

REDACTED

Docket No. 20000-520-EA-17

Witness: Chad A. Teply

BEFORE THE WYOMING PUBLIC SERVICE
COMMISSION

ROCKY MOUNTAIN POWER

REDACTED

Rebuttal Testimony of Chad A. Teply

December 2017

1 **Q. Are you the same Chad A. Teply who submitted direct testimony in this proceeding**
2 **on behalf of PacifiCorp dba Rocky Mountain Power (“Company”)?**

3 A. Yes.

4 **PURPOSE AND SUMMARY OF REBUTTAL TESTIMONY**

5 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

6 A. My rebuttal testimony supports the Company’s application for certificates of public
7 convenience and necessity (“CPCNs”) and nontraditional ratemaking treatment
8 (“Application”) for the Company’s proposal to construct or procure 860 megawatts
9 (“MW”) of new wind resources (“Wind Projects”) and construct the Aeolus-to-
10 Bridger/Anticline transmission line and 230 kV Network Upgrades (“Transmission
11 Projects”) (collectively, the “Combined Projects”). I summarize the current status of
12 the Combined Projects, including the proxy benchmark wind facilities in the
13 Company’s 2017 Request for Proposals (“2017R RFP”), the results of which will be
14 included in the Company’s supplemental testimony on January 16, 2018.

15 I also respond to the testimony of Wyoming Office of Consumer Advocate
16 (“OCA”) witness Mr. Bryce J. Freeman and Wyoming Industrial Energy Consumers
17 (“WIEC”) witness Mr. Nicholas L. Phillips.

18 **Q. What are the key issues you address in your rebuttal testimony?**

19 A. I address the following key issues:

- 20 1. The development of the proxy benchmark Wind Projects is on schedule, so if
21 the projects are selected to the final shortlist in the 2017R RFP, the Company is
22 positioned to timely deliver them and implement risk mitigation measures to

1 address the risks identified in the parties' testimony. These risk mitigation
2 measures advance the public interest in support of the Application.

- 3 2. The implementation schedules for the Combined Projects continue to provide
4 reasonable timelines to assess project risks, incorporate the assessments into
5 decision-making, and allow for changes in project direction in response to
6 changing circumstances (*i.e.*, off-ramps).

7 **Q. Please summarize your testimony.**

- 8 A. The Company recognizes the unique circumstances presented by the Application, given
9 that final project information and economics for the Combined Projects will not be
10 known until January 2018. This schedule is driven by the time-sensitivity of the
11 resource opportunity. The Company has addressed these circumstances with a project
12 schedule that permits the Company to comprehensively assess and confirm the
13 economic benefits of the Combined Projects as development progresses, and mitigate
14 many of the risks inherent in projects of this scope.

15 The Company has extensive experience successfully developing comparable
16 projects, with substantial customer benefits. The Company has every reason to believe
17 the Combined Projects will be similarly beneficial to customers. If changing
18 circumstances adversely impact the economics of the Combined Projects, however, the
19 Company has prudently established a process that will allow off-ramps. The Company
20 also recognizes the value of stakeholder engagement before committing to major
21 expenditures. The Company will therefore provide updated costs, analysis, and project
22 information in its January 2018 supplemental filing, and will continue to identify and
23 mitigate risks in the Combined Projects.

1 **COMBINED PROJECTS UPDATE**

2 **Q. Is the Company on schedule to supplement its original Application in January**
3 **2018 with a filing incorporating updated and detailed economic analysis, updated**
4 **wind and transmission project information, and discussing the Company’s project**
5 **implementation plans?**

6 A. Yes. The regulatory review process for the Combined Projects is ongoing and the
7 Company is currently finalizing its shortlist for the 2017R RFP, as described in
8 Company witness Mr. Rick T. Link’s rebuttal testimony. In addition, the Company
9 continues to refine and update its economic assessments and development of the Wind
10 Projects as required to support the January 2018 supplemental filing and the overall
11 project schedule. The January 2018 filing will include information pertaining to the
12 final shortlist projects selected through the 2017R RFP, including information related
13 to project configurations, project participants, equipment supply, and permitting status.

