PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Leslie Woods <woodslk32@gmail.com> Thu, Aug 3, 2017 at 5:09 PM
Reply-To: woodslk32@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

There are many problems with the utility's claims, including:

Rocky Mountain Power's Cost of Service study dramatically over estimates the cost of servicing rooftop solar customers while underestimating the benefits solar provides to the grid and other ratepayers.

Almost 60% of the "costs" in Rocky Mountain Powers study are actually lost revenue for the utility, rather than actual engineering and maintenance costs. It is not appropriate that the utility seeks to force solar customers to fill its shareholders' pockets.

Lastly, the utility has failed to fully account many of the grid benefits which rooftop solar provides, such as transmission upgrades, deferred capital costs and avoided environmental compliance costs.

I hope the governor's office and the commission take a hard look at the many detailed and thorough testimonies which the solar industry and clean energy advocates have filed.

Rooftop solar is not a "cost" for the grid, but a valuable resource and should be treated as such. These studies will prove it.

Thank you for your time.

Leslie Woods
7166 S 420 E
Midvale, UT 84047

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Alex Stephens <x.stephens3000@gmail.com> Thu, Aug 3, 2017 at 5:35 PM
Reply-To: x.stephens3000@gmail.com
To: psc@utah.gov

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Thank you for your time.

Alex Stephens
514 S Stewart St
Salt Lake City, UT 84102

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Mary Paul <marypauldesign@gmail.com> Thu, Aug 3, 2017 at 5:50 PM
Reply-To: marypauldesign@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

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Thank you for your time.

Mary Paul
6328 S 370 E
Murray, UT 84107

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Debra Elstad <Deb.elstad@gmail.com> Thu, Aug 3, 2017 at 8:05 PM
Reply-To: Deb.elstad@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

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Thank you for your time.

Debra Elstad
4596 S Fortuna Way
Salt Lake City, UT 84124

PublicService Commission <psc@utah.gov>

Public Comment Docket No. 14-035-114

1 message

Denise Chancellor <dchancellor5@gmail.com> Thu, Aug 3, 2017 at 9:02 PM
To: PSC@utah.gov

To the Public Service Commission:

Attached are my comments in opposition to Rocky Mountain Power's proposed rate change for net metering customers.

Denise Chancellor

Docket 14-035-114 Comment Chancellor.pdf
34K

BEFORE THE UTAH PUBLIC SERVICE COMMISSION
DOCKET NO. 14-035-114

Comments by Denise Chancellor In Opposition to Rocky Mountain Power's Proposed Rate Changes to Net Energy Metering

August 3, 2017

As a Net Energy Metering (NEM) customer of Rocky Mountain Power (RMP) I have a personal stake in the outcome of this proceeding. I made a capital investment to install rooftop solar on my home. I anticipated that my investment over a maximum of 25 years (the guaranteed life of the panels) would be realized by projecting long term savings based on reasonable expectations that utility rates for rooftop solar customers would not change dramatically. RMP's aggressive proposal is totally contrary to my investment-backed expectations. It is untenable and unprecedented that RMP proposes to put rooftop solar customers into a separate residential class and charge peak power rates only for those residential solar customers. In addition, RMP desires to institute a $15 fixed monthly charge and decrease credits paid for residential power sent to the grid.

This is not a general rate case; it is to determine costs and benefits of net metering. Under Utah Code § 54-15-105.1 the Commission shall:

> (1) determine, after appropriate notice and opportunity for public comment, whether costs that the electrical corporation or other customers will incur from a net metering program will exceed the benefits of the net metering program, or whether the benefits of the net metering program will exceed the costs; and
> (2) determine a just and reasonable charge, credit, or ratemaking structure, including new or existing tariffs, in light of the costs and benefits.

The Commission must first make a costs and benefits determination under sub-section 1 before addressing rate structure. RMP attempts to manufacture exigency conditions for it rate increase request where no such conditions exist. A traditional rate case proceeding would yield a more reliable and harmonious outcome for all. RMP conflates the two statutory subsections by increasing charges and decreasing credits for NEM customers, unrelated to and not supported by subsection 1 costs and benefits. Importantly, RMP has brought forward the proposal and thus bears the burden of proof in this proceeding.

There are several reasons RMP's proposal falls short. First, as Allison Clements testified, peak demand charges violate the fundamental ratemaking principles of efficiency, simplicity, and stability and are especially difficult for residential customers to manage and understand. Unlike an energy charge, which looks at a customer's total energy use, a demand charge is based on a snapshot of the customer's peak usage. Demand charges, familiar to large industrial users, are intended to recover those utility costs in building out the system to accommodate peak demand periods while sending a price signal that discipline customers' energy use during peak periods. *See* Sierra Club Allison Clements Tstmy (6/8/17). Obviously, this model is unsuitable for residential customers.

