

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of)	Docket No. 08-035-38
Rocky Mountain Power for Authority to)	
Increase Its Retail Electric Service Rate in)	Rebuttal Testimony of
Utah and for Approval of Its Proposed)	Randall J. Falkenberg
Electric Service Schedules and Electric)	On Behalf of the
Service Regulations)	Utah Committee of
)	Consumer Services
)	

March 9, 2009

- 1
2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**
- 3 **A.** Randall J. Falkenberg, PMB 362, 8351 Roswell Road, Atlanta, Georgia 30350. I am the
4 same Randall J. Falkenberg who filed direct testimony in this case on February 12, 2009.
- 5 **Q. WHAT IS THE PUPROSE OFTHIS REBUTTAL TESTIMONY?**
- 6 **A.** I present a correction to my SMUD adjustment and address the SMUD adjustment
7 proposed by Dr. Powell. I also comment on the proposals by UAE witness Higgins and
8 DPU witness Dalton to increase the capacity factor for Rolling Hills. Finally, I comment
9 on Mr. Dalton's proposed scheduled outage adjustment in GRID and present a correction
10 to the planned outage adjustment in my direct testimony.

11 **Correction to SMUD Adjustment**

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- 13 **Q. WHY IS IT NECESSARY TO CORRECT YOUR PROPOSED SMUD**
14 **ADJUSTMENT?**
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- 16 **A.** In direct testimony I recommended an imputed price of \$46.9/MWh for SMUD, based on
17 a calculation performed by Mr. Duvall in his workpapers for GND-3SS. My
18 recommendation was based on adding the levelized price of \$24.91/MWh computed by
19 Mr. Duvall (to recognize the \$94 million up front payment) to the 2009 nominal contract
20 price of \$21.99/MWh. Upon review I found there was a mistake in Mr. Duvall's
21 calculation because he assumed a 28 year levelization of the \$94 million, predicated on
22 deliveries from SMUD taking place from 1987 to 2014. However, the actual deliveries
23 did not start until January 1, 1990.¹ Thus, the term of contract deliveries was only 25
24 years, not 28. Using the 28 year term is simply an error, which I should have corrected in

¹ SMUD Contract, Paragraph 4.2

25 my direct testimony.² Making this adjustment increases my imputed price
26 recommendation to \$47.74/MWh, and increases the SMUD adjustment by \$116,722 as is
27 shown on Exhibit CCS 4.1R. It appears that all of the witnesses addressing SMUD in
28 this case, (Dr. Powell, Mr. Duvall, and myself) made this same mistake.

29 **Powell Testimony**

30

31 **Q. WHAT IS DR. POWELL'S RECOMMENDED PRICE FOR SMUD?**

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33 **A.** Dr. Powell recommends a price of \$41.56/MWh. Dr. Powell levelizes both the annual
34 nominal contract price and the \$94 million payment to arrive at his recommended price of
35 \$41.56/MWh.³

36 **Q. DO YOU AGREE IT IS NECESSARY TO LEVELIZE BOTH THE UP FRONT**
37 **PAYMENT AND THE ANNUAL CONTRACT PRICE AS RECOMMENDED BY**
38 **DR. POWELL?**

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40 **A.** No. I believe the best approach is to add the annual nominal contract price to the
41 levelized up front payment price. This is probably the most common way of handling a
42 cost stream composed of a fixed up front payment, and variable annual payments. For
43 example, conventional 30 year fixed rate mortgages have a constant amortization of
44 interest and principle, but charges for property taxes and insurance are adjusted on an
45 annual basis. This is done because it would require perfect knowledge of the future to
46 accurately levelize the variable payment stream, while the up front cost is known in
47 advance. This is the way the SMUD contract should be treated because the up front
48 payment was fixed on June 10, 1987 and the annual contract price is recomputed every

² Even if one accepted that the levelization should be based on the entire contract term, 28 years is incorrect because the contract was dated June 10, 1987. This would shorten the term to 27.56 years, not 28 years.

³ \$29.29/MWh for the levelization of the \$94 million and \$12.27/MWh for levelization of the contract price.

49 single year. If the Commission applied this approach it would substantially increase Dr.
50 Powell's imputed price.

