into

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the Company's transmission system. In the February 16, 2018 supplement, the Company removed the McFadden Ridge II project from its final shortlist and replaced it with the Ekola Flats benchmark project. This change increased the capacity of the final shortlist of Wind Projects from 1,170 MW to 1,311 MW.

Q. Have the Company's filings increased your confidence in the Combined Project's ability to provide net customer benefits?

A. No. The Division has evaluated the Company's proposal as it has changed shape and purpose and has evolved over time. The Division has previously discussed the scope and magnitude of the Combined Projects, a $2.245 billion investment. An investment of this magnitude should carry a greater certainty of benefits, especially if the investment is designed to lower costs instead of meeting reliability or other needs. Yet those benefits and costs, which the Company claimed were certain in June of 2017, continue to evolve with each iteration of updated assumptions. They remain uncertain enough to suggest preapproval is not in the public interest. Division witness, Mr. Peaco provides an analysis of the Company's currently proposed costs and benefits for the 20-year System Optimizer (SO) and PaR results, as well as the extrapolation of the benefits and costs to 30 years. I will also testify concerning other uncertainties that further diminish the case for preapproval.

Q. What other uncertainties exist?

A. This application requires regulatory approvals in Wyoming, land acquisitions and permits, rights-of-way acquisition, contracting, construction schedules, and other actions with unknown costs and outcomes.

Q. Has the Company acknowledged these uncertainties?

A. Not exactly. Though it has been candid about what steps remain, its testimony projects a certitude the rest of the record does not support.

In January, the Company claimed the costs and benefits were relatively certain.[3] In a matter of a few months' time, the projected costs and benefits for expensive, long-lived assets have changed yet again. However, the Company now claims it is certain that the economic benefits of the Combined Projects are clear:

> The benefits of the Combined Projects are *now* clear, with millions of dollars in benefits to customers, the addition of new resources that will enhance the ability of the Company to provide safe and reliable service to Wyoming customers with manageable risks while generating economic benefits to state and local economies.[4]

The Division notes that the Company is still in the midst of acquiring land rights and is having disputes with landowners in Wyoming.[5] The Division

[3] "The benefits are now greater and more certain, and the risks have decreased" Supplemental Direct and Rebuttal Testimony of Cindy A. Crane, January 2018, p. 1, lines 19-20.
[4] Supplemental Rebuttal Testimony of Cindy A. Crane, Wyoming Docket No. 20000-520-EA-17, March 2018, p. 1, lines 20-23 and p. 2, line 1 (emphasis added).
[5] Case No. 14781, CPCN for Wind and New Transmission Facilities, Intervening Parties include the following: Northern Laramie Range Alliance, Rocky Mountain Sheep Company, The Overland Trail Cattle Company, Southland Royalty Company, Anadarko Land Corp., and Rock Creek Wind, LLC.

understands that parties in Wyoming have negotiated a settlement stipulation in this matter that includes conditional approval of a CPCN to construct portions of the Combined Projects.[6] However, the Company must still obtain all rights-of way, permitting, and other regulatory approvals, including an approval by the Wyoming Industrial Siting Board (ISB).[7]

The Company has not secured final contractors or the EPC contracts for the Wind Project components, and these will not be known until June of 2018.[8] The Company states it is currently evaluating the preliminary responses of the competitive process in soliciting the transmission EPC contractor, and this review will continue through the fall of 2018.[9] Without the RFP for the EPC contracts, the bid score sheets, the terms of the contracts, and related information, much remains uncertain that might affect the ultimate benefits the Combined Projects achieve for ratepayers. At best, the Company has provided generic pro-forma contracts to date.

