

Docket No. UE 263  
Exhibit PAC/600  
Witness: Robert A. Ward

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**PACIFICORP**

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**Direct Testimony of Robert A. Ward**

**March 2013**

**DIRECT TESTIMONY OF ROBERT A. WARD**

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1 **Q. Please state your name, business address, and present position with**  
2 **PacifiCorp d/b/a Pacific Power (PacifiCorp or Company).**

3 A. My name is Robert Allen Ward. My business address is 825 NE Multnomah  
4 Street, Suite 700, Portland, Oregon 97232. My present position is Manager of  
5 Narrowband Compliance. I am responsible for ensuring that PacifiCorp complies  
6 with the recently enacted Federal Communications Commission (FCC)  
7 narrowband rules and, to that end, the delivery and implementation of a compliant  
8 two-way radio system for the Company.

### 9 **QUALIFICATIONS**

10 **Q. Briefly describe your education and professional experience.**

11 A. I graduated with a Bachelor of Science degree in Electrical Engineering from the  
12 University of Miami. I have been PacifiCorp's Narrowband Compliance Program  
13 Manager since April 2010. Before that, I served as Manager of Network  
14 Engineering from January 2010 to April 2010, Director of Telecommunications  
15 from March 2001 to December 2009, and Manager of Network Engineering from  
16 July 1998 to March 2001.

17 Before joining PacifiCorp in July 1998, I worked at Florida Power and  
18 Light for 24 years in a variety of positions of increasing responsibility in the  
19 generation, transmission and distribution, and information technology  
20 organizations.

### 21 **PURPOSE OF TESTIMONY**

22 **Q. What is the purpose of your testimony?**

23 A. The purpose of my testimony is to describe the Company's narrowband

1 compliance program. I will demonstrate why these plant additions are reasonable,  
2 prudent, and should be included in the Company's revenue requirement in this  
3 case.

4 **Q. Please summarize your testimony.**

5 A. My testimony describes the two-way radio system implemented to comply with  
6 FCC narrowband rules that took effect on January 1, 2013. In particular, I will  
7 describe those assets placed into service for the benefit of Oregon customers.

8 **Q. Please provide a brief description of the purpose and necessity of these assets.**

9 A. The Company uses two-way radio communications for efficient operations,  
10 remote system monitoring, reliable crew dispatch, and emergency response.

11 **Q. Please explain why these business functions are unmet by commonly  
12 available commercial services such as cellular telephones.**

13 A. The Company relies on two-way radio communications for power restoration and  
14 emergency response. Fulfilling these customer commitments is problematic when  
15 power is disrupted to the cellular infrastructure; for example, cellular service in  
16 Astoria was inoperative for three days following a coastal gale in December 2007.

17 **Q. Please briefly describe the assets added to comply with the FCC narrowband  
18 rules.**

19 A. Assets added to comply with the FCC narrowband rules include radio licenses,  
20 radio transmitter sites, supporting microwave transport facilities, electronic  
21 switching equipment, communications console equipment, monitoring and control  
22 equipment, mobile radios, portable radios, and peripheral devices.

1 **Q. Please explain the necessity for replacing the Company's legacy two-way**  
2 **radio communications system.**

3 A. The FCC has jurisdiction over the use of two-way radio communications systems  
4 in the United States. Seeking to obtain greater spectrum efficiency, the FCC  
5 released its Third Memorandum Opinion and Order in December 2004. This  
6 order mandated that all non-federal wideband radio systems licensed to operate on  
7 frequencies below 512 megahertz (MHz) convert to narrowband technology by  
8 January 1, 2013. Accordingly, the legacy wideband radio systems used by the  
9 Company and others would become obsolete. According to data provided by the  
10 FCC, a total of 107,665 licensees were affected.

11 **Q. Please state the projected cost to comply with the FCC's order.**

12 A. The projected capital cost to comply with the FCC's order on a total-company  
13 basis is \$119.3 million. Assets totaling \$64.4 million have been placed in service  
14 as of June 30, 2012, to comply with this order. The remaining total-company  
15 capital costs of \$54.9 million, or \$20 million Oregon-allocated, will be placed in  
16 service by October 2013 as shown in the exhibit of Mr. Gary W. Tawwater  
17 (Exhibit PAC/1002, Tawwater/8.5.10).

18 The projected capital cost to comply with this order on a total-company  
19 basis is \$119.3 million. Assets totaling \$80.0 million have been placed in service  
20 as of December 31, 2012, to comply with this order. The portion of this total-  
21 company expenditure attributable to Oregon customers is projected to be  
22 \$36.1 million. A total of \$26.3 million in assets that benefit the Company's  
23 Oregon customers have been placed in service as of December 31, 2012.

1 **Q. Has PacifiCorp complied with the FCC's order?**

2 A. Yes. The Company is currently compliant with the FCC's order. However, three  
3 legacy wideband transmitter sites continue to operate under waivers granted by  
4 the FCC. These waivers expire on October 31, 2013. Construction at each of the  
5 waived sites has been seasonally delayed by lease or permit restriction.

6 **Q. Do any of the transmitter sites operating under FCC waivers serve Oregon?**

7 A. Yes. The transmitter site at Mt. Isabelle serves southwest Medford, Oregon. It  
8 will be constructed in summer 2013 and will also accommodate the State of  
9 Oregon's radio system. Incremental cost incurred to accommodate the State of  
10 Oregon will be offset by lease payments.

11 **Q. What other post-compliance Oregon assets will be added under this  
12 program?**

13 A. Two new Oregon transmitter installations are planned for 2013. The first will be  
14 located at the State of Oregon's facility on Saddlebag Mountain. It will provide  
15 supplemental and back-up communications for Oar Hill, which is currently the  
16 only transmitter site serving the Company's Lincoln City, Oregon customers. The  
17 second transmitter installation will be located at Howard Butte. It will provide  
18 supplemental and back-up communications for Sheep Ridge, which is currently  
19 the only transmitter site serving the Company's customers in Enterprise, Oregon.  
20 Other post-compliance assets will be added in 2013 to improve system reliability  
21 and control.

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

23 A. Yes.