14 **Q. Please provide an updated timeline of key decision-points, regulatory outcomes,**
15 **and project development activities.**

16 A. The following timeline provides an overview of the key events that have already
17 occurred, and the anticipated events that will occur as the resource procurement and
18 development efforts continue.

Energy Vision 2020 New Wind and Transmission Timeline

2017	<p>Apr. 4, 2017—PacifiCorp 2017 Integrated Resource Plan (“IRP”) filing</p> <p>Jun. 30, 2017—Idaho CPCN filing Jun. 30, 2017—Wyoming CPCN filing Jun. 30, 2017—Utah Resource Decision filing</p> <p>Sept. 27, 2017—PacifiCorp 2017R RFP issued to market Nov. 17, 2017—PacifiCorp 2017R RFP initial shortlist determination Nov. 22, 2017—PacifiCorp 2017R RFP initial shortlist price updates from market</p> <p>Dec. 11, 2017—Oregon Commission action on 2017 IRP action items</p> <p>Dec. 2017—U.S. Tax Code legislation passes (anticipated)</p>
2018	<p>Jan. 8, 2018—PacifiCorp 2017R RFP final shortlist determination</p> <p>Jan. 16, 2018—Idaho CPCN supplemental filing Jan. 16, 2018—Wyoming CPCN supplemental filing Jan. 16, 2018—Utah Resource Decision supplemental filing</p> <p>Feb. 22–28, 2018—Wyoming CPCN public hearing Mar. 6–9, 2018—Utah Resource Decision public hearing Mar. 12–15, 2018—Idaho CPCN public hearing</p> <p>Mar. 9, 2018—Wyoming legislative session ends (budget session)</p> <p>Apr. 6, 2018—Idaho CPCN Commission Order Apr. 6, 2018—Utah Resource Decision Commission Order Apr. 30, 2018—Wyoming CPCN Commission Order (conditioned upon rights-of-way (“ROW”) acquisition)</p> <p>May 1, 2018—Begin Transmission Projects ROW acquisition</p> <p>May 31, 2018—Wind Projects BOP EPC Contract Limited Notice to Proceed (“LNTP”) (benchmarks)</p> <p>Jun. 30, 2018—USFWS Eagle Take Permit first-year data collection complete</p> <p>Nov. 30, 2018—Transmission Projects EPC Contract LNTP (500 kV)</p> <p>Dec. 31, 2018—Wyoming Industrial Siting Council permit received, New Wind (benchmarks) Dec. 31, 2018—Wyoming Industrial Siting Council permit received, Transmission</p>

2019	<p>Jan. 1, 2019—Complete Transmission Projects ROW acquisition (anticipated) Jan. 1, 2019—Wyoming CPCN issued (transmission ROW acquired; anticipated) Jan. 1, 2019—Wind Projects Development Transfer Agreement closing (benchmarks)</p> <p>Mar. 31, 2019—Wyoming legislative session ends (full session; approximate date)</p> <p>Apr. 1, 2019—Transmission EPC Contract Full Notice to Proceed (“FNTP”) (500 kV) Apr. 1, 2019—Wind Projects BOP EPC Contract FNTP (benchmarks) Apr. 1, 2019—Wind Projects Turbine Supply Agreement release (benchmarks)</p> <p>Jun. 30, 2019—USFWS Eagle Take Permit second-year data collection complete</p> <p>Sept. 30, 2019—Submit voluntary USFWS Eagle Take Permit application</p>
2020	<p>Mar. 15, 2020—Wyoming legislative session ends (budget session; approximate date)</p> <p>Dec. 31, 2020—Receive voluntary Eagle Take Permit (if issued by USFWS)</p> <p>Dec. 31, 2020—New Wind and Transmission Projects in-service</p>

1 **Q. Is the Company currently on track to meet this development schedule and**
2 **complete the Combined Projects by the end of 2020?**

3 A. Yes.

4 **Q. Does the timeline above provide off-ramps to allow the Company to revise, or**
5 **potentially terminate, development efforts in response to changes in federal**
6 **income tax policy, project permitting, or other risks associated with the Combined**
7 **Projects?**

8 A. Yes. In particular, the Company currently anticipates that changes to the federal
9 corporate income tax code that are being finalized by the U.S. Congress will be
10 reasonably clear by year-end 2017, and will be incorporated into the January 2018
11 supplemental filing. If tax reform is delayed such that it cannot be accounted for in the
12 supplemental testimony, it is still likely that the outcome of tax reform will be known
13 before the Company commits to the Combined Projects by a full notice to proceed to

1 major contracts. Thus, the risk associated with changes in federal tax rates should be
2 resolved before the Company moves forward with the Combined Projects.