51 **Q. DO YOU AGREE WITH DR. POWELL'S COMPUTATION OF THE**
52 **\$41.56/MWH?**

53 **A.** No. Dr. Powell computed the levelization of the annual contract price by assuming a
54 payment rate of zero dollars per MWh (\$0.00/MWh) for the period 1987-1989. Dr.
55 Powell stated in his response to CCS Data Request 1.1, that this was done because
56 SMUD did not take any deliveries in the first three years, and acknowledged that this
57 approach reduced the levelized contract price below the annual contract price every year
58 from 1990 to the end of the contract term. The lowest contract price since deliveries
59 started was \$13.96/MWh, while Dr. Powell's levelized price was only \$12.27/MWh.⁴

60 **Q. DO YOU AGREE WITH DR. POWELL'S ASSUMPTION REGARDING THE**
61 **TREATMENT OF THE YEARS PRIOR TO THE COMMENCEMENT OF**
62 **DELIVERIES IN 1990?**

63 **A.** No. Dr. Powell is assuming that years before deliveries started are equivalent to free
64 deliveries which is incorrect. Correcting this assumption would increase Dr. Powell's
65 annual contract price levelization to \$16.42/MWh, resulting in a total imputed price of
66 \$45.71/MWh.

67 **Q. ARE THERE ANY OTHER IMPLICATIONS OF THIS ISSUE?**

68 **A.** Yes. As discussed above, the up front payment should be levelized over the delivery
69 period, 25 years, not 28 years. Dr. Powell also levelized the up front payment over 28
70 years. Making this correction to Dr. Powell's recommendation would increase the
71 levelization payment price from \$29.29/MWh to \$30.01/MWh. Overall this would

⁴ This is another consequence of the confusion over the contract signing date, and delivery term which, unfortunately, was common to all three SMUD witnesses in this case.

72 increase Dr. Powell's levelized price to \$46.83/MWh when coupled with the first
73 correction.

74 **Dalton and Higgins Rolling Hills Testimony**

75 **Q. BOTH MR. DALTON AND MR. HIGGINS RECOMMEND THAT THE**
76 **ROLLING HILLS ISSUE BE RESOLVED BY USE OF AN INCREASED**
77 **CAPACITY FACTOR. PLEASE COMMENT.**

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79 **A.** Both witnesses discuss prudence concerns surrounding Rolling Hills, and propose to
80 increase the capacity factor assumed for the project. A problem with their
81 recommendations, however, is that they don't spell out whether this would be a
82 permanent, or one time adjustment. Simply increasing the assumed capacity factor for
83 Rolling Hills for a single test year would not amount to a significant prudence
84 adjustment. Nor would it address the long term question of how much energy Rolling
85 Hills will actually produce. It would be tantamount to a "slap on the wrist." It could also
86 result in the Commission having to hear evidence concerning Rolling Hills prudence
87 many years into the future.

88 Based on the evidence I presented in my direct testimony, the chief problem
89 concerning Rolling Hills prudence is the lack of reasonable data concerning its annual
90 energy production. Were the Commission to adopt a permanent capacity factor
91 requirement for Rolling Hills, it would largely moot any prudence issues and the
92 Committee would consider it to be a reasonable outcome. Mr. Higgins' proposal is to use
93 a 38% capacity factor, the same as the OPUC staff recommendation in Oregon Docket
94 No. UE 200. Comparison to other contemporaneous Wyoming wind projects supports a
95 38.6% capacity factor, as is shown in the table below:

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Table R-1
Current Estimate of Wind Power CF

	MWh	MW	CF
Glenrock Wind	323,799	99	37.3
Glenrock III Wind	124,409	39	36.4
Rolling Hills Wind	292,594	99	33.7
Seven Mile Wind	349,596	99	40.3
Seven Mile II Wind	68,862	19.5	40.3
Total	1,159,259	356	37.2
Total w/o RH	866,666	257	38.6
		Total Co.	Utah
NPC Adjustment with RH @ 38.6%		-1,618,823	-649,696

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98

The source of this data is the Company's GRID study for the 2009 test year. If

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the Commission were to adopt the recommendation to use a permanent capacity factor

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for Rolling Hills, I recommend 38.6%. As shown on the table above, this would produce

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a reduction to NPC of approximately \$650,000.

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Planned Outage Adjustment Correction

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Q. DO YOU WISH TO DISCUSS ANY OTHER CORRECTIONS TO YOUR DIRECT TESTIMONY AT THIS TIME?

