

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) DOCKET NO. 07-035-93
Service Regulations, Consisting of a General Rate)
Increase of Approximately \$161.2 Million Per Year,)
and for Approval of a New Large Load Surcharge)

DIRECT TESTIMONY OF CHARLES E. JOHNSON

on behalf of

**AARP, Salt Lake Community Action Program and
Crossroads Urban Center**

July 21, 2008

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1
2
3 **INTRODUCTION**

4 **Q. Please state your name and business address.**

5 **A.** My name is Charles E. Johnson. My business address is 1086 - 7B Pleasant Blvd, Toronto,
6 Ontario M4T 1K2.

7 **Q. By whom are you employed?**

8 **A.** I am an independent consultant.

9 **Q. For whom are you submitting testimony?**

10 **A.** I am testifying on behalf of AARP, Salt Lake Community Action Program (SLCAP), and
11 Crossroads Urban Center.

12 **Q. What are your qualifications for testifying in this proceeding?**

13 **A.** I have received extensive training in various aspects of utility accounting, utility planning and
14 utility practices over the years and have a Master's Degree and Ph.D. in Mathematics. I have met
15 the requirements to be a Certified Depreciation Professional by the Society of Depreciation
16 Professionals. I have taught short courses on utility matters to the Staff of several State Utility
17 Commissions and National Commissions of Caribbean Island Nations and to various U.S.
18 Department of Energy and National Laboratory Staff. I have been involved in utility proceedings
19 as a consultant for more than 30 years and have testified as an expert in proceedings before utility
20 commissions and courts throughout the country. I have testified in several cases before the Utah
21 Public Service Commission, including cases involving Rocky Mountain Power Company (as Utah
22 Power and Light Company and PacifiCorp), Questar and Qwest.
23

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

1 A. I have been asked to review the Rocky Mountain Power Company filing and provide
2 recommendations about the rate design proposed by the Company, with particular attention to
3 the proposed Residential rates.
4

5 **SUMMARY**

6 **Q. Please summarize your testimony.**

7 A. First, I will describe the overall approach and guiding principles for setting rates that are
8 appropriate for Rocky Mountain Power Company in the current and likely setting during
9 which these rates will be in effect. This discussion will include describing where the
10 Company has departed from these principles. Then I will turn to the Residential rates
11 proposed by Mr. Griffith. I will devote sections to the proposed increase in the Residential
12 Customer Charge, the proposed Customer Load Charge, the Summer block structure, the
13 Summer/Winter rate differential, the Minimum Bill, and lastly, I will provide my proposed
14 Residential rate for Schedules 1 and 3.
15

16 **Q. What recommendations do you make?**

17 A. I make six recommendations in my testimony.
18

19 First, I recommend that the Commission not approve the increase in the Residential customer
20 charge requested by the Company and propose that the Residential customer charge of \$2.00
21 per month be retained. Second, I recommend that the Commission not approve the
22 Company's proposal to implement a Customer Load Charge. The Customer Load Charge has
23 many flaws, will not be understood nor accepted by customers, and will create numerous
24 problems for customers, for the Company and for the Commission. Third, I recommend that
25 the three-block summer kWh Residential rate be maintained. Combining the first two energy
26 blocks creates incentives for some customers to consume more peak period energy, rather than
27 providing incentives for them to reduce their consumption. Fourth, I recommend that the

1 amount of the Residential minimum bill be increased to \$6.00 per month. Currently, over
2 150,000 minimum bills are rendered per year, constituting 2% of the Residential bills. These
3 150,000 bills are for customers who use less than about 22 kWh in that month. The current
4 level of the minimum bill does not cover meter costs, billing and other costs identified by the
5 Commission. Because no additional energy is billed to these customers, the costs to serve
6 them are not recovered through the energy charges, as they are for customers who use more
7 energy. Fifth, I propose a method of developing a Residential rate that is consistent with these
8 recommendations and which can be compared to the Company's proposal, although it will
9 need to be adjusted to produce the exact revenue level approved by the Commission. Lastly,
10 because Rocky Mountain Power has argued that Residential customers do not understand the
11 current rate structure, I recommend that RMP be directed to undertake an education program
12 to better inform Residential customers about the rate structure and how they can reduce their
13 costs by using lower amounts of electricity. I have prepared Exhibit___(CEJ-1), which
14 contains a full list of my six recommendations in detail.

15
16 **APPROACH TO SETTING RATES**

17 **Q. What is the appropriate basis on which to set rates?**

18 A. The appropriate approach to designing rates depends partly on the environment that is
19 expected to exist during the period in which the rates are in effect.

20
21 **Q. What is the environment during which you expect these rates to be in effect?**

22 A. For a variety of reasons that need not be repeated here, a primary consideration for rates to be
23 proposed in this proceeding is that they should discourage high levels of consumption.
24 Charging higher prices for high usage will also facilitate a second primary consideration,
25 which is the preservation of an affordable block of electricity for essential usage. This will
26 preserve our scarce resources and help keep electricity costs lower for that essential usage.
27 Rocky Mountain Power has addressed this issue in several of their rate designs.

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Q. What other factors are important in setting rates?

A. There is no single factor that should guide rate setting – it is a balancing of factors, each of which is important, and the importance of which may vary through time. One of the commonly-referred to lists of principles was given in Bonbright’s book.¹ Of the list provided there, some of the more important ones for our purposes are cost of providing service (both internal and external costs), fairness, and rate stability; as well as the many political considerations that accompany the ratemaking process.