3 To provide that risk mitigation, the Company's timeline for development and
4 implementation of the Combined Projects contemplates offering limited notices to
5 proceed ("LNTP") to key engineering, procurement, and construction ("EPC")
6 contractors associated with the projects only after receipt of the CPCNs. The LNTP
7 will facilitate EPC contractor support of the Wyoming Industrial Siting Council permit
8 review and hearing process, as well as initiation of certain engineering and pre-
9 procurement activities. The LNTP concept incorporated into these key contracts will
10 limit cost commitments, while allowing critical parallel path project development
11 activities and approvals to progress.

12 The project timeline also incorporates off-ramps to ensure that the transmission
13 rights-of-way ("ROW") acquisition effort is complete and the final CPCNs are obtained
14 before release of full notice to proceed ("FNTP") to EPC contractors for the Combined
15 Projects. Under the terms of the major EPC contracts for the Combined Projects that
16 will be awarded by the Company, FNTP allows the EPC contractors to proceed with
17 their major equipment purchases, site mobilization, and subcontract awards that also
18 entail the associated cost commitments for those activities. Recognizing that a
19 successful and timely ROW acquisition process is fundamental to the overall success
20 of the project, negotiation of the FNTP terms described above with major EPC
21 contractors provides another layer of risk mitigation that the Company has incorporated
22 into its planning.

1 **REBUTTAL TO OFFICE OF CONSUMER ADVOCATE**

2 **Q. Do you generally agree with the information on which OCA witness Mr. Freeman**
3 **based his assessment of the Company’s Application?**

4 A. Yes. Mr. Freeman relied on the information provided by the Company to date for Wind
5 Projects described in the Company’s Application, as well as the Transmission Projects
6 discussed in detail in the testimony of Company witness Mr. Rick A. Vail, in support
7 of the Application. Mr. Freeman also correctly describes the anticipated schedule for
8 the Company to make a supplemental filing in January 2018, describing the particular
9 projects selected as a result of the 2017R RFP.

10 **Q. Mr. Freeman discusses several project implementation risks, including ROW**
11 **acquisition, weather, and labor and material availability that could affect project**
12 **benefits for customers. (Freeman Direct, page 25, lines 25–29, and page 26, lines**
13 **1-6.) How does the Company plan to ensure successful and on-schedule delivery**
14 **of the Combined Projects?**

15 A. The Company relies on several strategies to ensure successful mitigation of the types
16 of project implementation risks that could delay the Combined Projects beyond 2020.
17 The Company has used these same strategies in recent years to successfully deliver
18 very similar wind and transmission projects as those under review in this docket.

19 Perhaps most importantly, the Company has built its regulatory procedural
20 schedules and project implementation timeline to allow sufficient time to acquire the
21 ROW necessary for the Aeolus-to-Bridger/Anticline transmission line. The ability to
22 acquire necessary ROW will be known before release of the FNTP to major EPC
23 contractors for the Combined Projects. Moreover, if there is a delay in acquiring the

1 necessary ROW for the Transmission Projects, the Company will reassess how to adjust
2 the projects' remaining critical path schedules to successfully deliver customers the
3 benefits of the Combined Projects.

4 **Q. Has the Company already begun negotiating the EPC contracts for the Combined**
5 **Projects?**

6 A. Yes. The Company has solicited competitive market proposals and is actively
7 negotiating EPC contract terms, conditions, and pricing for the Wind Projects, and is
8 engaged in similar efforts for the Aeolus-to-Bridger/Anticline transmission line, as
9 more fully described in the rebuttal testimony of Company witness Mr. Vail. These
10 efforts are underway not only to ensure the ability to execute agreements in a timely
11 and efficient manner following project regulatory approvals and receipt of critical
12 permits, but also to review each potential EPC contractor's ability to secure and deliver
13 labor and materials throughout their proposed construction schedules. This review
14 considers the number and scope of concurrent projects that potential EPC contractors
15 have demonstrated an ability to deliver historically, and their approach to booking
16 future projects and managing that business growth in times of significant market
17 opportunity. Because the Company has engaged its EPC contractors early, timely
18 selection of EPC contractors and timely approval of a CPCN for the projects will allow
19 labor and materials from the selected EPC contractors to be committed and secured to
20 the Company's projects before other market participants that engage in such
21 discussions later in 2018 and 2019.