Without this information, the Company cannot plausibly claim the costs and benefits of the projects are more certain. Yet Ms. Crane states, "The fact that the Combined Projects will provide customer benefits significantly in excess of their costs is extraordinary." [10]

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https://dms.wyo.gov/ManageDocket.aspx?DocketId=sOjTHd3KyRGK2i3QGZ1107kw1CxxMHCgEMwW5ZZBsNU%3d.
[6] Docket No. 20000-520-EA-17, Record No. 14781, Stipulation and Settlement Agreement, April 12, 2017.
[7] Supplemental Direct and Rebuttal Testimony of Chad A. Teply, January 16, 2018, p. 11, lines 194-195.
[8] Company Response to DPU Data Request 15.6, dated January 30, 2018.
[9] Company 1st Supplemental Response to DPU Data Request 14.4, dated January 30, 2018
[10] Supplemental Direct and Rebuttal Testimony of Cindy A. Crane, January 2018, pp. 2-3, lines 46-47.

Given the uncertainties I have identified, and those identified in Mr. Peaco's testimony, the only thing extraordinary is the Company's certitude in a docket that has shifted so much in such a short time.

Q. Aren't uncertainties inherent in forecasting?

A. Yes. A forecast, especially if made far into the future, will inevitably be wrong. Moreover, forecasts refine over time.

Q. Why should we be particularly concerned with the Company's projections in this case?

A. As I noted in recent testimony in the Company's concurrently filed wind repowering application, Docket No. 17-035-39, the Company's hasty planning and shifting analysis has significantly burdened parties, increased the Division's concerns with projections, and has not resulted in refinements that decrease those concerns. I refer the Commission to the Division's comments in that docket, which are applicable here too.[11] Rather than representing refinements of a well-vetted structure for forecasting the future, the most recent projections in this Combined Projects docket result from shifting assumptions and structures following each round of review by non-Company parties.

The Combined Projects and wind repowering projects did not go through the ordinary IRP stakeholder process, which might have offered useful input and built a reasonable structure for evaluating the projects' benefits. The EV 2020

[11] Docket No. 17-035-39, Response Testimony of Dr. Joni S. Zenger, April 2, 2018.

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project results were filed in August 2017 as a supplement to the Company's long-term resource plan (IRP) five months after the plan was filed. Parties had no opportunity to provide meaningful input, as the projects were introduced late in the IRP process. As a result, the IRP conclusion including the projects is not persuasive. The Commission intimated as much in its 2017 IRP Order:

> We also recognize PacifiCorp's timing in completing and making available to parties its Energy Vision 2020 analysis deprived parties of a reasonable opportunity to evaluate that substantial element of its IRP. Accordingly, we view Energy Vision 2020, including its effects on other aspects of the plan, *to be less credible for IRP purposes* than the remaining IRP components.[12]

Q. What other burdens has the Company's process imposed on this docket?

A. The 2017R RFP was filed on a parallel, but overlapping path, with the Combined Projects and the wind repowering projects, and there were several last minute changes to the RFP results. The RFP process was an accelerated process, and the schedule in this docket calls for an expedited review of the 2017R RFP results. The Company still had not completed the required transmission studies and system impact studies when it released its final shortlist. The Company filed its second supplemental filing in February with an updated final shortlist.[13] The Division's witness Mr. Peterson will discuss concerns with the RFP process and

[12] Docket No. 17-035-16, Report and Order, PacifiCorp's 2017 IRP, March 2, 2018, pp. 1, 45 (emphasis added).
[13] Second Supplemental Direct Testimony of Cindy A. Crane, February 23, 2018, p. 2, lines 38-40.

the problems noted by both the Utah and Oregon Independent Evaluators (IE) that cast doubt on the RFP results.

In addition to the 2017R RFP, the Company conducted an RFP for new solar resources (the 2017S RFP). The Company's solar sensitivity analysis, shared for the first time in supplemental testimony, suggest that the solar power purchase agreement (PPA) provides customer benefits without the attendant transmission cost or PTC risk borne by customers.[14] The 2017S RFP final shortlist should have been provided earlier to parties or should have at least been evaluated on an equal and comparable basis to the 2017R RFP wind results. Without the need for the transmission and without the PTC constraints, Utah solar resources should have been considered in this docket along with the Combined Projects. This way, Utah economies and jobs could have benefitted from the projects being constructed in our own state, rather than in Wyoming.