As far as cost is concerned, it must be kept in mind that the costing process never provides an exact measurement of the costs imposed on the utility. Allocated cost studies are simply allocations (as best they can be determined) of the costs allowed for recovery by the Commission. If greater or lesser amounts of costs were allowed by the Commission, those greater or lesser costs would be allocated, resulting in different levels of “cost of service” for the various rate classes. While the costs are typically accounting cost with precision to the dollar, the method of allocating costs is subject to wide variations and the results cannot be considered to be the “exact” cost of providing service. Debating these differences in every rate case has led to the establishment of Commission-approved or Commission-accepted methodologies in some jurisdictions. Moreover, these costs do not reflect the costs imposed on the Company if a customer chooses to consume additional energy.

Marginal costs, on the other hand, by their nature are estimates. Mr. Griffith points out in his discussion of New Large Load Schedule 500 [Direct Testimony Page 15] that the generation and transmission component for the proposed Schedule 9 is approximately 4.2 cents per kWh, while the marginal cost of generation to serve new load has a 20-year nominal levelized price

¹ “Principles of Public Utility Rates” by James C. Bonbright, Albert L. Danielsen and David R. Kamerschen (Second Edition, March 1988)

1 of 5.8 cents per kWh, nearly 40% higher. These higher marginal costs are applicable to all
2 new load, so other rates ought to be designed with an eye toward these costs. Because of the
3 substantially-higher level of marginal costs than embedded costs, the revenue recovered from
4 additional usage priced at standard rates does not cover the cost of providing that additional
5 energy. For that reason, it becomes important to price marginal usage closer to marginal cost
6 than embedded cost. This will result both in producing revenue closer to the cost of additional
7 usage and in reducing usage. The problems in setting rates equal to marginal cost are twofold
8 – first, different people will likely produce different estimated costs; and second, the total
9 marginal cost is unlikely to equal the revenue allowed.

10
11 The difficulty in using either allocated costs or marginal costs for the purpose of setting rates
12 leads one to conclude that precise measurement of any cost component or setting rates to
13 recover precisely the amount of revenue determined by a specific cost calculation is not a
14 worthwhile activity. Judgement has to be exercised in the development of the rates – it is not
15 proper to automatically rely on one specific calculation. The Company has recognized this in
16 the development of its proposed Schedule 500 for New Large Loads. In this case, greater
17 reliance is appropriately placed on marginal costs.

18
19 Moreover, there are external costs of providing service that the analyst may want to keep in
20 mind when setting rates. For example, a desire to induce conservation would lead the
21 Commission to price usage charges higher and fixed charges lower. The allocation of
22 embedded costs and calculation of marginal costs can only be used as guides in setting rates,
23 not as precise targets to be achieved.

24
25 Fairness is to be assessed amongst all parties involved; between the utility and its customers,
26 between customer classes and between customers in the same class. Fairness, as seen by
27 Bonbright, also leads to gradualism, as is practiced by this Commission. Bonbright uses the

1 characterization “The best tax is an old tax” to point out the acceptability of existing rates, and
2 based on his principle of stability in rates, one should make changes in rates and rate
3 structures gradually and consistently.
4

5 Lastly, the many political considerations that affect a jurisdiction can play a role in setting
6 rates. For example, economic development electric rates are fairly common in my experience.
7 The purpose of these kinds of subsidized rates is to attract businesses that will employ local
8 people in their workforce; i.e., to provide local jobs. Lastly, this Commission has taken the
9 impact of costs on low-income customers into consideration in setting rates. I will say more
10 about this issue later in my testimony.
11

12 **Q. Has Rocky Mountain Power followed these principles in developing its proposed rates?**

13 A. No. The Company has not completely adhered to appropriate rate-setting principles
14 throughout in developing its proposed tariff.
15

16 First, Mr. Griffith has relied extensively on the fact that marginal costs are high for the
17 Company, especially during the summer months, but has not been consistent in developing
18 rates that appropriately reflect high marginal costs. These high marginal costs and attempts to
19 suppress customer demands during peak periods are the underlying basis for the Schedule 500,
20 New Large Loads; for the proposed Residential Customer Load Charge (CLC); and for
21 increasing the summer energy block charge, but not the winter energy charge for the
22 Residential rate. However, some of the other Company proposals work at cross-purpose to the
23 Company’s objectives.
24

25 Another area where the proposed rates are inconsistent with these principles is in the
26 contradictory justifications given for eliminating the third block of energy in the Residential
27 rate as being too complex for customers to understand, while at the same time proposing to

1 implement a far more complex rate charge for Residential ratepayers, the Customer Load
2 Charge. Mr. Griffith cites a survey of customer knowledge that shows a lack of understanding
3 of the current rate structure and of their own usage levels and costs in support of a proposal to
4 reduce the energy blocks from three to two.

5
6 **IMPACT ON LOW-INCOME CUSTOMERS**

7 **Q. What is Rate Schedule 3?**

8 A. Rate Schedule 3 is a rate schedule for low-income customers that have qualified under the
9 conditions of the schedule, which is:

10 To qualify, a Customer must be qualified for the Utah Home Energy Assistance
11 (HEAT) Program; or earn no more than 125% of the federal poverty level.

