Q. Please state your name.

A. My name is James Z. Zhang.

Q. What is your business address and by whom are you employed?

A. My business address is 825 NE Multnomah Avenue, Portland, Oregon. I am employed by PacifiCorp (the Company).

Qualifications

Q. What is your current position with PacifiCorp?

A. My current position is Pricing Consultant in the Regulation Department.

Q. What is your educational and professional background?

A. I earned a Bachelor of Science degree in Mechanical Engineering from Beijing University of Chemical Technology in 1982, a Master of Science degree in Engineering Management from Tsinghua University in 1985 and a Ph.D. in Economics from Oregon State University in 1994. I joined the Company in the Regulation Department in August 1997.

Q. Have you appeared as a witness in previous regulatory proceedings?

A. No. Since 1997, with levels of increasing responsibility, I have developed and implemented a number of rate spread and rate design proposals throughout the Company's six state service territory.

Purpose of Testimony

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the Company's proposed rate spread in this case and to propose price changes for the affected rate schedules.

Q. Please describe PacifiCorp's pricing objectives in this case.

A. The Company's pricing objectives in this case are to implement, over two years, a cost of service-based redesign of the Company's prices along with the proposed power cost adjustment, while also implementing the revised BPA credit. The Company's overall goal is to implement these three elements in such a way that no customer class will see a price increase.

Q. How does the Company propose to redesign rates based on cost of service?

A. Based on the cost of service (COS) study introduced by Mr. Taylor, the Company proposes to redesign its rates so that all customer classes fall within five percent of their cost of service. Specifically, for rate schedules that are currently paying more than 105% of COS, the Company proposes to reduce their rates to 105% of COS. Similarly, for rate schedules that are currently paying less than 95% of COS, the Company proposes to increase their rates to 95% of COS. For rate schedules that currently fall between 95% and 105% of COS, the Company proposes no change to present base rates. The COS redesign will be fully implemented in the first year and has been designed to be revenue neutral; that is, the Company's total revenues will be unchanged as a result of this rate redesign.

Q. Why did the Company choose to bring all rate schedules within five percent of cost of service rather than proposing that all rate schedules be at 100% of cost of service?

A. Due to the changing makeup of customer classes, variations in usage and other factors, cost of service results can vary from year to year. A customer class that was at 100 percent of cost of service in one year can be higher or lower than that in the following year. The Company chose the five percent cost of service threshold as a way to balance cost of service precision and appropriate cost responsibility for

customer classes. We believe it makes reasonable movement toward bringing each customer class closer to cost of service, while recognizing the inherent variability from year to year.

Q. Please describe the Company's proposed power cost adjustment (PCA).

A. Mr. Widmer provides testimony regarding the Company's need to recover approximately $38 million in excess power costs. The Company proposes to recover these costs over a two-year period in which 70 percent, or $27 million, is recovered in the first year and the remaining 30 percent, or $11 million, is recovered in the second year. This 70/30 split is designed in conjunction with a rate mitigation adjustment (discussed below) to achieve the goal of customer classes not seeing any price increases as a result of these changes in either year.

Q. On what basis does the Company propose to collect the PCA from customers?

A. Because the excess power costs are energy related, the Company proposes to collect them through a cents per kilowatt-hour adjustment (PCA) based on customers' service voltage levels. The PCA rates are obtained by dividing the total excess power costs by the total kilowatt-hours at the generator and then adding an adjustment for voltage losses. The PCA will be applied to all customer classes and to all energy usage.

Q. Please describe the Company's proposed distribution of the credit from the Bonneville Power Administration (BPA).

A. In year one, the Company proposes to distribute the $34 million of Idaho BPA credit based on historic allocations, with 57 percent going to irrigation customers and 43 percent going to other qualifying (residential and qualifying small commercial)

customers. Moreover, residential and qualifying small commercial customers receive an additional credit benefit in year one equal to four months of their year-one BPA credit. This additional amount is being applied in order to distribute funds accumulated since implementation of increases in the BPA benefit in September 2001 and will be spread evenly over the twelve months of year one. In addition, $1.6 million of previously collected BPA exchange benefit is to be distributed in year one with the historic 57/43 percent split. The total amount of BPA credit the Company proposes to distribute to qualifying customers in year one is $40.6 million.

In year two, the Company proposes to adjust the BPA credit to distribute the $35.1 million of allowed benefits using the same historic 57/43 percent split between irrigation and other qualifying (residential and qualifying small commercial) customers.

Q. What is the purpose of the rate mitigation adjustment (RMA)?

A. The combination of the COS redesign, the PCA and the BPA credit as described above results in changes to most customer prices and in some cases increases occur. The RMA is designed to offset those changes and to balance revenues so that no customer class will see a price increase in the first two years. The RMA is also designed to maintain greater price stability by minimizing price fluctuations from year to year.

Q. How does the RMA work?

A. The RMA is a surcharge or surcredit applied on a cents per kilowatt-hour basis to each rate schedule. It has been designed to mitigate and moderate price impacts that may occur and to achieve the goal that no customer class receives a price increase for

the next two years. In fact, most customers will see significant price decreases in both year one and year two.

Q. Has the Company implemented an RMA in any of its other jurisdictions?

A. Yes. The Company implemented an RMA in Oregon in late 2001 in order to minimize price fluctuations across customer classes.

Q. Please describe Exhibit No. 17.

A. Exhibit No. 17 details the Company's proposed changes and the development of the RMA, based on the 12 month test period ending March 2001, to be implemented over a two year period. Table 1 shows the changes in year one; Table 2 shows the changes in year two. On an overall basis in year one, these revisions produce a 4.2 percent net price decrease. In year two, an overall net price decrease of 7.2 percent is achieved. Tables 3 to 18 contain monthly billing comparisons for each of the affected rate schedules showing the net impact of the proposed prices at various usage levels.

