**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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| In the Matter of the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Utility Service Schedules and Electric Service Regulations | ) ) ) ) ) ) ) ) | **DOCKET NO. 09-035-23**<br>**DPU Exhibit No. 15.0SR Phase II**<br><br>**Surrebuttal Testimony and Exhibits of**<br>**Dr. Abdinasir Abdulle** |

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

**Surrebuttal Testimony of**

**Abdinasir Abdulle, PhD**

**April 7, 2010**

## I. INTRODUCTION

**Q. Please state your name, occupation, and business address.**

A. My name is Dr. Abdinasir Abdulle. I am employed by the Utah Division of Public Utilities ("Division") as a Technical Consultant. My business address is Heber M. Wells Office Building, 160 East 300 South, Salt Lake City, Utah, 84114.

**Q. On whose behalf are you testifying?**

A. The Division.

**Q. What is the purpose of your rebuttal testimony?**

A. In my rebuttal testimony I will respond to the rebuttal testimonies of Ms. Wolf of Salt Lake Community Action Program (SLCAP), Ms. Beck and Mr. Gimble of Office of Consumer Services (OCS), Mr. Griffith of Rocky Mountain Power (RMP or the Company), and Mr. Ralph Cavanagh on behalf of Utah Clean Energy (UCE) and Southwestern Energy Efficiency Project (SWEEP).

## II. RESPONSE TO MS. WOLF AND MS. BECK'S REBUTTAL TESTIMONY

**Q. Would you please briefly describe the rebuttal testimonies of Ms. Wolf and Ms. Beck?**

A. Yes. In their rebuttal testimonies, both Ms. Wolf and Ms. Beck recommended that the Commission reject the decoupling mechanism proposed by the Division for a number of reasons.

1. The timing of the proposal is inappropriate;
2. The proposal discriminates against the residential class;

3. The Division failed to demonstrate the need for a decoupling mechanism; and

4. The proposed decoupling mechanism negatively affects the low income customers.

**Q. Are you going to address the issues listed above?**

A. I will address items 2, 3, and 4 of the above list. Dr. Powell will address item 1.

**Q. Please comment on the issue that the proposed decoupling mechanism singles out the residential class.**

A. Both Ms. Wolf and Ms. Beck interpreted the Division's proposed decoupling mechanism for the residential class as singling out one rate class and therefore discriminatory. Neither of them explained why it is not appropriate to introduce a decoupling mechanism for the residential class as a pilot project.

The proposed decoupling mechanism is a pilot project. The Division chose to apply it to the residential class because of its specific characteristics. The residential class is the only class among the major classes where there are no separate energy and demand charges. That is, for the residential class, both the fixed costs and the variable costs are collected volumetrically. In addition, it is the only class where inclining block rates are applied. These characteristics make the residential class ideal for a decoupling pilot project.

**Q. Please comment on the issue that the need for decoupling has not been demonstrated.**

A. Both Ms. Wolf and Ms. Beck indicated that it has not been demonstrated that there has been a residential revenue shortfall warranting a decoupling proposal. The Division understands

this claim as suggesting that a revenue shortfall is both a necessary and sufficient condition for decoupling. The Division does not believe that revenue shortfall is a necessary and sufficient condition for decoupling, nor did it base its proposal upon the need to rectify past revenue shortfalls. The Division did not claim that the residential class is earning below its cost of service. Rather, the Division believes that because fixed costs are collected with volumetric rates, the Company would face an increased risk of future under-collection (and a symmetrical risk of over-collection) if high tail block rates were instituted without also implementing decoupling. This was the Division's motivation to propose a decoupling mechanism.

Usage levels vary with the rate per kWh. If the rate per kWh is increased and the customers respond by lowering their energy usage, the Company may not be able to collect all of its distribution fixed costs. In other words, since the distribution fixed costs are collected volumetrically, the Company faces the risk under-collecting its fixed distribution cost. This poses problem for any attempt to increase the tail block to promote energy efficiency.

