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Attorneys for Rocky Mountain Power

BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF ROCKY MOUNTAIN POWER FOR AN ORDER APPROVING NONTRADITIONAL RATEMAKING RELATED TO WIND REPOWERING	Docket No. 20000-___-EA-17 (Record No. _______)

APPLICATION OF ROCKY MOUNTAIN POWER FOR AN ORDER APPROVING NONTRADITIONAL RATEMAKING RELATED TO WIND REPOWERING

Comes now PacifiCorp d/b/a Rocky Mountain Power ("Rocky Mountain Power" or "Company") under W.S. § 37-2-121, which allows the Wyoming Public Service Commission ("Commission") to approve innovative or nontraditional ratemaking methods. With this Application, the Company respectfully requests that the Commission (a) determine that the Company's decision to upgrade or "repower" existing wind resources is prudent, (b) approve the Company's continued recovery of the replaced wind plant equipment, and (c) approve the Company's proposed ratemaking treatment. The Company proposes to upgrade or "repower" its wind resources because it provides net benefits to customers by increasing energy production, reducing operating costs, and and requalifying the Company's existing wind resources for federal production tax credits ("PTCs"), which expire 10 years after a facility's original commercial operation date. To achieve the full PTC benefits, the Company must complete the wind repowering project by the end of 2020.

Wind repowering includes the installation of new rotors with longer blades and new nacelles with higher-capacity generators, which will increase energy output by an average of 19 percent without changing the footprint, towers, foundations or energy collector systems of the wind facilities. Using modern technology and improved control systems, the repowered wind facilities will produce more cost-effective energy, using zero-cost fuel over an extended useful life at reduced operating costs, saving customers millions of dollars. Because existing towers and foundations will remain in place and the footprint of the existing facilities are unchanged, the wind repowering project also results in minimal environmental impact and permitting requirements.

The Company estimates that the wind repowering project will cost approximately $1.13 billion. Because of the magnitude of this capital investment and the overall scope of the project, the Company requests that the Commission approve the wind repowering project before the Company completes equipment orders and begins construction. In addition, the wind repowering project is exempt from Wyoming's certificate for public convenience and necessity ("CPCN") process because it does not involve the construction of new resources.[1] The Application gives the Commission and interested parties a meaningful opportunity to evaluate the wind repowering project to ensure that the project is reasonable, prudent, and in the public interest.

I. NAME AND ADDRESS OF APPLICANT

1. Rocky Mountain Power, a division of PacifiCorp, is a public utility in the state of Wyoming subject to the jurisdiction of the Commission with regard to its electric service to retail customers in Wyoming. PacifiCorp provides retail electric service as Rocky Mountain Power in the states of Wyoming, Utah, and Idaho, and as Pacific Power in the states of Oregon, Washington, and California. Rocky Mountain Power's principal place of business in Wyoming is 2840 East Yellowstone Highway, Casper, Wyoming 82602.

2. Formal correspondence and requests for additional information regarding this matter should be addressed to:

By email (preferred): datarequest@pacificorp.com

By regular mail:

Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 2000
Portland, Oregon 97232

[1] Under Commission Rule Chapter 3, Section 21(b), the Company provided notice of wind repowering to the Commission on May 30, 2017. On June 6, 2017, at its regularly scheduled open meeting, the Commission confirmed that a CPCN is not required for wind repowering. This decision was memorialized in a letter dated June 8, 2017, from Christopher Petrie to Yvonne Hogle and Paul Hickey.

With copies to:

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Informal inquiries related to this Application should be directed to Stacy Splittstoesser, Wyoming Regulatory Affairs Manager, at (307) 632-2677.

