

1 **Q. Please state your name, business address and position with PacifiCorp dba**
2 **Rocky Mountain Power.**

3 A. My name is Hui Shu, my business address is 825 N.E. Multnomah, Suite 600,
4 Portland, Oregon 97232, and my present position is Manager, Net Power Costs.

5 **Qualifications**

6 **Q. Please describe your education and business experience.**

7 A. I received an undergraduate degree in Electrical Engineering and finished training
8 in the program for Master in Business Administration from University of
9 Shanghai for Science and Technology. I received a PhD degree in Systems
10 Science with a focus on Econometrics from Portland State University. I have
11 worked for PacifiCorp since 1992 and have held positions in the commercial and
12 trading and regulatory areas. I accepted my current position as the manager of
13 regulatory net power cost analysis in February 2008.

14 **Q. Please describe your current duties.**

15 A. I am responsible for the coordination and preparation of net power cost and
16 related analyses used in retail price filings. In addition, I represent the Company
17 on power resource and other related issues in regulatory proceedings across the
18 Company's six-state service territory.

19 **Q. Will you please summarize your testimony?**

20 A. I present the Company's proposed net power cost impact of the major plant
21 additions, specifically the scrubber installed at the Dave Johnston unit 3 ("DJ3")
22 and the Ben Lomond to Terminal transmission line.

23

24 **Q. What are the changes in the operational characteristics of the DJ3?**

25 A. As explained in Mr. Chad A. Teply's testimony, the Company expects installation
26 of the scrubber to cause degradation at DJ3. The maximum dependable capacity
27 is expected to decrease by approximately 4.2 megawatts, and the average heat rate
28 is expected to increase by 138 British thermal units per kilowatt-hour of
29 generation.

30 **Q. What is the impact of such degradation on the Company's net power costs?**

31 A. The net impact of the installation of the scrubber at DJ3 for the 12-month period
32 ending June 2010 is to increase net power costs by approximately \$1.6 million.

33 **Q. Could you explain how you calculated the incremental increase?**

34 A. The Company calculated the impact of the DJ3 scrubber as a one-off study from
35 the Company's rebuttal position in its general rate case in Docket No. 09-035-23.
36 The only changes to inputs from that position are the reduction in capacity and
37 increase in heat input at DJ3.

38 **Q. Did you use the same net power cost model to calculate the impact of the**
39 **major plant additions in this application?**

40 A. Yes. The Company calculated the net power cost impact of the degradation at
41 DJ3 using the same GRID model as the Company used in Docket No. 09-035-23.

42 **Q. What capacity output was included in the net power cost analysis in Docket**
43 **No. 09-035-23 for DJ3?**

44 A. The capacity included in the GRID model for DJ3 was 220 megawatts for the first
45 ten months and 230 megawatts for the last two months of the test-period. Initially
46 during the case preparation for Docket No. 09-035-23 the Company planned an

47 upgrade to DJ3 for the scheduled overhaul in the spring of 2010. However, this
48 upgrade was subsequently postponed, and the capital investment was removed
49 from the case. However, the capacity upgrade was inadvertently left in the net
50 power cost study understating the net power costs for Docket No. 09-035-23.

51 This increased capacity reduced net power costs by approximately \$0.1 million,
52 which benefited our customers.

53 **Q. Did the Company revise the net power cost analysis to remove the additional**
54 **10 megawatts at DJ3 in this application?**

55 A. No. The Company believes that the intent and purpose of the alternative cost
56 recovery mechanism for major plant additions is to calculate the incremental
57 difference caused by adding the new plant addition between base rates from the
58 most current general rate case. It was not the intent of this recovery mechanism to
59 update assumptions or forecasts. As stated earlier, the only changes made to the
60 GRID analysis provided in the Company's rebuttal position in Docket No. 09-
61 035-23 were to decrease the capacity by 4.2 megawatts and increase the average
62 heat rate by 138 British thermal units per kilowatt-hour of generation to identify
63 the incremental impact caused by the addition of the scrubber.

64 **Q. Were there any impacts to net power costs due to the addition of the**
65 **transmission line from Ben Lomond to Terminal?**

66 A. No. The addition of the transmission is within the transmission area "Utah North"
67 as modeled in GRID. While this addition will increase reliability and capacity
68 within that area, it has no impact on modeled net power costs, given the simplified
69 topology in GRID.

70 **Q. The Company's rebuttal position in Docket No. 09-035-23 may not be the**
71 **final net power costs ordered by the Commission in that case. Does the**
72 **Company believe having different base net power costs, before the plant**
73 **additions, have a material impact on your incremental net power cost**
74 **analysis for this major plant addition application?**

75 A. No. As I stated earlier the purpose of my analysis is to identify the incremental
76 impact of the plant additions. As long as all other assumptions are consistent in
77 the before and after net power cost studies, I would expect it would have very
78 little impact on the incremental difference.

79 **Q. Does this conclude your testimony?**

80 A. Yes.