

## Solar energy industry in Utah

1 message

Gary Walton <grywalton@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 5:14 PM

Dear PSC,

I understand that Rocky Mountain Power is again trying put regulations and fees in place that will negatively impact Utah's solar industry. As you are well aware, solar energy has benefitted thousands of Utah families. Putting regulations in place that benefit one utility company to the detriment of other companies seems unfair and unnecessarily restricts the operation of energy market. Energy independence, technological innovation and environmental stewardship are hallmarks of the solar industry, an industry that now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Turning a cold shoulder to innovation jeopardizes Utah's businesses, jobs and national image.

Respectfully, Gary R. Walton 950 W 20 North Orem, UT 84057

Sent from my iPad



## Please keep Solar Energy affordable.

1 message

Justin Grover <jg513jg@yahoo.com> Reply-To: Justin Grover <jg513jg@yahoo.com> To: "psc@utah.gov" <psc@utah.gov> Wed, Aug 9, 2017 at 5:15 PM

I am writing to comment for the Public Witness Hearing on Solar energy in Utah

I think that all utahns deserve to know how the regulatory process works and have transparency in the process. The state of Utah should uphold commitments to people who have paid their own money to make renewable clean energy. The net metering program should be fair and look at the future savings solar brings and the financial benefit to the environment - a plus that is not directly seen.

Solar Energy should be affordable. Thank you, Justin Grover 1488 W 4980 S Taylorsville, UT 84123



## Reject Solar "Penalties", Help Keep Solar Affordable in Utah

1 message

Keith Kuder <Keith@keithkuder.com> To: psc@utah.gov Cc: revans@utsolar.org Wed, Aug 9, 2017 at 5:37 PM

Dear Utah Public Service Commission,

I apologize that I cannot attend today's Public Witness Hearing in person. I, like the majority of those with Solar Panels, have a job which requires my presence. Please keep this in mind when evaluating the response to this issue – the lion's share of us are at work.

I plan to install solar panels on my home. I have a very smart home right now. Some might call me the "posterboy" for green energy.

In the winter, heating with geothermal is relatively expensive. Unlike most Utahns, my power bill is higher in the winter than it is in the summer.

To accommodate for this, I calculated how much electricity I use over the course of an average year, then sized my solar installation to produce an equivalent amount of energy over the year. The challenge for me is that – just like the farmers around me – I have to collect the sun during the summer, then "store" it for use in the winter. The cost to purchase batteries right now are way too expensive.

Rocky Mountain Power's proposal de-incentivizes people from using clean solar power, and pushes those like me to use "dirty" energy sources.

Is this really the outcome the Utah Public Service Commission wants?

## Concerns

That's just the over-simplification of this particular scenario. Let's look at RMPs arguments.

I know how wholesale and retail work. I recognize that RMP "buys" power at "wholesale", marks it up, and sells it to customers at "retail". I realize that it's that markup which pays for all the overhead required to deliver their product – power lines, transformers, linesmen, billing clerks, computer systems, executive golfing trips, etc.

On the surface, RMPs argument makes sense – but RMP isn't telling the whole story, nor are they representing the actual costs. Their recent costs study illustrates this point. Let's look at a few concerns with RMPs arguments:

State of Utah Mail - Reject Solar "Penalties", Help Keep Solar Affordable in Utah

- First, transmission costs: the cost of delivering power from coal-fired power plants to neighborhoods up and down the Wasatch Front isn't cheap. The cost of delivering power which I produce from my solar panels to my neighbors is virtually zero. RMP pockets those savings with no compensation to me.
- Second, it's not a fair comparison: to get a true cost comparison, RMP needs to evaluate equivalent products. Electricity produced by burning coal is not the same as electricity produced by rooftop solar panels. Yes, the perceived end-product is the same, which is how they're trying to confuse the issue.
- Third, under the current system, RMP gets to STEAL solar power: under the current plan, when a
  customer produces more solar power than they use in a year, RMP gets to keep it without compensation.
  The "banked power" account is "zeroed out" every year with RMP keeping the solar power their
  customers produced with absolutely NO COMPENSATION.

# Simple Solution

If you don't have solar power, but want to help the Government Mandated "green" initiative, RMP offers to sell you blocks of energy from their "Blue Sky" program. You'll pay a premium for power created from there, but many customers choose to do so to help the program expand. This program is divided into power generated from solar farms and power generated from wind farms.

What is the wholesale cost of power RMP pays for power from the solar farm component of the Blue Skies program? I've asked this for years and have never gotten an answer. Every time I've had a discussion with an RMP representative and have asked this question, they immediately change the subject and avoid the question.

Do you, as members of the Public Service Commission, know this answer? Why not? Why doesn't RMP want to answer this very simple question?

- Once we know that, the answer is simple:
- Since RMP "buys" solar power (at wholesale) for X-dollars per KWH from their Blue Skies solar farms,
- Customer "sells" solar power (at wholesale) to RMP at the same rate
- Customer "buys" coal power (at retail) from RMP at the already approved rates (unless Customer opts-in to buying power at the Blue Skies rate)
- RMP pays customer (actual cash, not electric "credits", or "banked" power) every month or every year.

This is not only fair to all parties, it:

- 1. reduces RMP's need to expand its Blue Skies locations by leveraging roof-tops across the state, thereby reducing their out-of-pocket expenses, are reducing the delivery costs to get that power to customers,
- 2. eliminates the disincentive of RMP's current "take the annual excess" practice,
- 3. removes the disincentive for customers to only make less solar power than they use in a given year, and
- 4. removes RMP's argument that it's "not fair" because of their (currently inaccurate) wholesale/retail argument.

#### 8/9/2017

State of Utah Mail - Reject Solar "Penalties", Help Keep Solar Affordable in Utah

Don't punish homeowners and businesses who have decided to or want to "go solar", especially not based on a misleading study, incomplete information, and an unequal comparison of coal vs. solar power.

Regards,

Keith Kuder

Keith@KeithKuder.com www.KeithKuder.com/facebook.html www.KeithKuder.com/googleplus.html www.KeithKuder.com/twitter.html www.KeithKuder.com



## Docket No. 14-035-114 presentation

1 message

**Douglas Vilnius** <dougvilnius@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 5:39 PM

Presentation Statement to Utah Public Service Commission, August 9, 2017 concerning

Docket No. 14-035-114. I was unable to continue attending after 5:00 p.m.

Thank you for the opportunity to comment.

I oppose Rocky Mountain Power's attempt to increase monthly service charges. I oppose their attempt to reduce solar credits and increased demand charges that discriminate against solar customers. Nevada lost thousands of solar jobs when a similar plan was implemented.

The following facts and projections are paraphrased from the book "Clean Disruption of Energy and Transportation", by \*Tony Seba, and Tom Price, The Last Auto Mechanic, Medium.

. Solar self generation(roof top) is already making central generation(public utility) obsolete.

- . The price of solar storage is going down.
- . Central generation of power, like Rocky Mountain Power ranges from 7 to 12 cents in the US.
- . Tucson's Electric Solar and Storage PPA will deliver power at 4½ cents.
- . 25% of Australia's power is solar with transmission and storage costs at 41/2 cents.

. There is a technological disruption in energy occurring across the world that will have a profound impact today and the future.

. The electric car will have a clean disruption on almost all ways of life from auto manufacturers, part suppliers, gas stations, parking lots, auto insurance, oil production.

- . The last internal combustion engine auto mechanic was probably born this year.
- . Too soon? Remember Kodak

In conclusion:

Do rooftop solar owners like me have an obligation to insure increased profitability of a private corporation who chooses not to adjust it's business model to a cheaper, cleaner and more efficient source of energy and continues to add to global warming by burning coal? Is the Public Service Commission an advocate for the public or for a private corporation who wants to punish public resourcefulness?

Thank you for your past efforts to keep solar and other renewables possible.

**Doug Vilnius** 

115 St. Moritz Way

Park City UT 84098



## Please reject the Rocky Mountain power proposal for solar panels

1 message

KIMM LOFTHOUSE <mylofthouse@me.com> To: psc@utah.gov Wed, Aug 9, 2017 at 5:40 PM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely, Kimm Lofthouse 18019491740 www.mylofthouse.com Realtor@Equity



## **Rocky Mountain Power Solar Fees**

1 message

Scott Knudsen <scott@skyline.solar> To: psc@utah.gov Wed, Aug 9, 2017 at 5:43 PM

Hello,

I just wanted to voice my concern with the solar fees that Rocky Mountain Power is attempting to pass. I am the owner of a solar company out of American Fork called Skyline Solar. We currently employ more than 50 people in multiple states. Most of our employees are in Utah.

If the changes that Rocky Mountain Power wants to implement, do pass, my entire company will be at risk of going out of business. At the very least, there should be an independent, 3rd party cost-benefit analysis of the effects of Rocky Mountain Power customers going solar. Without this, the situation we have here is simply a powerhouse flexing its monopolistic arms and getting its way just because.

I hope the right thing will be done by embracing competition instead of squashing it.



Thanks, Scott Knudsen

Owner

C: (801) 898-1351 O: (855) 475-9765 E: scott@skyline.solar W: skylinesolarpower.com



## Reference Docket 14-035-114

1 message

Jan Ellen Burton <Janellenb@msn.com> To: "PSC@utah.gov" <PSC@utah.gov> Wed, Aug 9, 2017 at 5:46 PM

August 9, 2017

I do not have solar panels--and I may not get them. Historically, they have tended to be heavy, and I have an old house which may not handle sufficient panels for my energy needs. However, solar panels are getting lighter and more efficient. Coal will likely not be getting more efficient. Rocky Mountain Power will need to spend increasing funds to maintain their fossil fuel infrastructure, and over time, Utahns will suffer. They will suffer economically by paying more for upgrades to an archaic system, and by paying the health care costs associated with this system. Most importantly, Utahns will continue to suffer from bad air.

So, I ask the Public Service Commission to maintain the current rate for rooftop solar customers, and to DISALLOW an increase. Rather than maintain the status quo, I would like to see RMP move forward and develop a plan to encompass more solar energy. Other countries have been successful in advancing clean energy. Why not us? We in the west have lots of sun!

Additionally, I attended today's hearing and had to leave before I spoke. I was impressed by many of the speakers. I think perhaps if the RMP bill was more clear, people would understand the costs better. However, I believe that the number of "bad air" days should also be noted in the bill. I have just returned from Africa, and isolated areas use solar power.