As of this writing, the Company has provided the Division with a copy of the redacted IE report on the solar RFP, commissioned by PacifiCorp.[15] The Division has not received the third-party confidential closing report.

The following statement from the Oregon IE, who oversaw the 2017 R RFP process, captures part of the problem I have described above:

> The real issue here is that PacifiCorp's procurement (in the form of this RFP) got out ahead of its resource and

[14] Supplemental Direct and Rebuttal Testimony of Rick T. Link, January 2018, p. 35, lines 712-715.
[15] Wyoming 200000-520-EA-17, WIEC 11.5, 1st Supplemental dated March 29, 2018.

> transmission planning. If PacifiCorp had identified this plan earlier, then all aspects of this work, (IRP, transmission planning and resource acquisition) could have worked together in a more coherent fashion.[16]

Q. What other Company actions in this docket concern you?

A. Approximately seven months into this proceeding, the Company changed the way it modeled PTC benefits from a levelized to a nominalized basis. This is a departure from how PTC benefits were modeled in the Company's 2017 IRP and in the early rounds of the Company's testimony. With this adjustment in the supplemental filing, the Company claims that, out of the 18 price policy scenarios studied, 16 show net customer benefits.[17] However, the Division's witness Mr. Peaco will show that the Company's economic analysis overstates the benefits, and the possibility of customers receiving any long-term benefit is tenuous.

Q. Did the Company update its capital costs in its supplemental testimony?

A. Yes. In fact the Company's total projected capital costs increased by $245 million in the span of two months, between the January and February filing.[18] The cost increase was because the Company, in its second supplemental filing, substituted the larger Ekola Flats wind project for the smaller McFadden project. Although pegged as insignificant, the capital cost increase again speaks to the magnitude of the entire Combined Projects. When such changes introduce such

[16] Wyoming Docket No. 20000-520-EA-17, Rock Creek Exhibit 100.1, Non confidential version of the Oregon IE Report, February 16, 2018, p. 38.
[17] Supplemental Testimony of Rick T. Link, February 2018, pp. 3-4, lines 1-2.
[18] Second Supplemental Direct Testimony of Cindy A. Crane, February 16, 2018, p. 5, line 102.

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large cost differences, it is unreasonable to expect that other elements of the cost-benefit projection will not shift significantly in coming years. Such shifts could quickly overwhelm the projects' relatively small purported benefits.

With respect to the Transmission Project costs, the Company estimated the accuracy of its transmission cost assumptions to be within plus or minus 15 percent of actual cost.[19] The Division points out that the Company completed the first segment of its Energy Gateway Project, the Populous to Terminal transmission line in 2008. The original scope and estimated project costs were $78 million, but the project's scope increased and costs increased to $801 million, almost ten times what the Company had initially planned.[20] Therefore, the Company's claim that it can accurately forecast the Transmission Project costs within budget should be viewed with skepticism.

Q. In your earlier testimony, you emphasized the inordinate amount of risk in the Company's proposal. Do you still have those same concerns?

A. Yes, with one exception. In my direct testimony, I called the Commission's attention to the risk of the change in the federal tax legislation. In fact, I stated the following:

> 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….

[19] Idaho Case No. PAC-E-17-07, PIIC Data Request 15.
[20] Docket No. 08-035-42, Direct Testimony of Dr. Joni S. Zenger, August 1, 2008, p. 21, lines 387- 394.

> 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. [21]

As mentioned previously, the federal tax legislation did pass. While the tax change is now known, other risks remain. These include the following:

- PTC-related risk. The ability to place the Combined Projects fully in service without any delay, so that the full maximum value of the PTCs is available. The PTC-related risk includes delays in permitting, acquiring rights-of-way, possible eminent domain proceedings, pursuing construction around extreme Wyoming weather conditions, delays in equipment deliveries, and difficulty finding skilled labor. The Oregon IE charged with overseeing the RFP process found the risk regarding the PTCs "exceptionally important" and recommended a high-level protection mechanism for ratepayers in the form of a "hard cap." In its final report, the Oregon IE stated the following:

  > . . . PacifiCorp must guarantee that the capital and O&M costs will not exceed the amount forecasted here and that ratepayers will be credited the full PTC values projected here as well regardless of whether or not PacifiCorp has the taxable income to utilize the credits. . . To be clear, these should be "hard" guarantees as would be found in a

[21] Direct Testimony of Dr. Joni S. Zenger, December 5, 2017, p. 13, lines 272-280.