II. SUPPORTING TESTIMONY

3. This Application is supported by the pre-filed written direct testimony and exhibits of the following Company witnesses:

- **Cindy A. Crane,** President and Chief Executive Officer of Rocky Mountain Power, testifies on the financial ability of the Company to make the wind repowering investment, explains the significant benefits to customers from repowering the Company's wind resources, and outlines the reasons why the wind repowering project is prudent and in the public interest. Ms. Crane also briefly describes the Company's proposals for ratemaking treatment and the continued recovery of the costs of the equipment replaced at the time of repowering.

- **Timothy J. Hemstreet**, Director of Renewable Energy Development, provides a detailed scope of the Company's wind repowering project, including technical details, qualification for PTC benefits, increased energy production, reduced operating costs, and continued system reliability. Mr. Hemstreet also addresses the status and timing of wind-turbine-generator ("WTG") equipment purchases, construction requirements, anticipated construction timelines, and the disposition of removed equipment.
- **Rick T. Link**, Vice President of Resource and Commercial Strategy, provides the economic analysis that supports the prudence of the Company's wind repowering project and quantifies the significant customer benefits resulting from repowering. Mr. Link also testifies on the selection of the wind repowering project for the preferred resource portfolio in the Company's 2017 Integrated Resource Plan ("2017 IRP").
- **Jeffrey K. Larsen**, Vice President of Regulation, explains the Company's proposal for the ratemaking treatment of the costs and benefits of the wind repowering project in rates, the accounting treatment of the replaced wind plant equipment, and the inter-jurisdictional allocation of costs.

III. THE WIND REPOWERING PROJECT

A. The Wind Repowering Project Increases Efficiency and Lowers Operating Costs.

4. Recent advancements in wind generation technology, including innovations in wind turbine design and control systems, allow modern wind turbines to generate greater energy from available wind resources. To take advantage of these recent technologies, the Company proposes to repower most of its Wyoming wind fleet (Glenrock I, Glenrock III, Rolling Hills, Seven Mile Hill I, Seven Mile Hill II, High Plains, McFadden Ridge, and Dunlap); the Marengo I, Marengo II and Goodnoe Hills facilities in Washington; and the Leaning Juniper facility in Oregon. These facilities currently represent a total of 999.1 megawatts ("MW") of installed wind capacity, with 594 MW in Wyoming, 304.6 MW in Washington, and 100.5 MW in Oregon.

5. Wind repowering involves the installation of new rotors with longer blades and new nacelles with higher-capacity generators. Longer blades increase the wind-swept area of the wind turbine and allows it to produce more energy at lower wind speeds. The nacelle is the housing that sits atop the tower and contains the gear box, low- and high-speed shafts, generator, controller, and brake. The new nacelles will include sophisticated control systems and more robust mechanical and generator components necessary to handle the greater loads that come with longer blades. Together, the new rotors and nacelles are estimated to increase wind facility generation from 11 to 35 percent, or an overall average of 19 percent (21 percent after new interconnection agreements are executed).

6. In addition, the innovative technologies provide for greater control of power quality and voltage, allowing the Company to more easily integrate the energy from the wind facilities into the transmission system and support the reliability of the grid. The new equipment also reduces

future operating costs and extends the useful life of each wind plant by approximately 10 years. Over the current life of the repowered facilities, incremental annual energy production exceeds 550 gigawatt hours ("GWh"). Over the extended life, the incremental annual energy production exceeds 3,280 GWh. Importantly, because the wind repowering project involves efficiency improvements to existing facilities, these benefits can be achieved without the costs and complexity of permitting and constructing wholly new facilities.

B. Completing the Wind Repowering Project by the End of 2020 Maximizes PTC Benefits for Customers.

7. The cost-effectiveness of the wind repowering project is driven in part by the fact that repowering requalifies the Company's existing wind facilities for PTCs, which are set to expire 10 years from their original commercial operation date (expiration dates range from 2016 through 2020). For 2017, wind facilities qualifying for the PTC receive 2.4 cents per kilowatt-hour—or $24 per megawatt-hour, a value adjusted annually based upon an inflation index.

