BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations, Consisting of a General Rate Increase of Approximately $161.2 Million Per Year, and for Approval of a New Large Load Surcharge	))))))))))	DOCKET NO. 07-035-93 Exhibit No. DPU 2.0 SR Surrebuttal Testimony and Exhibits Charles E. Peterson

FOR THE DIVISION OF PUBLIC UTILITIES
DEPARTMENT OF COMMERCE
STATE OF UTAH

Surrebuttal Testimony of

Charles E. Peterson

May 12, 2008

Q. Please state your name and occupation?

A. My name is Charles E. Peterson. I am employed by the Utah Division of Public Utilities ("Division" or "DPU") as a Technical Consultant.

Q. Have you submitted Direct Testimony in this proceeding?

A. Yes. I submitted Direct Testimony on March 31, 2008.

Q. What is the purpose of your testimony?

A. My purpose is to respond to comments made by PacifiCorp witnesses testifying in behalf of PacifiCorp's division Rocky Mountain Power (the Company): Dr. Samuel C. Hadaway in his Rebuttal Testimony and to his rebuttal exhibits identified as RMP Exhibits SCH-1R through SCH-8R; Bruce N. Williams in his Rebuttal Testimony; and finally A. Richard Walje in his Rebuttal Testimony.

I. GENERAL COMMENTS

Q. Do you have general comments regarding the Rebuttal Testimony of Messrs. Hadaway, Williams, and Walje?

A. Yes. Dr. Hadaway's Rebuttal Testimony recounts my testimony and analyses and shows how my analyses can be "corrected" to support his original Direct Testimony or his updated testimony. Dr. Hadaway and Mr. Williams spend much of their Rebuttal Testimony focusing on changes in the interest rates of government securities and the effects of those changes on corporate debt. If I accept Dr. Hadaway's and Mr. Williams' contentions on this point, my overall recommended cost of capital for PacifiCorp and its division Rocky Mountain Power would increase 1 basis point (i.e. 0.01 percent). As I explain later, I am reluctant to make that adjustment at this time.

With respect to principal differences, Dr. Hadaway and I continue to differ with respect to the proper growth rate for the DCF models. Dr. Hadaway continues to insist on a growth rate based upon a weighted average of the historical growth in U.S. gross domestic product (GDP). I demonstrated in my Direct Testimony that that was unrealistic. Dr. Hadaway has failed to present new evidence or argument that his historical GDP growth is better or even relevant to electric utility growth expectations. While in our Direct Testimonies Dr. Hadaway and I both supported the use of the widely used capital asset pricing model, Dr. Hadaway now disclaims that model for this case, whereas I continue to believe that it offers useful information into investor thinking. Finally, Dr. Hadaway continues to support his cost of equity calculations with historical authorized rates of return granted other companies in other jurisdictions. I argued against relying on this approach in my Direct Testimony and Dr. Hadaway has presented nothing new in his Rebuttal Testimony on this issue except to update his calculations.

Q. Do you find any of Dr. Hadaway's criticisms persuasive?

A. No. Dr. Hadaway's Rebuttal Testimony amounts to a reassertion of his original position as being correct and that contrary positions are not.

He does not present any new data that is substantially different from what he had in his Direct Testimony. He has abandoned his capital asset pricing model because current inputs to the model "do not reflect the current market cost of capital for corporate entities."[1] That is, the capital asset pricing model no longer supports the 10.75 percent cost of equity he asserts is proper for PacifiCorp and its Rocky Mountain Power division. His criticisms of my application of the different models do not invalidate my applications.

