

REDACTED

Rocky Mountain Power

Docket No. 21-035-42

Witness: Timothy J. Hemstreet

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

REDACTED

Direct Testimony of Timothy J. Hemstreet

August 2021

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, business address, and present position with PacifiCorp**
3 **d/b/a Rocky Mountain Power (“Rocky Mountain Power” or the “Company”).**

4 A. My name is Timothy J. Hemstreet. My business address is 825 NE Multnomah
5 Street, Suite 1800, Portland, Oregon 97232. My title is Managing Director of
6 Renewable Energy Development for PacifiCorp. I am testifying for PacifiCorp
7 d/b/a Rocky Mountain Power (“PacifiCorp” or the “Company”).

8 **Q. Please describe your education and professional experience.**

9 A. I hold a Bachelor of Science degree in Civil Engineering from the University of
10 Notre Dame in Indiana and a Master of Science degree in Civil Engineering from
11 the University of Texas at Austin. I am also a Registered Professional Engineer in
12 the state of Oregon. Before joining PacifiCorp in 2004, I held positions in
13 engineering consulting at CH2M HILL (now Jacobs Engineering, Inc.) and
14 environmental compliance at RR Donnelley Norwest, Inc. Since joining
15 PacifiCorp, I have held positions in environmental policy and compliance,
16 engineering, project management, and hydroelectric project licensing and program
17 management. In 2016, I assumed a role in renewable energy development, focusing
18 on PacifiCorp’s wind repowering effort, and assumed my current role in June 2019,
19 in which I oversee the development of renewable energy resources that enhance
20 and complement PacifiCorp’s existing renewable energy resource portfolio.

21 **Q. Have you testified in previous regulatory proceedings?**

22 A. Yes. I have previously sponsored testimony in California, Idaho, Oregon, Utah,
23 Washington, and Wyoming.

24

II. PURPOSE OF TESTIMONY

25 **Q. What is the purpose of your direct testimony in this case?**

26 A. The purpose of my testimony is to provide an overview of the TB Flats Wind
27 Project and provide an update on the status of the project.

28

III. TB FLATS WIND PROJECT

29 **Q. Please provide a brief overview of the TB Flats Wind Project.**

30 A. TB Flats is a 500-megawatt (“MW”) wind generation facility and associated
31 infrastructure, located on approximately 41,000 acres of leased private and state
32 land in Carbon and Albany Counties, Wyoming. The facilities consist of 132 wind
33 turbine generators (“WTGs”), an electrical collector system, collector substations,
34 access roads, meteorological towers, an operations and management building,
35 communication equipment, and supervisory control and data acquisition control
36 equipment.

37 **Q. What are the details of the technologies that are used in this project?**

38 A. The TB Flats project uses modern WTG equipment supplied by Vestas-American
39 Wind Technology, Inc. (“Vestas”), consisting of 28 Vestas model V110-2.0 WTGs
40 and 104 Vestas model V136-4.3 WTGs. The Vestas WTGs are pitch-regulated
41 upwind turbines with active yaw, gearboxes and three-bladed rotors. The V110-2.0
42 WTG has a 2.0 MW generator capacity, a rotor with a 110-meter diameter, and a
43 hub height of 80 meters. The V136-4.30 WTG has a 4.3 MW generator capacity, a
44 rotor with a 136-meter diameter, and a hub height of 82 meters. The WTGs use a
45 microprocessor-controlled pitch control system that allows the WTGs to operate
46 with a variable rotor speed to help maintain output at or near their rated power.

47 **Q. Please describe any changes to the Company's existing utility plant/system**
48 **that were necessary to integrate the TB Flats project with the Company's**
49 **system.**

50 A. Integration of the TB Flats project required the completion of specific
51 interconnection facilities and network upgrades to allow the project to interconnect
52 to the Company's electrical transmission system. The interconnection facilities
53 consisted of circuit breakers and metering at the point of interconnection and the
54 network upgrades consisted of the installation of new breakers and corresponding
55 bus and relay upgrades at the Shirley Basin substation, and a new transmission line
56 from the Shirley Basin substation to the Aeolus substation.

57 **Q. What is the current construction status of the TB Flats Wind Project?**

58 A. At the TB Flats wind project, all of the 132 WTGs have been erected,
59 commissioned, and are now serving customers. Due to the turbine equipment
60 delivery delays associated with the coronavirus pandemic, 28 WTGs were unable
61 to be delivered to the site during the construction season in time to allow for their
62 erection in 2020 prior to the onset of winter weather conditions and high wind
63 speeds that preclude efficient delivery, construction, commissioning, and
64 maintenance activities. As a result, construction activities at the project were halted
65 during the winter so they could resume when weather conditions were once again
66 favorable for construction activities to proceed. Delivery of the remaining 28
67 turbines to the site was completed in May 2021, allowing project construction
68 activities to resume. With major construction activities at the TB Flats project now
69 completed and the project fully in service, remaining construction activities include

70 completion of remaining punch list items, demobilization and site reclamation
71 activities that will be completed later this summer.

72 **Q. Did the Company receive pre-approval for the TB Flats project?**

73 A. Yes. In Docket No. 17-035-40, the Company received pre-approval for the
74 TB Flats project as part of its overall Energy Vision 2020 project.

75 **Q. Did the Company include the TB Flats project in its recent general rate case
76 in Docket No. 20-035-04 (“2020 GRC”)?**

77 A. Yes. The TB Flats project was included in the Company’s revenue requirement.
78 Although the project was included, delays associated with the COVID-19 pandemic
79 resulted in the project to only be partially included in the test period.

80 **Q. What are the final projected costs associated with the TB Flats project?**

81 A. The final projected costs reflected in this filing are approximately \$ [REDACTED] million.
82 This is slightly higher than the projected cost of \$ [REDACTED] million reflected in the
83 2020 GRC. The increase in forecasted costs is due to construction delays attributed
84 to disruption in the worldwide supply chain caused by the COVID-19 pandemic.
85 Mr. McDougal explains the revenue requirement treatment in 2020 GRC and the
86 Company’s request in this application.

87 **Q. Does this conclude your direct testimony?**

88 A. Yes.