

Docket No. 20000-520-EA-17
Witness: Chad A. Teply

BEFORE THE WYOMING PUBLIC SERVICE
COMMISSION

ROCKY MOUNTAIN POWER

Supplemental Direct Testimony of Chad A. Teply

January 2018

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

4 A. Yes.

5 **PURPOSE AND SUMMARY OF SUPPLEMENTAL DIRECT TESTIMONY**

6 **Q. What is the purpose of your supplemental direct testimony in this proceeding?**

7 A. I reflect the results of the Company’s 2017R request for proposals (“2017R RFP”) by
8 updating my testimony supporting the Company’s application (“Application”) for
9 conditional certificates of public convenience and necessity (“CPCNs”) and for
10 nontraditional ratemaking treatment related to the Company’s proposal to construct or
11 procure new wind resources (“Wind Projects”) and to construct the Aeolus-to-
12 Bridger/Anticline transmission line and network upgrades (“Transmission Projects”)
13 (collectively, the “Combined Projects”). I describe the four new wind facilities totaling
14 1,170 megawatts (“MW”) selected as final shortlist resources in the 2017R RFP, and
15 explain how those resources compare to the original proxy benchmark resources
16 incorporated into the Application. I also provide the information required by Wyoming
17 Public Service Commission (“Commission”) Rule Chapter 3, Section 21, for CPCNs
18 for the Wind Projects and for the associated facilities necessary to interconnect the
19 Wind Projects.

20 **Q. Please summarize your supplemental testimony.**

21 A. The Company determined the final shortlist from the 2017R RFP in early January 2018.
22 The Company successfully engaged the competitive market, and the RFP results
23 increase the benefits of the Combined Projects to customers. The Company is on track

1 to successfully deliver the Combined Projects by year-end 2020 through timely
2 development, procurement, and implementation. All of the steps taken by the Company
3 ensure that the Wind Projects will qualify for production tax credits (“PTCs”).

4 The Company is also well positioned to negotiate and implement risk-
5 mitigation measures, and maintain controllable implementation plans for the Wind
6 Projects, including associated interconnection infrastructure. The schedules for the
7 Combined Projects provide reasonable timelines to assess project risks, incorporate the
8 assessments into decision-making, and allow for changes in project direction in
9 response to changing circumstances (*i.e.*, off-ramps). The Combined Projects are in the
10 public interest, providing substantial benefits to customers—and to the state of
11 Wyoming.

12 **GENERAL DESCRIPTION OF THE 2017R RFP FINAL SHORTLIST**

13 **Q. Please describe the Wind Projects selected to the 2017R RFP final shortlist.**

14 A. The Wind Projects selected to the 2017R RFP final shortlist are four facilities in
15 Wyoming totaling approximately 1,170 MW:

- 16 1. McFadden Ridge II—109 MW Company benchmark;
- 17 2. TB Flats I and II (combined into single project)—500 MW Company
18 benchmark;
- 19 3. Cedar Springs—400 MW third-party build-transfer and power purchase
20 agreement; and
- 21 4. Uinta—161 MW third-party build-transfer.

1 **Q. How do these projects relate to the benchmark projects included in the**
2 **Application?**

3 A. In its Application, the Company provided detailed information on four proxy
4 benchmark wind facilities to meet CPCN requirements, and committed to providing
5 updated information regarding the Wind Projects ultimately selected in the 2017R RFP.
6 The Company's McFadden Ridge II and TB Flats I and II benchmarks were selected to
7 the final shortlist. The Company's fourth benchmark wind facility, Ekola, was not
8 selected to the 2017R RFP final shortlist.

9 **Q. Please describe the McFadden Ridge II project.**

10 A. McFadden Ridge II is a nominal 109 MW wind facility located in Carbon and Albany
11 counties, Wyoming, which the Company is currently developing on a Company-
12 controlled site. McFadden Ridge II is expected to have approximately 44 2.3-MW-to-
13 2.5-MW wind turbine generators. The facility will consist of an electrical collection
14 system, a 34.5-kilovolt ("kV")-to-230-kV collector substation, 230-kV breakers, a
15 230-kV tie-line between the wind project and the point of interconnection substation,
16 meteorological towers, access roads, and required communication and control facilities
17 (e.g., metering, hardware, software, and associated communication circuits and other
18 equipment).