Q. How does your own testimony differ from that of Dr. Hadaway's Rebuttal Testimony?

A: In my testimony I attempted to discuss and present to the Commission a wide range of options. I included some of the methodologies used by Dr. Hadaway, especially with respect to the Capital Asset Pricing Model (CAPM) and plainly stated that there are advocates for the particular applications of those models that Dr. Hadaway uses. I also explained that there are differing views among both academics and practitioners regarding the application of those models. I highlighted some of the problems and controversies with particularly the CAPM. Rather than being merely descriptive, I gave my guidance to the Commission regarding what I believe to be the better, more "middle of the road" positions to take and used this guidance to arrive at my recommended range and point estimate. However, I did not avoid presenting data on

[1] Dr. Hadaway's Rebuttal Testimony at line 198.

applications that were either higher than, or lower than, my recommended range and point estimate.

Q. In your testimony here do you intend to respond in detail to all of Dr. Hadaway's comments?

A. No. I plan to respond to a few of the more important issues raised by Dr. Hadaway. Omission of a specific comment on the various issues raised by Dr. Hadaway should not be construed as agreement with his position on those issues.

Q. Do you have any general comments on Mr. Williams's Rebuttal Testimony at this time?

A. Yes. I mentioned above Mr. Williams' assertions that Mr. Lawton and I were wrong to adjust the Company's cost of debt by a couple of basis points based upon lower government debt rates. Mr. Williams spends a considerable part of his Rebuttal Testimony responding to my comments regarding the Company's fulfillment of MEHC Acquisition Commitment 37 in Docket No. 05-035-54. While I can agree with most of what Mr. Williams says in his Rebuttal Testimony on this issue, what he leaves out of his rebuttal is that which caused me to highlight a concern in the first place. I will discuss this in some detail later.

Q. Do you have any comments on Mr. Walje's Rebuttal Testimony?

A. Yes. Mr. Walje appears to be most concerned about Rocky Mountain Power's ability to attract capital should the allowed rate of return be reduced to within the ranges that the Committee of Consumer Services (through Mr. Lawton) or I are advocating. He insists that Mr. Lawton or I did not properly consider business risk and that certain problems the Company faces should be addressed by the Commission through a higher cost of equity award.

Q. Is it likely that Rocky Mountain Power will no longer be able to attract capital?

A. No. The 10.1 percent point estimate I am advocating is higher than the return on equity the PacifiCorp has actually earned in recent years. PacifiCorp has been able to successfully market several significant debt issuances during this period of lower returns, consequently there is no evidence that they would have any difficulties with capital attraction if its profitability were higher.

Q. Has any of the Company's witnesses' Rebuttal Testimony altered your conclusions?

A. No. As detailed below the Company's witnesses are not persuasive in their critique of my testimony. My recommended point estimate for cost of equity remains 10.1 percent.

II. COMMENTS ON DR. HADAWAY'S REBUTTAL TESTIMONY

Q. How have you organized this section?

A. I have organized this section by the following topics: Comparable Companies; DCF Models; Capital Asset Pricing Models; Risk Premium Models; Interest Rates; and Other Issues and Conclusions.

A. Comparable Companies

Q. What comments do you have regarding comparable (or, proxy) companies used in Dr. Hadaway's Rebuttal Testimony?

A. Dr. Hadaway appears to continue to advocate his original list from his Direct Testimony. While there is some overlap between the two lists of comparable companies, I had some significant concerns with some of the companies used by Dr. Hadaway as I explained in my Direct Testimony. In deciding this case, the Commission should specify which companies it accepts as proxies.

B. DCF Models

Q. Dr. Hadaway disagrees with your use of forecast dividend growth rates. Is it correct to ignore dividend growth forecasts?

A. No. In the first place the DCF model is based upon dividend payments. Thus dividend forecasts are theoretically the most correct growth rate that should be used. I would agree with Dr. Hadaway that earnings growth rates will likely drive growth in dividends in the long-term. However, to the extent that near-term dividend growth is expected to be higher, or lower, than earnings growth, then the departure of the growth in dividends from the growth in earnings will affect the stock price either up or down under this model. As I mentioned in my Direct Testimony, the Commission's 2002 decision in Questar Gas'general rate case to weight earnings growth 75 percent and dividend growth 25 percent is a reasonable compromise of the earnings vs. dividend growth rate issue.