12 Rate Schedule 3 provides up to an \$8.00 per month discount to these customers.
13

14 **Q. How many customers currently qualify for Rate Schedule 3?**

15 A. There are approximately 24,400 customers as of 6/30/07, but estimates of the number of
16 households in Utah that could qualify are substantially higher. Included are approximately
17 300 customers who receive service on a Medical Life Support basis. These are customers who
18 have life-enabling electric devices, such as ventilators, essential air-conditioning, charging
19 batteries for wheelchairs, or other medical equipment that has intensive consumption of
20 electricity.
21

22 **Q. Are there other customers with limited means who don't qualify for Schedule 3?**

23 A. Yes. In particular, many senior citizens have income exceeding 125% of the poverty level
24 (\$17,500 for a couple), but are retired with relatively low amounts of income. Many of these
25 older customers are also likely to have lower levels of usage than the average Schedule 1
26 customer. As I will discuss later, these customers will have lower levels of usage in common
27 with the Schedule 3 customers. Their lower usage will impose lower peak use on the RMP

1 system. This is a sound reason for providing an initial block of affordable energy in the
2 pricing structure and will be justification for the rate design proposed later in my testimony.
3

4 **Q. Why should the Commission be concerned about the impact on low-income customers?**

5 A. Obviously the level of the revenue in any customer's bill affects the customer and low-income
6 customers are no different in that respect. But several aspects of rates affect low-income
7 customers different from other customers. One factor is that shelter (including energy for
8 heat, light, etc.) comprises more of the household income for low-income families than it does
9 for families with average income. This Commission has recognized this problem for low-
10 income customers of Rocky Mountain Power and has instituted a separate low-income rate
11 schedule for customers receiving HEAT assistance, Schedule 3, that provides a small
12 reduction in the monthly bill for eligible customers.
13

14 The usage patterns of low-income customers differ from other customers, which leads to
15 different impacts on low-income customers than other Residential customers from increases in
16 some rate charges. We can see the difference in usage from looking at the different usage
17 patterns in Schedules 1 and 3. The average monthly energy usage is 25% more for Schedule 1
18 customers (792 kWh) than for Schedule 3 customers (633 kWh). In addition, average summer
19 tail block usage for Schedule 1 customers is over 3 times that of Schedule 3 customers. Thus
20 low-income customers are contributing less to the increase in the summer peak than other
21 Residential customers and should bear less of the burden of the increase.
22

23 Some of the low-income Schedule 3 customers apparently use more than 1000 kWh in two
24 summer months, because Supplemental Exhibit D WRG indicates that over 4,600 Schedule 3
25 customers would pay the CLC if it is implemented. While all customers would be shocked to
26 have an additional \$72 tacked onto their annual bill, for these low-income customers, it could
27 be disastrous.

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For those low-income customers on Schedule 3 who receive a medical life-support discount, the additional charge is particularly problematic. The average summer usage for these customers is 981 kWh, only 19 kWh below the 1,000 kWh value at which the proposed CLC would be imposed. Because their average use is so close to the breakpoint, these customers would be in constant danger of being assessed this \$72.00 annual charge. Implementation of this new charge could mean the difference between these customers paying their electric bill and their being disconnected, leading to life-threatening problems.

Another rate charge that affects low-income customers more than other Residential customers is the customer charge. Because low-income customers have lower average usage levels, the customer charge is a larger fraction of their bill, and consequently, the increase in the customer charge is also a larger fraction of the increase in their bill. This means that the 100% increase in the customer charge results in a larger percentage increase for the average low-income customer than for the average Schedule 1 customer.

Lastly, because the Schedule 1 customers have more energy priced at the second block rate than Schedule 3 customers, and the Company's proposed second block rate is lower than the current rate, the average Schedule 1 customer receives a smaller increase than the average Schedule 3 customer.

Q. What are the increases for these average customers?

A. The increase for the average Schedule 1 customer would be 3.5% and for the average Schedule 3 customer it would be 3.9%. These calculations are shown in Exhibit__(CEJ-2). The crucial part of the calculation is for the second energy block. With a 400 kWh first block, the average Schedule 1 customer uses 392 kWh in the second block and the average Schedule 3 customer only uses 233 kWh in the second block. The cost of the second energy block is

1 reduced by \$1.86 for the average Schedule 1 customer and only \$1.11 for the average
2 Schedule 3 customer.

3
4 **RESIDENTIAL CUSTOMER CHARGE**

5 **Q. What is the Company’s proposal for the Residential Customer Charge?**

6 A. Rocky Mountain Power has proposed to double the Residential Customer Charge from \$2.00
7 to \$4.00. The proposal follows a doubling of the Residential Customer Charge in Docket No.
8 06-035-21 in December 2006.

9
10 **Q. Is it necessary to collect increased revenues from the Residential Class through an
11 increase in the Customer Charge?**

12 A. No, it is not necessary to increase the Customer Charge. There are a limited number of
13 component charges for Residential rates. The primary ones are a fixed customer charge and
14 an energy charge (or several energy charges, if blocks of energy are priced differently) based
15 on usage. With essentially only two charges, meeting a revenue target is like a see-saw –
16 when one charge goes up, the other comes down. If the fixed customer charge is increased as
17 proposed by the Company, the energy charges necessarily must be reduced from what they
18 would otherwise be.

19
20 **Q. What reason does RMP give for increasing the customer charge?**

21 A. Mr. Griffith claims that the current customer charge fails to recover the “related cost of
22 service.” What he should say is that it doesn’t equal the “allocated PSC-allowed” costs of the
23 utility providing service.”

