

1 Q. Please state your name, business address and present position with PacifiCorp (the
2 Company).

3 A. My name is Brian K. Hedman, my business address is 825 N.E. Multnomah, Suite
4 800, Portland, Oregon 97232, and my present position is Manager of DSM Policy.

5 **Qualifications**

6 Q. Briefly describe your education and business experience.

7 A. I received an undergraduate degree in Business from the University of Washington
8 and a Masters in Economics from Portland State University. I have worked for
9 PacifiCorp since 1981 and assumed my current title and duties in 1996.

10 Q. Please describe your current duties.

11 A. I am responsible for the development and presentation of the Company's regulatory
12 policy regarding demand side programs and other public purpose issues. I
13 coordinate the Company's application for approval of energy efficiency programs.
14 In addition, I manage the development of the Company's Integrated Resource Plan
15 (IRP).

16 **Purpose of Testimony**

17 Q. What is the purpose of your testimony?

18 A. The purpose of my testimony is to propose a System Benefits Charge (SBC)
19 approach to funding future demand side programs and the above market costs of
20 new renewable development.

1 **Background**

2 Q. Please explain how demand side programs are currently funded.

3 A. Energy efficiency programs are currently expensed in the same manner as other
4 Company expenses. This means that the costs of the programs are recovered
5 through base rates. The amount recovered through rates is essentially fixed at the
6 level that was included in the most recent test period used to set rates.

7 Q. How is the level of energy efficiency activity determined?

8 A. Currently, the level of energy efficiency activity is determined through the process
9 of Integrated Resource Planning or least cost planning. On a biennial basis the
10 Company files an IRP with the Commission. The IRP includes a range of future
11 load projections and resources required to meet the loads. The resources include
12 both supply-side and demand-side resources. An optimization process is used to
13 identify the least cost mix of demand-side and supply-side resources.

14 Q. Does this lead to fluctuating amounts of energy efficiency activity?

15 A. Yes. For example in 1992 the Company spent \$2.3 million on energy efficiency
16 programs in Washington. This increased to more than \$6 million in 1993 and 1994
17 then declined to approximately \$1 million in 1997 and 1998. Savings achieved
18 ranged in a similar manner from slightly more than 1 aMW in 1992 to a high of 3.2
19 aMW in 1995 before declining to 1.5 aMW in 1998.

20 Q. What leads to these fluctuations?

21 A. Two key assumptions in the least cost planning process drive the appropriate level

1 of energy efficiency activity under the current methodology. The first is the load
2 forecast. As load forecasts increase or decrease the timing of future resource needs
3 draws nearer or farther respectively. The sooner new resources are needed, the
4 more valuable is a saved kWh. The second is the utility avoided cost – the cost
5 avoided by the Company if a kWh is saved. In the early 90's the incremental
6 resource, used to determine the avoided cost for meeting load growth, was coal
7 generation. More recently, the incremental resource has become market purchases
8 and gas fired generation. Since both of these are less expensive than coal
9 generation, the value of saving kWhs through energy efficiency programs has fallen.

10 Q. What problems do the variation in annual energy efficiency activity cause?

11 A. Variations in energy efficiency activity causes problems for both the Company and
12 its contractors. Energy efficiency activities require a complex infrastructure which
13 consist of employees, as well as relationships with energy efficiency contractors,
14 business owners, architects and builders, and our customers. When there is wide
15 variation in the value of energy efficiency to the Company, and consequently the
16 level of energy efficiency activity, it is difficult to maintain the appropriate staffing
17 levels, to provide consistent programs and energy efficiency measures, and to
18 maintain the relationships with the other parties necessary to achieve the desired
19 energy efficiency savings. Two areas of conservation acquisition are most
20 adversely impacted, new commercial construction projects and residential
21 weatherization programs. New commercial construction projects are impacted by

1 the fact that they often take more than one year to design, build and commission.
2 With fluctuating levels of cost effectiveness, confusing signals are provided to the
3 architect, builder and building owner. Residential programs are adversely impacted
4 by the fact that they are often operating at a cost threshold that makes them most
5 susceptible to a decline in avoided costs. This sector is also impacted by variations
6 in energy efficiency activity because of the need to build and maintain a strong
7 alliance contractor network.

8 Q. Do you expect these fluctuations to continue in the future?

9 A. Yes, if we adhere to the current methodology. The IRP relies on forecasts of future
10 load growth, resource costs and market prices. Estimating these forecasts is
11 becoming increasingly difficult as the electric industry evolves toward a more
12 competitive environment.

13 Q. Are renewable resources also included in the least cost planning process?

14 A. Yes. Renewable resources have been a part of the least cost planning portfolio.
15 The optimization model chooses resources to meet future needs based on their
16 relative costs. Renewables are generally selected only when the modeling
17 assumptions include future emission controls, such as a CO2 tax. Nonetheless,
18 renewable resources have been developed consistent with the least cost plans for
19 reasons of resource diversity, to gain knowledge regarding the integration of
20 renewable resources with traditional resources and for risk mitigation.

1 **System Benefits Charge Approach**

2 Q. Is there an alternative methodology that would better suit the future environment?

3 A. Yes. The Company is suggesting that a System Benefits Charge approach be used
4 to fund future energy efficiency activities and the above market costs of new
5 renewable resources.