19 The McFadden Ridge II project selected to the shortlist is substantively
20 identical to the project described in the Company's direct testimony.

21 **Q. Please describe the TB Flats I and II project.**

22 A. TB Flats I and II is a nominal 500 MW wind facility located primarily in Carbon
23 County, Wyoming, although some facilities may be sited in Albany County as well. We

1 expect TB Flats I and II to have approximately 134 2.0-MW-to-4.2-MW wind turbine
2 generators and similar project infrastructure as described for McFadden Ridge II, with
3 the addition of an operations and maintenance (“O&M”) building.

4 The TB Flats I and II project, as selected to the 2017R RFP final shortlist, was
5 submitted as a single Company benchmark project alternative to benefit from
6 economies of scale and is no longer presented as two stand-alone projects of 250 MW
7 for TB Flats I and 250 MW for TB Flats II projects for CPCN purposes as originally
8 described in the Application.

9 The TB Flats I and II project is substantively identical to the TB Flats I and TB
10 Flats II projects described in the Company’s direct testimony.

11 **Q. Please describe the Cedar Springs project.**

12 A. Cedar Springs is a nominal 400 MW wind facility located in Converse County,
13 Wyoming, that is being developed by a third-party. We expect the project to consist of
14 approximately 161 2.3-MW-to-2.5-MW wind turbine generators and similar project
15 infrastructure as described for McFadden Ridge II, with the addition of an O&M
16 building. The Cedar Springs project, as proposed, will be procured as 50-percent build-
17 transfer and 50-percent power purchase agreement.

18 **Q. Please describe the Uinta project.**

19 A. Uinta is a nominal 161 MW wind facility located in Uinta County, Wyoming. The Uinta
20 project is being developed and delivered by a third-party under a build-transfer
21 agreement. We expect the project to consist of approximately 47 2.3-MW-to-3.6-MW
22 wind turbine generators and similar project infrastructure as described for McFadden
23 Ridge II, with the addition of an O&M building.

1 **Q. What are the total costs for the Wind Projects?**

2 A. The proposed Wind Projects are estimated to cost approximately \$1.30 billion,
3 recognizing the split procurement attributes of the Cedar Springs facility. This amount
4 is lower than the cost estimate for the initial benchmark projects included in the
5 Application, even though the Wind Projects selected to the 2017R RFP final shortlist
6 provide additional capacity. The overall costs of the Combined Projects reflected in the
7 Company's supplemental direct testimony are consistent with the costs included in the
8 Application.

9 **Q. Do all four Wind Projects rely on the Transmission Projects for interconnection?**

10 A. No. McFadden Ridge II, TB Flats I and II, and Cedar Springs, which total 1,009 MW,
11 rely on the construction of the Transmission Projects, which will relieve existing
12 congestion and allow interconnection of those Wind Projects. Uinta, which has a
13 nominal capacity of 161 MW, will interconnect to the Company's Wyoming
14 transmission system in southwest Wyoming and is not reliant on the Transmission
15 Projects for interconnection and delivery. In total, the benefits generated by the Wind
16 Projects' zero-fuel-cost generation, which lowers net power costs and provides 10 years
17 of PTCs, continue to support cost-effective development of the Transmission Projects.

18 **Q. Did the 2017R RFP consider the recently passed federal tax legislation and any
19 potential impacts on wind project proposals?**

20 A. Yes. As discussed in detail in Mr. Rick T. Link's testimony, the 2017R RFP process was
21 adjusted to allow proposals to be updated to reflect any impacts to proposal pricing, or
22 project viability, before determination of the final shortlist.

1 **Q. Has recently passed federal tax legislation resulted in a change to the time-**
2 **sensitive nature of the Combined Projects?**

3 A. No. The time-sensitive nature of the Combined Projects remains and is primarily driven
4 by the pending phase-out of PTCs for new wind resources. As Company witness Ms.
5 Nikki L. Kobliha explains, the recently passed federal tax legislation did not modify
6 the PTC provisions of the tax code.