Second, RMP has not met its burden of showing why Net Energy Metering customers should be placed into a separate rate class. Based on an extremely limited sample size and monitoring period, RMP argues that NEM customers have a different profile than other residential customers. There is non-homogeneity among various residential customers but in this proceeding RMP has not done any comparisons among other customers to see whether RMP's NEM load profile is aberrational. For example, customers with heated swimming pools or hot tubs, or those with large homes or families who consume above average energy may have very different load patterns from other residential customers. Yet, RMP wants to single out one type of residential customer from all the others: NEM customers. If such comparable analyses were done, it may show that other customer types are even more different than NEM compared to non-NEM customers. See *id*. and Utah Clean Energy Tom Wolf Rebuttal Tstmy (7/25/17),

Third, it would be neither practical nor sustainable to create a new rate class whenever customers installed each new type of technology behind the meter. New technologies such as more efficient electric cars, battery banks, other types of distributive generation may emerge in the near future. *See* Wolf *supra.* Surely each new and improved technology should not be subject to being carved out into a separate and confusing rate class. If the Commission approves RMP's separate NEM rate class it will create a precedent for balkanizing residential customers into separate rate classes. This is anything but in the public interest.

Fourth, RMP does not take into account the efficiency of locally produced solar sent to the grid, particularly in the summer. For example, the efficiency of traditionally produced energy is about 91.47% of initial generation by the time it reaches the customer as compared with 100% for locally-delivered solar. Thus, every 100 kWh local solar delivered to the grid requires 109.32 kWh traditional to be send to the same customer. This 9.32 kWh saved by all customers is not

included in RMP studies. Further, RMP fails to show cost avoidance of solar energy purchased to meet peak demand, particularly in summer months when air condition demands are high. *See* Michael Stanley T, Solar Energy Assoc Tstmy 6/8/17. Moreover, RMP does not account for solar credits taken back by the utility in March where those credits are used to fund the cost of power to low income customers.

Fifth, RMP data size is inadequate to be representative and too stale to be useful in this proceeding. RMP has a total of 875,130 customers in Utah. RMP Quick Facts https://www.rockymountainpower.net/about/cf/qf.html. About 19,000 or 2% of its Utah customers are NEM customers. RMP derived NEM customer load characteristics and usage patterns from only 52 residential NEM customers and production data for a mere 36 NEM customers. David DeRamus Rebuttal Tstmy, Vote Solar, 7/25/17. Consequently, it's sample size is 0.273% and 0.189% respectively of its NEM customers base and 0.006% and 0.004% of total customer base. Also, it did not measure the sample NEM customers load and usage data against a control group. These data are not representative, reliable or reproducible to support RMP's proposal to carve out NEM from non-NEM customers and lump NEM customers into the same type of rate structure as industrial and commercial customers. For example, RMP data do not establish that NEM customers (i.e., about 0.005% of its Utah customer base) cause significant reverse flows on the distribution system. Further, the monitoring period, the 2015 calendar year, is an insufficient period to gather reliable data on which to make long term predictions about such items as the industry's operations, customer upgrades, distribution efficiencies and RMP avoided costs. In addition, RMP's 2013 methodology and 2015 data are stale. *See* DeRamus *supra.* In what RMP has turned this proceeding into — a piecemeal rate making case— such data are woefully inadequate to create a new Schedule 5 for solar users and create a structure that will upend the residential solar industry in Utah.

Fourth, the Commission should look to the experience of other western states for guidance. RMP's proposal is strikingly similar to that of Nevada Electric's 2015 approved rate hike (this is unsurprising because both utilities are part of the Berkshire Hathaway group). The immediate effect of an increased monthly fee and demand charge decimated the Nevada solar industry decreasing solar installations by 90%. Now the Nevada legislature is attempting to reverse the damage. This is a cautionary example of what the Commission should not do. A similar outcome occurred when Arizona utilities obtained substantial rate hikes applicable only to solar customers. Unlike Nevada and Arizona, the parties in a Colorado solar rate case reached a settlement amenable to all, which may be a model the Commission should evaluate. *See* Clements Tstmy *supra*.

In sum, it is unnecessary for the Commission to modify the current net metering structure in this docket. A more practical and fairer approach to any perceived "cost shifting" created by NEM would be for the Commission to open a separate docket to investigate what the credits for excess generation should be and look to other states, such as Colorado, who have come to a more workable and fairer solution than that proposed by RMP.

Thank you for your consideration of my comments.

/s/

_____

Denise Chancellor
784 Edgehill Road
Salt Lake City UT 84103

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Gary Christensen <christensen.gary@gmail.com> Thu, Aug 3, 2017 at 11:08 PM
Reply-To: christensen.gary@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

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Thank you for your time.

