

1 **Q. Please state your name, business address and present position with Rocky**
2 **Mountain Power (the Company), a division of PacifiCorp.**

3 A. My name is Hui Shu, my business address is 825 NE 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 in Systems Science with
10 a focus on Econometrics from Portland State University. I have worked for
11 PacifiCorp since 1992 and have held positions in the commercial and trading and
12 regulatory areas. I accepted my current position as the manager of regulatory net
13 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 for the Populus to Ben Lomond transmission line and the Dunlap I wind
22 project.

23 **Q. How does the addition of the Populus to Ben Lomond transmission line**
24 **impact net power costs?**

25 A. As discussed in Mr. John A. Cupparo's testimony, the Populus to Ben Lomond
26 transmission line is a section of the Company's comprehensive transmission
27 expansion plan known as "Energy Gateway." The initial benefit of the section to
28 customers is to enhance reliability and improve transfer capability within the
29 existing system. In addition, the Populus to Ben Lomond transmission line
30 increases the transmission capacity across Path C from southeast Idaho to
31 northern Utah by approximately 650 megawatts, which makes it possible to better
32 utilize the market price differentials between the east and west sides of the
33 Company's system. For further details, please refer to the testimony of Company
34 witnesses Mr. Cupparo and Mr. Darrell T. Gerrard.

35 **Q. How does the addition of the Dunlap wind project impact net power costs?**

36 A. The generation from the 111-megawatt Dunlap I located in Wyoming provides
37 nearly free energy to the Company's portfolio of resources, except the costs
38 incurred to integrate the intermittent wind generation into the Company's resource
39 portfolio. For further details on this project, please refer to the testimony of
40 Company witness Mr. Stefan A. Bird.

41 **Q. Could you explain how you calculated the impact of the two plant additions?**

42 A. The calculations are carried out in the following steps:

- 43 1. Establish the Commission ordered net power costs from Docket No. 09-035-
44 23 at \$1.003 billion on a total Company basis.

- 45 2. Reduce the capacity of the Dave Johnston unit 3 by 4.2 megawatts for a 12-
46 month period, which was reflected in the Company's last major plant addition
47 case in Docket No. 10-035-13 for the impact of scrubber.
- 48 3. Increase the transfer capability from southeast Idaho to northern Utah by 650
49 megawatts for a 12-month period.
- 50 4. Add the Dunlap I wind project for a 12-month period.

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

53 A. Yes. The same GRID model is used as in the last general rate case Docket No.
54 09-035-23 and the last major plant addition case, Docket No. 10-035-13.

55 **Q. What impact do the addition of the transmission line from Populus to Ben**
56 **Lomond and the Dunlap I wind project have on net power costs?**

57 A. The impact of adding the transmission and the Dunlap I wind projects reduces net
58 power costs by approximately \$1.4 million and \$8.0 million, respectively on a
59 total Company basis. Exhibit RMP___(HS-1) has a summary of impact on net
60 power costs.

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

62 A. Yes.