1 **Q. Has the Company taken a similar approach to engage the major wind turbine**
2 **supplier market?**

3 A. Yes. The Company has also already solicited competitive market proposals and is
4 actively negotiating wind turbine supply contract terms, conditions, and pricing for the
5 Wind Projects. These efforts are underway not only to ensure the ability to execute
6 agreements in a timely and efficient manner following project regulatory approvals and
7 receipt of critical permits, but also to secure manufacturing and delivery queue
8 positions and schedules in support of the Wind Projects.

9 **Q. How will the Company manage weather-related construction delay risk?**

10 A. The Company is actively negotiating project schedules and commercial terms with its
11 shortlisted EPC contractors to address the potential for wind days, extreme weather,
12 wildlife winter range seasonal construction restrictions, and other potential weather-
13 related risks. For example, the Company has shifted construction activities such as
14 installation of turbine foundations and collector systems from 2020 to 2019 in the
15 proposed construction schedules to mitigate weather related construction risk in 2020.
16 The Company's economic analysis supporting the Combined Projects incorporates
17 these EPC contract provisions.

18 **Q. Do you agree with Mr. Freeman's argument that the customers are**
19 **disproportionately bearing the risk of the Combined Projects? (Freeman Direct,**
20 **page 29, lines 21–30.)**

21 A. No. Until the Commission reviews a resource acquisition for prudence, the Company
22 bears all acquisition risks. The Company anticipates that the prudence of its
23 implementation of the Combined Projects will undergo rigorous review in Wyoming,

1 and in all the other states where the Company provides retail service. As such, I do not
2 agree with Mr. Freeman’s assertion that the Company’s “shareholders will be held
3 harmless from anything that goes wrong in the project plan.” (Freeman Direct, page 30,
4 line 1.) In addition, as described by Mr. Link, the risks associated with the Combined
5 Projects are no different than the risks associated with any other utility resource
6 acquisition.

7 **REBUTTAL TO WYOMING INDUSTRIAL ENERGY CONSUMERS**

8 **Q. Does the Company accept any of the conditions that Mr. Phillips recommends to**
9 **address the risks he associates with the Combined Projects? (Phillips Direct,**
10 **page 4, lines 8–28.)**

11 A. No. Mr. Phillips recommends that the Commission impose several conditions related
12 to the Combined Projects’ cost and performance that he argues increase the likelihood
13 of customer benefits. Mr. Phillips’ proposed conditions are completely unprecedented,
14 and none of them have ever been applied to the Company’s past resource acquisitions.
15 Mr. Phillips has presented no basis to upend the traditional regulatory compact.

16 **Q. What is the basis for Mr. Phillips’ proposed conditions?**

17 A. Fundamentally, Mr. Phillips’ conditions presume the traditional regulatory compact
18 does not apply to the Combined Projects because of a perceived lack of resource need
19 and his assessment of key risks. (Phillips Direct, page 2, line 5.) Contrary to Mr.
20 Phillips’ claims, however, the Combined Projects meet both near-term and long-term
21 resource needs and the risks presented by the Combined Projects do not differ from
22 other utility investments. The fact the Company is taking advantage of a time-limited

1 opportunity presented by the expiring PTCs does not mean the Combined Projects exist
2 outside of the traditional regulatory framework for review and approval of CPCNs.

3 Company witnesses Mr. Link and Ms. Joelle R. Steward address the concepts
4 of resource need and the traditional regulatory compact as it applies to Mr. Phillips'
5 arguments. My testimony focuses on Mr. Phillips' assessment of key risks related to
6 project costs, performance, and schedule delays.