Q. Do you have a response to Dr. Hadaway's comments in his Rebuttal Testimony regarding forecast rates of growth for the economy, as represented by the Gross Domestic Product?

A. Yes. Dr. Hadaway continues to advocate the use of a weighted average historical GDP growth rate. This GDP grow rate is the most significant difference between my DCF models and Dr. Hadaway's. Dr. Hadaway has yet to provide any basis for the GDP growth rate's relevance to expected growth rates for regulated electric utilities. In fact, Dr. Hadaway leaves entirely unrebutted the fact that his own data indicate that the growth rate of electric utilities historically has been significantly less than the growth in GDP.[2]

Q. What are your comments with respect to Dr. Hadaway's rejection of the two forecast GDP growth estimates by the federal government agencies?

A. Dr. Hadaway asserts that because the U.S. Congressional Budget Office (CBO) and the Energy Information Administration (EIA) forecasts "are not consistent with

[2] See the chart on page 30 of Dr. Hadaway's Direct Testimony and my comments on page 35 of my Direct Testimony.

historical growth rates in the U.S. economy"[3] and that while "[s]uch forecasts may be useful for projecting a balanced budget, protecting Social Security, and other government purposes"[4] they have no relevance in the estimation of electric utility growth rates.

My response is twofold. First, apparently Dr. Hadaway believes that any deviation of the future from the past is not contemplated by investors, the future is always a linear (or weighted average) projection of the past, or at least that's the best forecasting we can ever hope to do. However, given the high energy prices and the significant and growing economic competition from places like China and India, it is easy to imagine that future economic growth in the United States will not reflect the past. Furthermore, there is some expectation specifically with regard to electric energy use that environmental concerns and legislation could additionally slow the growth in the electric industry. The economic world faced by the United States today is much different from the economically benign situation it faced for at least the first 20 years of Dr. Hadaway's post World War II historical period.

Second, Dr. Hadaway suggests that political motives drive the EIA and CBO forecasts. If the goal of the EIA or CBO forecasts were for "projecting a balanced budget" or for "protecting Social Security," I would have expected the EIA and CBO

[3] Dr. Hadaway's Rebuttal Testimony at lines 219-220.
[4] Ibid. lines 222-224.

forecasts to be relatively rosy. Instead we see fairly mediocre real growth rates of about 2.5 percent.

C. Capital Asset Pricing Models (CAPM)

Q. Dr. Hadaway now disagrees with the use of CAPM in this case. What are your comments on this issue?

A. Dr. Hadaway points to the low risk free interest rates and the turmoil in the credit markets and concludes that CAPM is invalid now. If this credit market turmoil is significant to electric utility cost of equity, one would expect significant declines in stock prices along with rising dividend yields. However, Dr. Hadaway has supplied evidence in his Rebuttal Testimony that shows just the opposite is happening, which one would expect from lower interest rates. On Exhibit RMP SCH -1R, page 6 of 6 consists of data compiled by Moody's Investors Service showing that public utility stock values have increased between March and April 2008; likewise the dividend yields have declined. Contrary to the problems in the mortgage and credit markets generally, they have not translated into turmoil in the stocks of the utility companies. The issue of government interest rates versus corporate bond rates will be dealt with later in subsection "F Interest Rates."

In the concurrent Questar Gas general rate case, Docket No. 07-057-13, my use of the CAPM has the tendency to raise my recommended rate above what it would have been based upon DCF models alone. In this docket, the CAPM has the tendency to lower the recommended point estimate slightly.

I can only conclude that the real problem is that Dr. Hadaway does not accept that electric utility stock investors may currently be satisfied with a return in the low ten percent range or perhaps even lower.