24
25 As I discussed earlier, these are not really the “cost of service,” but are simply the accounting
26 costs of the company, allowed by the Commission, and allocated to the rate schedules. RMP
27 is in the business of providing electric power; access to that service is of no interest to

1 customers without the power itself. Retail stores are not in the practice of charging customers
2 to enter the store – the costs of the store that provides the customer the ability to buy at retail
3 is included in the purchase price of the object being sold. Because RMP is a regulated utility,
4 it may be necessary to impose some fixed customer charge for the purpose of providing some
5 guaranteed revenue, but the Company has not argued for this. However, this is a pricing
6 mechanism and should be subject to the other principles of ratemaking that I have discussed.
7

8 Another reason given by Mr. Griffith is “In today’s environment where we encourage
9 reductions in usage where possible and attempt to achieve efficient usage in all circumstances,
10 it is no longer appropriate to achieve the recovery of fixed costs through the variable energy
11 component of rates.” [Direct Testimony Page 9] He does not elaborate on why he thinks it is
12 no longer appropriate, but by his reference to “encourage reductions in usage” one assumes it
13 is because he fears the possibility that reductions in usage will lead to revenue shortfalls. This
14 is simply counter to the primary issue he has raised in the section of his testimony titled
15 Residential Rate Design Background. [Direct Testimony Pages 7-12] In that section of his
16 testimony, he points out that summer usage increased 29 percent and higher-priced tail-block
17 usage increased 79 percent in the three-year period after inverted rates were introduced. Mr.
18 Griffith then observes that residential customers are not reducing usage in response to these
19 higher prices. If a major concern of the Company is that customers aren’t reducing
20 consumption with the current level of inverted rates, it shouldn’t simultaneously be concerned
21 that customers might reduce consumption and keep the Company from recovering its fixed
22 costs.
23

24 It is common for a utility’s proposal to have higher fixed charges because of the utility’s desire
25 to insure stable revenue flows. But that doesn’t seem to be consistently the case for Rocky
26 Mountain Power. Currently the Schedule 1 (Residential) Customer Charge provides the
27 Company with just over 3% of the Class revenue, while usage provides nearly 97% of the

1 revenue. If the proposed rates were to be adopted by the Commission, fixed cost recovery (the
2 Residential Customer Charge plus the Customer Load Charge) will amount to nearly 9% of
3 the Residential Class Revenue.

4
5 The fixed cost recovery from the Residential Class should be compared with fixed cost
6 recovery from Schedule 6 (General Service) customers. For Schedule 6, usage charges
7 currently provide nearly 99% of the class revenue, with the fixed customer charge providing
8 only 1%. If stable revenue flows from commercial and industrial customers (even with
9 fluctuations in economic conditions) were a consideration for Rocky Mountain Power, the
10 smaller percentage of revenue recovered from the Schedule 6 Customer Charge would
11 necessitate an even larger increase in that charge. However, the Company has proposed no
12 increase in the Schedule 6 Customer Charge. Rather, Mr. Griffith proposes only increasing
13 usage charges for Schedule 6.

14
15 **Q. Are there reasons to oppose an increase in the Residential Customer Charge?**

16 **A.** Yes, there are several reasons to oppose increasing the Residential Customer Charge.

17
18 First, if the Company's claim that the marginal cost of generation is nearly 40% higher than
19 embedded cost is anywhere near accurate, it is appropriate to price usage at a higher rate than
20 the embedded cost to reduce both uneconomic consumption and the subsidization of
21 increasing levels of consumption by those who do not increase their consumption. That is the
22 Company's justification for the New Large Load rate and it should be applied to the
23 Residential rate design. Customers using large amounts of energy should not be subsidized by
24 low-use customers, many of whom are fixed income seniors or low income households. The
25 result of applying that principle to Residential rates is that the increase in revenue should
26 largely be recovered through increases in the usage charges, particularly in a way that induces

1 customers to reduce their level of consumption. In fact, this argument could be used to justify
2 reducing the Residential Customer Charge from its current level.

3
4 Additionally, as I noted previously, a larger percentage of the Residential Class revenue is
5 recovered through fixed charges than for other classes. By increasing these fixed charges as
6 much as they propose, the Company's proposal would recover most of the Residential
7 increase from the Customer Charge and the CLC. The increase in these fixed charges
8 produces nearly \$34 Million of the class increase, compared to only \$7 Million increase in
9 energy charges. This \$7 Million would result in about a 1.4% increase in the average cost of
10 energy. Proposing to increase energy costs by such a small percentage, when the marginal
11 cost of energy is much higher than the embedded cost is inconsistent with proper pricing
12 practice.

13
14 Second, the Residential Customer Charge was doubled just over a year and a half ago and
15 doubling it again does not satisfy the two criteria of gradualism and stability in rates. I
16 therefore recommend that the Commission retain the Residential Customer Charge at the
17 current level of \$2.00 per month. If the Commission reduces the revenue requirement to the
18 Residential class by just over \$7 million and allows the Company to increase the Residential
19 customer charge and also to impose the CLC, all of the additional revenue will be collected
20 through those charges and no increase will occur in the energy charge. So it is especially
21 important not to increase the customer charge or impose the CLC if the revenue requirement is
22 decreased substantially.