7 **Q. To receive 100 percent of safe-harbor PTCs, must wind turbine generators still be**
8 **placed in service by the end of calendar year 2020?**

9 A. Yes. To receive 100 percent of safe-harbor PTCs, wind turbine generators in new
10 facilities that began construction before January 1, 2017, through purchase of safe-
11 harbor equipment, must be reviewed, approved, implemented, and placed in-service by
12 year-end 2020. The Company's implementation schedule for the Combined Projects is
13 designed to meet these criteria and provide customers the economic benefit of 100
14 percent of the PTCs.

15 **Q. Do the Wind Projects selected to the 2017R RFP final shortlist meet the Internal**
16 **Revenue Service ("IRS") start-of-construction criteria?**

17 A. Yes. The Company confirmed through its due diligence efforts that each of the Wind
18 Projects selected to the 2017R RFP final shortlist have acquired, or secured the rights
19 to, sufficient wind turbine generator equipment and other facility-specific components
20 before December 31, 2016, to meet the start-of-construction definition for tax purposes.
21 These transactions satisfy the safe-harbor requirements under the PTC guidance issued
22 by the IRS. More specifically, the Company has confirmed 2016 safe-harbor purchases
23 of wind turbine generator equipment for each of the 2017R RFP final shortlist Wind

1 Projects with the respective project developers. Each of the shortlisted 2017R RFP
2 project developers has provided the appropriate evidence of the safe-harbor purchases
3 that will be applied to each of the respective Wind Projects.

4 **Q. How does the Company plan to continue to procure the Wind Projects selected to**
5 **the 2017R RFP shortlist?**

6 A. With the final shortlist determined, the Company will continue to engage the shortlisted
7 counterparties in negotiations to finalize terms and conditions, with a target for
8 execution of definitive agreements by April 16, 2018. The final shortlist Wind Projects
9 include a combination of Company benchmark resources, facilities that have been
10 selected instead of one or more of the Company benchmark resources, and facilities in
11 addition to the Company benchmark resources. These Wind Projects have been
12 assessed as equal-to or better-than the Company benchmark resources included in the
13 Application. In each case, the individual Wind Projects' developer has submitted its
14 proposed commercial structure for construction and procurement of the resource within
15 the guidelines of the 2017R RFP.

16 **Q. Please provide an updated timeline of key decision points, regulatory outcomes,**
17 **and project development activities.**

18 A. The following timeline provides an overview of the key events that have already
19 occurred, and the events that will occur as the currently anticipated resource
20 procurement and 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 passed</p>
2018	<p>Jan. 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>Apr. 16, 2018-Executable Wind Projects Agreements Finalized</p> <p>May 31, 2018-Wind Projects Limited Notice to Proceed (“LNTP”)</p> <p>Jun. 30, 2018-USFWS Eagle Take Permit first-year data collection complete (benchmarks)</p> <p>Nov. 30, 2018-Transmission Projects Engineering, Procurement, and Construction (“EPC”) Contract LNTP (500 kV)</p> <p>Dec. 31, 2018-Wyoming Industrial Siting Council permits 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)</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 FNTP Apr. 1, 2019-Wind Projects Turbine Supply Agreement release (benchmarks)</p> <p>Jun. 30, 2019-USFWS Eagle Take Permit second-year data collection complete (benchmarks)</p> <p>Sept. 30, 2019-Submit voluntary USFWS Eagle Take Permit application (benchmarks)</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 **CONTINUED DEVELOPMENT, NEGOTIATIONS, AND IMPLEMENTATION**

5 **Q. What is the current status of development for each of the Wind Projects?**

6 A. As part of the 2017R RFP process, the Wind Projects have undergone preliminary
7 vetting for interconnection status, wind resource performance, PTC eligibility,
8 permitting status, conformance to specifications, constructability, and equipment
9 supply. Going forward, the Company’s resource development team will engage
10 shortlisted project counterparties in detailed commercial negotiations of scope,
11 schedule, cost, and terms within the construct of the 2017R RFP, and otherwise
12 continue with established development plans and activities for the Wind Projects.

13 **Q. Will the Company develop additional information for the Wind Projects?**

14 A. Yes. If material changes in circumstances or new information on the Wind Projects

1 becomes available during the detailed negotiations, ongoing development, and project
2 implementation activities, the Company will assess the information to ensure the
3 Company delivers the most competitive Wind Projects for customers. The Company
4 will communicate any material changes in circumstances, as discussed in the rebuttal
5 testimony of Company witnesses Ms. Cindy A. Crane and Ms. Joelle R. Steward.