D. Risk Premium Models

Q. Do have any observations regarding Dr. Hadaway's rebuttal comments to your risk premium model?

A. Dr. Hadaway's primary concerns are that like the CAPM, my risk premium model cannot handle the turmoil of the credit markets and that there is no underlying theoretical basis for using Value Line financial strength ratings "in the CAPM format."[5]

With respect to the credit market turmoil issue, I have answered that above under the CAPM comments and below under the interest rate comments.

With respect to the claim that my risk premium model lacks theoretical basis, it has the same basis as the CAPM to determine an overall market return. The CAPM is a flavor of the broader class of risk premium models which of the general form of k = d

[5] Dr. Hadaway's Rebuttal Testimony at line 62.

+ rp where k is the cost of capital, d is some base return, and rp is a risk premium.[6] CAPM solves this equation for common equity by using a risk free rate for "d" and beta times the market risk premium for "rp." Dr. Hadaway is misleading when he states that my risk premium model is in the CAPM format: CAPM is in the risk premium format.[7]

With this in mind, I will briefly reiterate what my risk premium model attempts to do. My analysis relates Value Line's forecast return to Value Line's financial strength rating to estimate a risk factor. Given a particular financial strength rating, an expected return can be estimated. This risk factor is then multiplied into the estimated market return which is the sum of the risk free rate plus the market risk premium. (To this point it is like a CAPM model with a beta of 1.0). In order to solve the problem of adjusting the market return to a more specific return customized to the subject company in question, I derive a risk adjustment using Value Line's financial strength rating as described above. Since the comparable companies I used had an average financial strength rating of B++ (above average), by this measure these companies should have a cost of capital less than the market mean. I have quantified this below average required return on equity in my analysis. Dr. Hadaway would disagree with my estimate of the expected market return since in arriving at the expected market return I reject the use of the 82 year Ibbotson historical period as

[6] Morin, Roger. "New Regulatory Finance", 2006. Chapter 5. p. 146. and Chapter 15.
[7] Ibid., see especially Chapter 15, Figure 15-1.

discussed in the CAPM section above. At least under current market conditions, Dr. Hadaway also disagrees with the risk free rate.

In any case as Dr. Hadaway observes, other than as a general test for reasonableness, I put little weight on this model. To the extent I have used this model, I stand by its results.

Q. You commented in your Direct Testimony on Dr. Hadaway's risk premium analysis, do you have anything to say about his comments in his Rebuttal Testimony regarding his risk premium model?

A. Yes, just one. On line 357 of his Rebuttal Testimony Dr. Hadaway states that the he is basing his updated risk premium analysis on 2009 project interest rates. I believe this is in error because the test year is 2008.

E. Authorized Rates of Return

Q. Do you have any further comments, beyond what you said in your Direct Testimony and alluded to above regarding Dr. Hadaway's adherence to historical authorized rates of return by various commissions as a major indicator on what PacifiCorp's cost of equity should be?

A. Only that Dr. Hadaway has not answered any of the issues raised in my Direct Testimony. For example, he does not rebut the fact that authorized rates of return have been steadily declining for a number of years, or that authorized returns may be based on local laws and customs.

F. Interest Rates

Q. What do you intend to discuss under this topic heading?

A. I will respond to both Dr. Hadaway's and Mr. Williams' Rebuttal Testimony comments that Mr. Lawton and I did not appropriately account for the difference between government interest rates and utility corporate bond rates. Next I will describe why current risk free rates are appropriate for the CAPM and risk premium models.

Q. What problems or disagreements do you have with Dr. Hadaway's and Mr. Williams' claim that while government interest rates have declined, corporate utility bond rates have remained essentially flat and therefore, per Mr. Williams, it was inappropriate to make a reduction to PacifiCorp's allowed cost of debt?

