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Dear Public Service Commissioners,

Below please see my arguments against why the proposed Net Metering Facilities Charge by Rocky Mountain Power (Docket Number: 13-035-184) is not only inappropriate but the reasoning underlying their justification is incorrect.

I apologize for having inadequate time to completely review the avalanche of overwhelming information in all of the various exhibits and testimony. However, I was able to work through the key documents relating to net-metering. And, fortunately, your staff is far better equipped to sift out the relevant information from all of the chaff.

If I can be of any additional help, please let me know.

Sincerely,

Michael D. Rossetti

Regarding the Proposal to Add a Net Metering Facilities Charge

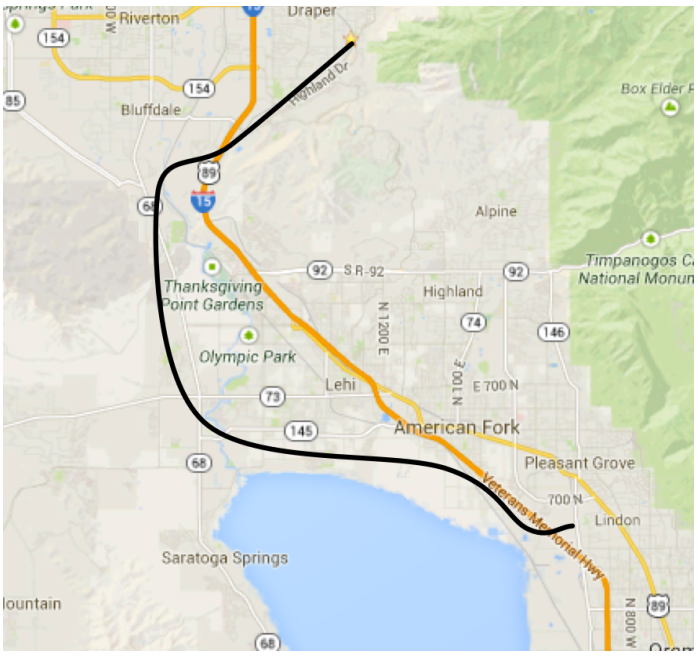
After carefully considering Mr. Steward's assertions and calculations I am compelled to point out certain flaws in the Net Metering Facilities Charge proposal.

The biggest flaw can be found in Mr. Steward's answer to one of the questions:

> Q. Some might argue that the reduction in billed kWh for net metering customers is similar to reduced usage from energy efficiency. Do you agree?
>
> A. No. Unlike a traditional energy efficiency measure where the load and impact on the grid will predictably be reduced by the implementation of the efficiency measure, customers that install distributed generation have the same, or in many cases an increased impact, on the local distribution facilities. Frequently the Company is required to modify the distribution network in order to effectively minimize negative impacts on the grid and accommodate the new flow of electrons from the customer to the grid. Even in cases where upgrades are not required, the flow of energy back through transformers and onto the grid causes increased wear on the equipment.

Allow me to illustrate the problem. Being generous, let's assume that all electricity delivered to my neighborhood comes from the Lake Side plant in Lindon, Utah. That's about 30 miles as the electrons flow. Below is a simple map with a heavy black line showing the approximate routing of the power lines with my house at the northern end of that line and the Lake Side power station at the southern end.

Note that at the northern end of the black line is my neighbor's house. The distance from my net-metering box to the common junction where my neighbor and I connect to the neighborhood power distribution is a distance of approximately 75'. Yes, 75 feet. This is important to know.



Mr. Steward would like the Commission to believe that any excess power I generate has some dramatic impact on all of the equipment and wiring along that 30 miles of power distribution. What Mr. Steward is overlooking (possibly since he studied political science and public affairs, not engineering) is that all excess electricity I generate runs happily out my net-metering box, all 75' to the common junction, and right into my neighbor's house.

Three key points:

- Net metering and excess power generation *does not* have the dramatic impact on the power facilities that Mr. Steward claims. In fact, in the six-sigma of cases of residential power generation, the impact on the system is not even measurable. This position is supported when system efficiency is considered. It is clear that it is far more efficient for me to deliver a kW of power from my box to my neighbor, with an efficiency nearing 100%. Delivering a kW of power generated from natural gas from Lake Side through all of the wiring, step-up and step-down transformers, etc. cannot hold a candle to my generation. I'm sure Mr. Steward can get the statistics related to system efficiency.
- My over-generation of electricity *saves* wear-and-tear on RMP's facilities by reducing the load my neighbor would otherwise put on the system. Any impact on equipment is strictly limited to the distance from my box to the box of the closest neighbor who is currently consuming electricity, 76 feet of 'equipment'. (Perhaps I should be receiving a rebate for my part in reducing the cost of power distribution.)
- Nothing is mentioned in the "Primary Cost Driver" about impact from residential self-generation. If Mr. Steward has evidence of even insignificant but measurable impact on the infrastructure then I suggest the Commission demand that he present such.

This concludes my primary argument that Rocky Mountain Power's justification for a proposal to impose a Net Metering Facilities Charge is fallacious at best and should be dismissed without further consideration by the Commission. (Nevertheless, there are additional flaws in the arguments in support of this Charge.)

Now I would like to move on to a couple of items I would suggest the Commission consider.

Regarding 'Fixed' vs 'On-going' Costs of Energy Distribution

Part of Mr. Steward's justification for proposing the Net Metering Facilities Charge is that RMP does not bill residential customers for the full 'fixed' costs associated with energy production and transmission. He says:

> "However, as a result of the current residential rate structures discussed above, the more immediate larger impact of net metering is on other customers through the shift of costs from net metering customers to non-net metering customers."