7 **Q. Do you have any general comments on Mr. Phillips' conditions?**

8 A. Yes. It is important to note that Mr. Phillips recommends the Commission impose
9 specifically quantified conditions around Wind Project cost and performance
10 assumptions that the Company will update in its January 2018 supplemental filing
11 based on the results of the 2017R RFP. The outcome of the Company's 2017R RFP is
12 likely to change the cost and performance information, and potentially even the
13 underlying commercial structures for the Wind Projects (*e.g.*, benchmark EPC, market
14 build transfer, or market power purchase). Thus, even if it were reasonable to impose
15 conditions similar to Mr. Phillips' proposal, no basis exists to impose the specific cost
16 and performance metrics included in his testimony.

17 **Q. Mr. Phillips proposes a cap on the capital costs of the Combined Projects. (Phillips**
18 **Direct, page 4, lines 12–15.) Does the Company appreciate the importance of the**
19 **capital costs of the Combined Projects to the overall benefit delivered to**
20 **customers?**

21 A. Absolutely. The Company is keenly focused on delivering risk-adjusted, least-cost
22 outcomes when securing competitive market EPC costs, terms, and conditions for the
23 Combined Projects. In fact, the Company's negotiated contracts are intended to

1 mitigate cost, schedule, labor, and contractor performance risks. The Company
2 recognizes that the parties participating in this docket are also keenly focused on those
3 important risk-mitigation efforts; however, it is premature to attempt to identify or
4 dispute specific capital cost overrun assessments or caps. While the [REDACTED]
5 value referenced in Mr. Phillips' testimony reflects the proxy value incorporated into
6 the Company's Application to represent the 860 MW of new Wind Projects, that
7 estimate was further refined for final submission in the 2017R RFP. The Company's
8 January 2018 supplemental filing will reflect updated cost estimates for the Wind
9 Projects, if they are selected for the final shortlist.

10 **Q. Does the level of risk or uncertainty of the capital cost estimates for the Combined**
11 **Projects differ from the risks and uncertainty inherent in all resource**
12 **acquisitions?**

13 A. No. The Company's approach to estimate costs and then engage the competitive market
14 during the Combined Projects' development schedules, as described in my testimony
15 above, demonstrates a reasonable and prudent approach to provide additional certainty
16 and mitigate capital cost risk.

17 **Q. Mr. Phillips recommends the imputation of an estimated capacity factor for the**
18 **life of the Wind Projects. (Phillips Direct, page 4, lines 19–22.) Does the Company**
19 **appreciate the importance of project capacity factors when assessing project life-**
20 **cycle cost of energy and benefit projections for customers?**

21 A. Absolutely. But it is unreasonable and unprecedented to impute an assumed capacity
22 factor for the life of these inherently variable resources. The Commission has never
23 imposed such a condition on any of the Company's previous wind projects.

1 Moreover, as described above, it is premature at this point to identify or dispute
2 any project-specific capacity factor assessments. The outcome of the Company’s
3 2017R RFP is likely to change the capacity factor information associated with final
4 shortlisted wind projects. The [REDACTED] value referenced in Mr. Phillips’ testimony
5 reflects the proxy value incorporated into the Company’s Application to represent the
6 Wind Projects at the time of the filing. However, wind projects are ultimately judged
7 by their levelized cost of energy (“LCOE”), and capacity factor is only one component
8 of the LCOE. Installation and operation costs of wind turbines available in the
9 competitive market also contribute to the LCOE. As a result of competitive bidding,
10 wind turbines with significantly lower capital costs, as well as lower projected capacity
11 factors, can be found to offer a lower LCOE assessment than higher cost wind turbines
12 with higher capacity factors. Creating a capacity factor threshold in isolation can lead
13 to the unintended outcome of eliminating projects with lower LCOE assessment and
14 negatively impact our customers. The Company’s proxy capacity factor value, and the
15 Wind Projects costs, were updated for final submission in the 2017R RFP. The
16 January 2018 supplemental filing will provide updated capacity factor estimates for the
17 Wind Projects if they are selected for the final shortlist.

18 **Q. Is there anything about the Wind Projects that makes the estimated capacity**
19 **factor more uncertain than for other wind facilities the Company has developed?**

20 A. No. The Company’s methodology for estimating the capacity factors for the Wind
21 Projects is the same as the methodology previously relied on by the Commission. In
22 this respect, the Wind Projects are no riskier than any of the previous wind projects the
23 Company has successfully developed for customers.