Gary Christensen
3712 Spruce Dr
SLC, UT 84124

PublicService Commission <psc@utah.gov>

Docket 14-035-114 - Public Comment France Barral

1 message

France Barral <france@francebarral.com> Fri, Aug 4, 2017 at 5:46 AM
To: "psc@utah.gov" <psc@utah.gov>

Dear Commission,

Please find my public comment regarding the Docket 14-035-114. Please acknowledge reception.

Respectfully,

France Barral

801-842-3836

14-035-114_PSC Letter_170804.pdf
534K

August 4, 2017

Public Service Commission
160 E. 300 S.
Salt Lake City, UT 84111

Re: Docket 14-035-114

Dear commissioners,

My letter is in regards to docket 14-035-114 and the question of the net metering costs. Based on the Rocky Mountain Power filing and cost study, it seems that a reduction of 63% of the bill credit for schedule 1 customers or an overall reduction of 48% of the bill credits for all customer classes would make RMP whole.

I thank you for the opportunity to explain to you how I derived these numbers, and share my thoughts on RMP's November 9th, 2016 filing.

I would like to start by stating that as a RMP customer, I am grateful for their work and dedication. I have traveled the world, and I have gotten a true appreciation for the fact that I never have to worry about getting my appliances to run and that electricity comes to my home 24/7, regardless of how much and when we use it. This is remarkable and a testament to the hard work of RMP over the years.

But the standards of what is acceptable do evolve overtime, and what was acceptable yesterday (cheap and reliable electricity) is now perceived as insufficient and unsatisfactory. What is now desirable for most consumers is reliable and healthy electricity - and most of us would be willing to pay a premium for this.

We consumers are a doubly captive market, first because we all need and depend on electricity, and second because of the monopoly situation that utility companies enjoy by law. With the safety of a monopoly, utilities companies enjoy the benefit of a guaranteed statutory profit margin greater than 10% in exchange for being regulated. Rooftop solar is largely seen by RMP as a threat to its revenue and profit model, because it reduces its revenues, and one of the ways to stop it is simply to impose prohibitive rates that will discourage even the best-intentioned customer.

It appears to me that the biggest issue at stake is precisely this situation of monopoly that RMP enjoys. It renders useless and unnecessary the feedback loop with customers that all other capitalistic businesses - small or large - have to build in to stay in business. If RMP were not a monopoly, it would have sought to hear consumers' needs and tried to accommodate them years ago. Instead of this, RMP can rely on appealing to this commission and simply recommend a price hike that most people will rightly see as an attempt at preventing consumer choices.

The truth is that a lot of customers in Utah would love to have power that comes from renewable sources rather than coal. Most of us see that the sun is abundant in Utah, and that

solar-powered electricity is now reliably cheaper than any other source[1], and we wonder why we should continue burning coal that is so damaging to our health and our environment. We also wonder why we should continually pass up opportunities to bring prosperity, well-paying jobs, new businesses and additional local taxes to our great state of Utah.

We consumers see that our utility is not moving fast enough to accommodate these sources and wish to accelerate this transition. This is why so many of us have turned to rooftop solar: in absence of large-scale utility solar, it is our only option at this time.

I will take my own household as an example, and I know that we will be representative of many. As a customer, I subscribed to the program Subscriber Solar program as soon as I heard about it. This program, which has a capacity of 20 MW, allows people to get their energy from a solar farm in Holden[2]. Not surprisingly, and even though the cost of electricity is higher than the regular rate, the program was fully subscribed within a matter of a couple months, indicating that consumers are hungry for such options, even at a higher cost. This reality is also evidenced in the figure 1 of Mr. Hoogeveen & Ms Steward testimony, where such a stark difference can be seen between actual net metering customers (over 16,000) and projected (818). There is no doubt that the demand for renewable-powered electricity in Utah is far superior to its current supply. *This argument is central to the net metering debate*.

But let us turn to the long study from RMP and examine their arguments and how they derived their proposed rates.

First, the argument invoking an ”exponential growth of its net metering program” is arithmetically correct, but misleading. The growth is only exponential because the starting numbers are so small. The program went from 2,200 net metering customers in 2013 to 6,700 at the end of calendar year 2015 and as of October 7th, 7,000 customers enrolled with expected 3,500 by the end of 2016 to a projected 16,412 customers. Even doubled to 35,000 rooftop customers, these would still account for well less than 5% of the residential customers, and much less of the RMP overall load in Utah[3]. Yet, the consensus in the research is that grid can reliably handle up to 15% of renewable energy. Furthermore, 2 prominent studies have recently been published indicating that the current level of renewables do not pose a reliability problem to the grid.[4] In other words, at the levels of penetration of 2015 of 1% the rooftop solar load could not possibly have the significant impact noted on the grid.