8. To requalify for PTCs, the repowered wind facility must meet the Internal Revenue Service's 80/20 test—meaning that the fair market value of the retained property (*i.e.*, tower and foundation in the Company's proposed project) is no more than 20 percent of the facility's total value after installation of the new property (*i.e.*, nacelle and rotor). The Company has designed its wind repowering project to satisfy this test to ensure that the repowered wind facilities are PTC-eligible.

9. Further, to ensure the repowered facilities are eligible for 100 percent of available PTC benefits, in December 2016, the Company contracted with global wind industry leaders General Electric, Inc., and Vestas-American Wind Technology, Inc., for the purchase of new WTG equipment. These "safe-harbor" equipment purchases allow the repowered facilities to qualify for

100 percent of the value of available PTCs if they are commercially operational by the end of 2020.

10. To achieve commercial operation by 2020, the Company requests that the Commission adopt a procedural schedule that will allow for approval of this Application by March 16, 2018, so that the Company can complete as much of the repowering work as possible in 2019. The renewal of the PTCs has dramatically increased the demand for materials, equipment, and labor for wind facilities. The Company must order equipment and execute construction contracts by early 2018 to ensure that all repowered facilities achieve commercial operation by the end of 2020. A delay in regulatory approval may compromise the Company's ability to meet the 2020 deadline and achieve the PTC benefits.

11. The Company's construction schedule will maximize the value of the existing PTCs by minimizing the period between the expiration of the original PTCs and the eligibility for the new PTCs. The original PTCs expire 10 years after each plant became commercially operational. Thus, the PTCs for most of the facilities will expire in 2018 and 2019. Achieving commercial operation in 2019 for most of the facilities will minimize the time during which the wind facilities are ineligible for PTCs.

C. The Proposed Facilities Provide Substantial Customer Benefits and Advance the Public Interest.

12. The Company's 2017 IRP, filed with the Commission on April 4, 2017, identified wind repowering as a least-cost, least-risk resource. The 2017 IRP is designed to ensure, on a long-term basis, an adequate and reliable electricity supply at a reasonable cost and in a manner that is consistent with the public interest. To that end, the IRP's primary objective is to identify the best mix of resources to serve customers over the short- and long-term, based on an analysis of the

costs and risks associated with various resource portfolios. The IRP identifies the preferred portfolio as the least-cost, least-risk portfolio that can be delivered through specific action items at a reasonable cost and with manageable risks, while ensuring compliance with state and federal regulatory obligations. The preferred portfolio in the 2017 IRP includes repowering all of the wind facilities included in the Application, except Goodnoe Hills, which was still being analyzed when the IRP was filed.

13. The Company conducted a comprehensive economic analysis of the wind repowering project in support of the Application. This analysis demonstrates that wind repowering will provide substantial customer benefits. The Company analyzed nine different scenarios, each with varying natural gas and carbon dioxide ("CO_2") price assumptions, and all nine scenarios show customer benefits, ranging from $41 million when assuming low natural gas and zero CO_2 prices to $589 million when assuming high natural gas and high CO_2 prices. With medium natural gas price and CO_2 price assumptions, wind repowering results in customer benefits of $359 million.

14. The wind repowering project creates these benefits by:

- Increasing energy production from the wind facilities between 11 to 35 percent as a result of longer blades and increased generator capacity;
- Reducing ongoing operating costs associated with aging wind turbines;
- Extending the useful lives of the wind facilities by at least 10 years;
- Increasing the output of renewable energy from existing assets, while avoiding the environmental impacts and view-shed issues associated with new facilities;
- Reducing customer costs by requalifying the wind facilities for PTCs for an additional 10 years; and,

- Improving the ability of the wind facilities to deliver cost-effective renewable energy into the transmission system through enhanced voltage support and power quality.