1 **Q. What efforts has the Company taken to validate the capacity factors developed**
2 **for the Wind Projects?**

3 A. The Company engaged an independent third-party wind-resource data technical analyst
4 to review and determine the appropriate capacity factor estimates to incorporate into
5 its Wind Project analyses and 2017R RFP submissions. The third-party technical
6 assessments are based on an annual 50-percent probability (“P50”) approach and
7 provide estimated wind production over several years to account for normal and
8 expected annual variations. By the very nature of a P50 estimate, actual wind project
9 production is expected to be below the P50 estimate half of the years and above the
10 P50 estimate the other half of the years. Requiring the Company to provide the full
11 PTC and energy benefits at the higher of the P50 capacity factor or actual production
12 is asymmetrical and unreasonable.

13 **Q. Has the Company taken additional efforts to validate the capacity factors assumed**
14 **in the bids to be included in the 2017R RFP shortlist?**

15 A. As Mr. Link testifies, the Company engaged another independent third-party wind-
16 resource data technical analysts to review and determine the appropriate capacity factor
17 estimates to incorporate into any final shortlist analyses. The third-party experts based
18 their assessments on a P50 approach. The Company intends to include this independent
19 study in its supplemental filing.

20 **Q. Has the Wyoming Commission previously addressed the Company’s approach to**
21 **reporting and assessment of wind project capacity factor information?**

22 A. Yes. In Docket Nos. 20000-352-ER-09 and 20000-363-EP-10, the Commission
23 addressed the issue in paragraph 172 of the Commission Order:

1 “172. There was considerable discussion at hearing regarding wind
2 capacity and measuring the capacity factor of wind generation projects
3 to determine [i] whether they are operating at capacity levels predicted
4 when the decision was made to construct the projects, or [ii] if the wind
5 resource had been measured more accurately, whether the projects
6 should have been constructed. We believe this is an important issue.
7 However, the evidence suggests that several years experience is
8 necessary to fairly judge the capacity factor of individual projects and
9 of the Company’s wind portfolio as a whole. We therefore direct that the
10 Company work with the Commission Staff to establish a consistent set
11 of data to be gathered by the Company and provided to the Commission
12 in future rate proceedings that will allow the Commission to make
13 meaningful comparisons between the actual operating capacity factor of
14 the Company’s wind generation facilities and the capacity factor upon
15 which the Company based its decision to pursue those projects. In
16 accomplishing this task, the Company and the Commission Staff shall
17 identify the best industry practices and employ them in their work.”
18 (emphasis added)

19 **Q. Did the Company and Commission Staff agree upon a consistent set of data to be**
20 **gathered by the Company as a result of the aforementioned Order?**

21 A. Yes. The Company and Commission Staff agreed to represent wind generation data for
22 individual projects on an expected calendar-year basis, actual calendar-year basis,
23 average of all calendar-years basis, and median of all calendar-years basis in future rate
24 proceedings for each wind resource it owns.

25 **Q. How have the Company’s Wyoming wind resources performed from 2010 through**
26 **2016, as compared to the annual capacity factors estimated for the individual**
27 **projects at the time of acquisition decision-making?**

28 A. Overall, the Company’s wind resources in the Medicine Bow, Wyoming area near the
29 proposed Aeolus substation have out-performed the pre-construction estimates, as set
30 forth in the following table:

Capacity Factor Summary	MW Nameplate	COD	Pre-Construction P50 (non leap years)	Average Actual 2010 - 2016	Difference
SEVEN MILE HILL I	99	12/31/2008	41.3%	39.2%	-5.0%
SEVEN MILE HILL II	19.5	12/31/2008	39.3%	42.5%	8.1%
HIGH PLAINS	99	9/13/2009	35.7%	35.2%	-1.3%
MCFADDEN RIDGE I	28.5	9/29/2009	34.5%	37.2%	7.9%
DUNLAPI	111	10/1/2010	36.4%	40.2%	10.4%
Total	357				

2 **Q. Do the results to date indicate fatal flaws or undue risk in the third-party P50**
3 **analysis the Company relies on to assess project economics and customer benefits**
4 **before acquisition of new wind projects?**

5 A. No. If anything, the data presented above indicates the Company's approach to P50
6 capacity factor assessment for its Wyoming projects has provided a conservative
7 representation of results on an average basis through the first seven years of project
8 operation.