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[1] Just in February 2017, Mexico got a contract that prices the MGh at $26.99 (https://www.pv-magazine.com/2017/02/06/mexico-signs-lowest-price-solar-contracts-in-the-world-to-date/), only to be outdone by India (https://www.bloomberg.com/news/articles/2017-04-12/india-gets-record-low-bid-to-build-solar-power-minister-says), at 5 USD cents per kWh in April 2017. Many other such contracts are being awarded, with falling prices for the last few years, these 2 examples being the most recent and striking.

[2] A 20 MW plant is a tiny fraction of the capacity of RMP to power Utah, about 0.2% is of course far insufficient to meet the demand for utility-scale solar.

[3] The findings, in RMM 1, page 3/3, show that there are 870,593 customers for all classes concerned, 754,063 for the residential alone. This excludes commercial and industrial customers.

[4] Several studies have proved this. Recently, a report funded by the Advanced Energy Economy Institute concluded this (http://www.utilitydive.com/news/report-renewable-energy-is-no-threat-to-power-reliability/445419/), along with a leaked DOE report that concludes the same.

Secondly, the study was conducted on data from 2015 (the only data available at the time the study was commissioned), when there were about 6,700 customers enrolled. The pattern observed in 2015, with early adopters of rooftop solar - people typically less risk-adverse and willing to spend more to get new technology - may well not match the overall pattern and total usage of the approximately 20,000 rooftop solar customers of today[5]. It certainly does not appear to match mine. *My recommendation to the commission would be to redo the survey and include a large timeframe, at least up to 2016 if not up to mid-June 2017.*

I am not able to comment on how the estimated production was calculated, or how the sample size and samples were chosen and numbers ultimately derived. It is easy to imagine that the same survey, realized by an independent firm would come up with lower costs overall and more costs savings than the findings of this survey; adding a larger timeframe, i.e. covering 2012 to 2016, the difference of results could be even starker. Because of their importance in the findings, *I recommend that a reputable independent auditing firm be selected to conduct the survey rather than commission the very company that stands to lose revenues from net metering*.[6]

Perhaps the most persuasive argument from RMP is that the change in load brought by rooftop solar customers and the fact that, after all, solar rooftop customers do not alleviate the impact on the grid while benefiting from it.

This argument is crucial to RMP's request for a rate change, and therefore too essential to leave to sampling, extrapolations, estimations and approximations - however reliable - found in the survey. *My recommendation to the commission would be to rely on a data-driven and fact-based survey*.

Yes, it may be true that my load as a residential customer would peak at 7:00 or 8:00 pm (this is quite surprising given what I know of our appliance usage), whereas my production peaks at 2:00 or 3:00 pm, but surely that time does not coincide with the overall peak load of the grid - all consumers included? In other words, is RMP not able to use and reroute my extra production during the day to industrial and commercial customers that need it?

Further, as a solar rooftop customer, I would love to have the chance to analyze my load on a daily if not hourly basis and model my usage to mitigate my impact on the grid. But this option is not offered to me by RMP: Even though the technology to accurately measure the flows of electrons by 15-minute increment exists, it is not deployed by RMP for its existing solar customers. The opportunity to install a smart meter during the switch to solar was lost when a

[5] Especially the peak load observed in figure 2 of Ms. Steward's testimony whereby a rooftop solar customer has a higher peak than a regular customer further in the day.

[6] This is particularly true because independent surveys, including seminar work from the Brookings Institute concluding that the net metering is a benefit to the grid (https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/). When a survey derives such stark and unexpected numbers, one must wonder the type of assumptions made to find conclusions so drastically counter-intuitive. If it is too good to be true….

simple bi-directional analog meter was installed instead. The meter that we have does not allow me or RMP to understand and measure my true impact on the grid. It does not allow me, as a customer, to modify my usage and shift my usage to when my production is at its highest[7]. *I recommend to the commission that RMP move immediately to install smart meters to all rooftop customers, if not all customers. The cost of the meter could be partially born by the consumer as part of the overall investment*.

If RMP wishes to use pricing to modify behavior, may I suggest educating the customer beforehand? The suggestion to install westward panels is an excellent one[8], but one that RMP cannot leave to the customer to take; and once the panels are installed, they can't be uninstalled and reinstalled without significant additional costs. This recommendation could be useful for the solar installers instead. But more simply, RMP could educate the residential customers like it does the commercial customers, explaining on its website the power (demand) charge[9], and how to mitigate it. Why not take the same tack for residential customers? Arguably, the consensus is that residential customers do not place a large demand on the grid and that therefore cannot be required to pay such a demand charge. Still, I am in favor of everyone understanding their impact on the grid, and *I recommend to the commission proposes that RMP produce a one or 2-page documentation similar to what they offer their commercial customers, explaining not only the usage but the power and what consumers can do to reduce both and offer the same information on their website for residential and solar rooftop customers alike*.

More generally, I see two large problems with the proposed 3-tiered rate structure of RMP[10]: first, they place a large, unjustified, therefore unfair, burden on future rooftop solar customers, and second, they do not match the findings of the cost survey.