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> commercial contract. . . The risk regarding the PTCs is exceptionally important.[22]

- Construction cost overruns and risks. The Company must complete the Combined Projects within the Company's estimated capital budget without capital and operating and maintenance cost overruns. The Company cannot accurately estimate or verify the project costs without the results of the competitive procurement for the Company's contractors.
- Net capacity factor risk. Overly optimistic net capacity factors of the proposed wind resources result in customers receiving less than the projected wind energy and PTC benefits. The benefits are determined by the amount of wind energy that is actually produced or generated, a function of the estimated capacity factors for each of the Wind Projects. The Company has stated that "the PTCs generated by the Wind Projects are potentially volatile and outside the Company's control."[23] The Company admits that it still has not quantified the economic risk associated with variable wind output, but would perform this assessment later when the wind sites, equipment, and layout were more certain.[24] If the capacity factors of the Wind Projects are lower than projected, then some or all of the expected savings will not materialize.

[22] Wyoming Docket No. 20000-520-EA-17, Rock Creek Exhibit 100.1, Non confidential version of the Oregon IE Report, February 16, 2018, p. 38.
[23] Docket No. 20000-520-EA-17, Supplemental Rebuttal Testimony of Joelle R. Steward, March 2018, p. 5, lines 11-12.
[24] Docket No. 20000-520-EA-17, Company' response to WIEC Data Request 5.9 and 18.2 and

The Utah IE expressed concern over this issue and in its final report to the Commission made the following conclusions:

> A common occurrence in the wind industry has been that the actual capacity factors of wind projects have been lower than the projected capacity factors. Such an occurrence for PPA options is not a major issue since the PPA project must conform to the contract requirements for meeting generation required levels or incur penalties. For BTA or benchmark options, failure to meet the target capacity factor is an issue. For one, the full PTC benefits may not be realized if generation is lower than projected. Failure to meet projected generation levels for these resources results in higher unit costs and raises the question of whether these projects would have been selected if realistic generation profiles were provided. While PacifiCorp retained Sapere to conduct such an analysis to ensure the generation levels and capacity factors are reasonable, the IE feels there is some risk associated with the [redacted] based on the Sapere analysis regarding wake losses. The IE feels that the generation levels of the benchmark and BTA options should be closely monitored to ensure they perform as proposed.[25]

- Market price risk. There are risks that natural gas and carbon prices are or may be lower than assumed. The Company is projecting 20 to 30 years of market and fuel prices into the future. Any calculation that is too high means that net power costs savings are less likely to be realized. To the extent market projections factor in future price risk, they overstate projected benefits by inflating future benefits.

[25] Non-Confidential Final Report of Merrimack Energy Group, Inc., February 27, 2018, p. 38.

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- Life of wind plant risk. There is a risk that the 30-year life of the wind projects is unrealistic.[26] There are projects being constructed across the country hoping to take advantage of the PTC credits that use the assumption of a 25-year life of new wind projects, e.g., the 2,000 MW Wind Catcher Energy Project in Oklahoma[27] and the Sagamore and Hale Wind Projects in New Mexico.[28] The economics of the projects may be overstated when using a 30-year life, rather than an assumed 25-year life. The 30 year-life aligns with the Company's currently approved depreciable life for wind resources. However, there may be additional O&M costs that may have not been included in the assumptions that allow the wind generating facilities to operate for 30 years. In addition, the Company will be filing with the Commission a new depreciation study in 2018 and today's depreciable life number may change by next year or with future experience.
- Opportunity costs. In addition to least cost, least risk solar options discussed previously, the Company may be foreclosing other, possibly economic alternative generation resources, battery storage capabilities,

[26] The National Renewable Energy Lab (NREL), states onshore wind turbine generators have a useful life of 20 years. See: https://www.nrel.gov/analysis/tech-footprint.html.
[27] Oklahoma Cause No. PUID 201700627, Report and Recommendation of the Administrative Law Judge, February 12, 2018 p. 77.
[28] Case No. 17-00044-UT, Southwestern Public Service Company's CPCN and PPA Application, Direst Testimony of Andrea C. Crane, p. 5, lines 10-11, October 24, 2017.