23 24 **CUSTOMER LOAD CHARGE**

25 **Q. Please describe the proposed Customer Load Charge (CLC).**

26 A. The proposed CLC for Residential customers is similar to a demand ratchet, in which a high
27 load results in higher charges for subsequent periods. In the case of the proposed CLC, it is

1 not demands that are measured, but high kWh usage (above 1,000 kWh for two summer
2 months) that will result in an additional charge of \$6.00/month for 12 months, or a total of
3 \$72.00 over the next year.
4

5 **Q. What is the purpose of the CLC?**

6 A. Mr. Griffith says that he expects the charge to provide price signals for a customer's high
7 usage that will result in more effectively influencing usage decisions.
8

9 **Q. Do you agree that the CLC will more effectively influence usage decisions?**

10 A. No. The CLC will not more effectively influence usage decisions. It is more likely that the
11 result will be a flood of complaints to the Company and to the Commission.
12

13 The CLC is not a charge that will be easily understood by ratepayers. If there is any
14 conclusion that one would reach from examining customer lack of comprehension of rate
15 structure cited by Mr. Griffith in his testimony, it is that most customers do not know much
16 about the components of their utility bills and understand even less. Some ratepayers will no
17 doubt only notice that their total bill had increased and attribute that to higher electricity costs.
18 They will not understand how their usage has affected their charges and they can do nothing
19 about it for a year, but will have to reduce their usage next year to eliminate that charge.
20 Other ratepayers will see a new charge on their bills, become outraged and begin a series of
21 actions that benefit no one. These actions will likely include complaints to the Company, the
22 Commission, letters to the editor of the newspapers, and complaints to the Utah Legislature
23 and others. In the end, they will probably find an increase in their bill for 12 months to be
24 incomprehensible and unjust.
25

26 It should be noted that there is a large number of extremely large Residential users of
27 electricity on the RMP system. Based on bill frequency data provided by RMP, over 4% of

1 the annual Schedule 1 customer bills (approximately 320,000 bills) are for usage in excess of
2 2000 kWh and their usage amounts to over 15% of the total kWh consumption of Schedule 1
3 (nearly a million kWh). In addition, over 14,000 bills have usage exceeding 5,000 kWh.
4 These customers are driving the high summer usage and these are the customers who should
5 be paying more of the cost of meeting that summer peak.

6
7 The CLC will have little effect on the usage of larger customers. The electricity bill for a
8 customer using 5,000 kWh is currently nearly \$500 in a summer month and would be \$525.20
9 under RMP's proposed rates. The additional \$6.00 for the CLC is about 1% of the bill and is
10 almost lost as noise in the total cost. These customers will just pay the additional monthly
11 \$6.00 as part of their increased cost. The possibility of them reducing their consumption to
12 below 1000 kWh for 4 of the 5 summer months is nil.

13
14 Also, 25% of the summer bills are above 1000 kWh, amounting to over half the Residential
15 energy, and nearly 22% are above 1100 kWh. A few of these customers may be able to reduce
16 consumption to below 1000 kWh, but reason suggests that most of these customers will not be
17 able to do so. The result will be little change in behavior or consumption levels.

18
19 By comparison, it is those customers using energy exactly above the 1000 kWh CLC
20 breakpoint who will be most affected. These customers are the only ones likely able to reduce
21 their consumption to below 1000 kWh. About 4% of the summer bills are for between 1000
22 and 1100 kWh and their total usage accounts for about 5.5% of the Residential energy. If this
23 4% of the Residential customers all reduced their consumption to avoid the CLC, that would
24 be less than 0.5% of the Residential consumption and about 0.1% of the total consumption. It
25 is at this 4% of the Residential customers and 0.1% of the energy that the CLC is targeted.

1 **Q. What about the CLC will be viewed as incomprehensible and unjust?**

2 A. Several other aspects of the CLC will be seen as incomprehensible and unjust. First, the intent
3 of the new charge is to influence usage decisions about peak summer usage. But the charge is
4 determined after the peak season and becomes effective on the October bills, after the peak
5 season has passed. It then applies for the next 12 months, the first 8 months being those of the
6 winter season. That means that the first time the customer is aware of the higher charge will
7 be on a winter bill, perhaps months after the usage that caused the higher charge. For
8 example, if May and June are months of usage exceeding 1000 kWh, it will be October before
9 the customer's bill reflects that charge.

10
11 Moreover, it is not until the summer a year after the peak usage occurred that the customer can
12 take any action to affect the charge that has been imposed by the CLC. For the charge
13 imposed in October, the first action that can be taken to eliminate that charge will be the
14 following May and that will be to reduce usage below 1000 kWh in 4 of the 5 summer
15 months. The consequence of that action to avoid the CLC will not occur until October, four
16 months after corrective action has occurred and more than a year following the action that first
17 caused the charge to be imposed.

18
19 Second, two customers with nearly identical usage of 1000 kWh each month and 1001 kWh
20 each month would have monthly bills that differed by \$6.00, whereas two customers with
21 monthly usage of 999 kWh and 1000 kWh would have bills that differed by about \$0.10. That
22 would be difficult to explain to the customers.

23
24 Third, the peak season is not a precise period. Billing cycles run throughout the month; some
25 June bills are for usage mostly in May and some for usage mostly in June. There are instances
26 when bill readings are missed and bills are estimated. There are a whole host of problems
27 with implementing a rate that has such serious cost implications on such a loosely-defined

1 basis. I include the RMP response to AARP Data Request No. 4.3 as Exhibit—(CEJ-3) to
2 show some of the problems for the CLC that would arise from the standard billing practices of
3 the Company. Two stand out here – 1. The Company’s use of billing cycles ranging from 26
4 days to 34 days can make a customer subject to the CLC without ever having exceeded 1,000
5 kWh for any 31 day period, and 2. The CLC may be imposed as the result of an estimated
6 bill.