Again, let me take the example of our household on how the proposed rate would impose an unfair burden. The net cost shift mentioned by RMP of $400[11] represents 78% of our total electricity costs[12]. With the proposed scenario, $45 per month of fixed costs ($15 + 9.02 times 3.36) would bring the fixed portion of our bill to $540, which is more than we paid all year last year without solar panels. This cost structure, imposed on current rooftop solar customers would be punitive, and prohibitive for prospective ones. It is also overly focused on fixed costs therefore placing too heavy a burden on customers with lower usage. I would also not be surprised if these proposed rates, modeled on the customer base of 2016 would not increase the revenues of RMP far in excess of their "costs".

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[7] It could be part of the reason why RMP's proposed rates are for new customers only. RMP admits not having the meters to measure information that would be used to bill their current rooftop customers.
[8] Ms. Steward's testimony, lines 450 and after.
[9] See the following website pages: https://www.rockymountainpower.net/ya/kyb/dbt/bec.html "Business Energy Charges", http://members.questline.com/article.aspx?articleID=779 "Understanding your load profile", and http://members.questline.com/Article.aspx?articleID=6936&accountID=437 "ask an expert – tips to reduce peak demand."
[10] There are countless more, including the fact that it is not a "relatively simple rate structure" but one complex to understand; and one radically different from similar class customers. They also set a bad precedent for the utility, implying that requesting a rate hike is an acceptable behavior to deal with pesky customers.
[11] The exact figure is $378 according to RMM 1, page 3/3.
[12] Our total bill was $512.58 from the period of March 25th 2016 to March 27th, 2017 before we moved to solar.

Most customers would be fine with a fixed charge – there is already one, currently set at $8.49 monthly. However, imposing a demand charge on a tiny class of residential customers - where their load is essentially similar to all residential customers, does not strike me as fair. Either all customers should be charged one or else commercial and industrial customers only.

More importantly, it is simply not justified by the findings of the cost study. Leaving aside the arguments of the validity of the cost study, and accepting them as correct and complete (that is that no avoided costs would have been forgotten and that the costs mentioned are indeed correct), we can clearly see that the costs are overwhelmingly linked to the "Bill Credit." If one removed that single line item, the *cost study would display a benefit to the grid*. See below:

MM1- Page 3

	With the Bill Credit 'Cost'	Without the Bill Credit 'Cost'
Costs		
Metering Costs	161	161
Engineering/Admin	528	528
Customer Service	83	83
Bill Credits	4,237	-
Total Costs	**5,009**	**772**
Benefits		
Net Power Costs	(1,168)	(1,168)
Lower Class Alloc	(1,673)	(1,673)
Lower Line Loss	(118)	(118)
	(2,959)	**(2,959)**
Net Cost	2,050	**(2,187)**
	Cost	Revenue

Naturally, it does escape anyone that the Bill Credit is actually not a cost, but rather a *loss of revenue* (also known as "opportunity cost"). It is also completely linked to the customer's production and usage patterns. In other words, it is proportional to the customer's size and as such is an entirely variable cost.

Following the cost survey, RMP was tasked with proposing rates to compensate for the costs. How to transform a cost structure into a rate that appropriately represents the costs, while also encouraging the right behavior is a difficult task, one where RMP has expressed significant artistic license. How can one conclude that variable "costs" could be best recouped as large fixed costs if one wanted to use pricing to modify behavior?

We understand that RMP is a company that requires large capital expenditures to serve its customers. But it is hardly unique in our world. Many companies face the same challenges, and none attempt to recover their costs via prohibitively high fixed costs for fear of losing their customers to competition.
My recommendation is that variable costs would remained expressed as variable in the rate as there is no justification for transforming them into fixed rates.

Additionally, it troubles me to think that these rates are proposed for ***future*** net metering customers and not the ***current*** ones. First, the proposed rates are mostly fixed in nature, which means that there is a built-in assumption that the customer profile isolated based on 2015 will be applicable for customers in 2017 and beyond: to me, nothing is further from certain. Secondly, RMP is attempting to model the past into the future, assuming that the growth of net metering customers will continue unabated. The reality is that the market for rooftop solar customers has already hit a plateau which will further be solidified if these rates are approved[13].

The irony of their proposal is that RMP would be left with 20,000 / 25,000 rooftop solar customers grand-fathered in, not paying anything to a system that they supposedly place a burden on, and very few, if any, new residential net metering customers to cover these costs. It seems that this would entirely defeat the purpose of the proposed rates and render the entire proposal moot, unless of course they were meant to stop these customers from going solar in the first place or that the proposed rate was simply unenforceable on current customers.