D. The Company has the Ability to Fund the Wind Repowering Project.

15. The Company anticipates that the total costs of the wind repowering project will be $1.13 billion. The Company will fund the wind repowering project through its normal sources of capital, both internal and external, including net cash flow from operating activities, public and private debt offerings, the issuance of commercial paper, the use of unsecured revolving credit facilities, capital contributions and other sources. Although the wind repowering project is a significant investment, the financial impact of repowering will not impair the Company's ability to continue to provide safe and reliable electricity service at reasonable rates. In addition, approval of the Company's application and requested ratemaking treatment provides important regulatory support for the Company's current credit rating while it makes the significant capital investments set forth in the IRP.

E. Proposed Ratemaking Treatment.

16. The Company proposes a new Resource Tracking Mechanism ("RTM") to address the proper ratemaking treatment to match the annual costs and benefits of the wind repowering project until the incremental costs and benefits are fully reflected in base rates, primarily including incremental capital and operating costs, net power costs savings not already captured in the Company's Energy Cost Adjustment Mechanism ("ECAM"), and PTC benefits. The Company forecasts a net benefit from the wind repowering project, and this mechanism will align the costs and benefits so that customers receive the full net benefits from the repowering project while shareholders receive appropriate cost recovery of the prudent investment. Once the full costs are

reflected in base rates in a general rate case, the Company proposes that the mechanism continue to track only year-to-year changes in PTCs to capture the full impact of the new PTCs.

IV. LEGAL STANDARD

17. W.S. § 37-2-121 authorizes a utility to apply to the Commission for use of "innovative, incentive or nontraditional rate making methods." The Commission may approve such proposals if they are supported by substantial evidence and "consistent with the public interest." W.S. § 37-2-121. The Commission has observed that W.S. § 37-2-121 "provide[s] reasonable latitude for innovation, if the innovation does not work against the public interest and leads to just and reasonable results which are not unjustly discriminatory" and that the statute allows the Commission to approve a "wide variety of innovative regulatory concepts." *In the Matter of the Application of Kinder Morgan, Inc., For Authority to Amend its Tariffs Related to the Automatic Default Provisions of the Choice Gas Service Program*, Docket No. 30022-GT-04-48, Record No. 9501, Final Order, ¶ 57 (Mar. 11, 2005). The Commission has relied on this authority to approve innovative or nontraditional ratemaking on numerous occasions. *See, e.g.*, *In the Matter of the Application of Black Hills Power, Inc. for Authority to Establish the Cheyenne Prairie Generating Station Rider Tariff and Current Recovery of Construction Financing Costs*, Docket No. 20002-84-ET-12, Record No. 13336, Order (Nov. 07, 2012) (approving a rate rider to collect the costs of financing the construction of a new generating plant contemporaneous with the construction); *In the Matter of the Application of Rocky Mountain Power For Authority to Implement an Energy Cost Adjustment Mechanism*, Docket No. 20000-368-EA-10, Record No. 12477, Memorandum Opinion, Findings and Order (Feb. 4, 2011) (approving Rocky Mountain Power's ECAM as nontraditional ratemaking in the public interest); *In the Matter of the Application of Questar Gas Company For Approval to Implement an Increase In the Non-Gas*

Rates and Charges For a General Rate Increase of $482,980 and for Approval of a Conservation Enabling Tariff, Docket No. 30010-94-GR-08, Record No. 11846, Memorandum Opinion, Findings and Order (June 17, 2009) (approving Conservation Enabling Tariff as innovative ratemaking under W.S. § 37-2-121).