7
8 One of the principles listed in Bonbright’s book which was mentioned earlier that is not
9 usually at issue is the last one in his list: “Freedom from controversies as to proper
10 interpretation.” The CLC is likely to lead to conflicts with this principle because of the
11 reasons mentioned above and possibly some unforeseen complications that would arise if the
12 CLC rate were to be implemented. According to the Company’s numbers in Supplemental
13 Exhibit D_WRG, fully 37 percent of the Schedule 1 customers will be charged the CLC. That
14 is a substantial percentage of the customers that will be affected.

15
16 In addition, as I discussed in the previous section, the Company’s proposal results in over 80%
17 of the increased revenue being recovered through the fixed charges and less than 20% being
18 recovered through energy charges. This recovery division is not in keeping with the marginal
19 cost structure of the Company. Much more of the additional revenue should be recovered
20 through the energy charges, particularly those charges that will likely cause customers to
21 reduce their consumption, such as the summer tail-block charge.

22
23 Lastly, the rates approved by the Commission from this rate case won’t be known until after
24 the summer season has passed. The Company has proposed implementing the CLC in
25 October, 2008 based on usage during the summer months May - September 2008. While the
26 customers are using electricity in the summer, they won’t know the full cost of their usage

1 until long after they have used it. It is inherently unfair to customers to impose a charge on
2 them based on usage incurred before the Commission determines the amount of the charge.
3

4 **Q. Do you recommend that the CLC be adopted by the Commission?**

5 A. No, I recommend that the Commission not adopt the proposed Customer Load Charge or any
6 charge similar to it. However, if the Commission does approve a charge like the CLC for
7 Residential customers, I recommend two modifications to the Company's proposal. One
8 modification is in the size of the charge. Some of the objections I have raised would be
9 reduced, but not eliminated, if the charge were smaller. The second modification is that I
10 recommend exceptions be granted to some customers. Specifically, those customers on
11 Schedule 3 that have medical issues for which they have been given medical discounts should
12 not be assessed the CLC. These customers have medical equipment on which they rely and
13 have little opportunity to reduce their consumption. This is a small number of customers and
14 their exclusion does not impact the revenue significantly.

15
16 I would also note that low-income customers on Schedule 3 have substantially lower usage
17 levels than Schedule 1 customers. Slightly more than 9 percent of summer usage by Schedule
18 3 customers is in the block exceeding 1000 kWh, compared to nearly 22.5 percent for
19 Schedule 1 customers. The Company's numbers in Supplemental Exhibit D_WRG show that
20 while over 37 percent of the Schedule 1 customers are impacted by the CLC, less than half
21 that percentage (17 percent) of Schedule 3 customers would be. For these 17 percent of the
22 Schedule 3 customers, the proposed additional \$72/year will be an undue hardship that some
23 can't sustain. While I oppose the CLC on both practical and theoretical grounds as being
24 improper, if the Commission does implement it or some similar charge, I recommend that the
25 amount of the charge be different for Schedules 1 and 3. Because Schedule 3 customers don't
26 contribute as much to peak usage, I recommend that if the CLC is implemented, the CLC

1 charge for Schedule 3 be set at half the level for Schedule 1 and not imposed on the Schedule
2 3 customers receiving the life-support discount.

3
4 **SUMMER RATE BLOCKS**

5 **Q. What has Rocky Mountain Power proposed for the Residential energy rate?**

6 A. The Company has proposed to eliminate the three energy block structure in the summer
7 Residential energy charge by combining the first two blocks. To accomplish this, the price of
8 the first 400 kWh will be increased by 7.2%, the price of the next 600 kWh will be decreased
9 by 5.6% and the price of the remaining kWh will be increased by 8.3%. The impact of these
10 changes can be seen in Supplemental Exhibit C WRG. Smaller customers (those using up to
11 400 kWh) would receive the largest percentage increase, up to 26%. The largest users would
12 see a slightly larger than the average 7.8% increase, the largest increase being only around
13 8.7%. The average-sized customers (those with usage from 400 to 1000 kWh/month would
14 receive a below-average increase, with customers using 1,000 kWh per month having an
15 increase as small as 1.5%. The slightly-larger-than-average-usage customers are precisely the
16 ones that could be induced to reduce their consumption levels by proper rate structures. These
17 are customers with usage between the average usage (792 kWh) and 1,000 kWh, the point at
18 which the CLC would be imposed. They should not receive smaller increases by charging
19 low-usage customers more. Nor should the largest customers' rates be increased only slightly
20 larger than average at the expense of the smaller customers.

21
22 Were it not for the increased customer charge, customers using up to 1000 kWh a month
23 would actually receive a reduction in their bills with the RMP proposal. That is not to suggest
24 that I recommend the customer charge be increased to avoid this particular inconsistency. In
25 fact, if the Commission accepts my recommendation to retain the Residential Customer
26 Charge at its current level, the changes to the rate structure proposed by the Company will

1 have this adverse effect. For these reasons, the Company's proposal to combine the first two
2 energy blocks should be rejected.

3
4 **Q. Will the Company's proposed change in Residential rate structure help to dampen the**
5 **summer usage as is desired by the Company?**

6 A. No, there is almost no possibility that this change in Residential rate structure will help to
7 dampen summer usage. The largest customers, those customers whose usage levels have
8 grown over the past several years, will only see a slightly larger than average increase. While
9 the 7.8% average increase in costs would be expected to reduce usage somewhat, the rate
10 structure would have little to do with it.