The good news is that based on the cost data provided by RMP, there is an enforceable, easy and fair rate solution: not only will a simple reduction of the bill credit make RMP whole, but will do so regardless of the size of customers that apply for net metering status in the future and will hit these customers fairly, that is proportionally to their usage. Further applied to existing customers[14], RMP would recoup all the ”costs” to come for existing rooftop solar customers going forward.

Let me share my calculation details[15].

Based on my calculation, a decrease of 48% of the bill credit ***across all classes taken together***, would bring the costs back in line. See the calculation below where the bill credit reduced to 2,187 from 4,237 suffice to breakeven.

[13] With the decrease of the state tax credit for the installation of rooftop solar, the incentive to install these systems is significantly reduced.
[14] This is not proposed by RMP – but any fair proposal of a moderate rate increase will be acceptable to most solar rooftop customers. What is not acceptable is an unfair one.
[15] Please note that I have manually plugged in the numbers found of the cost study in a spreadsheet, and that because of missing decimals, I will be off a little bit from the actual numbers presented. The logic however stands.

MM1- Page 3

Across all Classes	Costs as Presented	With a reduction of Bill Credit	
Costs			
Metering Costs	161	161	
Engineering/Admin	528	528	
Customer Service	83	83	
Bill Credits	4,237	2,187	-48%
Total Costs	**5,009**	**2,959**	
Benefits			
Net Power Costs	(1,168)	(1,168)	
Lower Class Alloc	(1,673)	(1,673)	
Lower Line Loss	(118)	(118)	
	(2,959)	**(2,959)**	
Net Cost	**2,050**	**-**	

Taken separately, the residential class 1 would only need a reduction of 63% of its rate to breakeven, from 2,987 to 1,109. See below.

Residential Class Only	Costs as Presented	With a reduction of Bill Credit	
Costs			
Metering Costs	112	161	
Engineering/Admin	369	528	
Customer Service	72	83	
Bill Credits	2,987	1,109	-63%
Total Costs	**3,540**	**1,881**	
Benefits			
Net Power Costs	(675)	(675)	
Lower Class Alloc	(1,137)	(1,137)	
Lower Line Loss	(69)	(69)	
	(1,881)	**(1,881)**	
Net Cost	**1,659**	**-**	

This reduction of bill credit would have to be accompanied by an elimination of the $8.49 fixed monthly fee to ensure breakeven.

A reduction in a selling rate to RMP would have all the immediate effects needed:

- ✓ First, no-one would install solar panels factoring in the sale of power - because these revenues would not be significant
- ✓ Second, it would immediately enforce a better behavior among the solar rooftop owners, precisely the one that RMP was trying to encourage. There would be a real cost to selling power at a discounted rate and purchasing it at a retail rate. If at all possible, the net metering customers would naturally be encouraged to match their production with their usage - that is use as much as they can when we can produce it and as little as needed when they are not producing.
- ✓ Third, it would essentially lift the constraint that RMP imposes on solar installers of limiting the size of their system to the overall yearly usage, since they would be a reduced incentive to sell to the grid.
- ✓ Fourth, it would also not unfairly place a burden on smaller rooftop customers, but place the burden equally on all rooftop customers, regardless of their size.
- ✓ Fiftth, it would be fair, recognizing that the cost of electricity is not only the cost of generating it, but also the cost of transmitting and distributing it[16].
- ✓ Finally, it would be very simple to explain to the customers and to execute.

I would like to conclude my letter with a few final thoughts.
Because the net metering customers account and will continue to account for such a sliver of the total load, one must wonder if this net metering "fight" is not a proxy for a much bigger fight against the future and against renewable energy. Could rooftop customers be the victims of the "slippery slope" argument one that vehemently protects the *status quo* over anything else? As a customer, I strongly encourage RMP to retire some old, pollution and costly assets and move towards a combination of utility-scale solar (for economies of scale) and storage (as it is providing excellent solutions for grid-balancing services and other ancillary services).

Rocky Mountain Power is a great company. As we move away from the twentieth century into the twenty-first, their challenge is to manage a more decentralized, healthier, more secure and more resilient grid. I am concerned that agreeing with RMP's proposed rate is giving the wrong incentive to RMP and rendering a disservice by weakening the company and preventing it from adapting to market forces. To thrive in that new environment, RMP will need to be ingenious, innovative, and continually finding new solutions to new problems. The only wish I have is for RMP to lead the way to this new bright future[17].

[16] From RMP's study, we can see that generation costs represent 67% of the total costs, while T&D 30%.