6 **Q. Will the Company provide additional landowner notifications now that the 2017R**
7 **RFP final shortlist has been identified?**

8 A. Yes. To ensure compliance with the Wyoming statute on landowner notifications
9 associated with CPCN applications for wind and transmission facilities, the Company
10 updated landowner information for parcels within 2,000 feet of any 230-kV
11 transmission lines related to the Wind Projects and will work with the Commission to
12 notify landowners who were not previously included in the landowner notifications
13 related to the Transmission Projects.

14 **Q. Are applications with the Wyoming Industrial Siting Council (“ISC”) for the**
15 **Wind Projects being prepared?**

16 A. Yes. The Company’s McFadden Ridge II benchmark project scope was included in a
17 previous permitting process before the ISC, which was approved. The ISC Permit
18 applications for the TB Flats I and II, Cedar Springs, and Uinta projects are being
19 developed and will be filed in accordance with the individual project development and
20 implementation schedules to support year-end 2020 in-service dates now that those
21 projects have been selected to the 2017R RFP final shortlist. Based upon a review of
22 the shortlisted project schedules, the Company expects the ISC review processes and
23 hearings for the TB Flats I and II, Cedar Springs, and Uinta projects will proceed

1 through April 2019, subject to updates identified during detailed negotiation of project
2 contracts, schedules, and implementation plans with each of the shortlisted Wind
3 Projects counterparties. The ISC is required to hold a hearing within 90 days of each
4 application under W.S. § 35-12-109.

5 **Q. Does the Company anticipate landowner participation in the ISC proceedings**
6 **associated with the Wind Projects?**

7 A. Yes. Based upon past experience in siting wind resources in Wyoming, as well as the
8 landowner intervener interests in this docket, the Company anticipates robust
9 participation of landowners in the ISC proceedings for each of the Wind Projects to
10 ensure that all issues and concerns within the scope of the ISC permit process are fully
11 vetted.

12 **Q. Has the Company performed preliminary evaluations of the wind potential at**
13 **each Wind Project site?**

14 A. Yes. Studies for each of the Wind Projects were completed by the individual project
15 developers. The Company also validated wind potential with a third-party wind
16 resource evaluation firm as part of the 2017R RFP process. Wind assessments for each
17 of the Wind Projects indicate that the sites have favorable wind regimes suitable for
18 high performance wind resources. In particular, the Company previously provided
19 testimony in this docket regarding the wind resources and the anticipated capacity
20 factors expected to be produced by the Company's project layouts for the McFadden
21 Ridge II and TB Flats I and II wind projects. The third-party developers of the Cedar
22 Springs and Uinta Wind Projects provided similar assessments of the wind resources
23 and expected capacity factors for their projects, which is included in the exhibits for

1 each project attached to my testimony.

2 The 2017R RFP evaluation team also reviewed the wind resource assessments
3 and independently determined whether the wind data supported the proposed capacity
4 factors or whether adjustments to the proposed capacity factor for a project were
5 warranted. Mr. Link provides additional testimony regarding the results of the 2017R
6 RFP team's independent review in his supplemental direct testimony.

7 **Q. Has each Wind Project developer determined who will be responsible for**
8 **construction of each Wind Project?**

9 A. Not yet. Each of the Wind Project developers has indicated its intent to issue
10 competitive procurement requests for proposals to obtain firm fixed pricing to engineer,
11 procure, construct, and commission each wind facility now that they have been added
12 to the 2017R RFP final shortlist. For the McFadden Ridge II and TB Flats I and II
13 projects, the Company is negotiating with shortlisted EPC contractors that submitted
14 formal proposals in 2017.

15 **Q. Has each Wind Project developer determined who will supply the wind turbine**
16 **generators for each Wind Project?**

17 A. Not entirely. As discussed above, each of the Wind Project developers has acquired or
18 has rights to acquire safe-harbor wind turbine generator equipment and other project-
19 specific components, which it proposes to use at the Wind Projects as required to meet
20 the IRS's start-of-construction criteria for PTC eligibility. Each of the Wind Project
21 developers also indicated its intent to finalize procurement of follow-on wind turbine
22 generator equipment through competitive procurement requests for proposals or under
23 existing master supply agreements, and identified its intended equipment suppliers,

1 models, and configurations in its 2017R RFP submittals.