11
12 Even worse, the average-sized customers, those with usage between 400 and 1000 kWh per
13 month would face smaller than average increases, leading them to consume more electricity
14 than if the rate increase were spread equally over all the components.

15
16 **Q. What do you propose for the Summer blocks for the Residential Schedule 1 Rate?**

17 A. I recommend that the Commission retain the three block kWh structure for the summer
18 Residential rate. I also propose that the tail block be increased more than average and the
19 initial block be increased less than average. This will provide some incentive for larger users
20 to reduce their consumption and will also maintain an initial block of affordable energy for
21 essential usage.

22
23 If the Commission does choose to increase the customer charge, a decrease in the initial
24 energy block would more equitably distribute the increase among Residential customers by
25 reducing the percentage increase for smaller customers. This would also require higher
26 charges for the other two energy blocks, which would reinforce the conservation effect of the

1 rate structure. This will help suppress the summer consumption, a desire of Rocky Mountain
2 Power. I will present my complete Residential rate later in my testimony.

3
4 **SUMMER/WINTER DIFFERENTIAL**

5 **Q. What has the Company proposed for the difference between summer and winter**
6 **Residential rates?**

7 A. The Company has proposed to increase the seasonal rate differential by holding the Winter
8 energy price the same as currently and recovering the full increase in revenue through the
9 increase in customer charge, the CLC, and the increase in summer kWh charges.

10
11 **Q. Do you agree with that proposal?**

12 A. No. I advise the Commission to keep the Residential Customer Charge at its current level, to
13 reject the CLC and to increase all energy charges. The peak period energy charges should be
14 increased by a greater amount, but all other usage charges, including the winter usage charge
15 should be increased.

16
17 **MINIMUM BILL**

18 **Q. Has Rocky Mountain Power proposed to eliminate the minimum bill in its Residential**
19 **Tariff?**

20 A. Yes, in Mr. Griffith's testimony, he has proposed elimination of the single-phase Residential
21 minimum bill.

22
23 **Q. What justification is given for elimination of the minimum bill?**

24 A. No justification was given by Mr. Griffith for eliminating the single-phase minimum bill for
25 the Residential customers. It is probably because the proposed customer charge is greater than
26 the current minimum bill.

1 **Q. Please describe the current RMP minimum bill for Residential customers.**

2 A. Currently, the minimum charge for single-phase Residential customers is \$3.67 per month.

3 There are also three-phase Residential customers who receive minimum bills. Because of the
4 small number of them, I have not included them in my analysis or discussion.

5

6 There are substantial numbers of customers who receive a minimum bill. Nearly 2 percent of
7 the Schedule 1 bills rendered by Rocky Mountain Power are minimum bills, over 150,000
8 bills per year. The average monthly usage for these 150,000 bills is 9 kWh. The Company
9 incurs costs to serve these customers and these costs are not recovered by the minimum bill,
10 nor are they recovered through charges for energy usage.

11

12 The average Schedule 1 customer uses about 800 kWh per month at a current cost of around
13 \$66.00 for a summer bill and \$60.00 for a winter bill. The customers receiving a minimum bill
14 currently pay \$3.67. If the Company's proposal were adopted, those customers currently
15 receiving minimum bills would be assessed the customer charge plus the charges for whatever
16 energy they did use. For example, a customer using 22 kWh is currently charged just the
17 minimum bill of \$3.67, but under the Company's proposal, for that same usage of 22 kWh, the
18 customer would be charged the new \$4.00 customer charge plus 8.0812¢ per kWh for a total
19 of \$5.78. Those customers who have summer cabins that are only used a few months of the
20 year and have no electricity usage during the winter currently pay the minimum bill for those
21 winter months and will pay only the customer charge for them under the proposed rates, which
22 would increase their bill during those winter months from \$3.67 to \$4.00 per month.

23

24 **Q. Do you support elimination of the Residential minimum bill?**

25 A. No, combined with my proposal to retain the current low customer charge, I do not support
26 elimination of the minimum bill. While a minimum bill is difficult for some customers to

1 understand, there are several reasons to include a Residential minimum bill provision in the
2 Rocky Mountain Power tariff and it is certainly not as difficult to understand as the CLC.

3
4 **Q. What increase do you propose for the minimum bill charge?**

5 A. I propose that the minimum bill be increased to \$6.00. Assuming my proposed customer
6 charge is adopted by the Commission, the minimum bill would include usage up to nearly 50
7 kWh, the exact amount depending on the energy charge for the first block of energy that is
8 approved by the Commission.

9
10 **Q. Is 50 kWh per month a large amount of energy?**

11 A. No. A 70 Watt light bulb will use that much electricity in a month, if left on 24 hours a day.
12 An older refrigerator will use several times that much during a month and even a new one uses
13 almost twice that much.

14
15 **Q. Why do you propose such a large increase in the minimum bill?**

16 A. The Company has to have the facilities in place to serve these customers whenever they
17 demand electricity. These facilities are not just the meter and service drop. It includes the
18 costs of maintaining generation, transmission, and other distribution plant that would be
19 required to provide electricity to these customers. Even if they never require any electricity,
20 these facilities must be available and their costs are subsidized by other customers. Those
21 customers who use electricity only in the summer are imposing their use on Rocky Mountain
22 Power when the costs are highest and the Company must have enough capacity to meet their
23 demand, but collects little revenue from them during the remainder of the year. I have not
24 calculated the exact cost of holding these facilities at the ready, but even if it were
25 substantially higher than the \$6.00 per month charge I propose, I would not suggest increasing
26 the minimum bill charge by a greater amount at this time.