Than you,

Jan Ellen Burton

1340 Gilmer Drive

Salt Lake City, Utah



# Please Reject the Rocky Mountain Power Roof-Top Solar Proposal!

1 message

Karen Riley <karenrileyatc@gmail.com> To: psc@utah.gov

Wed, Aug 9, 2017 at 5:48 PM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely,

Karen Riley 5636 Oakbrush Drive Park City, UT 84098

Karen Riley, ATC-L, EMT, PES 440-552-3622 | KarenRileyATC@gmail.com



## Rocky Mountain Power proposed solar rate increase

1 message

Wed, Aug 9, 2017 at 5:55 PM

Darren Rabosky <robo8969@gmail.com> To: psc@utah.gov

The proposed rate structure by Rocky Mountain Power (RMP) would be unfair to the public citizens of Utah and provide inequities between those who have made the long term decision to invest in reducing their energy bill by installing solar. Some of these inequities are listed and discussed in detail below:

1) The proposed rate hike will provide an unfair weighting of penalizing a solar grid tied customer compared to a nonsolar owner through the peak power rate structure. Under the current proposed plan, a person with installed solar could have identical usage patterns as a person without solar and have a higher electric bill. For instance, compare a non-solar and solar customer, both charging an electric car or operating a dryer during peak hours. The rate spike for the grid tied solar customer would accumulate fees that can add up to an amount that their bill could actually be higher than the nonsolar user even though the grid tied user has identical usage patterns and is providing additional power to the grid.

2) The beautiful Salt Lake City and surrounding region has tremendous economic value brought to the communities through tourism and recreation. Using the above example of two electric car owners, one having grid-tied solar and the other not, the RMP proposal provides unfair weighting of rates against the grid tied solar owner and does not account for the economic value brought to the local Utahn's by using an electric car to help reduce our local air pollution. While the electric energy usage may be provided from a coal fired or natural gas power plant, those are generally located in area's remote from dense population centers. Additionally, power plants can rely on economies of scale savings when reducing per capita emissions compared to standard gasoline cars. It would be unfair for an electric car user that decided to also to make an investment in grid-tied solar to be charged in a manner that is not representative to increased costs for RMP or the average Utahn's rate as a result of using solar.

3) The new proposal by RMP is unfair to grid tied solar customers that have already purchased solar, having made a long term investment decision, by providing unforeseeable changes that would have a significant impact on the grid tied customer's investment decision. Those solar customers that may have still made the decision to go solar would likely have invested in a different system design more applicable to the changed rate structure. An example of a design more suited toward the newly proposed RMP rate structure would be having a non-grid tied battery back-up system installed with a single inverter rather than the cost of multiple micro-inverters that are typically installed on grid tied systems.

4) In addition to providing unfair weighting of rates for peak power usage for grid-tied solar customers compared to nongrid tied solar customers, the proposed rate change does not provide equivalent offset rate savings incentives for its customers who choose to shift their usage during non-peak times of day. If the proposal by RMP is to reflect its true costs for impacts to the grid or cycling of thermal power plants, customers should have equivalent economic incentives to use power during very low usage rates. Many modern appliances including: dryers, washers, electric cars, etc. have the ability to be run on a timer. Those customers choosing to charge at very low usage times should be offered substantial and equivalent savings to counter balance the effects of usage during peak hours. RMP cannot truly assess the cost impacts unless these effects are accounted for and the shift usage patterns of the populations as a mass are accounted for as system load profiles, etc.

5) RMP does not provide any tools for the average customer to better understand their usage patterns and how they may shift their usage patterns to reduce their costs to the utility.

Sincerely,

Darren



## Please Reject the Rocky Mountain Power Roof-Top Solar Proposal!

1 message

**Eric Gessner** <eric.a.gessner@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 5:55 PM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely, Eric Gessner 3569 E Lone Brook Lane, Cottonwood heights, Ut 84121

Sent from my iPhone



## **Rocky Mountain power**

1 message

Jason Alden <jasonalden9@icloud.com> To: psc@utah.gov Wed, Aug 9, 2017 at 6:01 PM

Hello Gary,

My name is Jason Alden. I bought my first home in Saratoga springs last year and I am excited for my opportunity to participate in my local economy and politics.

I wanted to take this opportunity to express my opposition to raising fees on solar customers. I believe this de-incentivizes people to participate in renewable resources which is the opposite direction we should be moving as a community. We should take this as an opportunity to excite people about solar by simply not raising the rates and instead, raising solar awareness. The technologies are shifting and I would love to see our governor and our local power authorities get behind this exciting technology and support it.

Thank you for your time today,

Jason Alden



# Reference Docket No. 14-035-114, Rocky Mountain Power proposed solar rate increase

1 message

**Darren Rabosky** <robo8969@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 6:03 PM

Reference Docket No. 14-035-114

The proposed rate structure by Rocky Mountain Power (RMP) would be unfair to the public citizens of Utah and provide inequities between those who have made the long term decision to invest in reducing their energy bill by installing solar. Some of these inequities are listed and discussed in detail below:

1) The proposed rate hike will provide an unfair weighting of penalizing a solar grid tied customer compared to a nonsolar owner through the peak power rate structure. Under the current proposed plan, a person with installed solar could have identical usage patterns as a person without solar and have a higher electric bill. For instance, compare a non-solar and solar customer, both charging an electric car or operating a dryer during peak hours. The rate spike for the grid tied solar customer would accumulate fees that can add up to an amount that their bill could actually be higher than the nonsolar user even though the grid tied user has identical usage patterns and is providing additional power to the grid.

2) The beautiful Salt Lake City and surrounding region has tremendous economic value brought to the communities through tourism and recreation. Using the above example of two electric car owners, one having grid-tied solar and the other not, the RMP proposal provides unfair weighting of rates against the grid tied solar owner and does not account for the economic value brought to the local Utahn's by using an electric car to help reduce our local air pollution. While the electric energy usage may be provided from a coal fired or natural gas power plant, those are generally located in area's remote from dense population centers. Additionally, power plants can rely on economies of scale savings when reducing per capita emissions compared to standard gasoline cars. It would be unfair for an electric car user that decided to also to make an investment in grid-tied solar to be charged in a manner that is not representative to increased costs for RMP or the average Utahn's rate as a result of using solar.

3) The new proposal by RMP is unfair to grid tied solar customers that have already purchased solar, having made a long term investment decision, by providing unforeseeable changes that would have a significant impact on the grid tied customer's investment decision. Those solar customers that may have still made the decision to go solar would likely have invested in a different system design more applicable to the changed rate structure. An example of a design more suited toward the newly proposed RMP rate structure would be having a non-grid tied battery back-up system installed with a single inverter rather than the cost of multiple micro-inverters that are typically installed on grid tied systems.

4) In addition to providing unfair weighting of rates for peak power usage for grid-tied solar customers compared to nongrid tied solar customers, the proposed rate change does not provide equivalent offset rate savings incentives for its customers who choose to shift their usage during non-peak times of day. If the proposal by RMP is to reflect its true costs for impacts to the grid or cycling of thermal power plants, customers should have equivalent economic incentives to use power during very low usage rates. Many modern appliances including: dryers, washers, electric cars, etc. have the ability to be run on a timer. Those customers choosing to charge at very low usage times should be offered substantial and equivalent savings to counter balance the effects of usage during peak hours. RMP cannot truly assess the cost impacts unless these effects are accounted for and the shift usage patterns of the populations as a mass are accounted for as system load profiles, etc.

5) RMP does not provide any tools for the average customer to better understand their usage patterns and how they may shift their usage patterns to reduce their costs to the utility.

Sincerely,

Darren



## Support rooftop solar.

1 message

**Bill Cutting** <bcutting@twiobrand.com> To: psc@utah.gov Wed, Aug 9, 2017 at 6:26 PM

Re: Docket No. 14-035-114

Public Service Commission,

Net-metering rates stopped the advancement of Arizona's solar initiative dead in its tracks. They are now waging a costly battle to get back to square one, and re-start their solar industry. The same thing will happen in Utah if Rocky Mountain Power has its way.

Solar has not only reduced our dependence on coal-fired electricity, it has created thousands of jobs. Average wages in the solar industry are \$14 per hour. In the coal industry they are \$10 per hour. I am personally investing in rooftop solar for my home this month for all the right reasons. Why would we, as a state, NOT want to continue to support solar growth in Utah?

Utah should be a leader in alternative energy instead of a late follower. We have finally gotten solar costs to an affordable level for middle class families. It finally makes sense from a cost perspective, and many of us put solar on our roofs trusting it will not change dramatically.

I have no confidence that this rate increase will change a thing in their approach. They will continue with their status quo behavior which is to gouge their customers to stay profitable, rather than change and prepare for the future.

Please leave the current rate structure for solar customers alone.

BILL CUTTING Partner, Director of Brand Strategy http://twiobrand.com

o 801 486 1624 m 801 949 4080

2205 e 2100 s Salt Lake City, UT 84109





## Feedback on docket #14-035-114

1 message

**Chad Smith** <chadhyrumsmith@gmail.com> To: "psc@utah.gov" <psc@utah.gov> Wed, Aug 9, 2017 at 6:35 PM

To whom it may concern,

I wanted to speak before the commission today about rooftop solar. But I'm leaving the public hearing, as the commission takes a 10-minute recess and I realize they're currently ready to hear person #92 on the list. (I'm #161 on that list, and I can't stay here for another 2+ hours.)

In any case, thanks for soliciting public input and for hearing us out.

Here's my brief pitch, which I care about enough to have driven downtown from Draper just to give:

We should NOT approve Rocky Mountain Power's proposal to raise rates on rooftop solar. I have no vested interest in this, as far as my work or finances go. We don't have rooftop solar on our house and we never have had it. But wait... I do have an interest in this decision, as do all residents along the Wasatch Front. We have terrible pollution, and it's hurting our health, our economy, etc.

If anything, we should be finding ways to subsidize rooftop solar and other forms of truly clean energy. We should not be raising rates on those who are helping to keep pollution out of Utah. I'm tired of seeing our family's good friends leave Utah for Colorado and other states with cleaner air. I'm tired of unsuccessfully attempting to recruit businesses to the Silicon Slopes, because they hear about (or see) our inversions. I'm tired of telling our kids that we have to cancel our outside plans because the air is unhealthy.

I can see why Rocky Mountain Power wants to raise rates. I can NOT see why our government would want to let them. Please do the right thing.

Thank you for your time and consideration. I'd be happy to talk more if that would be helpful.

Chad Smith (and family) 801-971-8993



## 14-035-114 RMP Proposal

1 message

Kevin Adams <kadams@solcius.com> To: Psc@utah.gov

Wed, Aug 9, 2017 at 6:44 PM

In a country that prides itself on freedom of choice, people should have the liberty to choose how to and where they receive power without unfair, arbitrary, punishment from their local energy provider. True ups should happen at most on a monthly basis, not every 15 minutes, which punishes home owners for uncontrollable circumstances, such as cloudy days, or night time. Furthermore, import and export rates should be consistent and proportionate to one another, rewarding solar users for being environmentally friendly, and not hurting them. Solar is an economy building industry, benefiting not only solar users, but corporations, employees, and families, and the current proposal would affect these parties in a very negative way, unless revised to be more fair to solar users.