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plant closures, or transmission alternatives by investing $2.245 billion now.

- Risk of newer technologies. There is a potential risk that the Company is investing prematurely in new wind projects when the industry is experiencing rapidly changing technologies, potentially making the proposed New Wind resources obsolete or less desirable.

Each of these risks are real. Given the narrowness of the Combined Projects' purported benefits relative to their costs, these risks should be given considerable weight.

Q. Utah Code Ann. § 54-17-402 states that the Company's proposed resource decision should be based on other factors determined to be relevant. Are there other factors that the Division considers relevant?

A. Yes. Another relevant factor to consider is the status of the 2017 Multi-State Protocol (MSP) that expires on December 31, 2019. Currently stakeholders are working to develop a replacement interjurisdictional allocation methodology. [redacted] but this source of uncertainty is another real risk to ratepayers. The Commission needs to consider the short- and long-term impacts of the Company's proposed resource decision in light of the uncertainties of the multi-state allocation process.

SURREBUTTAL TESTIMONY

Q. What is the first point you wish to rebut?

A. Mr. Teply references my testimony (Zenger Direct, lines 289-293) and states the following:[29]

> Several parties note that the wind projects must be operational by the end of 2020 to receive full benefits. How does the Company plan to ensure successful and timely delivery of the Combined Projects?

He suggests the Company is making adequate progress to mitigate these concerns.

Q. What is your response?

A. There has been some progress made in the schedule but other risks remain. Mr. Teply explains the progress the Company has made since its June 30, 2017 filing. In particular, the Company has initiated the following actions:

- It solicited competitive market proposals for the Wind and Transmission projects (Combined Projects) and is currently negotiating contracts for the Combined Projects.[30]

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[29] Supplemental Direct and Rebuttal Testimony of Chad A. Teply, January 16, 2018, p. 23, lines 462-463.
[30] Id., pp. 23-24, lines 478-482.

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- The Company is incorporating off-ramps into its EPC contracts to limit cost commitments, such as issuing a Limited Notice to Proceed before a full Notice to Proceed is issued to counterparties.[31]
- The Company has moved up the date by one year (from 2020 to 2019) to install wind turbine generator foundations and collector stations for its TB Flats I and II wind projects as a hedge against possible weather-related delays.[32] The Company does not state how it will manage weather-related delays for the rest of the Combined Projects.

However, the critical construction risks I stated in my direct testimony and re-stated in my supplemental testimony remain. First, the Company has not obtained all of its permits or regulatory approvals, even though the Company has entered into a settlement stipulation regarding the CPCN in Wyoming. Many of the dates on Mr. Teply's EV 2020 Timeline referenced earlier have changed.[33] First, the table lists March 6-9, 2018 as the Utah resource decision public hearing dates with a Utah Commission Order by April 6, 2018. Because the Company had not yet filed its supporting material for the Combined Projects, a fact the Company acknowledged in oral argument, the Commission amended the

[31] Id., pp. 10-11, lines 178-206.
[32] Id., p. 25, lines 504-510.
[33] Id., pp. 9-10.