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A. Yes. I also discovered a problem that overstated my recommended planned outage

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adjustment. Developing this adjustment was a two step process. First, a planned outage

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schedule was developed based on the method described in the testimony. Planned

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outages were modeled with 1/4 of the duration of the actual planned outages, starting at

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the mid-point of the original outage. After the planned outages were developed, a

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comparison was made of the annual outage energy on a unit by unit basis, to make sure

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that the planned outage energy for each unit was approximately the same as in the

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Company's test year. (Rounding or overlaps could cause a problem where not all

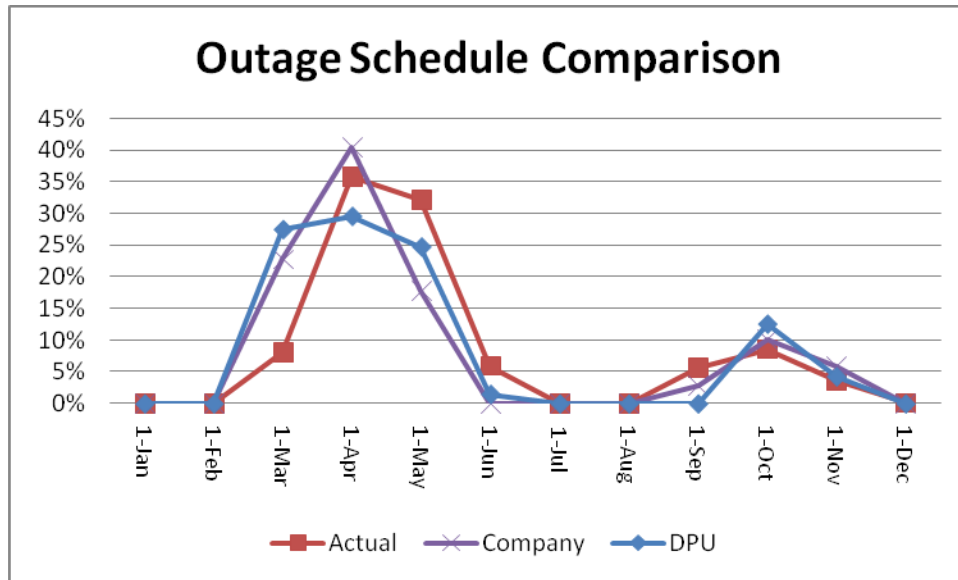
115 historical outage energy was realized.) The second step made some schedule
116 adjustments to address any shortfall. In the original process, errors were introduced in
117 the second step into the planned outage schedule that incorrectly increased the amount of
118 the adjustment. The corrected adjustment is now much closer to the average of the four
119 individual planned outage adjustments based on the historical period ending June 20,
120 2008 (See Table 2 Corrected as Exhibit CCS4.2R). I believe the four actual historical
121 schedules provide the most objective metric for judging the reasonableness of any
122 planned outage schedule. This correction reduces my planned outage adjustment by
123 about \$454,000 on a Utah basis. I notified the Company and DPU of this error shortly
124 after it was identified and provided corrected workpapers and GRID inputs March 2,
125 2009. As I may adopt some adjustments to my proposal based on the DPU and Company
126 rebuttal filings, I will present a new Table 1 in my March 23, 2009 testimony.

127 **Dalton Planned Outage Adjustment**

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129 **Q. PLEASE COMMENT ON MR. DALTON'S CORRECTED PLANNED OUTAGE**
130 **ADJUSTMENT, AS PROVIDED IN HIS SUPPLEMENTAL TESTIMONY.**

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132 **A.** As the figure below shows, Mr. Dalton's corrected schedule places too much
133 maintenance for coal plants in March and too little in April, May and June. Mr. Dalton's
134 result, while more reasonable than the Company's, produces an adjustment that is less
135 than implied by the actual outage schedules used by the Company over the past four
136 years.⁵ Also, it is somewhat subjective in that it requires some adjustments be made to
137 the Company schedules.

⁵ \$1.94 million for Mr. Dalton's recommendation vs \$2.40 million for the average of the four actual schedules. Both figures are presented on a Total Company basis.



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139 **Q. PLANNED OUTAGE MODELING IS COMPLEX, AND WAS A CONTENTIOUS ISSUE**
 140 **IN THE LAST CASE. IS THERE AN ALTERNATIVE THE COMMISSION MAY WISH**
 141 **TO CONSIDER?**

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143 **A.** In order to arrive at a more lasting solution to the issue of the planned outage scheduling,
 144 the Commission may wish to use the actual four year planned outage adjustment (the
 145 composite result of the four schedules, \$962,000, as shown on Table 2 and Exhibit
 146 CCS4.2R) and require that the parties work together to develop a methodology to
 147 produce a single planned outage schedule based on historical outage patterns for use in
 148 the next general rate case. This would further reduce my proposed adjustment by
 149 approximately \$220,000.

150 **Q. PLEASE EXPLAIN EXHIBIT CCS4.3R.**

151 **A.** Exhibit CCS 4.3R is an errata showing corrections to my original direct testimony.

152 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

153 **A.** Yes.