Saving money, and being environmentally friendly should be rewardingly simple, not a penalizing runaround.



## docket # 14-035-114

1 message

Wed, Aug 9, 2017 at 6:52 PM

Jim Catano <jimcatano@gmail.com> To: psc@utah.gov Cc: Nedda Hendler <nedda.hendler@gmail.com>

I came in today to give testimony in person but was unable to wait the estimated 3 hours in order to give it. This document substitutes for that oral testimony.

First, I must make a confession. When I was the marketing director for a medical device manufacturer I participated in the massaging and cherry-picking of data to make our product look as favorable as possible to potential customers and even to the FDA during the approval process for our product over 20 years ago. We didn't endanger any lives by doing this, but nevertheless we used the best possible data and interpretations thereof to make our product look good and to maximize profit.

Furthermore, I had previously worked for two other Fortune 100 corporations that essentially did the same thing. In short, such practices are quite common, and companies routinely selectively package data internally or contract for it to be done externally in order to derive the most benefit for themselves. I'm not suggesting that they are doing anything illegal when they do such things (although some might be,) but they do go to great expense to make sure that the interpretation is favorable.

So, based on my personal experience which has been corroborated by other cases I have seen documented, I suggest that it would be the height of gullibility and naivete for the commission to view as anything but a liberal interpretation the "facts" that Rocky Mountain Power presents to you in order to justify its rate increases and to displace expenses onto solar-equipped customers.

This isn't to say that the most extraordinary claims of the solar industry aren't suspect as well. They probably overstate certain things too, but at least they have RMP's own net meters to back up most of their claims. I therefore exhort the commission to look to the best information coming out of the academic community...but even there one must beware since we live in a time of endowed university chairs funded by fossil fuel companies etc... in order to discover the most reliable data as to the benefits of solar energy and how it impacts the generation and transmission of power by public utilities.

Please do all you can to continue to encourage the easy and affordable access to solar power in order to help transition our economy to one based on renewable resources for the financial benefit of Utahns and for a cleaner environment and world for all.

For full disclosure, we have 39 panels on the roof (21 of which are new within the year) backed up by 32 lead acid batteries which we use only in a power outage to preserve the life of the batteries. The RMP account is in the name of my housemate Nedda Hendler.

Jim Catano 795 18th Avenue Salt Lake City, Utah 84103



## docket 14-035-114

1 message

**Ed Orschel** <edorschel@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 6:55 PM

It is imperative to our earth that energy corporations be held to making renewable power the priority. Allowing RMP to raise connection fees and reduce the amount paid for generated power puts money and profits in front of healthy air and protecting our planet from climate change.

That is a BAD idea. RMP instead should be developing ways to encourage private home owners and businesses to invest in developing electricity without burning fossil fuels.

Thank you,.

\_\_\_

Ed Orschel PREMIERE BUILDERS, INC. 2840 Sidewinder Drive Park City, UT 84060 435-640-0348 www.edorschel.com



Virus-free. www.avast.com



# Docket No.14-035-114 Comments on the Rocky Mountain Proposal on Solar

1 message

Cathrine Beaty <cathybeaty@gmail.com> To: psc@utah.gov Cc: cathybeaty@comcast.net Wed, Aug 9, 2017 at 7:00 PM

Subject: Comments on the Rocky Mountain Proposal to increase the cost for Rooftop Solar Generation Customers

My husband and I are both retired. We installed solar panels on our home in Pleasant View in 2013 for a number of reasons.

- 1. It is the right thing to do to improve air quality, reduce impacts of climate change, and make electricity available for a longer period
- 2. Electricity prices were rising dramatically, and on a fixed income, we looked for ways to stabilize our future costs.
- 3. It allows us to track our energy consumption better.
- 4. Rocky Mountain Power offered net metering, so that energy we produce would offset our consumption.

The cost of installing the system, even with federal and state rebates was a serious investment. We expect that it will take 7 – 10 years to pay off. Period depends on both our use, as well as the rates charged by Rocky Mountain Power. We would not have made the investment, if we had known that the utility companies would be able to dramatically change the rate structure to now penalize those who install solar systems.

It is also hard to understand why the utility company doesn't see the long term benefits to all utility consumers. They did not seem to factor in the benefits in their analysis in any way to show the costs saved in the long term for the value added by homeowners and companies who invest in solar systems. A complete and thorough analysis should be done showing cost savings for equipment, the value added benefit of rooftop solar panels, and the future economic benefit of not having to rely on expensive and dirty energy producing sources.

It appears that Rocky Mountain is buying into the theory that climate change does not exist. That we shouldn't be investing in renewable resources today to benefit tomorrow. Instead of finding ways to discourage citizens from investing in energy like solar, wind, and geothermal, they should be finding ways to encourage citizens to make this investment.

I hope that you will ensure that Rocky Mountain Power does not succeed in increasing the cost for Rooftop Solar Generation Customers. There has to be a fair solution that looks at long term benefits of encouraging solar production, not discouraging it.

Thanks for listening.

Cathy Beaty



## Docket #14-035-114 Public Comment

1 message

**Dan Schroeder** <dvs1444@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 7:01 PM

Dear Commissioners,

Please find attached my public comment on Docket #14-035-114, "Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program."

Thank you,

Daniel V. Schroeder 1444 Binford Street Ogden, UT 84401 dvs1444@gmail.com

SchroederComment9Aug2017.pdf 318K Date: 9 August 2017 Subject: Docket #14-035-114 Public Comment

Dear Commissioners,

I write regarding Docket #14-035-114, "Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program."

#### About me

My name is Daniel V. Schroeder and I have been a Rocky Mountain Power (RMP) customer since 1993. I have been a net-metering customer since August 2015. I consider myself knowledgeable about home electricity use and have monitored my own use through careful tracking of bills, meter readings, and the use of plug-in power meters. Since 2015 I have also monitored the production of my rooftop solar panels through the Enphase Envoy monitoring system, while monitoring my electricity usage with an Efergy CT-style sensor and datalogging system. I therefore have a thorough understanding of my own household energy use over long time periods, and of my minute-by-minute power use at all times of day, during all seasons. I am also reasonably familiar with statistics on the growth of the photovoltaic industry on a regional, national, and world-wide scale. To establish my credentials for working with numbers and technical concepts, let me state that I hold a PhD in Physics from Stanford University (1990), and that I am a Professor of Physics at Weber State University. These comments are mine alone and do not represent the views of my employer or any other organization.

#### Introduction

In these comments I will explain why RMP's rate proposal for new net metering customers, as modified in its rebuttal testimony of 25 July 2017, is nonsensical and would produce unwanted effects. For simplicity I will limit my attention to the proposed rates for residential 1-phase customers. In brief, the proposed rate structure would violate four basic commonsense principles that any reasonable person would accept.

#### Principles

First let me state these four principles and explain why each of them is reasonable.

**Principle 1:** Adding a solar generation system to my home should not increase my electricity bills.

A solar generation system produces something of value (electrical energy), so the system itself should also have at least some value. Violating Principle 1 would make the value of a solar generation system negative. If new customers are forced onto a rate schedule that violates this principle, then when a home is sold from one customer to another, the presence of a solar array on the home would subtract from the home's value. This would be nonsensical.

**Principle 2:** Putting energy onto the electric grid for my neighbors to use should not increase my electricity bills.

Consider two customers who use exactly the same electrical energy from the grid, at exactly the same times of day. However, Customer A also puts some energy onto the grid at certain times, while Customer B never puts any energy onto the grid. Because the energy that Customer A is putting onto the grid has at least some (possibly small) value, it would be nonsensical to make Customer A pay a higher monthly bill than Customer B.

**Principle 3:** Adding a solar generation system that produces zero (or negligible) energy should not decrease my electricity bills.

If I merely install a solar generation system and then turn that system off, or if it is a tiny system that produces negligible energy in comparison to my household use, then I should not be able to lower my bill in comparison to someone who uses the same electricity, at the same times, but has no solar generation system. We don't want customers to install token solar generation systems for the sole purpose of taking advantage of a more favorable rate schedule.

**Principle 4:** Making a small change to my electricity use should not have a large effect on my electricity bills.

This principle is less black-and-white than the other three, but the idea is that any variations in rates, based on time of day, usage levels, or power vs. energy, should not be too abrupt. Overly abrupt rate variations confuse customers and, potentially, invite savvy customers to "game" the system through contrived modifications in use that have negligible impact on the actual cost of service.

#### The RMP proposal violates Principle 1 for low-usage customers.

Table 1 (attached at the end of this document) shows projected monthly bills for net metering customers under the proposed new rate schedule, compared to bills for customers who use the same amount of electricity but do not have on-site generation or net metering. This table is based on Exhibit RMP JRS-1R, Page 2, with just two modifications. First, I added four rows at the top of the table to show how the rate proposal would affect customers with monthly usage of 100-400 kWh. Second, because the purpose of this table is to show *average* monthly bills, I have modified the formulas so that the peak power, as used in the "demand" component of the rate calculation, is no longer rounded to the nearest integer number of kWh. Aside from these two modifications, all formulas and parameters are the same as in the original version supplied by RMP.

As you can see in the cells highlighted in pink, the proposed rate schedule would actually *increase* the average monthly bills for many customers at the low end of the usage spectrum, relative to what their bills would be without solar generation or net metering. Therefore, for these customers, the RMP proposal violates the principle that adding solar generation to a home should not increase the electricity bill (Principle 1 above).

The violation of Principle 1 would probably be worse than Table 1 indicates, because Table 1

assumes an "average on-peak load factor" of 29% (meaning that the average household load is 29% of highest load during an on-peak one-hour time period). RMP estimated this parameter for a customer with a more typical monthly usage of approximately 1000 kWh (see the "Profile" page of Exhibit RMP JRS-1R), but it is reasonable to assume that this parameter should be lower for a low-usage customer, whose property may be occupied only part-time, or who may make only occasional use of a central air-conditioning system or an electric oven. Table 2, which is identical to Table 1 in all other respects, shows a billing comparison assuming an average on-peak load factor of 20% instead of 29%. As you can see, Table 2 predicts that the proposed rate schedule would violate Principle 1 by even more, for a wider spectrum of low-usage customers. (Table 2 is probably not appropriate for customers who use 1000 kWh per month or more.)

The violation of Principle 1 would be worse still for a low-usage customer who opts for the newly proposed "Energy Focused TOU Schedule 5," in which the peak-power "demand" charge is replaced with a much higher customer charge and a very high peak-time energy charge. For example, the \$28/month customer charge alone is more than is currently paid by any customer using 200 kWh/month or less. A glance at Page 3 of Exhibit RMP JRS-1R shows that even some customers using 500 kWh/month would see their bills increase if they install modestly sized solar arrays.