6 Q. Please explain.

7 A. In an environment where some or all of the Company's customers may have
8 alternatives to purchasing their energy from the Company at some time in the
9 future, it is difficult, if not impossible, to forecast the loads over a twenty-year IRP
10 horizon. Consequently, it is difficult to determine the appropriate level of energy
11 efficiency activity. An alternative approach would be to remove energy efficiency
12 activity funding from the traditional rate structure and to fund the activity through a
13 tariff rider called a System Benefits Charge. The name System Benefits Charge is
14 derived from the understanding that saving kWhs through energy efficiency and the
15 integration of new renewable resources does have a benefit to the electric system
16 even if it is difficult for an individual utility to determine the value that it has to that
17 utility's system. For energy efficiency the SBC is set at a particular dollar level.
18 The energy efficiency program activity is planned to spend the dollars collected
19 through the SBC on a year-by-year basis.

20 Q. How would the level of the SBC be set?

21 A. System benefits charges have been incorporated in various restructuring legislation

1 enacted in the U.S. In the States that provide for a System Benefits Charge, the
2 funding is handled in various ways. Some States collect a percentage of revenues,
3 others levy a per kWh charge. California levies specified dollar amounts on
4 individual utilities. Texas will charge between 50 and 65 cents per MWh. Illinois
5 requires utilities to contribute to a \$3 million statewide fund for residential energy
6 efficiency programs. In December of 1996 a regional task force appointed by the
7 governors of the four Northwest States issued a “Comprehensive Review of the
8 Northwest Energy System” (Regional Review) which recommends a three percent
9 surcharge. In the West, Montana enacted a 2.4 percent system benefits charge,
10 Oregon enacted a three percent system benefit charge and California specified
11 amounts to be collected by each of the major electric utilities that was
12 approximately three percent.

13 Q. Are these recommendations for energy efficiency programs only?

14 A. No. The System Benefit Charge recommendations previously noted generally
15 include local energy efficiency programs, market transformation based energy
16 efficiency initiatives, low-income weatherization and renewable resource
17 development. They may also include low-income bill paying assistance.

18 Q. Is the SBC proposed in this filing intended to fund a range of system benefits?

19 A. Yes. The SBC currently proposed would be used to fund energy efficiency, low-
20 income weatherization programs and the above market costs of new renewable
21 development.

1 Q. At what level are you proposing to set the SBC?

2 A. The Company proposes that the SBC be set at approximately \$2.8 million for
3 energy efficiency programs including low income weatherization. This level is
4 approximately 1.5 percent of the Year 1 tariffed retail revenues. This amount
5 represents a transition from the current spending levels of about \$1 million to a
6 level closer to that recommended in the Regional Review. The Company
7 recommends making the transition to the Regional Review level over time as the
8 program infrastructure is developed and the initial allocation is successfully
9 administered. The Company believes that such a transition is a sound approach. It
10 is difficult to justify energy efficiency expenditures under a least cost plan
11 methodology with uncertain future loads and fluctuating market prices. It would be
12 equally difficult to ramp up to the full level of energy efficiency funding
13 recommended by the Regional Review in a short period of time. This transition
14 approach recognizes that stable energy efficiency funding is valuable to our
15 customers and to our energy efficiency contractors and partners.

16 Q. How will the above market costs of new renewable generation be incorporated in
17 the SBC?

18 A. The above market cost of new renewable generation cannot be determined until
19 specific projects are identified. As part of the commitments made in its merger with
20 PacifiCorp, ScottishPower committed to developing 50 MW of new renewable
21 resources. As specific projects are identified, the above market costs will be

1 determined. At that time the Company will file with the Commission an application
2 for approval to increase the 1.5 percent collected under the SBC to a level sufficient
3 to recover the above market costs of these projects.

4 Q. How has the Company treated the energy efficiency expenses in the test period used
5 for this filing?

6 A. In anticipation of a SBC approach for future funding the Company has removed the
7 expenses incurred for energy efficiency programs from the filing. If the SBC
8 approach is rejected by the Commission the Company requests that the revenue
9 requirement determined by the Commission include the expenses associated with
10 the test period energy efficiency programs.

11 Q. Would the programs offered by the Company change as a result of this approach?

12 A. Yes, but only after review and approval of new offerings by the Commission.
13 Initially the Company would continue to offer its existing programs. These
14 programs are evaluated annually. An advisory group reviews the evaluations with
15 participation by the Commission Staff. The evaluations have indicated that the
16 existing programs are cost effective under the current definitions, which are linked
17 to the avoided utility cost. This method of determining program offerings is tied
18 closely with the least cost plan approach to energy efficiency funding. Moving to a
19 SBC approach for energy efficiency funding would allow more flexibility and
20 consistency in energy efficiency offerings.

21 Q. In the merger proceedings with PacifiCorp, ScottishPower committed to spend

1 \$300,000 on low income programs for three years following the approval of the
2 merger. Are these funds expected to be recovered under the SBC?

3 A. No. The \$300,000 committed to low income programs is in addition to the funds
4 collected under the SBC. As part of that same merger stipulation ScottishPower
5 also committed to continuing to fund low income weatherization at a level of
6 \$560,000. Low income weatherization funding is intended to be recovered through
7 the SBC.

8 Q. How have existing renewable resources been incorporated in this rate case?

9 A. Existing renewable resources have been included in the ratebase. The SBC would
10 apply only to new renewable resources.

11 Q. How would the funds collected by the SBC be accounted for?

12 A. The funds collected would be accounted for in a balancing account. This would
13 assure that any amounts not spent in a given year would carry forward to the
14 following year. Similarly, if the amounts spent exceed the amounts collected for
15 energy efficiency in a given year the deficit would be recovered in the following
16 year.

17 Q. Does this conclude your testimony?

18 A. Yes.