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procedural schedule. The hearings in this matter in Utah are scheduled for May 29-31, 2018, not March 6-9, 2018.[34]

The Division supposes that other anticipated project dates may be overly optimistic or incorrect. For example, Mr. Teply states that the Wyoming ISC review processes and hearings for most of the wind projects will proceed through April 2019, and the ISC is required to hold a hearing within ninety days of each application.[35] In his second supplemental testimony, Mr. Teply claims the ISB process and hearings for the Ekola Flats project should be completed in 2018, but the Company still does not know who will construct the Ekola Flats project.[36]

With the robust landowner participation noted by the Company[37] and the number of intervening parties in the Wyoming CPCN proceeding, the Company may encounter difficulties with landowners and affiliated groups, who object to the necessary rights-of-way or require condemnation hearings, both of which could potentially push back the construction schedule.[38] The list of intervening landowners in the Wyoming CPCN docket, many who have voiced strong opposition to the CPCN, is as follows: Northern Laramie Range Alliance, Rocky

[34] Docket No. 17-035-40, Order Granting Motion to Vacate Remaining Schedule and Amended Scheduling Order, February 13, 2018.
[35] Supplemental Direct and Rebuttal Testimony of Chad A. Teply, January 16, 2018, p. 13, lines 239-245.
[36] Second Supplemental Direct and Rebuttal Testimony of Chad A. Teply, February 16, 2018, p.5, lines 105-109.
[37] Id., p. 13, lines 246-250.
[38] Case No. 14781, CPCN for Wind and New Transmission Facilities, Intervening Parties include the following: Northern Laramie Range Alliance, Rocky Mountain Sheep Company, The Overland Trail Cattle Company, Southland Royalty Company, Anadarko Land Corp., and Rock Creek Wind, LLC. https://dms.wyo.gov/ManageDocket.aspx?DocketId=sOjTHd3KyRGK2i3QGZ1107kw1CxxMHCgEMwW5ZZBsNU%3d.

Mountain Sheep Company, The Overland Trail Cattle Company, Southland Royalty Company, Anadarko Land Corp., and Rock Creek Wind, LLC.[39] Although some landowner problems may have been assuaged through the stipulated settlement in this matter, many are still in dispute over property rights.

Mr. Vail states the severity of this issue:

> In particular, it is critical that the Company obtains CPCNs from the WPSC for the Transmission Projects, which are conditioned upon acquisition of all necessary rights-of-way, with sufficient time to meet this condition. The Company must also obtain the outstanding siting permits by the end of 2018. If the Company does not receive conditional CPCNs in early 2018, or siting permits by the end of 2018, it must assess the viability of achieving a year-end 2020 online date before moving forward.[40]

As previously mentioned, the Company has requested from the Wyoming Commission a conditional CPCN to construct the Combined Projects, but the approval is conditional, and the Company still has to acquire all siting permits, land rights, and other conditional permits by the end of 2018.

The Company states that it has experience and confidence in its ability to select skilled labors and in its ability to negotiate contracts. Nevertheless, risks remain and the Company appears unwilling to accept the consequences of those risks materializing.

[39] Id.
[40] Rebuttal Testimony of Rick A. Vail, Case No. PAC-E-17-07, December 2017, p. 21, lines 4-9.

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If, as the Company claims, it has faith in its ability to successfully negotiate these contracts, and manage risks, then it should be willing to bear the risk of failure with respect to construction delays and cost overruns.

Q. The Company's witnesses claim that the level of risk or uncertainty in the Combined Projects is no different from the risks and uncertainty inherent in all resource acquisitions. (Teply, p. 28, lines 569-572; Crane, p. 7, lines 142-153; Link, p. 53, lines 1085-1086; Steward, p. 14, lines 299-300). Do you agree?

A. No. There are a number of factors that differ, many of which I have discussed previously. Because receiving full PTC credits is so fundamental to the project's benefit, time is a risk present here that is often not found in resource acquisitions. Additionally, because there is not a reliability or resource need, as traditionally understood, there is a new risk: that a reasonable and adequate status quo will be upset by the acquisition of expensive resources that may not provide net benefits.

As mentioned previously, the outcome of the 2017 IRP is not persuasive to support the Company's EV 2020 projects in the context of a regularly vetted IRP proceeding. The Commission determined EV 2020 "to be less credible for IRP purposes."[41] There is simply no problem these projects solve. If they are not built, the system will remain adequate, reliable, and reasonably priced. That benefit is not susceptible to valuation, but its absence is the driver of new resource

[41] Docket No. 17-035-16, Report and Order, PacifiCorp's 2017 IRP, March 2, 2018, pp. 1, 45.