This violation of Principle 1 for low-usage customers could be due to a flaw in the proposed net metering rate schedule, or a flaw in the existing residential rate schedule, or both. If we choose to trust the analysis showing that the proposed net metering rate schedule is fair, then we would be forced to conclude that the existing rates for low-usage customers without net metering are unfair. Alternatively, if we believe that there are good reasons for keeping rates as low as they currently are for existing low-usage customers without net metering, then that same reasoning should also be applied to low-usage net metering customers. Obviously the current RMP proposal does not do so.

#### The RMP proposal violates Principle 2 for low-usage customers.

Table 3 makes two further modifications to Table 2. First, for simplicity, it makes comparisons only for customers whose average on-site generation provides 50% or 100% of their total average load. Second and more importantly, Table 3 compares the monthly bill under the new proposed net metering schedule not to the bill before solar generation was installed, but instead to what the bill would be under current rate schedules if the customer's usage were reduced by an amount that represents what could be used directly, "behind the meter," from the installed solar array. Based on personal experience, I have assumed that this reduction would be 30% for a solar array that provides (over the course of a year) 100% of the customer's total energy usage, and 20% for a solar array that provides (over the course of a year) 50% of the customer's total energy usage. These percentages are shown in gray at the top of the table, and the reduced bills under the current rate schedule (but with *no* net metering credit) are shown in the columns beneath.

A positive % Change value in Table 3 indicates a violation of Principle 2, that is, a situation in which the customer is being charged for putting electricity onto the grid. Charging a fee for putting electricity onto the grid is nonsensical.

It might be argued that the hour-by-hour usage profile of a net metering customer is different from that of other customers, and therefore the net metering customer should be charged more even for using the same energy from the grid. However, it is easy to imagine other customers having a similar usage profile. For example, an avid outdoorsperson who spends sunny days recreating outside (and turns the air conditioning off while out) could have an effective usage profile that is very similar to that of a customer who takes electricity from a rooftop solar array on sunny days. A more common scenario, still similar enough to make the point, would be a customer who works a 9-to-5 job outside the home.

#### The RMP proposal violates Principle 3 for high-usage customers.

Now look again at Table 1, where in the lower-left portion I have highlighted (in yellow) the savings that a customer could theoretically achieve by installing a solar array that produces no energy whatsoever. In the most extreme cases the amount saved would exceed \$1000 per year. Thus, RMP's proposed rate schedule would provide high-usage customers with a massive financial incentive to become net metering customers, just to obtain the fantastically low energy charge of less than \$0.04 per kWh.

It is nonsensical that RMP should offer such an incentive. If the goal is to reduce the bills of high-usage customers, then this should be done in an honest way that does not require those customers to install token solar arrays.

Of course the savings would be even greater if these customers could keep their peak-hour usage below the level assumed in the table, and the financial incentive is great enough that many customers would find ways to do so (e.g, real-time usage monitors, programmable thermostats, and perhaps even on-site battery storage). Incentives to shift usage away from peak hours would be a good thing, but again, such incentives should apply to everyone—not just to those with on-site generation. Also, as discussed below, any such incentives should operate in a way that is less abrupt and less confusing.

#### The RMP proposal violates Principle 4.

The proposed \$8.25/kW "demand" charge violates Principle 4 because it results in enormous variations in price as a result of tiny changes in behavior. For example, running a central air conditioning system for a single hour between 3:00 and 4:00 pm, on just one weekday per month, could cost more than \$30. On the other hand, doing the same between 2:00 and 3:00 pm, or on a weekend or holiday, or on a second weekday during the same billing month, could cost nothing. Similar comparisons would apply to the use of an electric oven, a hot tub, an electric car charger, or any other high-wattage appliance that might run continuously for an hour.

The optional "energy focused" rate schedule is somewhat less arbitrary, but still entails price variations of a factor of nearly 8 between peak times and off-peak times.

If the true cost of providing power varied from one hour to the next in such an abrupt (yet predictable!) way, then these rate variations would be appropriate. But in fact, the cost of

providing power—at least insofar as it can be predicted in advance—varies smoothly throughout the day and almost never by a factor as large as 8. Large and abrupt variations in customer charges, when these do not accurately reflect actual variations in cost of service, can cause serious problems.

The most obvious problem is simply that customers will be confused. Some will simply conclude that their electric bills are unpredictable, or are too hard to understand. Others will become angry over the seeming arbitrariness of the rate structure. This anger could even make its way into legislation.

The other problem is that savvy customers will learn to game the system, effectively taking unfair advantage of customers who are less savvy. Some of us could do this without any technological aids, simply by being aware of our electricity use and avoiding peak hours. Others will employ smart thermostats and other technology to help shift use away from peak times. Some may even install battery storage systems, effectively engaging in electricity arbitrage to buy energy when it is cheap and sell it back when it is expensive.

Of course, we want customers to shift their energy use from peak times to off-peak times. But the incentives for doing so should be commensurate with the actual variation in cost of service, and should be available to all customers at all times, whether or not they use net metering and whether or not they have already hit their demand peak for the current billing month. It would be especially unfortunate if thousands of RMP customers were to invest thousands of dollars each in battery storage systems, shifting loads in a way that is only marginally beneficial and that RMP itself could achieve—either with a central storage facility or through more traditional means such as the Cool Keeper program—at a small fraction of the cost.

#### The broad view

Broadly speaking, the effects of the proposed net metering rate structure would be to shift costs from larger electricity users onto smaller users, and to shift some electricity use away from peak hours and onto off-peak hours. Some form of the second effect is undoubtedly desirable, while the first effect is undoubtedly controversial. Both effects would be achieved in a clumsy way that is hard for customers to understand, and that entails complicated side effects.

Perhaps most importantly, neither of these effects is fundamentally related to solar power or net metering. If possible, we should encourage *all* customers to shift use from peak hours to off-peak hours. And if there are valid reasons to shift costs from large users onto small users, then those reasons presumably apply to everyone. There is no reason why net metering customers should bear the entire burden (or reap the entire benefit) of achieving either of these goals.

Therefore the sensible approach is not to impose an erratic and disruptive rate structure on new net metering customers, but rather to revise the rate structure for all residential (and, for that matter, commercial) customers. Accordingly, RMP should abandon the present proposal and instead begin the process of moving all customers onto a time-of-day metering schedule. The details of such a rate revision may still be controversial, but at least it would then be possible to adhere to reasonable and consistent principles.

Net metering is relevant, however, for a somewhat indirect reason. Based on current trends, it seems clear that within about a decade, electrical grids throughout the southwestern U.S. will be flooded with solar-generated power whenever the sun is shining. This power will come from a mix of utility-scale solar farms and distributed rooftop systems—both of which have their advantages and disadvantages. Under these radically new conditions, the times of peak electricity value will shift from summer afternoons into the evenings, mornings, and winters, and the marginal value of additional electricity during mid-day sunshine will plummet.

It is perfectly understandable that under these future conditions, RMP would not want to credit a homeowner for mid-day solar generation at the same rate that it charges for energy in the early evening. But this disparity in value, whose cause is at a multi-state scale, should also be reflected in the rates charged to non-net-metering customers.

Thank you for your consideration of these comments.

Sincerely,

Daniel V. Schroeder 1444 Binford Street Ogden, UT 84401 dvs1444@gmail.com

Attachments: Tables 1, 2, and 3, all modified from Exhibit RMP JRS-1R

#### Rocky Mountain Power (with modifications by Daniel V. Schroeder) Monthly Billing Comparison Schedule 136 - State of Utah Bill Savings from Proposed Demand Focused TOU Schedule 5 Rates for New Residential NEM Customers

Full Requirements	0%	0	%	10%		25%		50%		75%		100%	
Monthly kWh	Present	Proposed	% Change										
100	\$15.57	\$21.24	36%	\$20.73	33%	\$19.95	28%	\$18.66	20%	\$17.38	12%	\$16.09	3%
200	\$24.94	\$29.28	17%	\$28.25	13%	\$26.70	7%	\$24.13	-3%	\$21.55	-14%	\$18.98	-24%
300	\$34.32	\$37.32	9%	\$35.78	4%	\$33.46	-3%	\$29.59	-14%	\$25.73	-25%	\$21.87	-36%
400	\$43.69	\$45.36	4%	\$43.30	-1%	\$40.21	-8%	\$35.06	-20%	\$29.91	-32%	\$24.75	-43%
500	\$55.39	\$53.40	-4%	\$50.83	-8%	\$46.96	-15%	\$40.52	-27%	\$34.08	-38%	\$27.64	-50%
750	\$84.63	\$73.50	-13%	\$69.64	-18%	\$63.84	-25%	\$54.18	-36%	\$44.52	-47%	\$34.86	-59%
1,000	\$113.88	\$93.60	-18%	\$88.45	-22%	\$80.72	-29%	\$67.85	-40%	\$54.97	-52%	\$42.09	-63%
1,250	\$146.32	\$113.71	-22%	\$107.27	-27%	\$97.61	-33%	\$81.51	-44%	\$65.41	-55%	\$49.31	-66%
1,500	\$178.76	\$133.81	-25%	\$126.08	-29%	\$114.49	-36%	\$95.17	-47%	\$75.85	-58%	\$56.53	-68%
1,750	\$211.20	\$153.91	-27%	\$144.89	-31%	\$131.37	-38%	\$108.83	-48%	\$86.29	-59%	\$63.75	-70%
2,000	\$243.64	\$174.01	-29%	\$163.71	-33%	\$148.25	-39%	\$122.49	-50%	\$96.73	-60%	\$70.97	-71%
2,500	\$308.52	\$214.21	-31%	\$201.33	-35%	\$182.01	-41%	\$149.81	-51%	\$117.61	-62%	\$85.41	-72%
3,000	\$373.41	\$254.41	-32%	\$238.96	-36%	\$215.77	-42%	\$177.14	-53%	\$138.50	-63%	\$99.86	-73%

% of DG Production to Full Requirements Energy Usage

#### Assumptions

Assumptions	
1. Average monthly DG generation kWh/kW	116
2. Average on-peak load factor %	29%
3. Average monthly Full kWh for Residential NM customer	977
4. DG demand impact index: on-peak kW/MWh	1.47

5. Estimated on-peak kW = Full kWh/(730\*29%) - DG MWh x 1.47

This version, unlike the original, does not round the on-peak kW to the nearest integer before appyling the \$8.25 demand charge

# Table 1

#### Rocky Mountain Power (with modifications by Daniel V. Schroeder) Monthly Billing Comparison Schedule 136 - State of Utah Bill Savings from Proposed Demand Focused TOU Schedule 5 Rates for New Residential NEM Customers