That revenue volatility would increase, in the absence of decoupling, if more revenue is collected from tail block rates in which usage levels are more variable than in the first two blocks. The Division believes that, with current tail block rates, revenue volatility is not a major problem. However, it recognizes that, in the future, the Company could under (or over) earn with steeply inverted rates. Our decoupling proposal is based on a view toward the future, not past performance, of the Company. It therefore should go without saying that, if the Commission chooses not to implement a significant increase to the tail blocks rates, the Division would not support decoupling, at this time.

**Q. Would you comment on the issue that the proposed decoupling mechanism negatively affects the low income customers?**

A. Yes. The proposed decoupling mechanism involves an initial proposed rate design and subsequent true-ups performed semiannually. The bill impact analysis of the Division's proposed rate design indicates that the percentage change in the bills is higher for the high usage customers as compared to low usage customers.

DPU Exhibit 15.4 filed in my direct testimony indicates that the first semiannual true-up will result in a rate per kWh reduction of $0.000097 and the second semi-annual true-up will result in an increase in the kWh rate of $0.000113. This exhibit showed that the rate impact of the proposed decoupling mechanism is expected to be small and could result in either an increase or in a decrease. The following Table shows the proposed rates and rates after the true-ups.

| | Proposed | After 1st True-Up | After 2nd True-Up | Overall |
|---|---|---|---|---|
| **Summer** | | | | |
| Basic | $3.00 | $3.00 | $3.00 | $3.00 |
| kWh1 | $0.076045 | $0.075948 | $0.076061 | $0.076061 |
| kWh2 | $0.09031 | $0.090213 | $0.090326 | $0.090326 |
| kWh3 | $0.12391 | $0.123256 | $0.123369 | $0.123924 |
| Minimum | $0.00 | $0.00 | $0.00 | $0.00 |
| HELP | $0.23 | $0.23 | $0.23 | $0.23 |
| DSM | 4.82% | 4.82% | 4.82% | 4.82% |
| **Winter** | | | | |
| Basic | $3.00 | $3.00 | $3.00 | $3.00 |
| kWh | $0.078789 | $0.078692 | $0.078805 | $0.078805 |
| Minimum | $0.00 | $0.00 | $0.00 | $0.00 |
| HELP | $0.23 | $0.23 | $0.23 | $0.23 |
| DSM | 4.82% | 4.82% | 4.82% | 4.82% |

DPU Exhibit 15.1SR Phase II shows the bill impact of the rate decrease resulting from the first true-up. This exhibit shows that during the summer months, low usage customers enjoyed a larger percentage bill reduction than high usage customers, whereas during winter months, the opposite was true. However, in both cases the percentage bill reduction was very small - about one tenth of a percent.

Similarly, DPU 15.2SR Phase II, shows bill impact of the rate increase resulting from the second true-up. The exhibit shows that, throughout the year, the percent bill increase is lower for the low usage customers compared to high usage customers. This clearly indicates that the low-income customers will not be disproportionately impacted by the proposed decoupling mechanism.

Another reason that Ms. Wolf is incorrect on this point is that decoupling true-ups will have the effect of dampening swings in the total bills that customers pay. This is because the true-ups will seek to return rates to collecting only the allowed level of revenue for fixed distribution costs. As an example, if a customer's usage increases drastically in a summer month due to high temperatures, they can also expect a drastic increase in their bills for that month. Assuming, however, that all customers' usage went up in that month, the Company would over-collect for that period and would need to refund that amount (assuming it was not cancelled out by later low-usage months) in future rates. Thus, the amount that the customer would pay next period will actually decrease and their own long term energy costs will be more stable.