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acquisitions. In such an instance, the Company has no choice but to acquire new resources. It must make its best projections and proceed with the best resource. Inaction is not an option. The resource proposal here requests approval to make a speculative investment for economic reasons in the absence of a truly required generation resource. This is a different risk than the risk faced with imperfect, shifting projections in a typical resource acquisition.

Q. The Company repeatedly claims that the Combined Resources are tied to a specific resource need and will meet near-term and long-term resource needs. (Crane, p. 2, lines 15-19 and p. 7, lines 142-153; Link, p. 39, lines 772-778 and p. 41, lines 804-819; Vail, pp. 13-17, lines 261-361; Steward, p. 13, lines 294-295). Will you please comment?

A. The Company is confusing a need with a benefit. Mr. Link states that the 1,100 MW of new Wyoming wind meets only 17 percent or 174 MW of the resource need in 2021.[42] "Resource need" in this context is the amount the Company is short power in those years. The other 83 percent of the resource need over the course of the 20-year plan is met with front office transactions (FOTs). Therefore, according to the Company's own statements, the Combined Projects are displacing 174 MW of the resource need in 2021 at the cost of $2.25 billion. Leaving this "resource need" exposed to the market for FOTs is an option the Company dismisses when discussing "needs" but addresses when discussing

[42] Supplemental Direct and Rebuttal Testimony of Rick T. Link, January 16, 2018, p. 41, lines 816-819.

"benefits." The Company believes the Combined Projects will be a better deal for ratepayers than FOTs, but it makes no representation that FOTs will be unavailable or unreasonably priced.

Although the Company has included the Combined Projects in its 2017 IRP, and in its Supplement to the IRP in August of 2017, this does not mean that the Combined Projects meet an identified deficiency.[43] The Company confuses its discussion of needs and benefits. Mr. Peaco supports this position in his surrebuttal testimony.

With respect to the Transmission Line, the Company is also confusing "an attribute" or characteristic of the Transmission Line, with the need for the line. The Company states the line will relieve congestion, provide voltage support, improve reliability, and reduce line losses.[44] However, this is a generic attribute of adding transmission capacity to any line, rather than a necessary benefit or "need" that this particular line would satisfy. Mr. Peaco discusses this position in depth in his surrebuttal testimony.

Q. The Company admits the Combined Projects are an "early acquisition" if not needed now (Link, p. 53, line 1083). How do you respond?

[43] Table 5.14 of the 2017 IRP shows—without the Energy Vision 2020 investments— available FOTs of 1,670 MW exceed the system requirements by a wide margin through the first ten years of the study period. In 2026, PacifiCorp expects that currently available resources and FOTs will exceed total system requirements, including a 13% planning reserve, by approximately 447 MW. This means that, without acquiring any new generating resources or transmission lines, PacifiCorp will continue to be capable of providing adequate services to customers in Utah, inclusive of a material reserve margin. As such, the proposal cannot reasonably be characterized as addressing a resource need.

[44] Supplemental Direct and Rebuttal Testimony of Rick A.Vail, January 16, 2018, p. 16, lines 332-339 and Supplemental Direct and Rebuttal Testimony of Cindy A. Crane, January 16, 2018, p. 3, lines 8-10.