Full Requirements	0%	0% 0%		10%		25%		50%		75%		100%	
Monthly kWh	Present	Proposed	% Change										
100	\$15.57	\$23.03	48%	\$22.52	45%	\$21.75	40%	\$20.46	31%	\$19.17	23%	\$17.88	15%
200	\$24.94	\$32.87	32%	\$31.84	28%	\$30.29	21%	\$27.72	11%	\$25.14	1%	\$22.57	-10%
300	\$34.32	\$42.70	24%	\$41.16	20%	\$38.84	13%	\$34.98	2%	\$31.11	-9%	\$27.25	-21%
400	\$43.69	\$52.54	20%	\$50.48	16%	\$47.39	8%	\$42.23	-3%	\$37.08	-15%	\$31.93	-27%
500	\$55.39	\$62.37	13%	\$59.80	8%	\$55.93	1%	\$49.49	-11%	\$43.05	-22%	\$36.61	-34%
750	\$84.63	\$86.96	3%	\$83.09	-2%	\$77.30	-9%	\$67.64	-20%	\$57.98	-31%	\$48.32	-43%
1,000	\$113.88	\$111.54	-2%	\$106.39	-7%	\$98.66	-13%	\$85.78	-25%	\$72.90	-36%	\$60.03	-47%
1,250	\$146.32	\$136.13	-7%	\$129.69	-11%	\$120.03	-18%	\$103.93	-29%	\$87.83	-40%	\$71.73	-51%
1,500	\$178.76	\$160.72	-10%	\$152.99	-14%	\$141.40	-21%	\$122.08	-32%	\$102.76	-43%	\$83.44	-53%
1,750	\$211.20	\$185.30	-12%	\$176.29	-17%	\$162.76	-23%	\$140.22	-34%	\$117.68	-44%	\$95.14	-55%
2,000	\$243.64	\$209.89	-14%	\$199.58	-18%	\$184.13	-24%	\$158.37	-35%	\$132.61	-46%	\$106.85	-56%
2,500	\$308.52	\$259.06	-16%	\$246.18	-20%	\$226.86	-26%	\$194.66	-37%	\$162.46	-47%	\$130.26	-58%
3,000	\$373.41	\$308.23	-17%	\$292.78	-22%	\$269.59	-28%	\$230.95	-38%	\$192.31	-48%	\$153.68	-59%

% of DG Production to Full Requirements Energy Usage

#### Assumptions

1. Average monthly DG generation kWh/kW	116	_
2. Average on-peak load factor %	20%	< Modified from original 29%
3. Average monthly Full kWh for Residential NM customer	977	
4. DG demand impact index: on-peak kW/MWh	1.47	
5. Estimated on-peak kW = Full kWh/(730*29%) - DG MWh x 1.47		

This version, unlike the original, does not round the on-peak kW to the nearest integer before appyling the \$8.25 demand charge

# Table 2

#### Rocky Mountain Power (with modifications by Daniel V. Schroeder) Monthly Billing Comparison Schedule 136 - State of Utah

#### Bill Savings from Proposed Demand Focused TOU Schedule 5 Rates for New Residential NEM Customers Relative to a non-NEM customer who uses the same power from the grid

% of DG Production to Full Requirements Energy Usage								
Full Requirements	0%	20%	50%		30%	100%		
Monthly kWh	Present	No NEM	Proposed	% Change	No NEM	Proposed	% Change	
100	\$15.57	\$13.70	\$20.46	49%	\$12.76	\$17.88	40%	
200	\$24.94	\$21.20	\$27.72	31%	\$19.32	\$22.57	17%	
300	\$34.32	\$28.69	\$34.98	22%	\$25.88	\$27.25	5%	
400	\$43.69	\$36.19	\$42.23	17%	\$32.44	\$31.93	-2%	
500	\$55.39	\$43.69	\$49.49	13%	\$39.00	\$36.61	-6%	
750	\$84.63	\$67.08	\$67.64	1%	\$58.31	\$48.32	-17%	
1,000	\$113.88	\$90.48	\$85.78	-5%	\$78.78	\$60.03	-24%	
1,250	\$146.32	\$113.88	\$103.93	-9%	\$99.26	\$71.73	-28%	
1,500	\$178.76	\$139.83	\$122.08	-13%	\$120.37	\$83.44	-31%	
1,750	\$211.20	\$165.78	\$140.22	-15%	\$143.07	\$95.14	-34%	
2,000	\$243.64	\$191.74	\$158.37	-17%	\$165.78	\$106.85	-36%	
2,500	\$308.52	\$243.64	\$194.66	-20%	\$211.20	\$130.26	-38%	
3,000	\$373.41	\$295.55	\$230.95	-22%	\$256.62	\$153.68	-40%	

% of DG Production to Full Requirements Energy Usage

Assumptions		
1. Average monthly DG generation kWh/kW	116	
2. Average on-peak load factor %	20%	< Modified
3. Average monthly Full kWh for Residential NM customer	977	
4. DG demand impact index: on-peak kW/MWh	1.47	

5. Estimated on-peak kW = Full kWh/(730\*29%) - DG MWh x 1.47

This version, unlike the original, does not round the on-peak kW to the nearest integer before appyling the \$8.25 demand charge

# Table 3



## Docket 14-035-114: Rooftop Solar PSC Docket

1 message

edward macner <emacner@comcast.net> Reply-To: emacner@comcast.net To: psc@utah.gov Wed, Aug 9, 2017 at 7:10 PM

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.

edward macner 154 Ogden Canyon PO Box 3754 Ogden, UT 84401



## Docket # 14-035-114

1 message

**Carson Hoch** <choch@solcius.com> To: psc@utah.gov Wed, Aug 9, 2017 at 7:20 PM

Hello my name is Carson,

RMP only looked at a sample size of 40 homes and looked at those homes for only a one year period. This is a purposefully narrow view at a population and the sample size is not large enough to properly reflect accurate findings.

The benefits of solar cannot be observed in simply one year either. The energy savings and environmental impact is very observable on longer timetables such as 10 - 20 years. If Rocky Mt Power wishes to present findings in relation to their proposal, they should be concise, and unbiased in their manner of collecting data.





## (no subject)

1 message

Roger Faircloth <rdfaircloth@gmail.com> To: psc@utah.gov

Wed, Aug 9, 2017 at 7:30 PM

Utahan's deserve transparency and certainty in the regulatory process. Utah consumers have invested their own money and enter into binding contractual agreements with the expectation that policy makers and regulators will not change the rules unilaterally. We urge the State of Utah, the creator of the net metering program, to uphold its commitments to solar power pioneers.

Energy independence, technological innovation and environmental stewardship are hallmarks of the solar industry, an industry that now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Turning a cold shoulder to innovation jeopardizes Utah's businesses, jobs and national image.

The spirit of self-reliance is synonymous with Utah. Utahns should have the opportunity to use the energy they produce on their roof within their own home and not be penalized for it.

We embrace technological advancements and are early adopters of technology and innovation that multiply the Earth's resources, mitigates adverse impacts and enhances our ability to enjoy nature.

Roger Faircloth Solar panel customer and supporter.

Sent from my iPad



## Docket #14-035-114

1 message

Wed, Aug 9, 2017 at 7:37 PM

**Money Array** <moneyarray@yahoo.com> Reply-To: Money Array <moneyarray@yahoo.com> To: "psc@utah.gov" <psc@utah.gov>

I tried to testify at the public hearing today, but there were too many people ahead of me and I only had 2 hours for parking, so I'm emailing my statement. Attached is my statement. I also want to say that as I listened to testimonies, I find that there is a lot of misunderstandings about solar. For one thing, it's not just for the rich. My husband and I make around 32,000 per year and have a 10 K system that we have had for about 9 years now. We started small and added some as we went. We paid for it in full each time we bought and install it ourselves. We also help others to install it themselves. Solar doesnt have to cost \$30 to \$40 thousand. Our systems generally cost about \$6 to \$8 thousand. Next, its best to put it on the ground rather than on the roof. You can clean your modules and adjust them for better out put. We generate all year round and yes, Rocky Mountain Power takes all our bank in March. We produce enough 9 months of the year to bank enough to help us make it the last 3 months of the year. It really is rare that we do not produce in the winter. Very snowy days, for several days in a row, with thick cloud cover, will stop production. But once the sun peeks out and we clear the snow from our array, we're up and producing again. The reflextion from the snow produces quit well and cold days are better for production then hot, so winter is not as bad and most make it out to being. Utah is a great state for Solar. We currently have 9 years of data, everything we produced and everything we got from the grid in exchange for our bank. One last thing that most people dont understand about net metering is that you consume what you produce first and then you bank it or send it out to be used by your neighbor and you get a credit for it. Later when you dont produce what you are consuming, you use your banked KW. It has been a really great system for us. One of the byproducts of being your own generation system, is that you watch what you use very carefully. It is great incentive to not waist a single KW.

Next time you have a hot issue that you need a full public hearing for, you may want to choose a larger seating venue. I think many more wanted to testify, but were unable to do to parking and time restrictions. And a lot of others went home when they found little or no seating available.

Thanks

W

Sally Buttars

P.S. I disagree with the women who said Solar is hurting the elderly. It is do to Solar that I am able to retire early without Social Security. We are on our own and Solar made it possible. It is a good item to add to anyone's retirement planning.

PSC Testimony August 9 2017.doc 32K

PSC Heber/Wells Building Salt Lake City, UT

Testimony given by: Sally Buttars 4294 S 4500 W West Haven, UT 84401

1. The PSC is our only defense against abuse made by monopolies like the Electric Companies. What Rocky Mountain Power/Pacific Corp. is asking for in peak demand charge is abuse. They must not be allowed to charge solar customers peak demand charges. They must not be allowed to eliminate their competition through unrealistic rate charges and fees.

2. Solar has many benefits both direct and indirect. Here are a couple:

Direct	Indirect
A. Solar increase a family's ability to be	A. Solar has indirectly influenced Technological
Self Reliant not only for emergencies, but	advancements in battery storage and battery
also for retirement and daily living.	storage innovation.
<b>B.</b> Solar reduces the cost of living for retirees in terms of utility expenses. By paying for residential solar prior to retiring, the retiree cuts their daily living expense by the energy they produce and use.	B. Solar has indirectly influenced the advancement and innovations in Electric Cars. Many residential solar owners also own an Electric Car. (We Own 4)

C. Retirees with solar can retire earlier and can use that extra time to service their communities. (I'm 57 and plan on retiring this year. Solar is a big part of my retirement plan.)

**3.** Solar is good for the community at large. It reduces emissions both in terms of production and through the uses of Electric cars.

4. The people who will be hurt the most will be the citizens who have "some solar", but not enough to significantly reduce their regular power bill. They will be force to pay all the penalty fees for being a solar generator as well as their regular electric bill.