A. The main problem is that there appear to be contradictory statements and data between Mr. Williams' and Dr. Hadaway. Some of these contradictions may be explained as the use of different sources (Mr. Williams didn't provide supporting sources and documents in his Rebuttal Testimony), and different time periods being examined. On page 2 of his Rebuttal Testimony, Mr. Williams has a table alleging that PacifiCorp's borrowing costs are 1 basis point higher now than they were when he wrote his Direct Testimony. It must be remembered that Mr. Williams is trying to forecast what PacifiCorp's borrowing costs will be around the end of 2008. His present forecast is that that PacifiCorp's borrowing cost will be 6.45 percent based upon a forward (futures) long-term government interest rate of 4.47 percent and a forward spread for single-A utility debt of 1.98 percent. Dr. Hadaway by contrast uses a forecast long-term government rate of 5.0 percent and an estimate of 136 basis points to arrive at a borrowing cost 6.36 percent.[8] In his discussion on page 16 of his Rebuttal Testimony, Dr. Hadaway states that the current (as of April 21, 2008) single utility bond rate is 6.27 percent. On the same page (at line 324) he states that "Current and forecasted single-A utility interest rates are converging." This last statement is to be expected as debt investors begin to search for higher yielding alternatives to the government rates. Dr. Hadaway also states that "Corporate interest rate "spreads" (the difference between corporate borrowing cost and the rates on U.S. Treasury bonds of approximately equal maturity) are currently at the highest levels seen in many years."[9] This last statement at least suggests that we have an anomalous situation with respect to the rate spreads which will more likely than not correct themselves in the coming months.

The conclusion I can draw from all of this is that there is a good chance that in November or December when PacifiCorp issues its contemplated debt that the interest rate could very well be 6.28 percent (the rate I used in my Direct Testimony) or lower.

[8] See Dr. Hadaway's rebuttal Exhibit RMP SCH-8R, page 1.
[9] Dr. Hadaway's Rebuttal Testimony at lines 83-85.

Q. Is there any possibility that you could be persuaded to accept Mr. Williams' and Dr. Hadaway's criticism regarding the current relationship between government and corporate debt yields and reverse your reduction in the Company's cost of debt?

A. Yes. But it would require reconciliation of Dr. Hadaway's and Mr. Williams' statements and data and more persuasive evidence than I have seen to this point. But as noted at the beginning of my surrebuttal testimony, any correction here would only affect the recommend cost of capital by 1 basis point. Therefore, I am standing by my Direct Testimony.

Q. What about Dr. Hadaway's criticisms that current risk free rates can't reasonably used for the CAPM?

A. As I indicated earlier Dr. Hadaway's own data suggest a lack of "turmoil" with respect to utility stock prices and dividend yields. While the general decline in the stock market has had some effect, the electric utility industry appears to have been only lightly affected. Be that as it may, the theory of CAPM is that investors peg their required returns on a given stock based upon the returns they can get that are "risk free." As the risk free rates fluctuate, so will investors' required returns on common stock. Implicit in Dr. Hadaway's criticism is that the market risk premium, i.e. the average required return on common stocks generally over the risk free rate, "must have" increased dramatically in recent months which can't be measured by usual CAPM applications. The basis for this is Dr. Hadaway's subject belief that investors wouldn't accept the returns indicated by the CAPM. Dr. Hadaway offers no other evidence for this.

Lacking other evidence to support Dr. Hadaway's beliefs, I am not persuaded that CAPM (and my risk premium model) are invalidated by the current levels of government interest rates.

G. Other Issues and Conclusions Regarding Dr. Hadaway's Rebuttal Testimony

Q. Dr. Hadaway responds to your Direct Testimony Exhibit 14 by criticizing the volatility of analysts' forecasts and then uses this as a basis for seemingly rejecting the use of analyst forecasts.[10] How do you respond?

A. Analyst forecasts, like other financial and market-related data fluctuate. In Exhibit 14 there is an obvious departure from previous levels during the 2001 time frame, which is at the end of the deregulation enthusiasm. The purpose of Exhibit 14 was to rebut Dr. Hadaway's implicit claim in his Direct Testimony that the 2001 high forecasts were "right" and that the more normal range of growth rate forecasts are "wrong" and too low. But Dr. Hadaway does not rebut that criticism.

