Q. Are you the same Reed C. Davis who previously filed direct testimony in this proceeding?

A. Yes.

Purpose of Testimony

Q. What is the purpose of your rebuttal testimony?

A. I will respond to the line loss values proposed by Division of Public Utilities (DPU) witness Andrea Coon and Committee of Consumer Services (CCS) witness Phil Hayet. The net power cost adjustments associated with their proposed revision to line losses would lower net power costs by $12.6 million and $12.1 million, respectively. I will also respond to DPU witness Andrea Coon's proposal of using a lower sales growth rate for forecasted sales.

Q. Please explain how line losses impact the system load forecast?

A. The sales forecast for each state is increased by estimates of line losses for that state. Line loss percentages represent the additional electricity requirements to move the electricity from the generating plant to each end-use customer in the state and are part of the costs incurred to serve customers. The summary of the generation level forecasts for all states creates the system load forecast used for the development of power costs.

Q. What line loss value has PacifiCorp used in this case?

A. The line loss percentage used in this case was calculated by dividing the forecasted loads by the forecasted sales and subtracting 100 percent to arrive at a value of 9.93 percent for the system.

Q. What line loss value do Ms. Coon and Mr. Hayet recommend?

A. In their testimonies they both recommend a line loss value of 9.269%, based on a five-year average of Company historical values.

Q. Where did Ms. Coon and Mr. Hayet get the historical loss values from which to calculate the single value average?

A. The results of the same loss calculation for the historical years from 1999 to 2003, using sales and jurisdictional loads was provided by the Company in response to DPU request 11.7. These historical values ranged from 8.7 percent to 9.9 percent.

Q. Are those values still representative of this historical period?

A. No, for two reasons. Firstly, there were problems with the state loads for Wyoming. The Company began to review the causes for the variability of the historical loss value. We started by reviewing the year-over-year percent increase in sales and the year-over-year percent increase in loads. All things being equal, we would expect the percentage change in load to be very similar to the percentage change in sales. However, we found that the two values did not move in tandem as expected. This finding led to a review of the loss values by state. While reviewing the loss values in Wyoming, we discovered that the loss calculation resulted in a loss percent for the state of less than 2 percent for 1999 and 2000. Further review of the values was undertaken, and we found that the state loads for 1999 and 2000 for Wyoming were not correct. This means that the data that Ms. Coon and Mr. Hayet use in their calculations contains errors.

Q. How do the Wyoming corrected values compare to those used by Ms. Coon and Mr. Hayet?

A. Exhibit UP&L___ (RCD-1R) shows the values originally provided in our respond to DPU Request 11.7 and the updated values using the corrected Wyoming loads. As you can see, the minimum value changed to 8.8 percent, the maximum is still 9.9 percent, and the average has moved to 9.54 percent.

Q. What is the second reason that the values are not representative?

A. During 2003, the Company completed research that indicated that the amounts booked for unbilled revenue were not accurate. In that year we improved the process for estimating unbilled revenues and made an accounting adjustment in order to reflect the correction of past estimates. This change resulted in 199,525 MWh being added into sales for the year as corrections for prior period estimations of unbilled revenues. When the loads, which required no adjustment, are divided by the adjusted sales, it results in a lower line loss value for that year which does not correctly reflect what is happening in that year. As a result we have further corrected line losses for this accounting adjustment, and these adjusted values are also shown in Exhibit UP&L___ (RCD-1R). The five-year average now moves to 9.626% and the minimum loss value for the five years moves to 9.223%.

Q. Why would the Company use 9.93 percent when the better historical average value is 9.63 percent and the maximum historical value is 9.90 percent?

A. Changes to losses are the result of many factors such as: loadings on the lines, ambient temperatures, growth by customer class, state growth, location and

change in generating units. Some of these events impact losses many times in a single year, others will impact losses in future years, and some will result in changes due to specific events. The changing loss factor is due to the events in the near term that impact the coming years. Changes in customer growth over the coming years should put upward pressure on line losses. This pressure will result from the growth expected in the residential and commercial classes system-wide. Customers with delivery at secondary voltage levels typically have higher losses than customers taking delivery at primary voltage levels, and both have higher losses than customers taking delivery at transmission levels. As such, with customers growth coming mainly from those taking secondary voltage level delivery (the residential and commercial customers), there will be upward pressure on line losses.