What Rocky Mountain Power/Pacific Corp. is proposing is not good for Utah and its citizens. I strongly urge you to vote in favor of Solar and against the abusive requests of Rocky Mountain Power/Pacific Corp.

Thank you,

Sally A. Buttars


# **Rmp net metering**

1 message

**Mark Richards** <markrichards@imwindandsolar.com> To: "psc@utah.gov" <psc@utah.gov> Wed, Aug 9, 2017 at 7:40 PM

Hello PSC

Thank you for taking time for a public hearing. I have been in the PV Solar industry for 8 years here in Utah. Please don't let the large monopoly kill our industry. With over 100 employees, I am committed to keeping them employed Bless you

Mark Richards Sent from my iPhone



# Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Pat Annoni <patricia@ecologyfund.net> Reply-To: patricia@ecologyfund.net To: psc@utah.gov Wed, Aug 9, 2017 at 8:19 PM

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.

Pat Annoni 7022 S 300 E Midvale, UT 84047 FAX TO:

801 530- 6796

VOICE: 801 530 6716

Deliver to Public Service Commissioners:

LeVar , Clark, and White

Address: Heber M. Wells Building

160 East 300 South Salt Lake City, UT 84111

Re: Docket Number 14-035-114

Proposed changes to Net Electric Metering rates

This is a copy of attached Press Release and is a public comment.

The author must remain anonymous due to relatives working in the electric power industry . Thank you very much for your service to Utah and her citizens.

# Don't Let Utah's Electric "Supreme Court" Smash Solar ! [For Immediate Release]

The Utah Commission that regulates all Electricity rates, could vote to SMASH SOLAR. Email them.

Utah.gov include Docket number 14-035-114

The State of Nevada "Smashed Solar " ..., logally!

30,000 Nevada families and businesses spent roughly \$ 600,000,000 to install clean green Solar electric "generators". They were promised "Net Metering" where they get fairly paid for the power they give to their neighbors. The State of Nevada changed the rules in 2015

When SolarCity fired 550 solar workers they said of the Nevada Commission:

"is particularly callous and leaves Nevadans to question whether the State would ever place the financial security of regular citizens above the financial interests of NV Energy".

In Nevada, almost 2600 solar workers were fired. For a loss of \$72 million statewide. Utah will have a similar loss if the Utah Public Service commission changes our solar electric rates.

Nevada solar citizens now owe around \$20,000 per home for solar and will not get fairly paid for the electricity they create. The same thing can happen to Utah's 20,000 solar families. We have a Lien on our homes. If roof top solar stops paying for their investment, it will be tough to sell their home and they may even default on their full home mortgage.

We saw what happened in 2007 when thousands lost their homes and the banks were hammered.

- Total Solar Investment in Utah: \$2.1 Billion dollars
  - Percentage of State's Electricity from Solar: 3.56%
  - Utah Solar Jobs: 4,408

From: state solar statistics.

Solar Energy Industry Association [State by

SOLAR WORKS: Rocky Mountain Power spent over \$1 Billion dollars building the generators in Lindon, Ut This is only used to meet peak demand in the early morning and evening. It consists of 4 – 250 Mega watt generators. It is obvious when they are running, from the massive clouds from the stacks. There are several of these plants in Payson and Salt Lake. The Lindon "Lakeside" plant is fed by a super high pressure 24 inch gas line. The fumes are invisible, unlike coal fired plants. However they produce massive amounts of Carbon Dioxide which encourages global warming. Solar panels have zero emissions and even shade peoples roofs.

Solar Photovoltaic panels take up much of the power demand during the day. Without Solar these plants would need to run more of the time. Interesting that Rocky Mountain Power would claim that roof top solar good citizens are costing their neighbors money. So the neighbors would rather pay for more Billion dollar plants and massive amounts of Natural Gas?

Its ironic that the US Federal government gives a 30% Solar tax credit and Utah gives a \$2000 incentive. Now Utah is being encouraged to make Solar a losing investment?? Most important is to email Utah Public Service Commission. Final ruling Aug 16<sup>th</sup>.

We need thousands to make Public Comments to the folks that are supposed to protect Utah citizens from the massive might of our Electricity monopoly:

Emailed comments can be submitted to psc@utah.gov and should include Docket No.14-035-114.

UPDATE: After 18 months of costly legal battles, Nevada solar owners got their rates back. We are confident the Utah Public Service Commission will be immune to any unethical influence. It would never happen in Utah that State officials would be influenced unjustly.

References:

,

Testimony to UT Commission: <u>https://psc.utah.gov/2016/06/20/docket-no-14-035-114-2/</u> The electric monopoly spends a fortune on Lawyers and "spin doctors" to testify.

The Guardian: https://www.theguardian.com/environment/2016/jan/13/solar-panel-energy-power-company-nevada

GreenTech Media: <u>https://www.greentechmedia.com/articles/read/nevadas-solar-exodus-continues-driven-by-</u> retroactive-net-metering-cuts

Ogden Standard Examiner newspaper: <u>http://www.standard.net/Environment/2016/11/28/Rocky-Mountain-Power-</u> s-net-metering-changes-cause-conflict-in-Utah



### docket #14-035-114

1 message

Janet Muhn <sllilac4644@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 8:21 PM

Dear Sirs:

RMP is trying again to rise the rates on solar customers, which is ridiculous! If they do that, then they should pay us for the surplus energy that we produce that they just take away every March and never pay us for. They had the Blue Sky program for years that we contributed to, but when we got solar, it was made abundantly clear that they do not care about us producing solar power if they can't charge us more and more until it does not even pay to have it! If they keep this up they will lose the big producers who will just buy their own battery and produce no power for RMP. They are not considering their public relations and they are truly showing their true, greedy colors! I definitiely speak against their unabashed greed and disregard for those who are producing power for them.

Thank you,

Janet Muhn

# Don't Let Utah's Electric "Supreme Court" Smash Solar ! [For Immediate Release]

The Utah Commission that regulates all Electricity rates, could vote to SMASH SOLAR. Email them.

Utah.gov include Docket number 14-035-114

The State of Nevada "Smashed Solar " .... legally!

30,000 Nevada families and businesses spent roughly \$ 600,000,000 to install clean green Solar electric "generators". They were promised "Net Metering" where they get fairly paid for the power they give to their neighbors. The State of Nevada changed the rules in 2015

When SolarCity fired 550 solar workers they said of the Nevada Commission:

"is particularly callous and leaves Nevadans to question whether the State would ever place the financial security of regular citizens above the financial interests of NV Energy".

In Nevada, almost 2600 solar workers were fired. For a loss of \$72 million statewide. Utah will have a similar loss if the Utah Public Service commission changes our solar electric rates.

Nevada solar citizens now owe around \$20,000 per home for solar and will not get fairly paid for the electricity they create. The same thing can happen to Utah's 20,000 solar families We have a Lien on our homes. If roof top solar stops paying for their investment, it will be tough to sell their home and they may even default on their full home mortgage.

We saw what happened in 2007 when thousands lost their homes and the banks were hammered.

- Total Solar Investment in Utah: \$2.1 Billion dollars
  - Percentage of State's Electricity from Solar: 3.56%
  - Utah Solar Jobs: 4,408

From: state solar statistics.

Solar Energy Industry Association [State by

SOLAR WORKS: Rocky Mountain Power spent over \$1 Billion dollars building the generators in Lindon, Ut This is only used to meet peak demand in the early morning and evening. It consists of 4 – 250 Mega watt generators. It is obvious when they are running, from the massive clouds from the stacks. There are several of these plants in Payson and Salt Lake. The Lindon "Lakeside" plant is fed by a super high pressure 24 inch gas line. The fumes are invisible, unlike coal fired plants. However they produce massive amounts of Carbon Dioxide which encourages global warming. Solar panels have zero emissions and even shade peoples roofs.

Solar Photovoltaic panels take up much of the power demand during the day. Without Solar these plants would need to run more of the time. Interesting that Rocky Mountain Power would claim that roof top solar good citizens are costing their neighbors money. So the neighbors would rather pay for more Billion dollar plants and massive amounts of Natural Gas?

Its ironic that the US Federal government gives a 30% Solar tax credit and Utah gives a \$2000 incentive. Now Utah is being encouraged to make Solar a losing investment ?? Most important is to email Utah Public Service Commission. Final ruling Aug 16<sup>th</sup>.

We need thousands to make Public Comments to the folks that are supposed to protect Utah citizens from the massive might of our Electricity monopoly:

Emailed comments can be submitted to psc@utah.gov and should include Docket No.14-035-114.

UPDATE: After 18 months of costly legal battles, Nevada solar owners got their rates back. We are confident the Utah Public Service Commission will be immune to any unethical influence. If would never happen in Utah that State officials would be influenced unjustly.

References:

Testimony to UT Commission: <u>https://psc.utah.gov/2016/06/20/docket-no-14-035-114-2/</u> The electric monopoly spends a fortune on Lawyers and "spin doctors" to testily.

The Guardian: <u>https://www.theguardian.com/environment/2016/jan/13/solar-panel-energy</u> power-company-nevada GreenTech Media: <u>https://www.greentechmedia.com/articles/read/nevadas\_solar\_</u>exodus\_continues-driven-by-

retroactive-net-metering-cuts

Ogden Standard Examiner newspaper: <u>http://www.standard.net/Fnvironment/2016/11/28/Rocky\_Mountain-Power-</u> s-net-metering-changes-cause-conflict-in-Utah



# 14-035-114

1 message

p-zuckerman@comcast.net <p-zuckerman@comcast.net>
To: psc@utah.gov

Wed, Aug 9, 2017 at 8:42 PM

Please accept my comment here as I could not stay long enough for my turn to speak.

Thank you, Paul Zuckerman Salt Lake City

PSC Comments.docx

Good afternoon and thank you for allowing the public this time. My name is Paul Zuckerman, a resident of Salt Lake City. I'll speak as being sworn in.

I'm here to try to keep three promises:

The first is to my daughter. Through the progressive thinking we expect of modern medicine, she may soon get pregnant with my first grandchild in spite of infertility issues. I want that child to experience the same exhilarating smell of clean air first thing in the morning and clear blue skies that I remember as a child.

The second promise is to my fellow Utahns. Years ago, I taught classes on Energy and Power. I taught my students how all energy starts with the sun and how much of it is lost with every conversion when we burn fossils fuels to create heat, that creates steam that produces motion to generate electricity. Then I showed them a toy solar panel that turned a small fan with just **one** conversion. Clean, efficient, amazing! Three decades later, I'm even more excited yet dismayed that it took so long to get to this moment. Will we choose to nurture the recent surge in rooftop solar or endanger it for false economy?