Q. Do you have any final comments regarding Dr. Hadaway's Rebuttal Testimony?

A. Yes. Dr. Hadaway and I fundamentally disagree on the appropriate growth rate for the DCF model. Dr. Hadaway's growth rate is based upon his weighted average of GDP growth. While we had some agreement regarding CAPM in his Direct

[10] Dr. Hadaway's Rebuttal Testimony at lines 202-214.

Testimony, Dr. Hadaway now rejects CAPM as a viable model, at least at the present time. I continue to support the CAPM. We disagree with each other regarding our respective risk premium models.

Dr. Hadaway's comments in his Rebuttal Testimony are not persuasive; I continue to maintain my original positions.

III. COMMENTS ON MR. WILLIAMS'S REBUTTAL TESTIMONY

Q. Do you have anything more to say regarding Mr. Williams' criticism of your adjustment to the cost of debt?

A. No, I covered that issue above.

Q. Do you have any comments regarding Mr. Williams' Rebuttal Testimony of your discussion of Acquisition Commitment 37 data?

A. Yes, have two comments. The first is that Mr. Williams' spends a large part of his Rebuttal Testimony is devoted to an issue on which I recommended that no action be taken.

The second comment is that I believe there were one or more instances where without the new issue premium being at least 10 basis points, that PacifiCorp would not have satisfied its Commitment.

Q. Finally, Mr. Williams indicates that Standard & Poor's has altered the way it evaluates business risk. Do you have any comments on that?

A. Yes. I was unaware of the change; Standard & Poor's must have changed this in the last year. Mr. Williams' statement that "Standard & Poor's cautions that they do not assign credit ratings strictly based on what part of the matrix a utility finds itself in" has always applied to any quantitative or quasi-quantitative measures that Standard & Poor's may apply. In any case, Mr. Williams does not say what effect, if any, this new system would have on this matter, nor does he say or provide documentation showing where PacifiCorp might lie in the new "matrix."

IV. COMMENTS ON MR. WALJE'S REBUTTAL TESTIMONY

Q. You earlier indicated that Mr. Walje, in his Rebuttal Testimony, is most concerned about the Company's ability to attract capital. Have you complied with Hope and Bluefield criteria in this regard?

A. Yes. As I discussed above, the equity rates I'm advocating are derived from market data, and are higher than the Company's earning recent history. There is no evidence that PacifiCorp will not be able to attract capital for its divisions including Rocky Mountain power.

Q. Mr. Walje's talks about "business risk" and cites several examples of what he perceives are risk items that neither you nor Mr. Lawton dealt with adequately. Do you have any comments about this "business risk" issue?

A. Yes. What Mr. Walje describes as "business risk" is referred to as diversifiable risk in finance. That is, an investor can virtually eliminate his exposure to this type of risk through diversification. Since investors can minimize their exposure to this risk, markets do not reward investors if they choose to bear this type of risk. Consequently, diversifiable risk is irrelevant to the estimation of cost of equity.

Q. But aren't these risks real?

A. They may be. However, the best way to handle them is to deal with them directly, rather than as some sort of ill-defined add-on to the cost of equity.

For example, PacifiCorp could say it needs "X" amount of additional money to attract and train its workforce; the Company already has asked for additional funding for its capital expenditure program; it could request "Y" amount of dollars from the Commission to deal with regulatory conflicts among the six states in which it operates. In my view that's a much better approach than to assert a list of allegedly special risks and then arbitrarily ask that 50 or 75 basis points be added to its allowed return on equity.

V. CONCLUSION

Q. After reading the Rebuttal Testimony of the Company's witnesses, what conclusions have you reached?

I maintain my point estimate of 10.1 percent as my recommendation for Rocky Mountain Power's cost of equity as being just and reasonable and supported by substantial market and theoretical evidence.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.