**Q. Can you respond to the argument that Ms. Beck and Ms. Wolf both make that high usage customers might cause bill increases for low usage customers?**

A. Yes. It is true that true-up rate changes will be driven more by high usage than low usage customers, for the simple reason that, with volumetric rates, high usage customers will always have a disproportionate effect upon revenues, especially when inclining block rates are in effect. However, it is important to remember that there will be both minor rate increases and decreases with partially decoupled rates, not just increases as Ms. Beck and Ms. Wolf suggest. Therefore, high usage customers could also drive refunds to low-usage customers. It is also important to keep in mind the magnitude of monthly changes that are likely to be seen. Referring again to my Exhibits 15.1SR and 15.2SR, one will see, for instance, that a low usage customer (600 kWh per month) would see summer rate changes of only 6 cents and 8 cents, respectively. A high usage customer (1,200 kWh), on the other hand, would see changes of 13 and 15 cents, respectively.

**Q. What is the bill impact of the rate design proposed by Ms. Wolf?**

A. In her direct testimony, Ms. Wolf proposed to increase the minimum charge to $6 and to spread the remaining revenue increase equally between the customer charge and an equal increase in the summer second and third blocks rates. She proposed no increase to the summer first block rate and the winter rate. The Division performed a bill impact analysis of this proposal (DPU Exhibit 15.3SR) and found that during the summer months, bills of the high usage customers increased by about 3% whereas the bills for the low usage customers increased by about 2%. However, during the winter months, the percentage bill increase for

the low usage customers is about 2% whereas that of the high usage customers is about less than 1%. During the winter season where there is no volumetric rate increase, the low usage customers will be disproportionately impacted by the proposed increase in customer charge. Overall, Ms. Wolf's proposed rate design is neither low usage customer friendly, nor does it promote energy efficiency, and therefore it should not be adopted.

**Q. Ms. Wolf indicated that SLCAP opposes the full revenue decoupling proposed in this rate case. Would you comment on that?**

A. Yes. On page 3, lines 31-33 of her rebuttal testimony, Ms. Wolf indicated that "…SLCAP is opposed to the concept of full revenue decoupling and is particularly troubled by the proposal in this rate case." The decoupling mechanism proposed by the Division is a partial decoupling because it includes only distribution fixed costs and not any of the generation and transmission fixed costs. Therefore, characterizing the Division's proposed decoupling mechanism as full revenue decoupling is not correct.

**Q. Both Ms. Wolf and Ms. Beck indicated that the proposed decoupling mechanism would not guarantee Company investment in DSM programs. Please comment on that.**

A. On page 4, lines 71-73, of her rebuttal testimony, Ms. Wolf states that "A revenue decoupling mechanism by itself in no way guarantees that utility companies will invest in effective energy efficient programs." Similarly, on page 9, lines 261-263, of her rebuttal testimony, Ms. Beck states that "Thus, removing disincentives via a decoupling mechanism does not appear necessary to ensure DSM continues to play a vital role in RMS's future resources and business plans." Both of these statements imply that the Division proposed a

decoupling mechanism to promote DSM. Though the Division agrees that DSM could a motive to implement a decoupling mechanism, the Division's primary motive was not to promote DSM, though this can be seen as a secondary benefit. Rather, the Division's intent in proposing a decoupling mechanism was to send a strong price signal to high usage customers by increasing the tail block rate considerably without exposing the Company to the risk of revenue volatility that would otherwise result from pushing more revenue into the tail block rates.

One has to realize that relying on DSM programs is not the only way to promote conservation and efficiency. There is no DSM program and there are no utility rebates now available or proposed that incent turning off the lights or turning up the thermostat. These types of activities could be incented using a price signal. This is why the Division has proposed a decoupling mechanism along with a rate design that increases the tail block rate significantly.

**Q. On page 12 of her rebuttal testimony, Ms. Wolf makes the argument that low income customers do not have the same ability to access energy efficiency improvements. Do you agree with that argument?**

A. Only Partially. We recognize that because of financial problems low income customers may not have the same ability to access energy efficiency improvements. However, this is not the issue. The issue is promoting energy conservation. Energy efficiency programs are not the only thing available for customers to conserve energy. Simple change changes in behavior

158 such as turning off the lights and turning down the thermostat could also be used to conserve
159 energy. These could be achieved through sending appropriate price signals.