2 **Q. How did the Company generate the cost information for construction, operation,**
3 **and maintenance of the individual Wind Projects through their useful lives?**

4 A. As further discussed in Mr. Link's testimony, the Company prepared its capital cost
5 estimates for the Wind Projects using information from a variety of sources.

6 For its McFadden Ridge II and TB Flats I and II benchmark Wind Projects, the
7 Company obtained wind turbine costs from competitive procurement processes that
8 were held in 2016 to procure the Company's safe-harbor wind turbine generator
9 equipment and in 2017 for follow-on wind turbine generator equipment. The Company
10 also obtained balance of plant engineering, procurement, construction, and
11 commissioning costs from a competitive procurement process that was held in 2017 to
12 support final submittals in the 2017R RFP process. Transmission interconnection costs
13 were estimated using comparable wind facility transmission studies and prior project
14 experience, and internal project development; management, and permitting costs were
15 estimated based upon the Company's experience with construction of past wind
16 facilities and other recent generation resource additions. The Company applied
17 contingencies in various cost categories to account for project uncertainties given the
18 current stage of development of the project. O&M cost estimates were developed based
19 upon the Company's experience with wind resource O&M budgets and third-party
20 contracts for the Company's existing wind facilities. Ongoing capital costs were
21 estimated based upon the Company's experience and indicative costs provided by wind
22 turbine generator suppliers for critical capital components.

23 For the third-party developed Wind Projects, the Company received

1 competitive market proposals for a combination of build-transfer projects and power
2 purchase agreements within the guidelines provided in the 2017R RFP. All bid
3 proposals received through that process require a bid-validity date through April 16,
4 2018, and final shortlist bidders provided a letter signed by an officer that commits to
5 the requirements of the 2017R RFP. Transmission interconnection costs for the
6 individual projects were informed by transmission system impact studies, and internal
7 project development, management, and permitting costs were estimated based upon the
8 developers' experience with development and construction of past wind facilities.
9 O&M cost estimates were developed based upon the Company's experience with wind
10 resource O&M budgets and third-party contracts for the Company's existing wind
11 facilities. Ongoing capital costs were estimated based upon the Company's experience
12 and indicative costs provided by wind turbine generator suppliers for critical capital
13 components.

14 **Q. Will the Company and third-party developers collaborate with the Wyoming**
15 **Game and Fish Department, the U.S. Fish and Wildlife Service, and other**
16 **environmental agencies to develop and implement the Wind Projects?**

17 A. Yes. The Company and the third-party project developers have initiated discussions
18 with the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service
19 regarding developing and implementing the Wind Projects. The Company and the
20 third-party project developers have also begun pre-construction usage surveys for
21 various avian, bat, and wildlife species using recommendations from applicable state
22 and federal guideline documents, including the 2012 Land Based Wind Energy
23 Guidelines. The Company and third-party project developers will coordinate with

1 county, state, and federal agencies that have jurisdiction over development, permitting,
2 and operations to ensure appropriate environmental and safety measures are
3 implemented throughout the life of the Wind Projects. The Company is committed to
4 establishing development and implementation schedules and protocols that recognize
5 the potential environmental impacts of the Wind Projects and strive to mitigate negative
6 impacts.

7 **Q. Will the Wind Projects' wind turbine generators or associated infrastructure be**
8 **built in Wyoming's Greater Sage Grouse Core area?**

9 A. No. The Wind Projects' wind turbine generators and associated infrastructure,
10 including the associated generation interconnection tie-lines, will not be located within
11 the current boundaries of Wyoming's Greater Sage Grouse Core area.

12 **Q. How will potential visual and lighting impacts from the Wind Projects be**
13 **addressed?**

14 A. State and county permitting regulations contain requirements that recognize and
15 address potential visual and lighting impacts. The Company and third-party developers
16 will incorporate those applicable measures into the siting, construction, and operations
17 of the Wind Projects as part of the permitting process. Such measures may include:
18 down shielded lighting on project infrastructure; Federal Aviation Administration
19 approved/recommended turbine lighting protocols; active aviation light management;
20 and use of approved paint colors for turbines.