Q. Will this upward pressure be dampened overall as the states grow differently?

A. Yes, there will likely be some dampening in the overall system losses, but most states will continue to see the major growth in the residential and commercial classes pushing losses higher. Based on this fact, the Company does not believe that the growth in line losses from a maximum of 9.90 percent to 9.93 percent is unreasonable.

Q. What else has the Company learned from the year to year variability of losses?

A. We have learned that a precise calculation of line losses is extremely difficult to obtain. Thus, an additional way to look at the reasonableness of a value is to look

at it relative to the average and distribution of historical values. Using a simple average and one standard deviation on the values suggest a range wherein one would expect a reasonable value to fall. The Company's value of 9.93 percent falls within that range of reasonableness for the corrected historical values.

Q. Given the difficulty of getting a precise value what does the Company recommend in this case?

A. Recognizing that achieving precision on a value for line losses is not possible, PacifiCorp recommends that a compromise position be adopted for this case, with additional review of the values in the future. The Company proposes that the historical values for line losses be adjusted to properly reflect the correct Wyoming values, because the lack of precision in that data has been identified. The Company further recommends using the average of the values after removing the high and low annual values. This proposal results in the averaging of the loss values for years 1999, 2000, 2001 (9.2529%, 9.8734%, 9.8789%) from the "corrected calendar year values" column in Exhibit UP&L___ (RCD-1R), resulting in a loss value of 9.668% for this case.

Q. **Has your revised line loss recommendation been included in the Company's updated case?**

A. Yes. Mr. Widmer has included an adjustment in the updated net power cost study presented in his rebuttal testimony. As discussed in Mr. Widmer's testimony, the adjustment reduces net power costs by $6.5 million Total Company.

Q. Ms. Coon proposes a reduction to the average growth rate presented by the Company of 4.7 percent, do you agree with this.

A. No. Choosing a simple historical average is not the best method to forecast the sales. The methods used to produce the forecast that results in the average growth rate reflected in my testimony is consistent with the processes that have been discussed with various parties in our public IRP process. The approaches used to determine this growth rate are consistent for each of the six states that PacifiCorp serves. It also reflects the factors which based on our analysis are likely to be most representative of future load growth in Utah. This process has been subjected to detailed public scrutiny.

Q. Are there any other issues that concern you with this proposed adjustment?

A. Yes. Ms. Coon only made this proposed adjustment for Utah load growth and has not researched whether any adjustments would be appropriate for other states. As a result this adjustment creates a mismatch of cost allocation factors across states. In addition, I disagree with the historical period Ms. Coon has used to consider as the average for proposing the new forecasted growth rate. The Company has put forth testimony supporting the 4.7 percent growth rate but if it is to be reduced to an average historical value this time period is not appropriate.

Q. Can you clarify this?

A. Yes. Attached is Exhibit UP&L___ (RCD-2R). This exhibit shows the same information Ms. Coon has used to calculate the average growth rate she is proposing plus additional historical years. If one looks at a longer historical period or a more distant historical period the growth rate is greater than what Ms. Coon

proposed. The Company believes that including the period immediately after the bombing of the World Trade Center (9/11/2001) lowers the growth rate by a one-time event that is not representative of the future and should not be considered when developing a growth rate based on history. The Company does not agree that a simple average historical rate is the best method for forecasting sales. At best, a simple average gives a very limited perspective against which to review forecasted growth rates. However care must be used when doing this. As Exhibit UP&L___ (RCD-2R) shows, the average historical growth rate one might choose as the standard can change dramatically depending on the years used in calculating the average. Also, as can be seen in the exhibit, if the growth in any year does match the average it is completely coincidental. Past experience has shown me that using a historical average growth rate to gain perspective on future growth rates works best when doing it by developing the average over a long time period and comparing it to an average for a forecast covering a long period of time.

Q. Does this mean that you think the Company growth rate is the best to use?

A. Yes. I know that the nature of forecasting means that updating the forecast to new assumptions will give a different result from what was previously produced. Yet, the forecast developed using these methodologies will produce growth rates that most appropriately reflect the factors that are likely to be most representative of future load growth in Utah .

Q. Does this conclude your rebuttal testimony?

A. Yes.