## 160 III. RESPONSE TO MR. GRIFFTH'S REBUTTAL TESTIMONY

161 **Q. Mr. Griffith is concerned as to whether the Division's proposed decoupling mechanism**
162 **allows for changes in the number of customers over time. Please comment on this.**

163 A. The Division understands Mr. Griffith's concern about the apparent contradiction between
164 the information contained in DPU Exhibit 15.3 (a spreadsheet outlining the Division's
165 proposed decoupling mechanism) and DPU Exhibit 15.9 (the Tariff language). In DPU
166 Exhibit 15.3, the actual monthly revenue was calculated by multiplying monthly kWh sales
167 by the fixed cost recovery rate per kWh (monthly kWh sales x $0.02706613). However, in
168 DPU Exhibit 15.9, the Division inadvertently used the following formula to calculate the
169 actual monthly distribution fixed cost revenue

170 (Number of Customers Served x $3.00) + (Monthly kWh Sales * $0.02706613)

171 This is where the contradiction is. To solve this problem, RMP proposed and the Division
172 agrees with removing the first term (Number of Customers Served x $3.00) from the formula
173 shown in the proposed tariff language. This would clarify that the Division's proposed
174 decoupling mechanism allows for changes in the number of customers over time.

175 **Q. Are you going to suggest some changes to your primary and alternative rate designs?**

176 A. Yes. In developing the Division's proposed rate designs I inadvertently missed collection of
177 customer charges from those customers who would be paying the minimum charge had I not

proposed eliminating the minimum charges. I am correcting that mistake by including this billing determinant into my proposed rate design. The impact of such inclusion would be that the tail block rate will change from 12.3908 cents to 12.3353 cents for the rate design with decoupling (DPU Exhibit 15.5 – Corrected), and from 12.067 cents to 12.0069 cents for the alternative rate design (DPU Exhibit 15.8 – Corrected), resulting in a minimal bill impact change as l compared to what I filed earlier.

**Q. Mr. Griffith proposes a customer charge of $4.45 per customer per month. Please comment on that.**

A. As I indicated in my direct testimony, a customer charge this high would collect all of the Commission approved revenue increase as customer charge. It is true that, if one were to base rate design strictly upon cost causation principles, that increasing the customer charge would be appropriate. However, rate design is governed by a variety of principles, as I outlined in my direct testimony. Placing all of the required revenue increase in the customer charge is contrary to the principle of promoting conservation and efficiency in the use of resources.

Another reason that one could argue that a high customer charge is necessary is to protect the financial integrity of the utility. The Division's decoupling proposal accomplishes this. The Division does not see any need for the Company to increase the customer charge if the Commission adopts the decoupling proposal because the Company is no longer facing the risk of under-collecting its distribution fixed costs. The Company seems, by continuing to argue for a high customer charge even with decoupling, to be asking for protection from a

problem that would no longer exist. Adopting both decoupling and a large increase in the customer charge is not warranted, and Mr. Griffith's proposal to have both is not reasonable.

The Company's proposed customer charge is higher than the customer charge calculated using the Commission approved methodology and cannot be accepted. The Division believes that, if the Commission chooses not to adopt the proposed decoupling mechanism, the customer charge should be increased gradually toward a cost based level while still allowing room to increase the tail block to send the appropriate price signal to the high usage customers. Therefore, the Division recommends that the Commission not adopt the Company's proposed customer charge, with or without decoupling.

In earlier rate cases, the Division supported raising the customer charge closer to its cost based level. This was because the Division was balancing issues of intra-class equity, compensating the Company for its fixed costs, and conservation of resources. With the proposed decoupling mechanism, the Company's compensation for its fixed distribution costs is no longer a concern and the Division's primary policy target is to encourage conservation and energy efficiency. That is why the Division proposed a decoupling mechanism along with a rate design that encourages energy efficiency.