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A. The Company has repeatedly stated that the Transmission Line is included in the Company's long-term transmission plan, coming online in 2024.[45] The Company has previously attempted to construct a segment of Energy Gateway Transmission Project early in Utah and the Commission disallowed it outright. Shareholders were not allowed the opportunity to begin earning a return on the portion of the line ahead of need. The Division had determined that a portion of the Mona to Oquirrh to Terminal Transmission Line was an early acquisition, and the Commission denied approval of the CPCN for that portion of the line.[46] Similarly, the Segment D Transmission Line in this docket is being proposed four years early and it too should be denied. In the Mona-Oquirrh case, the Commission said:

> We find the Company has not adequately established the present or future need for the Limber-to-Terminal transmission line. . . Additionally, the Company has not received, nor is it in the process of obtaining, a conditional use permit for this line.
>
> Accordingly, construction of the Limber-to-Terminal transmission line *is not authorized under the certificate* granted herein.
>
> The Application of Rocky Mountain Power for a Certificate of Public Convenience and Necessity to construct the Mona-Oquirrh 500/345 kV transmission line is granted, *except for that portion of the transmission line connecting the Limber and Terminal Substations*.[47]

[45] Id., Crane, p. 3, lines 7-9; Vail, p. 13, lines 265-268.
[46] Report and Order, Docket No. 09-035-43, Mona to Oquirrh Transmission Line, June 6, 2010 (emphasis added).
[47] Id, at p. 15 and p. 18

However, constructing a facility early is not unwise only because it results in costs before they are needed. It is also unwise because circumstances can change in a short period of time. Time can bring plant retirements, load changes, technological change, and a host of other circumstances that can render an early decision a bad one.

CONCLUSION

Q. Given the updated results of the 2017R RFP and the Company's supplemental analysis of benefits, costs, and risks, has the Company demonstrated that the Combined Projects satisfy the public interest standard?

A. No, it has not.

Q. Will you please summarize the Division's main findings in its supplemental rebuttal and surrebuttal testimony and explain why not.

A. The Division continues to recommend that the Commission not approve the Company's Application in this matter.

- The Company's supplemental and second supplemental testimony fails to demonstrate that the Combined Projects are in the public interest. The Company has not demonstrated that the Combined Projects will most likely result in the acquisition, production, and delivery of utility services at the lowest reasonable cost to the retail customers. The

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Company has the burden to demonstrate this, and the Division maintains that it has not reasonably done so.

- The Company's economic analysis shows that the projected economic benefits have declined relative to the Company's rebuttal filing, and there is a great deal of uncertainty surrounding the Company's cost assumptions. The projected benefits of the Combined Projects that the Company has put forth are tenuous and heavily dependent on assumptions. Minor changes could cause customers to pay higher costs than they would without the Combined Projects.
- Because the resources are not needed, the projects are only beneficial if they provide net economic benefits to customers. The Combined Projects are not required to meet the Company's capacity or energy needs over the next ten years. The status quo, in other words, requires no additions of the type the Company is advocating.
- Because the Company can continue to meet its capacity or energy needs reliably over the next ten years with a combination of demand-side management resources and front office transactions, there is no need to commit Utah ratepayers now to a $2.245 billion long-term resource that puts an unacceptable level of risk and uncertainty on customers. This is a different risk than the risk faced with imperfect, shifting projections in a typical resource acquisition. The status quo,

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in other words, requires no additions of the type the Company is advocating.

- Given the risk that ratepayers are being asked to bear, as well as consideration of the short and long-term impacts presented in this case, the Division cannot recommend that the Commission find the Company's resource decision prudent or in the public interest.

- If the Combined Projects are not built, there is no indication in anything filed by the Company that ratepayers will not be reliably served at a reasonable cost in the future. Thus, there is little downside risk for customers in the Combined Projects' absence. Rather, the Company contends that the future will be more expensive without the Combined Projects than it would be with them. While there are scenarios in which the Company is likely correct, the point is there are plausible scenarios in which the Company is wrong.

- Because the future without these projects appears reasonable and the projects are expensive, the Company is asking ratepayers to assume the risks of large costs without corresponding benefits. This is an important distinction from a situation where the future is deficient and the deficiency must be corrected using the best available information.

The Commission should deny approving the Company's Application because the Company has not demonstrated that the Combined Projects are in the public interest as set out in Utah Code Ann. Section 54-17-402. The proposed Combined Projects present clear and potential ratepayer risks not outweighed by a reasonable probability of significant savings when compared to the no action option.

Q. Does this conclude your Testimony?

A. Yes.