RMM2, page 1/3

Cost of Service					
Production	Transmission	Distribution	Retail	Misc	Total
1,297,521,618	282,217,001	302,714,369	33,400,393	8,310,784	1,924,164,165
67%	15%	16%	2%	0%	100%

[17] RMP can get inspiration from other innovative utilities like this small one in Vermont. https://www.nytimes.com/2017/07/29/business/energy-environment/vermont-green-mountain-power-grid.html And with the development of storage. https://www.cnbc.com/2017/05/12/tesla-does-deal-with-vermont-utility-to-reduce-electricity-bills-with-tesla-batteries.html

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Jessica Winitzky-Stephens <jessiejessiejessie@gmail.com> Fri, Aug 4, 2017 at 8:51 AM
Reply-To: jessiejessiejessie@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

There are many problems with the utility's claims, including:

Rocky Mountain Power's Cost of Service study dramatically over estimates the cost of servicing rooftop solar customers while underestimating the benefits solar provides to the grid and other ratepayers.

Almost 60% of the "costs" in Rocky Mountain Powers study are actually lost revenue for the utility, rather than actual engineering and maintenance costs. It is not appropriate that the utility seeks to force solar customers to fill its shareholders' pockets.

Lastly, the utility has failed to fully account many of the grid benefits which rooftop solar provides, such as transmission upgrades, deferred capital costs and avoided environmental compliance costs.

I hope the governor's office and the commission take a hard look at the many detailed and thorough testimonies which the solar industry and clean energy advocates have filed.

Rooftop solar is not a "cost" for the grid, but a valuable resource and should be treated as such. These studies will prove it.

Thank you for your time.

Jessica Winitzky-Stephens
514 S Stewart St
Salt Lake City, UT 84104

BOUNTIFUL

Utah Public Service Commission
160 East 300 South
Salt Lake City, Utah
84111

Re: Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program (Docket No. 14-035-114)

Dear Commissioners

This letter is to write in support of your Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program (Docket No. 14-035-114). Bountiful City Light and Power (BCLP) is a municipal power provider serving the residents and businesses of Bountiful City. As the power utility of over 43,000 residents, we take seriously our role as the power provider of last resort. Suppling safe, reliable power 24 hours a day, 365 days a year at an affordable cost is our primary mission.

The current interest in home and business solar co-generation is both promising and complicated for power utilities, including BCLP. Solar power has the advantage of being clean and renewable, but the disadvantage of being relatively expensive and largely un-schedulable. Solar generation from our resident co-generators peaks between 12 and 1 pm. Bountiful's peak load, to which all of our infrastructure is necessarily sized, is just over 80 MW. Because of the bedroom community nature of our City, our peak daily demand happens in the late afternoon and early evening. Thus solar power, generated primarily in the morning and early afternoon, is of little use to the community at the time of day the power is most needed.

Bountiful recently addressed this dilemma by introducing a "feed-in tariff" program for all new solar customers (current solar customers were grandfathered under the City's old "net-metering" policy). The Bountiful City Power Commission and City Council believe this program is more fair for all of our power customers for two reasons: (1) energy is purchased from our co-generators at a time-of-use rate which matches the entire system requirements and the hourly market rates, and (2) solar co-generators pay their fair share of BCLPs infrastructure to which they are connected and upon which they rely.

There are many ways equity and proportionality can be accomplished, but the underlying principle for BCLP and Bountiful City is this: solar co-generators should pay their fair share of the utility infrastructure, and their power generation should not be subsidized by other rate payers.

We wholeheartedly support the development of clean, renewable power sources, but also must have sufficient funds to properly maintain and operate the system, and to provide power that is reliable and affordable. We hope that you will support efforts by Pacifcorp and the utilities you regulate to balance these priorities.

Respectfully,

Randy Lewis, Mayor

Gary Hill, City Manager

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Linda Wood <l.r.wood49@gmail.com> Fri, Aug 4, 2017 at 12:53 PM
Reply-To: l.r.wood49@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

It is crazy to suggest that our providing a portion of our own electricity is costing the utility revenue, especially when our excess returns to the utility and they sell it back to other customers. If none of us had rooftop solar, the electric company would be scrambling around trying to meet the demands of new growth in Utah.

It is short sighted of them not to recognize the benefits of rooftop solar, and fighting it is not in the best interests of their shareholders. (Not that I give a damn about their shareholders)

Thank you for your time.

Linda Wood
848 Kumo Court
Ivins, UT 84738

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Sylvia Wilcox <hints4480@mypacks.net> Fri, Aug 4, 2017 at 2:14 PM
Reply-To: hints4480@mypacks.net
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

There are many problems with the utility's claims, including:

Rocky Mountain Power's Cost of Service study dramatically over estimates the cost of servicing rooftop solar customers while underestimating the benefits solar provides to the grid and other ratepayers.

Almost 60% of the "costs" in Rocky Mountain Powers study are actually lost revenue for the utility, rather than actual engineering and maintenance costs. It is not appropriate that the utility seeks to force solar customers to fill its shareholders' pockets.

Lastly, the utility has failed to fully account many of the grid benefits which rooftop solar provides, such as transmission upgrades, deferred capital costs and avoided environmental compliance costs.

I hope the governor's office and the commission take a hard look at the many detailed and thorough testimonies which the solar industry and clean energy advocates have filed.