Q. Please describe Exhibit No. 18.

A. Exhibit No. 18 contains the Company's proposed revised tariffs in this case.

Q. Please describe the overall change that customers will see in their prices in year one of the Company's proposal.

A. In year one, residential customers will see an average price decrease of eight percent. Irrigation customers on average will also see a price decrease of eight percent while, overall, commercial and industrial customers will see a decrease of three percent. Lighting customers will see an overall decrease of nine percent.

Q. Please describe the change customers will see in year two of the Company's proposal.

A. In year two, the residential customer class will see a decrease of 15 percent from prices at the end of year one. Irrigation customers will also see an average decrease of 15 percent, while commercial and industrial customers overall will see a decrease of four percent from prices in effect at the end of year one. Lighting customers overall will see a decrease of another 15 percent.

Q. What happens to these customers' bills when the PCA and the RMA go away at the end of two years?

A. In the third year, prices will continue to decline. Residential prices will decrease by 19 percent. Irrigators will see a decrease of 21 percent while commercial and industrial customers will see, overall, a decrease of six percent. Lighting customers will see, overall, a decrease of 17 percent. It should be noted that this discussion about the decreases that will be seen by customer classes reflects the effective price paid by customers, taking all adjustments into account.

Q. Please summarize these changes over the course of three years for the major rate schedules.

A. The following table summarizes these percentages:

Customer Class	Year One	Year Two	Year Three
Residential	-7.8%	-14.6%	-18.8%
General Service			
Schedule 6	0.0%	0.0%	0.0%
Schedule 9	0.0%	0.0%	0.0%
Schedule 23	-7.1%	-6.2%	-5.0%
Irrigation			
Schedule 10	-7.8%	-14.6%	-21.2%
Commercial &			
Industrial Total	-2.8%	-4.4%	-5.7%
Lighting	-8.5%	-14.9%	-17.3%

Residential Prices

Q. Please describe the Company's proposed residential price design changes.

A. For residential customers, the Company proposes to implement the COS redesign decrease by reducing the energy charges, while keeping the current ratio between summer/winter energy charges and on-peak/off-peak energy charges for the optional time of day schedule. The Company proposes no changes to the minimum charge, service charge or seasonal service charge minimums in the residential schedules.

Q. How does the Company propose to implement the PCA and the RMA?

A. Proposed Schedule 93 contains the PCA, a cents per kilowatt-hour adjustment based on the customer's voltage level. (All residential customers are served at the secondary level.) Proposed Schedule 94 contains the RMA, a cents per kilowatt-hour adjustment based on rate schedule. Both schedules have columns indicating different prices for year one and year two and are proposed to expire 24 months after these tariffs go into effect. These tariffs are included in Exhibit No. 18.

General Service & Irrigation Prices

Q. Please describe the Company's proposed price design changes for commercial and industrial customers.

A. To implement the COS changes, for Schedules 19 and 23, the Company proposes to decrease the energy charges while keeping the same summer/winter ratio. To implement the COS changes for Schedule 8, the Company proposes to increase the demand charges as well as the energy charges, again while keeping the same seasonal ratios.

Q. Why does the Company propose to change the demand charges for Schedule 8?

A. An increase in the demand charge as well as the energy charge for Schedule 8 will bring Schedule 8's prices more closely in line with the cost of service results.

Q. What are the Company's proposed price design changes for irrigation customers.

A. The Company proposes to consolidate the three rates currently contained in irrigation Schedule 10 into one firm service rate. The proposed service charges and demand charge are the average of the three current rates, proportioned for the amount of usage under each of the three rate options.

Q. What does the Company propose for the energy charge in Schedule 10?

A. The Company proposes to recover the COS redesign increase through the energy charge while keeping the same relationship between the current average on-season and off-season revenues. The charge for off-season energy has consequently been increased to 5.2459 cents per kWh. Also, the two-block current on-season energy charge has been revised to a three-block energy charge. The three-block energy charge will more closely track cost of service while giving more uniform price signals to large irrigation customers. The first block covers the first 25,000 kilowatt-hours, the same as the current design. The second block covers the next 225,000 kilowatt-hours, and the third block covers all kilowatt-hours over 250,000. The proposed rates for on-season kilowatt-hours are 5.9485 cents per kWh for the first tier, 4.7588 cents per kWh for the second tier and 2.5000 cents per kWh for the last tier.

Q. How are the PCA and the RMA applied to general service and irrigation customers?

A. As with residential customers, for general service and irrigation customers the PCA is applied as a cents per kilowatt-hour adjustment based on the customer's voltage level.

The RMA is applied as a cents per kilowatt-hour adjustment by rate schedule. The PCA and RMA adjustments are contained in Schedules 93 and 94, respectively.

Q. If Schedule 10 is proposed to be a firm service rate, what does the Company propose for the current load control program?

A. The Company is developing an optional load control credit for irrigation customers that will replace the load control program. We have been engaged in discussions with customers and Commission staff, and plan to file a program later this year.

Other Changes

Q. What price changes does the Company propose for lighting customers?

A. The appropriate COS redesign percentage change has been applied to the current per lamp charges in each of the lighting schedules. The PCA and RMA for lighting schedules are contained in Schedules 93 and 94 as cents per kilowatt-hour charges and credits.

Q. Please explain Exhibit No. 19.

A. In Exhibit No. 19, Table 1 details the billing determinants used in preparing the pricing proposals in this case. It shows billing quantities and prices at present rates and proposed rates. Table 2 and Table 3 show the development of Company's proposed BPA credit and PCA surcharge, respectively.

Q. Does this conclude your testimony?

A. Yes, it does.