I want to emphasize that word <u>delay</u>. Just as companies like Kodak and Blockbuster found, innovation is undeniable and inevitable. I believe RMP even knows that. They know that one solar farm in Holden Utah is good publicity, but many more is a sustainable business model. While I am not able to put roof top solar on my home, I did enroll in their Subscriber Solar program. I did so to do my part to clean up our air but also in hopes of encouraging greater investment on their part. I pay **slightly** more for my usage that comes from their solar farm but I am happy to do so. One argument made by RMP for this special rate structure is that those able to afford solar would be unfairly subsidized by neighbors who could not. I believe that **all** ratepayers should shoulder any costs that RMP can justify are incurred by rooftop solar, rather than targeting solar customers. We all benefit from clean air and more efficient direct access to their net metered surplus power. I prefer this scenario over providing life support to a fossil fuel that has outlived its desirability. Oliver Wendell Holmes said it best: "I like to pay taxes. With them I buy civilization".

And finally, my third promise is to RMP. I do not wish to deny them a fair profit. But they are a legal monopoly serving at the desire of the people of Utah. And the majority of Utahns desire clean, renewable energy. They favor a free market based economy that does not stunt specific industries and jobs. They support the individual initiative and ingenuity of their neighbors. They are **happy to deny** RMP this segregated rate structure request since doing so might hasten the time when RMP realizes that they must find ways to monetize *their own* transition to solar. The tobacco industry showed that selling a product sourced from material detrimental to public health is not an advisable business model.

Finally, I've heard it said you can improve your life by stopping some habits and starting others. We should stop the habit of incentivizing coal and start a habit of incentivizing rooftop solar. This nexus is an opportunity to start. Reconsidering this rate plan the thing to do.

Thank you.



#### Solar power

1 message

**Ron Hamblin** <ronald.hamblin@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 9:16 PM

I can't understand why Utah is still stuck back in the mechanical age of inefficient internal combustion engines, deadly air pollution, and burning fossil fuels as quickly as we can. Why aren't we out in the forefront leading the nation in developing new, clean, efficient ways of powering our movement? Come on lets lead the nation into the new era. It has to happen because this planet cannot support internal combustion. It takes hundreds of gallons of fuel just to get a gallon of gasoline to my car. Lets do a great thing and show the world how to get on a higher plain. I remember as a youth the great vistas we enjoyed in Utah, but no longer can I see Navaho Mountain from Bryce Canyon or the LaSalle's from Thousand Lakes Mountain. Is "life elevated" here in Utah or are we sliding down to the level of the rest of the world? Ron Hamblin



(no subject) 1 message

Lisa Baird <ltsailv@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 9:44 PM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely, Lisa Baird

12644 S Park Avenue Riverton, UT 84065



### Solar power, Net metering

1 message

**lewis411@veracitynetworks.net** <lewis411@veracitynetworks.net> To: psc@utah.gov Wed, Aug 9, 2017 at 9:53 PM

# Fairness

Utahns deserve transparency and certainty in the regulatory process. Utah consumers have invested their own money and enter into binding contractual agreements with the expectation that policy makers and regulators will not change the rules unilaterally. We urge the State of Utah, the creator of the net metering program, to uphold its commitments to solar power pioneers.

I agree with this statement 100%. I signed up and installed solar panels with the expectation that Utah would hold the line they established. Do not let the energy companies raise the rates so high it is not practical to install solar. Solar panels are a huge investment (I own mine). I expect to earn some return on my investment. A small increase may be justified, but don't let them kill an industry that fits our desert conditions in Utah. The panels produce the most power in the daytime when the demand is the highest. Rocky Mountain Power is essentially getting "load-leveling" for minimal cost to them. I thought I read somewhere in my research that the "excess power" would be donated to assist those "in need" each March rather than go to RM Power.

Rick Lewis 864 W 180 S Orem, Ut 84058 801-362-7348

ps. Everyone I talk to tells me Solar Panels and solar power was "Killed" in Nevada because the rates were raised so high. It no longer makes economic sense to install solar panels there. Don't let that happen in Utah!!!!



# Net Metering 14-035-114 sub category of Meter aggregation

1 message

**C Sisson** <see.sisson@gmail.com> To: psc@utah.gov Wed, Aug 9, 2017 at 10:06 PM

I am attempting to aggregate a meter 4 lots away from my solar panel net meter Rocky Mountain Power (RMP) has adopted a narrow definition of adjacent. The definition they have adopted is designed to greatly restrict the ability to do meter aggregation.

I would like the commission to consider a broader interpretation of adjacent. For example Salt Lake City is adjacent to the Wasatch front mountains.

For example: We have 5 lots, A, B, C, D and E Lot A has the net meter Lot E has the meter that I want to aggregate

RMP definition:

Lot A is adjacent to only lot B. A is not adjacent to any of the other lots. Why? They say it is because none of the other lots share a point or common property boundary.

My proposal: Lot A is adjacent to Lots B, C, D and E

Sincerely

**Charles Sisson** 

Laus Deo



## Comments re: RMP's proposed rate increases--Docket No. 14-035-114

1 message

Richard Jirik <RJirik@msn.com> To: "psc@utah.gov" <psc@utah.gov> Wed, Aug 9, 2017 at 10:56 PM

State of Utah Public Service Commission

Heber M. Wells Building

160 E 300 S

Salt Lake City, Utah

84111

Dear Sirs:

Please find attached a WORD file with my comments on Rocky Mountain Power Company's proposed rate increases to replace the existing net-metering rate structure.

Sincerely,

Richard Jirik

2083 W Champagne Circle

Taylorsville, Utah 84129

Comments to Utah PSC\_Docket # 14-035-114.docx 17K

### **Comments on Rocky Mountain Power's Proposed Rate Changes to Net-metering**

My name is Richard Jirik. I am a homeowner and Rocky Mountain Power (RMP) customer residing in Taylorsville, Utah. I originally intended to provide my comments orally before the Public Service Commission (PSC) but due to other obligations I was not able to attend the public comment period on August 9th. Before proceeding I want to express my thanks to the PSC for allowing public comment on the rate increases requested by RMP that would impact all of its customers, not just its existing netmetering customers or those homeowners who will install a rooftop solar system in the future.

I could cite a number of arguments why I am opposed to proposed RMP rate increase but for the sake of brevity I will leave those talking points to the experts that will testify on behalf of the solar industry in Utah and public interest and environmental advocacy organizations. Suffice to say, RMP's analysis, upon which RMP justified their proposed rate increases, is flawed---overstating costs to the utility from netmetering customers and minimizing or ignoring the long-term environmental and economic benefits that the solar industry will provide to the state of Utah. Rather, I want to relate to the Commission my wife's and my situation because I believe it is representative of many RMP's customers who have contemplated the installation of a rooftop solar system, for economic and/or other reasons, but have deferred making the commitment to solar energy due in large part to the uncertainty surrounding the PSC's response to RMP's request for a three-part rate increase on existing and future solar users.

Over the past two years my wife and I have evaluated a few proposals for the installation of a rooftop solar panel system for our home. I should note that our average monthly usage of electricity is quite modest, as we are empty nesters and make a conscientious effort to limit our power consumption. Based on that factor, and our limited ability as retirees to utilize the state and federal tax credits provided to homeowners to install rooftop solar systems, we had previously concluded that the time required to recoup the initial capital investment in a solar system would likely extend beyond our projected life expectancies. Thus, installing a solar rooftop system was not an economically attractive proposition. Even after arriving at this assessment, which was reached prior to learning of RMP's proposed rate hike, my wife and I remain amenable to the possibility of installing rooftop solar panels, as a solar system would add value to our property that could realized by heirs upon sale of the property after our deaths. But our primary motivation is to reduce our carbon footprint given that most of RMP's electricity is generated from coal-fired power plants. We feel such action is morally justified in view of the almost universal acceptance of global climate change among the scientific community, and the long -term global environmental changes we have witnessed and read about over the past few decades. Unfortunately, like many other RMP customers considering the installation of a solar system, we are on the fence waiting to see how the PSC responds to RMP's proposed rate increase on existing and future solar users.

To determine how the proposed rate increase would impact my wife's and my power bill, I used the calculator developed by the Salt Lake Tribune at <a href="http://local.sltrib.com/solar/">http://local.sltrib.com/solar/</a>. As stated on its webpage, this calculator employed simplified versions of RMP's current and proposed power-rate formulations, and does not account for the various fees and taxes levied by governmental entities. I looked at two scenarios: the first represents our current situation, i.e., we continue to purchase all of

our power through RMP and do not install a rooftop solar system. The second scenario assumes the installation and operation of a rooftop system. I calculated our average monthly usage at 417 kw (derived from the previous two years of RMP power bills), and from the guidelines on the calculator I derived an estimated monthly peak usage value of just over 3 kwh. These values apply to both scenarios. The surplus power generated each month and sold back to RMP would be 0 kw under the first scenario and was estimated at 250 kw under the second scenario. The monthly cost of power (excluding fees and taxes) that we would pay is presented in the table below for current and proposed RMP rates under both scenarios:

	Scenario # 1 (no solar)	1 (no solar) Scenario # 2 (solar)	
Current RMP rates	\$43.20	\$20.77	
Proposed RMP rates	\$58.14	\$48.66	

Although these costs are only estimates, based on the proposed RMP rates the current payback period to recoup our initial capital investment in a rooftop solar system would more than double, given that our monthly electric bill would increase by over 100 % (from \$20+ /month to \$48+/month). And for many RMP customers that consume more electricity each month on average than my wife and I, these proposed rate increases would effectively make rooftop solar financially unfeasible. Moreover, the rate increases could effectively kill the solar industry in this state, as similar increases appear to have done in neighboring Nevada. Finally, if these rate increases are approved by the PSC, it is highly unlikely my wife and I will install a rooftop solar power system.

In closing, in order to continue a societal transition to clean energy in response to global warming, and promote further growth of the solar industry in Utah, I urge the PSC to deny RMP's rate request.

Thank you.

Sincerely,

Richard Jirik 2083 W Champagne Circle Taylorsville, Utah 84129 ph: (801) 957-7436



# Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Mary Harrison <Maryahlander@gmail.com> Reply-To: Maryahlander@gmail.com To: psc@utah.gov Wed, Aug 9, 2017 at 11:14 PM

I'm sorry I could not attend the hearing in person, I just got out of the hospital. I would like to submit this letter instead. I understand that 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. This really is crucial for Utahns. I appreciate being heard.

Mary Harrison 1248 N 70 E American Fork, UT 84003



# Docket 14-035-114: Rooftop Solar PSC Docket

1 message

**Robert Jordan** <robert@robertjordan.net> Reply-To: robert@robertjordan.net To: psc@utah.gov Wed, Aug 9, 2017 at 11:14 PM

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.