Rooftop solar is not a "cost" for the grid, but a valuable resource and should be treated as such. These studies will prove it.

Thank you for your time.

Sylvia Wilcox
2689 S Imperial St
Salt Lake City, UT 84106

PublicService Commission <psc@utah.gov>

Writing to express my concern re: RMP's proposed net metering changes for residential rooftop solar customers

1 message

John Kowalewski <johnkffb@gmail.com> Fri, Aug 4, 2017 at 4:42 PM
To: psc@utah.gov

Hi,

My name is John Kowalewski and I am writing in reference to Docket No. 14-035-114.

I understand that Rocky Mountain Power (RMPs) is asking the Utah Public Service Commission to consider a rate hike for residential rooftop solar customers. I respectfully understand RMP's need to keep energy affordable for all of its customers, but I have serious concerns about the manner in which the company is approaching this specific net-metering request.

I installed solar panels on my North Ogden home in 2015. I did so for many reasons, including wanting to model sound, sustainable energy practices to my children, do my fair share to improve the air quality of our state (especially during our brutal winter inversions) and help the state find alternative power sources.

This undertaking required a fair amount of up-front cost on my part, with the idea that I hoped to break even on my investment in 11-12 years. Ultimately, I hoped that the second half of my solar panels' lifespan might actually result in me saving some money.

That's why I am stunned and extremely disappointed to read that RMP is proposing rate hikes on customers like me. I find the claims RMP makes in defense of this rate hike to be a bit of a reach. I would be more open to the power company's claims if the research presented was conducted by independent third-parties, not tied to RMP's revenue. I note the analysis conducted by Utah Clean Energy, which found RMP's estimates "misleading."

Utahns pride themselves on being independent, pioneer spirited people. I consider my move to solar power to be a modern-day version of our early settlers who struck out on their own to find a place to live. I am trying to help our great state find renewable, sustainable energy solutions that will keep our skies clean and reduce our dependency on fossil fuels. I believe that is critical for all of us as well as some of our major industries, such as tourism and skiing.

I applaud RMPs desire to buy and draw on more sustainable energy sources. I also commend their efforts to keep energy inexpensive for all. Good for them. But I am puzzled as to why the company contends that the power I'm generating for the grid, (along with my fellow early adopters) poses such a threat to their economic model.

I would encourage the Utah Public Service Commission to study closely the impact a similar move had in Nevada. Not only did knee-jerk decisions lead to the demise of the residential solar industry in that state, but ultimately, the power company's overreach resulted in them being declared a monopoly. Talk about unintended backlash.

I am asking the Utah Public Service Commission tread carefully on this net-metering request from RMP. I don't believe the company's request is altruistic. At a bare minimum, I believe the commission should consider grand-fathering early adopters of residential solar panels, and I believe it is in everyone's best interest (including RMP's) to foster an environment where homeowners can pursue sustainable energy sources now and moving forward.

Our skies and the long-term health of our citizens are at stake.

I would be happy to elaborate on anything stated in this email. Feel free to contact me via email or mobile phone at 801-726-8461 if I can further clarify my position on this issue.

Thank you for the opportunity to comment. I trust that the commission will arrive at the best decision for everyone involved.

Sincerely,

John Kowalewski

North Ogden residential solar panel customer

PublicService Commission <psc@utah.gov>

Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Sam Rushforth <samrushforth@gmail.com> Fri, Aug 4, 2017 at 4:43 PM
Reply-To: samrushforth@gmail.com
To: psc@utah.gov

On November 9, Rocky Mountain Power filed a request before the Public Service Commission to raise rates on rooftop solar customers. I oppose this fee request. I do not believe the utility has proven that these customers burden other ratepayers or the system with significant costs.

There are many problems with the utility's claims, including:

Rocky Mountain Power's Cost of Service study dramatically over estimates the cost of servicing rooftop solar customers while underestimating the benefits solar provides to the grid and other ratepayers.

Almost 60% of the "costs" in Rocky Mountain Powers study are actually lost revenue for the utility, rather than actual engineering and maintenance costs. It is not appropriate that the utility seeks to force solar customers to fill its shareholders' pockets.

Lastly, the utility has failed to fully account many of the grid benefits which rooftop solar provides, such as transmission upgrades, deferred capital costs and avoided environmental compliance costs.

I hope the governor's office and the commission take a hard look at the many detailed and thorough testimonies which the solar industry and clean energy advocates have filed.

Rooftop solar is not a "cost" for the grid, but a valuable resource and should be treated as such. These studies will prove it.

Furthermore, in a state such as Utah with HUGE air pollution issues, the costs of increased medical expenses due to burning coal must be factored in. If this is done, and if accurate economic analyses are done, roof-top solar is a jewel for our state.

Sam Rushforth
452 North Palisades Drive
Orem, UT 84097