He explains that, since the residential monthly customer charge is only $5.00, 'fixed' costs must be recouped through the non-fixed usage charges. Residential energy generation lowers the ability to recoup fixed costs via the non-fixed costs.

Generally, fixed costs are carried by those who use more energy. I am sure there is some logic behind not charging each residential customer (and each industrial customer) a 'fair' fee for providing the basic infrastructure, likely some social agenda. If it *is* some social justification then the monthly bill should reflect the true fixed costs: how much of the fixed costs have been recouped by the monthly charge and a contribution from the usage. And then a final line showing any 'discount' the customer is receiving because their usage did not cover the fixed costs.

In like manner, the customer who consumes enough energy to more than cover their fixed costs should see on their bill the true figure of how much has gone into the fixed cost bucket.

Looking at the numbers, it is safe to assume that low-energy consumers have been subsidized by the high-energy consumers for *years* and that focusing on residential energy generation as a 'culprit' is a weak position to take. This "shift of costs" started many years ago – it was not triggered by the 'netters'.

It is phrasing like that that tempts me to become a bit perturbed. Yes, a customer who net-meters and who generates *any* electricity, whether that electricity is immediately used by the customer or put back out into the system, sees a credit on his or her bill for the electricity generated. The phrasing of this statement implies that the customer receives an undeserved credit, which is blatantly not true. At most, the customer receives the benefit of the poorly devised fixed-cost formula. Compare this statement with another:

> "In effect, under net metering the customer receives a bill credit for the cost of electricity that the company did not have to provide to the customer, but also gets credit for the part

> of the kWh charge that is in place to provide the company with revenues to pay for its fixed costs. All of the costs of providing poles and wires to these customers are not reduced when they take advantage of net metering."

Take another look at the question and answer quoted at the beginning of this letter. In his answer, Mr. Steward admits that the net-meterer has, "… the same, or in many cases an increased impact…" as the eco-minded conservator. I've already debunked the claim that residential energy generation has an "increased impact" on the power infrastructure so this statement quoted above holds no water – the home power producer has the same impact on fixed cost recovery as those who employ energy efficiency. In fact, *anyone* who does not use their "fair share" of electricity is not paying their "fare share" of the fixed costs.

Mr. Walje says:

> "The Company's focus is to ensure that customers, including net metering customers, pay the cost the Company incurs to serve them."

It appears that only the net metering customers will be expected to pay this as no proposal has been made to have other residential customers pay their "fair share" of the fixed costs. The only rational approach is to call out the true fixed costs, reduce the rates for the lower tiers, and use some other mechanism for offsetting the fixed costs for the low-energy consumers.

We, as a society, want to accommodate in some way the residential customers who cannot afford that minimum "fixed cost" but we also want to encourage those who can afford it to invest in energy efficiency, be it through residential energy production, general energy conservation or increased energy efficiencies.

Regarding Peak Generation

Mr. Steward said the following about PV electricity generation:

> "Because photovoltaic solar generation peak output poorly matches the peak demand on the distribution system, the same electrical facilities are required to serve a customer during the peak demand period, regardless of how many kWh the customer offsets."

In fact, and in general, PV generation matches *very well* peak demand since most residential PV systems are producing well during peak summer air conditioning demands. Further, it is an exception when a residential PV system's annual production is greater than consumption. Mr. Steward needs to justify his claim with statistics that are surely available to him.

Questions to Ask of RMP

1. Of the $42.0 million in unrealized revenue, how much of that was from lower residential vs. commercial/industrial? (The percentages shown in "Rate Spread" should be based on an analysis of the contribution of each "Customer Class" to the claimed $42 million "unrealized revenue" in addition to overall usage share by class for capital improvements and REC revenue decreases. This does not

appear to be the case: the residential customer looks to be carrying a greater share of recovering the $42 million. Mr. Walje later confirms this when he says, "Utah residential customers represent over 25 percent of the kWh sold and over 35 percent of the revenues the Company receives annually in Utah.")

2. Mr. Walje says, "Even though the Utah economy is doing better than in most states, and is forecast to continue to improve, we recognize the impact that electric price increases have on businesses, individuals on fixed incomes, and the economy at large." Through his omission, is Mr. Walje implying that working individuals are not being impacted?
3. What is the monthly per-customer fixed cost based on kWh usage?
4. What is the relationship between a customer's peak maximum consumption and their fixed charges? (This question is trying to establish how well a customer is covering the ongoing maintenance of equipment that potentially sits idle until a peak demand occurs versus the cost being spread to other customers who do not need such peak support.)
5. What was the total kWh production fed back into the system for net metering customers for 2013?
6. What were the various types of residential energy production and their kWh production amounts for 2013?
7. What is your growth projection in net metering installations and energy production by type for the next five years?
8. How many residential net-metering installations have required the modification of the distribution network?
9. Please quantify the cost/impact of the increased wear and tear on system equipment by residential self-generation?
10. What is the estimated fixed and ongoing costs for modifying your billing system for handling the new $4.25 Net Metering Facilities Charge?
11. How many monthly residential customer billings over the last year (2013) failed to cover the fixed cost plus production costs for that month? Classify by tier.
12. How have PV generation patterns compared with peak demand patterns?
13. What is the efficiency of delivering a kW of energy from the Lake Side plant to a residence in Draper? That is, how many kWs must come out of one of the Lake Side generators to equal 1 kW at the box of a home in Draper?

Other Observations

- Should the $4.25 net-metering fee be found to be valid then keep in mind that the potential revenue from the current 2,139 net-metering residential customers is $9,090.75. If, instead, this purported cost were distributed to the existing 830,000 RMP customers, the net effect per customer would be 1¢.
- The current 2,139 net-metering residential customers represent only 0.29% of total residential customers.
- There is no doubt that RMP will *not* recover the costs associated with just the billing system changes from that $9,090.75.