21 **Q. When will construction of the Wind Projects begin and end?**

22 A. As described in detail in the exhibits attached to my testimony, site construction of the
23 Wind Projects will begin as soon as the second quarter of 2019. The Company and the

1 third-party developers will not begin construction, however, until all of the necessary
2 regulatory approvals and applicable permits and authorizations from other local, state,
3 tribal, or federal governmental agencies that have jurisdiction over the construction or
4 operation of the Wind Projects have been received, including approval from the
5 Wyoming ISC to ensure that the projects ultimately selected are in the best interest of
6 customers. The Company anticipates that substantial completion for the Wind Projects,
7 under normal construction circumstances, weather conditions, labor availability, and
8 materials delivery, will be achieved by November 15, 2020, or as otherwise updated
9 during detailed negotiation of project contracts, schedules, and implementation plans
10 with each of the shortlisted Wind Projects counterparties.

11 **Q. What is the expected operational life of the Wind Projects?**

12 A. The anticipated operational life of the Wind Projects has been assessed at 30 years for
13 the purposes of the CPCN Application and this supplemental filing, which aligns with
14 the Company's currently approved depreciable life for wind resources. The operational
15 life may be reviewed and extended based on advances in turbine technologies or
16 improvements in maintenance processes (or both) through the course of the Company's
17 regular depreciation studies and filings.

18 **Q. Will the Wind Projects be decommissioned or repowered at the end of their
19 operational life?**

20 A. The Company may dismantle and reclaim the Wind Projects delivered under a build-
21 transfer agreement at the end of their operational life based upon the requirements of
22 the operating permit. Typically, county and state agencies identify the decommissioning
23 requirements during the permitting process, including expected reclamation efforts and

1 overall decommissioning costs and security requirements. The Company may also
2 consider replacing or upgrading the existing infrastructure at the end of the operational
3 life if conditions (*i.e.*, economics, permitting, customer load needs, etc.) are conducive
4 to reinvestment in the Wind Projects.

5 **REQUIREMENTS OF COMMISSION RULE CHAPTER 3, SECTION 21**

6 **Q. Please summarize how the Company’s Application meets the requirements for a**
7 **CPCN application.**

8 A. Commission Rule, Chapter 3, Section 21(c), describes what must be included in an
9 application for a CPCN. The exhibits to my testimony include the required information
10 for the Wind Projects.

11 **Q. Please describe your exhibits for the nominal 400 MW Cedar Springs facility that**
12 **provide the information required by Commission Rule, Chapter 3, Section 21(c).**

13 A. The required information for the nominal 400 MW Cedar Springs facility is included
14 in Confidential Exhibit RMP___(CAT-1SD) to my testimony. Confidential Exhibit
15 RMP___(CAT-1SD) subparts are:

- 16 • Confidential Exhibit RMP___(CAT-1SD-1)—Wind Turbine Generator (“WTG”)
17 Site Layout
- 18 • Confidential Exhibit RMP___(CAT-1SD-2)—Site Wind Resource Data
- 19 • Confidential Exhibit RMP___(CAT-1SD-3)—Preliminary Project Schedule
- 20 • Confidential Exhibit RMP___(CAT-1SD-4)—Project Map
- 21 • Confidential Exhibit RMP___(CAT-1SD-5)—Metes and Bounds Property
22 Information
- 23 • Highly Confidential Exhibit RMP___(CAT-1SD-6)—Generation Tie-line Property

1 Information

- 2 • Confidential Exhibit RMP___(CAT-1SD-7)—Environmental Studies
- 3 • Confidential Exhibit RMP___(CAT-1SD-8)—Raptor Nest Information
- 4 • Confidential Exhibit RMP___(CAT-1SD-9)—Permitting Matrix
- 5 • Confidential Exhibit RMP___(CAT-1SD-10)—System Impact Re-Study Q712
- 6 • Confidential Exhibit RMP___(CAT-1SD-11)—230-kV Tie-line Structure Details

7 **Q. Please describe the exhibits to your testimony for the nominal 500 MW TB Flats I**
8 **and II wind facility that provide the information required by Commission Rule,**
9 **Chapter 3, Section 21(c).**

10 A. The required information for the nominal 500 MW TB Flats I and II wind facility is
11 included in Confidential Exhibit RMP___(CAT-2SD) to my testimony. Confidential
12 Exhibit RMP___(CAT-2) subparts that have been updated since my direct testimony
13 was filed in this docket are:

- 14 • Confidential Exhibit RMP___(CAT-2SD-1)—Preliminary Site Layout
- 15 • Confidential Exhibit RMP___(CAT-2SD-7)—Parcel Map
- 16 • Confidential Exhibit RMP___(CAT-2SD-14)—Large Generator Interconnection
17 Facilities Study

18 **Q. Please describe the exhibits for the nominal 109 MW McFadden Ridge II wind**
19 **facility that provide the information required by Commission Rule, Chapter 3,**
20 **Section 21(c).**

21 A. The required information for the nominal 109 MW McFadden Ridge II wind facility is
22 included in Exhibit RMP___(CAT-3SD) to my testimony. Exhibit RMP___(CAT-3)
23 subparts that have been updated since my direct testimony was filed in this docket are:

1 • Confidential Exhibit CAT-3SD-1-WTG Site Layout

2 **Q. Please describe the exhibits to your testimony for the nominal 161 MW Uinta wind**
3 **facility that provide the information required by Commission Rule, Chapter 3,**
4 **Section 21(c).**

5 A. The required information for the nominal 161 MW Uinta wind facility is included in
6 Confidential Exhibit RMP___(CAT-4SD) to my testimony. Confidential Exhibit
7 RMP___(CAT-4SD) subparts are:

8 • Confidential Exhibit RMP___(CAT-4SD-1)—Project Details and Facilities

9 ◦ Confidential Exhibit RMP___(CAT-4SD-1-A)—Site Layout

10 ◦ Confidential Exhibit RMP___(CAT-4SD-1-D)—Preliminary One-Line
11 Diagrams

12 ◦ Confidential Exhibit RMP___(CAT-4SD-1-E)—Wetlands and Surface Water

13 • Confidential Exhibit RMP___(CAT-4SD-2)—Site Description

14 ◦ Confidential Exhibit RMP___(CAT-4SD-2-A)—Preliminary Metes and
15 Bounds Description

16 • Confidential Exhibit RMP___(CAT-4SD-3)—Geology

17 ◦ Confidential Exhibit RMP___(CAT-4SD-3-A)—Vicinity Topography

18 ◦ Confidential Exhibit RMP___(CAT-4SD-3-B)—Groundwater

19 ◦ Confidential Exhibit RMP___(CAT-4SD-3-C)—Surficial Geology

20 ◦ Confidential Exhibit RMP___(CAT-4SD-3-D)—Bedrock Geology

21 ◦ Confidential Exhibit RMP___(CAT-4SD-3-E)—Mineral Deposits

22 • Confidential Exhibit RMP___(CAT-4SD-4)—Natural Resources

23 ◦ Confidential Exhibit RMP___(CAT-4SD-4-A)—Visual Resources

1 resources for the benefit of residents and the long-term economic health of the state.
2 Finally, the Wind Projects are beneficial to Wyoming because they demonstrate that
3 wind is one of many valuable natural resources in the state. Economically attractive
4 and environmentally responsible projects, such as the Wind Projects, should be
5 constructed in Wyoming to take advantage of the valuable wind resource for the benefit
6 of residents and, as it relates to the Company, for the benefit of our significant customer
7 base.

8 **Q. Please summarize your recommendation to the Commission.**

9 A. I recommend that the Commission determine that the Wind Projects provide significant
10 benefits to Wyoming customers and the state of Wyoming and therefore are in the
11 public interest. Based on those findings and conclusions, I recommend that the
12 Commission grant the Company the CPCNs for the Wind Projects at the conclusion of
13 these proceedings.

14 **Q. Does this complete your testimony?**

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

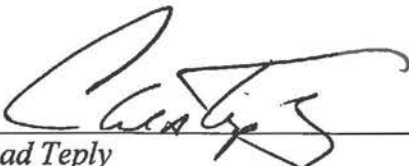
Affiant is the *Sr. Vice President Strategy and Development* for PacifiCorp, which is a party in this matter.

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 11th day of January, 2018



Chad Teply
Sr. Vice President Strategy and Development
1407 W. North Temple, Suite 310
Salt Lake City, UT 84116
801-220-4715

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

The foregoing was acknowledged before me by *Chad Teply* on this 11th day of January, 2018. Witness my hand and official seal.



Notary Public

My Commission Expires: October 19, 2019

