

Docket No. 20000-520-EA-17
Witness: Cindy A. Crane

BEFORE THE WYOMING PUBLIC SERVICE
COMMISSION

ROCKY MOUNTAIN POWER

Second Supplemental Direct Testimony of Cindy A. Crane

February 2018

1 **Q. Are you the same Cindy A. Crane who previously filed testimony in this case on**
2 **behalf of Rocky Mountain Power (“Company”), a division of PacifiCorp?**

3 A. Yes.

4 **PURPOSE AND SUMMARY OF TESTIMONY**

5 **Q. What is the purpose of your second supplemental direct testimony?**

6 A. I support the request that the Wyoming Public Service Commission (“Commission”)
7 grant conditional certificates of public convenience and necessity (“CPCNs”) for new
8 wind resources (“Wind Projects”) and for the Aeolus-to-Bridger/Anticline line and
9 network upgrades (“Transmission Projects”) (collectively, the “Combined Projects”). I
10 update the Company’s policy testimony based on the updated results of the Company’s
11 2017R request for proposals (“2017R RFP”).

12 **Q. Please summarize your testimony.**

13 A. The Company updated the 2017R RFP final shortlist to reflect the results of the
14 interconnection restudy process and new system impact studies (“SISs”). The updated
15 final shortlist replaces one Company benchmark resource, McFadden Ridge II, with
16 another benchmark resource, Ekola Flats. The Company’s economic analysis for the
17 updated final shortlist shows an increase in customer benefits, demonstrating that the
18 2017R RFP was robust and produced favorable resource opportunities for customers.

19 **SECOND SUPPLEMENTAL DIRECT TESTIMONY**

20 **Q. Why is the Company making this second supplemental filing?**

21 A. In its first supplemental filing, the Company explained that it had selected four Wind
22 Projects, totaling 1,170 megawatts (“MW”), for the 2017R RFP final shortlist: TB Flats
23 I and II; McFadden Ridge II; Cedar Springs; and Uinta. At that time, however, the

1 Company had not concluded its interconnection restudy process for the Aeolus-to-
2 Bridger/Anticline line or updated its SISs for resources interconnecting to that line,
3 including resources on the 2017R RFP final shortlist. This second supplemental filing
4 updates the 2017R RFP final shortlist to reflect the results of the interconnection
5 restudy process and updated SISs. The updated 2017R RFP shortlist consists of
6 1,311 MW, replacing the McFadden II benchmark resource, totaling 109 MW, with
7 another Company benchmark resource, Ekola Flats, totaling 250 MW.

8 **Q. Why did the Company select the final shortlist in the 2017R RFP before it had SIS**
9 **results?**

10 A. In the original draft of the 2017R RFP filed in Utah in Docket No. 17-035-23, the
11 Company proposed that all bidders have a completed SIS to qualify. The Utah
12 independent evaluator and certain intervenors proposed that the Company require only
13 that bidders show they have requested a SIS. The Company removed the requirement
14 of a completed SIS in the final 2017R RFP approved by the Commission. When the
15 Company announced the final shortlist in January 2018, it still had not completed the
16 interconnection restudy process and updated the SISs. While the interconnection
17 restudy process ultimately affected the final shortlist, the potential implications of the
18 restudy process, if any, on bid selections were not known until the interconnection
19 restudy process was finalized.

20 **Q. What were the results of this process?**

21 A. As explained by Company witnesses Mr. Rick A. Vail and Mr. Rick T. Link, there were
22 two important findings. First, the interconnection restudy process identified that
23 projects with interconnection queue positions higher than a certain point were not

1 viable without Energy Gateway South, a PacifiCorp transmission project that is not
2 scheduled to be built before the expiration of production tax credits (“PTCs”) in 2020.
3 McFadden Ridge II has a queue position higher than the cutoff point, so the Company
4 removed it from the final shortlist.

5 Second, the restudy identified 1,510 MW of total interconnection capacity for
6 projects in eastern Wyoming, up from 1,270 MW. The Company updated its System
7 Optimizer (“SO”) model simulations taking into account these findings. The SO model
8 continued to select TB Flats I and II, Cedar Springs, and Uinta, but replaced McFadden
9 Ridge II with Ekola Flats for the 2017R RFP final shortlist now that more
10 interconnection capacity was identified.