9 **Q. Is there a mechanism to appropriately capture the variability in resource benefits**
10 **inherent with new wind projects?**

11 A. Yes. As utilized with previously implemented new wind projects, the Energy Cost
12 Adjustment Mechanism captures the variability in resource benefits inherent with new
13 wind projects, in conjunction with other system energy costs and PTCs, and distributes
14 those benefits to customers.

15 **Q. Does your summary above provide different results than the data provided in Mr.**
16 **Phillips' testimony about the Company's track record in estimating wind project**
17 **capacity factors? (See Phillips Direct, page 32, Table NLP-5.)**

18 A. Yes. I've limited my wind project capacity factor data set to those projects the Company
19 developed in the Medicine Bow area of Wyoming and placed in service between 2007

1 and 2010. The Company's results with the relatively recent wind projects that were
2 developed near Medicine Bow, Wyoming, are better correlated and more representative
3 of the results the Company would expect with the Wind Projects, particularly
4 considering that each of the four Wind Projects incorporated into the Application are
5 located adjacent to the Company's existing operating sites included in the chart above.
6 Mr. Phillips' reliance on capacity factor data from projects developed in the earliest
7 years of the wind industry, and those developed outside the Medicine Bow, Wyoming
8 area in those early years, skews the data set and presents an inapt comparison.

9 **CONCLUSION AND RECOMMENDATION**

10 **Q. What is the conclusion of your rebuttal testimony?**

11 A. The Company's Combined Projects remain well positioned to provide customer
12 benefits and are being effectively developed in parallel to ongoing regulatory
13 proceedings, including the 2017R RFP, procurement activities, and upcoming
14 permitting to mitigate project risks and deliver upon desired outcomes. Project
15 development activities continue to be managed within a reasonable timeline to assess
16 project risks, incorporate those assessments into decision-making, and allow for
17 changes in project direction (*i.e.*, off-ramps), if necessary. The Company appreciates
18 the engagement of parties and believes the Combined Projects will benefit from this
19 rigorous stakeholder review before the Company makes major commitments to the
20 project. The Company looks forward to the opportunity to supplement its filing in
21 January 2018, with the results of the 2017R RFP and more detailed cost and production
22 information about the Combined Projects.

1 **Q. Does this conclude your rebuttal testimony?**

2 **A. Yes.**

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE)
APPLICATION OF ROCKY MOUNTAIN)
POWER FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY AND NONTRADITIONAL)
RATEMAKING FOR WIND AND)
TRANSMISSION FACILITIES)

DOCKET NO. 20000-520-EA-17
(RECORD NO. 14781)

AFFIDAVIT, OATH AND VERIFICATION

Chad A. Teply (Affiant) being of lawful age and being first duly sworn, hereby deposes and says that:

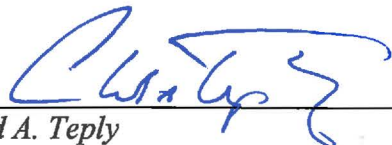
Affiant is the *Sr. Vice President Strategy and Development* for PacifiCorp, which is a party in this matter.

Affiant prepared and caused to be filed the foregoing testimony. Affiant has, by all necessary action, been duly authorized to file this testimony and make this Oath and Verification.

Affiant hereby verifies that, based on Affiant's knowledge, all statements and information contained within the testimony and all of its associated attachments are true and complete and constitute the recommendations of the Affiant in his official capacity as *Sr. Vice President Strategy and Development*.

Further Affiant Sayeth Not.

Dated this 15th day of December, 2017


Chad A. Teply
*Sr. Vice President Strategy and
Development*
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801-220-4715

STATE OF Utah)
) SS:
COUNTY OF Salt Lake)

The foregoing was acknowledged before me by *Chad A. Teply* on this 15 day of December, 2017. Witness my hand and official seal.

Lori Hughes

Notary Public

My Commission Expires: 10/19/19