1 **Q. If these costs are borne by the Company for the customer who uses little energy, why not**
2 **just increase the Residential customer charge as proposed by Rocky Mountain Power?**

3 A. The difference between a customer charge and the minimum bill are in the different way that
4 the charge recovers revenue and in the different response from the customers. These two are
5 interrelated and I will discuss them in that fashion.

6
7 In the past, rates were set to recover fixed costs through fixed charges and variable costs
8 through variable charges that provided the utility with relatively consistent revenue flows.
9 This procedure was also the basis for declining block rates, used to encourage customers to
10 increase their consumption of electricity. With the customer charge set to recover all fixed
11 costs, a minimum bill was unnecessary. Such rates were common 40 or 50 years ago.

12
13 In the current environment, rates need to serve purposes other than to guarantee that the utility
14 has a stable revenue flow. Conserving scarce resources has taken on a prominent role and
15 declining block rates are no longer appropriate. This Commission has even deemed flat rates
16 to be improper and has instituted inverted rates for the Residential class.

17
18 Raising the customer charge has an effect on the energy charge. Because the total revenue to
19 be recovered is set by the Commission, a higher customer charge forces the kWh charge to be
20 reduced.

21
22 An increase in the minimum charge has a different effect partly because it affects fewer
23 customers. About 2 % of the bills rendered are currently for the minimum bill, i.e., customers
24 who currently use less than about 22 kWh in a month. That means the minimum bill for these
25 2% of the Residential customers recovers less total revenue than a similar-sized customer
26 charge for all Residential customers, so that the energy charge can be higher, producing the
27 desired conservation effect.

1 A higher minimum charge can assess those fixed costs against only those customers who don't
2 buy additional energy rather than charge all customers as the increased customer charge does.
3 Customers who use more than the minimal amount of electricity will pay for their additional
4 costs through the higher energy charges. Customers who use substantial amounts of energy
5 will pay for their full cost of service, even with a relatively low customer charge.

6
7 The number of bills for less than 50 kWh per month is about 200,000 per year. Currently,
8 customers using 50 kWh in a month have a bill of about \$5.77, so this would be a modest
9 increase in the bills of these customers. For customers who use no electricity in their
10 minimum bill, the increase is from the current \$3.67 to \$6.00 and these are the customers who
11 should pay more.

12
13 **PROPOSED RESIDENTIAL RATE**

14 **Q. Have you prepared a Residential rate that you propose be adopted?**

15 A. Yes, but it is only a demonstration rate. It will be necessary to adjust the calculations to more
16 accurately reflect the billing data that only the Company can produce, to reflect all Residential
17 rate schedules and to match the approved revenue requirement. But the Residential rate
18 should be developed in accordance with the methods I have proposed here.

19
20 **Q. Please describe the demonstration Residential rate you have developed.**

21 A. First, I established the Residential customer charge at \$2.00 and the single-phase minimum
22 bill at \$6.00. For this demonstration rate, I left the three-phase minimum charge at the
23 Company's proposed level of \$11.87 per month. The winter energy charge was set equal to
24 the initial summer block charge of 7.9117¢ per kWh, the second summer energy block charge
25 was set equal to 9.4940¢ per kWh, and the tail-block energy charge was set to 12.1312¢ per
26 kWh. The proposed AARP Residential Schedule 1 rates appear in Exhibit____(CEJ-4).

1 **Q. Please describe the process used to perform the calculations.**

2 A. After setting the customer charge and the minimum bill charges, I then calculated the revenue
3 to be produced by the energy charges and the minimum bill, excluding revenue from the
4 customer charge, the three-phase minimum bills and the seasonal minimum charge. The
5 winter energy charge was set equal to the initial summer energy block charge. Then the
6 relative ratios of the summer energy charges were set. The second block was set 20% higher
7 than the initial block and the tail block was set about 50% higher than the first block.

8
9 With these parameters set, I scaled the energy charges to produce the required revenue. This
10 included adjusting the kWh and number of customers receiving minimum bills for the
11 increased kWh included in the minimum bill and deducting those amounts from the customers
12 paying the customer charge and the kWh charge.

13
14 **Q. How do these rates affect various customers in the Residential class?**

15 A. I have prepared billing comparisons, which are shown in Exhibit____(CEJ-5).

16
17 With the increase in the minimum bill from \$3.67 to \$6.00, the customers receiving the
18 minimum bill are those that have the largest percentage increase; those customers with usage
19 below 22 kWh. The customers receiving the smallest increase are those with usage exactly at
20 the level of kWh contained in the \$6.00 minimum bill, for the demonstration rate this is 51
21 kWh. The increase for customers just above the 51 kWh level have rates increased about
22 3.3%. From that level, the percentage rises to the average increase for customers using
23 average levels of energy. The percentage increase is higher for larger customers, with the
24 largest customers, those using over 5000 kWh seeing an 18.3% increase.

25

1 **Q. You recommended that Rocky Mountain Power be directed to increase its Residential**
2 **information program to help customers better understand the rates and to reduce their**
3 **consumption. How should it undertake that effort?**

4 A. [I suggest RMP work with representatives of customer groups to](#) develop educational [materials](#)
5 [to inform its customers how to better understand their rates.](#) What I am recommending is that
6 the effort be increased and that the PSC direct RMP to do so. It is clear from the Company's
7 survey that such an increased effort is needed.

8
9 **Q. Does this conclude your prepared direct testimony?**

10 A. Yes.