## IV. RESPONSE TO MR. GIMBLE'S REBUTTAL TESTIMONY

**Q. In his rebuttal testimony, Mr. Gimble indicated that the Division's proposed rate design lacks the necessary cost and price elasticity evidence. Would you comment on that?**

A. As described more completely in Dr. Powell's testimony, an elasticity study targeted specifically at Utah might be interesting for a few economists, but would not add significantly to our understanding of price elasticity for electricity, which we know from the existing literature to be relatively inelastic. Additional study on this topic would result only in delay, not enlightenment.

It is true that the Division has proposed a rate design that is not based on a recent marginal cost study. We have concurred with the Office that it would be useful for future rate cases for the Company to conduct such a study. The purpose of such a study would be to better identify cost causation within the residential classes. As we have repeatedly pointed out in this case, however, the Division is balancing several policy objectives, of which cost causation is one. Assuming all of the parties were to give cost causation primacy, however, the absence of a current marginal cost study would argue for the status quo in all aspects of rate design. That is, in the absence of better information, one would increase revenues evenly from the customer charge and all rate blocks. No party to the residential rate design discussion has made such a proposal. All have placed various emphases on preferred portions of the residential rates absent any clearly cited tie to a recent marginal cost study. To accept the Office's argument that the Division's proposal should be rejected because it is not tied to such a study would be to reject all parties' proposals, including that of the Office. The Division believes that maintaining the status quo is not appropriate, and that movement toward a rate design that sends conservation price signals in the current energy climate is more appropriate.

## V. RESPONSE TO MR. CAVANAGH'S REBUTTAL TESTIMONY

**Q. Please comment on Mr. Cavanagh's proposition that the decoupling mechanism should adjust for customer count.**

A. The Division's proposed decoupling mechanism allows for changes in the number of customers over time, as I discussed above in addressing a similar concern from Mr. Griffith.

## V. RESPONSE TO MR. TOWNSEND'S REBUTTAL TESTIMONY

**Q. On Page 6, lines 4-6, Mr. Townsend states that inverted block rates for commercial and industrial customers are entirely inappropriate and should not be considered. Please comment on that.**

A. The Division does not agree that it is necessary for the Commission to explicitly disavow inverted block rates for industrial and commercial customers (essentially an advisory opinion, since no one has proposed such rates in this rate case), but does agree that such rates are not appropriate for industrial and large commercial customers. Mr. Townsend's summary of the rationale for inverted block rates in the residential class is essentially correct, as is his judgment that the lack of relative homogeneity among the industrial and large commercial classes runs contrary to the rationale for inverted blocks. As a result, we have not, and do not plan, for the foreseeable future, to propose them. One exception, however, may be the small commercial class (Schedule 23), for which some degree of homogeneity is more likely than for other classes. Though the Division has not at this time considered whether to pursue such rate structures for this class, if the Commission chooses to make a statement such as that requested by Mr. Townsend, we would recommend that Schedule 23 not be included in such a statement at any time.

**Q. On page 6, lines 20-22, Mr. Townsend indicates that he opposes the decoupling mechanisms because they are typically unwarranted applications of single-issue rate making. Please comment.**

A. The Division disagrees with the assertion that decoupling mechanisms are single-issue rate making. Since decoupling mechanisms do not change the total revenue requirement or total cost of service for any class, it is not clear how one can argue that it is even a ratemaking issue. Typically, ratemaking takes place in an environment where there is a need to increase or decrease a revenue requirement. Decoupling adjusts and evens out collection of a revenue requirement that results from a rate case, but does not change the overall amount that is to be collected from a given class over time.

Nevertheless, decoupling mechanisms are explicitly authorized by Utah Code Ann. § 54-4-4.1 (2) (c) and is thus exempt from the single-item ratemaking prohibition.

**Q. Does this conclude your rate design surrebuttal testimony?**

A. Yes, it does.