18. The Commission has also relied on its authority to approve nontraditional ratemaking to provide a process for the Commission and parties to review large, capital-intensive investments that are comparable to wind repowering. In Rocky Mountain Power's 2010 general rate case, the Commission approved a stipulation that provided for a process to review major transmission and environmental capital projects. *In the Matter of the Application of Rocky Mountain Power for Approval of a General Rate Increase*, Docket No. 20000-384-ER-10, Record No. 12702, Memorandum Opinion, Findings and Order Approving Stipulation (Sept. 22, 2011) ("2010 Stipulation"). In the stipulation, the Company agreed to a process that would "allow the Commission an opportunity to meaningfully review, generally before construction, whether the proposed expenditures are reasonable and in the public interest and to allow parties to have meaningful input into that process." *Id.* Appendix A ¶ 13. This review process is based on both the Commission's authority to grant CPCNs under W.S. § 37-2-205, where a CPCN is required, and its authority to approve innovative and nontraditional ratemaking under W.S. § 37-2-121 for projects that do not require a CPCN. *Id.* ¶ 121 (stipulation "addressed a deep concern for evaluating the prudence of major capital projects by proposing a marriage of revisions to our existing process for granting [CPCNs] with our statutory authority for innovative ratemaking.").

19. While the wind repowering project does not fall under the terms of the 2010 Stipulation, approval of the Company's wind repowering project is consistent with the policy and purpose of the 2010 Stipulation, and the use of W.S. § 37-2-121 in addressing innovative, incentive

or nontraditional rate making methods. Review of the Company's repowering project under this statutory authority will give the Commission and parties an opportunity to review wind repowering before construction begins, allowing the Company can respond to potential issues and address concerns before embarking on a project of this scope. Although the Company is not requesting a CPCN, this Application and the supporting testimony and exhibits provide most of the information required for a CPCN under Commission Rule Chapter 3, Section 21(c). Thus, the Commission will have a robust and well-developed record on which to review and approve the Company's wind repowering project and the ratemaking treatment proposed in this Application.

V. PROPOSED NOTICE OF APPLICATION AND PROCEDURAL SCHEDULE

20. A proposed Notice of Application is included with this Application for the Commission's consideration. In addition, the Company is filing a Petition for Confidential Treatment and draft Protective Order concurrently with this Application. The Company includes these documents in both written and electronic format to help facilitate the timely and efficient development of this case, and for the convenience of the Commission.

21. The Company proposes the following Procedural Schedule, consistent with Commission practice:

June 30, 2017	Application filed
July 3, 2017	Notice issued by the Commission
July 17, 2017	Technical conference in Cheyenne
August 4, 2017	Deadline for interventions
August 7, 2017	Scheduling conference
November 23, 2017	Deadline for all parties to file discovery on RMP direct testimony. All responses to discovery are due within 10 business days of receipt.
December 8, 2017	Deadline for intervenors to file pre-filed direct testimony
January 6, 2018	Deadline for all parties to file discovery related to intervenor pre-filed direct testimony. All responses to discovery are due within 5 business days of receipt.
January 10, 2018	Deadline for RMP to file rebuttal testimony and for intervening parties to file cross-answer testimony.
January 15, 2018	Deadline for all parties to file discovery on rebuttal and cross-answer testimony. All responses to discovery are due within 5 calendar days of receipt.
January 19, 2018	Deadline for all parties to exchange exhibits.
January 22, 2018	Deadline for parties to file any pre-hearing reports, pre-hearing motions, any objections to pre-filed testimony and exhibits. Deadline to file exhibits and exhibit index.
January 26, 2018	Pre-hearing conference.
January 29, 2018	Public hearings in Cheyenne
March 16, 2018	Order issued by Commission

VI. CONCLUSION

22. Rocky Mountain Power respectfully requests that the Commission issue an order by March 16, 2018, (a) finding that the Company's decision to repower most of its existing wind resources is prudent, (b) approving the Company's continued cost recovery of the replaced wind plant equipment, and (c) approving the Company's proposed ratemaking treatment. The Commission has authority to approve innovative or nontraditional ratemaking methods. W.S. § 37-2-121. In this case, approval of the wind repowering project is reasonable and in the public interest because repowering the existing wind resources by the end of 2020 will produce significant net benefits for customers.

Respectfully submitted this 30th day of June, 2017.

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