11 **Q. Did the Company update its SO and Planning and Risk (“PaR”) studies to reassess
12 the economic benefits of the Combined Projects?**

13 A. Yes. As explained by Company witness Mr. Link, the Company updated the SO and
14 PaR studies for all nine price-policy scenarios. Mr. Link’s updated economic analysis
15 demonstrates increased customer benefits of \$196 million in the medium case through
16 2050 (as compared to \$137 million in the original filing and \$177 million in the first
17 supplemental filing), and an increased benefit range of \$333 million to \$405 million in
18 the medium case through 2036. Moreover, the updated economic analysis demonstrates
19 the Combined Projects continue to provide net customer benefits under all scenarios
20 studied through 2036, and in seven of the nine scenarios through 2050.

21 **Q. Did the Company prepare new sensitivity analyses to test the likelihood of
22 achieving these economic benefits?**

23 A. Yes, as in the first supplemental filing, the Company updated several different scenarios

1 to determine their impact on the Combined Projects' economic benefits, including a
2 scenario reflecting the Company's proposal for wind repowering, and one comparing
3 the benefits with and without projects from the pending solar RFP, using the latest
4 pricing information from that RFP. In each case, the scenarios confirm the significant
5 customer benefits associated with the Combined Projects.

6 **Q. Based on the results of the 2017R RFP, what modifications is the Company making**
7 **to its request for resource approval related to the Wind Projects?**

8 A. In its first supplemental direct testimony, the Company sought approval to construct or
9 procure four new Wyoming wind projects with a total capacity of 1,170 MW, including
10 three of the benchmark facilities (TB Flats I and II, now combined as a single project,
11 and McFadden Ridge II), and two new facilities (Cedar Springs and Uinta).

12 In this second supplemental filing, the Company still seeks approval of three of
13 the benchmark facilities, but has replaced McFadden Ridge II with Ekola Flats. The
14 Company seeks resource approval for Wind Projects totaling 1,311 MW, consisting of
15 1,111 MW of Company-owned facilities, and a 200 MW power purchase agreement.
16 Of the 1,311 MW total, there are 1,150 MW of Wind Projects in eastern Wyoming
17 enabled by the Aeolus-to-Bridger/Anticline transmission line.

18 **Q. Has any aspect of the Aeolus-to-Bridger/Anticline transmission line changed as a**
19 **result of the updated final shortlist?**

20 A. No. The proposed route and facilities required for the construction of the Aeolus-to-
21 Bridger/Anticline transmission line have not changed.

1 **Q. Are there any modifications to the network upgrades included in this second**
2 **supplemental filing?**

3 A. Yes. The network upgrades required to interconnect McFadden Ridge II are no longer
4 needed. Based on the results of the updated SISs, however, some additional network
5 upgrades to other Wind Projects are required. Mr. Vail provides a detailed description
6 of these network upgrades.

7 **Q. The Company's original and supplemental filings contained a capital cost estimate**
8 **of approximately \$2 billion for the Combined Projects. With additional wind**
9 **resources and network upgrades, have the total costs of the Combined Projects**
10 **changed?**

11 A. Yes. Adding the Ekola Flats wind resource increases total projected capital costs for the
12 Combined Projects from approximately \$2 billion to \$2.245 billion. Mr. Link explains,
13 however, the Company's capital costs have declined by 18 percent from the initial filing
14 on cost-per kilowatt basis. The per-unit capital cost for the benchmark wind projects
15 was \$1,590/kilowatt ("kW") in the initial filing, and \$1,320/kW in the first
16 supplemental filing. The total capital for the Wind Projects in the final shortlist is now
17 \$1,310/kW.

18 **Q. Based on the Company's updated economic analysis, has the Company updated**
19 **its forecast of the near-term rate impact to Wyoming customers?**

20 A. Yes. As explained in the testimony of Ms. Steward, the first-year revenue requirement
21 of the Combined Projects is less than 1.7 percent in 2021, the first full year of operation.
22 This is 0.2 percent lower than the increase projected in the initial filing and 0.1 percent
23 higher than the increase projected in the first supplemental filing.

1 **Q. Considering the updated results of the 2017R RFP and the Company's updated**
2 **analysis of benefits, costs, and risks, do the Combined Projects satisfy the public**
3 **interest standard?**

4 A. Yes. The Combined Projects are the least-cost, least-risk path available to serve the
5 Company's customers by meeting both near-term and long-term needs for additional
6 resources. The Combined Projects provide significant benefits to customers under
7 virtually all scenarios and sensitivities studied.

8 **Q. Does this conclude your second supplemental direct testimony?**

9 A. Yes.