It is important to me that people have the freedom to generate their own electricity and be compensated fairly for it. Rocky Mountain Power is being outrageous to request the high charges that they are proposing. The solar industry in Utah needs to be expanded through incentive to reduce our public and private carbon footprint and all efforts need to be incorporated towards that end. It is vital for the future of our community to take a responsible approach towards net metering and other policies associated with rooftop solar.

Thank you for your time.

Robert Jordan 749 N. Emigration Canyon Road Salt Lake City, UT 84108



# Docket 14-035-114: Rooftop Solar PSC Docket

1 message

Marcia Maurycy <mmaurycy@hotmail.com> Reply-To: mmaurycy@hotmail.com To: psc@utah.gov Thu, Aug 10, 2017 at 6:19 AM

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.

Marcia Maurycy 1726 Imperial Park Lane SLC, UT 84106



# Please reject RMP rooftop solar proposal!!

1 message

**Greg Garcia** <gregfgarcia@gmail.com> To: psc@utah.gov Thu, Aug 10, 2017 at 6:38 AM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely,

Greg Garcia Cell (801) 556-0564 Sent from iPhone



### **Rocky Mountain Power & residential Net Metering**

1 message

**Chris Jones** <chris.jones@hsc.utah.edu> To: "psc@utah.gov" <psc@utah.gov> Thu, Aug 10, 2017 at 9:10 AM

TO: Public Service Commission of Utah (PSC)

60 E 30	0 S, Sa	t Lake (	City, L	JT 84111
---------	---------	----------	---------	----------

RE: Citizen household rooftop solar photovoltaic installations and possible change in net metering charges from Rocky Mountain Power (RMP).

DATE: 08/10/17

I was present at the public meeting just outside Hearing room 403 for about 20 minutes yesterday (08/10/17) but the meeting room was full and there were just over 100 fellow citizens in front of me on the check-in sheet. I decided to return to my job.

I have net metered with RMP for the last 8.5 years.

1) When considering any proposed increase in the cost of net metering to residential customers and their families the benefit of the doubt should go to Utah home owner families rather than PacifiCorp shareholders because: a) we the home owners are the ones paying those net metering bills and b) the primary purpose of a regulated monopoly is to serve the local public, not anonymous shareholders living in other states around the country.

2) As currently proposed, the so-called "demand charge" based on electricity usage during peak power, and thus peak cost to RMP, appears to be exorbitant. Therefore, to be credible, the PSC needs to retain the services of unbiased accountants who are familiar with these matters and completely independent of both the PSC and RMP.

3) Lower middle-income families, not just the rich, should be able to afford the pride of gaining at least some fraction of energy self-sufficiency.

4) In a county beset with chronic summer and winter air pollution we should be doing everything we can to promote renewable electric power sources including geographically distributed residential roof-top power generation. After all, it is the citizens of Salt Lake County who suffer the health consequences and the health care costs when spikes in summer and winter air pollution increase the number of heart attacks, strokes, and asthma attacks.

Sincerely,

Christopher R Jones

3798 East Sunnydale Lane

Salt Lake City, UT 84108

#### 8/10/2017

State of Utah Mail - Rocky Mountain Power & residential Net Metering

Chris.jones@hsc.utah.edu



# Fwd: The State of Solar Energy in Utah - A small correction

1 message

**Kiran Bhayani** <kiranlbhayani@outlook.com> To: "psc@utah.gov" <psc@utah.gov> Cc: Law Eric <eric@synergypowerpv.com> Thu, Aug 10, 2017 at 10:07 AM

In item 2, fossil dependence should've been read as fossil fuel independence..

I regret the oversight ..

Sent from my iPadPro Kiran L Bhayani, PE, D.EE, F. ASCE kiranlbhayani@outlook.com +1 801 277 6625 (Main) +1 is 801 879 3116 (Mobile)

Begin forwarded message:

From: "Eric Law" <eric@synergypowerpv.com> Date: August 9, 2017 at 10:33:27 PM MDT To: "'Kiran Bhayani'" <kiranlbhayani@outlook.com> Subject: RE: The State of Solar Energy in Utah

Thanks for your input Kiran.

Thanks

Eric Law

801-499-1299

eric@synergypowerpv.com



#### www.synergypowerpv.com

From: Kiran Bhayani [mailto:kiranlbhayani@outlook.com] Sent: Wednesday, August 09, 2017 4:28 PM To: psc@utah.gov Cc: Law Eric Subject: The State of Solar Energy in Utah

Please enter the following message in your records on the issue of Solar Energy in Utah:

1. Whether we like it or not global warming is occurring primarily attributed to human activities. Our population has increased, consequently our energy needs in every aspect of our lives including automobile transportation has gone up several folds. Let us not bury our heads in sand by ignoring breakup of glaciers, warming of poles, dramatic changes in weather patterns etc.

2. Notwithstanding the fact that Rocky Mountain Power has solar energy farm, such production effort requires large area to sustain communities. So, where possible, individual community or citizens should have an ability to install solar panels without hindrance to promote <u>fossil fuel dependence</u>. Rocky Mountain Power has limits to its production abilities. If they had pursued solar farming earlier than now, then we would have jumped on that effort.

3. As a home owner, we have an investment up to \$ 1000 per panel. We are contributing to environmental protection in a small way. We do not want to hand nothing but problems with environment and health related matters to future generations if we do not think farther. Let us not be selfish and stifle individual effort to promote environment conscious society.

4. Incentives offered by the Federal and State Governments have been helpful in promoting solar investment. Let us continue.

5. Environmental control does come with a price, but when you weigh benefits in terms of health, welfare and safety of citizenry exceeds incremental costs we may have to bear now. Let us protect the environment not for this generation, but for coming generations.

\* \_FAIRNESS:\_ Utahan's deserve transparency and certainty in the

regulatory process. Utah consumers have invested their own money and

enter into binding contractual agreements with the expectation that

policy makers and regulators will not change the rules unilaterally.

We urge the State of Utah, the creator of the net metering program, to

uphold its commitments to solar power pioneers.

State of Utah Mail - Fwd: The State of Solar Energy in Utah - A small correction

\* \_\_\_\_ECONOMY:\_ Energy independence, technological innovation and environmental stewardship are hallmarks of the solar industry, an industry that now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Turning a cold shoulder to innovation jeopardizes Utah's businesses, jobs and national image.

\* \_\_\_\_SELF-RELIANCE:\_ The spirit of self-reliance is synonymous with Utah. Utahns should have the opportunity to use the energy they produce on their roof within their own home and not be penalized for it.

\* \_\_\_\_INNOVATION\_\_ -\_ We embrace technological advancements and are early adopters of technology and innovation that multiply the Earth's resources, mitigates adverse impacts and enhances our ability to enjoy nature.



### Docket # 14-035-114

1 message

**Jeremy** <jpking789@gmail.com> To: psc@utah.gov Thu, Aug 10, 2017 at 11:05 AM

Commissioners LeVar, Clark and White

My name is Jeremy King and I live in SLC.

I would like to register my strong opposition to the attempt by RMP to apply punitive fees on customers with solar panels. The Public Service Commission should not approve this as it unfairly penalizes rooftop solar customers.

I have always disliked consuming dirty coal generated electricity and for many years lve been a participant in the BlueSky Renewable program and now finally am able to generate clean energy from a rooftop solar system. I feel this is an action that should not be penalized.

The argument RMP uses to try to justify their request, is false -in fact if anything, more rooftop solar means less investment needed in power plant infrastructure.

There are also other benefits that RMP gain from a net meter partnership with solar rooftop customers -namely not requiring transmission upgrades and also avoided environmental compliance costs.

It is difficult not to see this as a blatant attempt to purposely destroy the solar industry in Utah.

Attempts to surpress inovation goes against the need to keep Utah's economy growing.

It must be remembered that RMP is a monopoly utility and should not be allowed to unilaterally get away with tactics designed specifically to squash potential opposition.

I find this to be un-American by nature.

RMP has a responsibility to be receptive to new innovative technology as we move toward a clean energy future. In stark contrast to burning coal, solar generated electricity is CLEAN power.

Rooftop solar is not a cost for the grid, but a valuable resource and should be treated as such.

The proposal to reduce the value of solar energy exported to the grid by a staggering 64% is also ludacris as RMP would just resell that solar generated clean power at their rates.

Why can't we see a rate structure that more fairly takes into account the long term benefits of clean power generation rather than trying vilify it. Is RMP ultimately going to accept the concept of paying compensation to people adversly affected by coal generated air pollution? That would only be fair, right?

I hope to be a proud owner of a solar system for clean energy generation and not a frustrated customer to be penalized over and over again for doing the right thing.

Please say NO to rate increases for solar customers.

Thank you for this opportunity and for hearing my voice on this issue.

Jeremy King Architect 1205 S Glendale Street Salt Lake City, Utah



# NO to Rocky Mtn Power Plan to Destroy Net Metering

1 message

**Dan Syroid** <dsyroid@gmail.com> To: psc@utah.gov Thu, Aug 10, 2017 at 11:07 AM

### Dear Public Service Commision of Utah

Re: docket NO. 14-035-114, RMP and Solar Net metering

Thank you for having the hearing yesterday, which I and my wife attended and for allowing public comment. I have a personal interest in this as I have severe lung impairment likely caused by bad air and we are solar customers and providers to RMP. I have enclosed the text of a letter to the editor that I had published in the Aug 2 edition of the Park Record newspaper. It expresses my views. I also added a link to a disruptive video by Tony Seba of Stanford University that describes the inevitable changes coming in the near future. Please tell RMP: NO to killing Solar.

Park Record Letter:

### **Rocky Mountain Power: Assault on Solar**

RMP is pushing for draconian changes to Utah's solar policy that will kill jobs and solar in Utah. They want to end net metering and add significant fees to solar customers. Keep in mind that there are already way more solar jobs in Utah and the US than coal industry jobs. RMP's proposal will destroy thousands of solar jobs in Utah, as similar measures did last year in Nevada. Nevada has since come to its senses and restored net metering and hopefully the solar industry in that state. Here is RMPs proposal:

- 1. Reduce the credit for solar generated energy from 10.8 to 3.8 cents/kwhr.
- 2. Raise the minimum connection fee for solar customers from \$8.50 to \$15 per month.
- 3. Add new demand charges of \$30 to \$90/ month, only for solar customers

RMP talks about the need for fairness and that non solar customers are paying more for the distribution network. But actually solar energy is generated locally and is shared with non-solar neighbors reducing the amount of power coming over the transmission networks. Also bear in mind that solar customers have invested their own dollars to purchase clean non polluting solar generating equipment, saving RMP and its non solar customers the need for more capital investment. Solar is generated at peak energy use times, such as when folks come home from work and turn on their air conditioners. Solar is growing at a terrific rate in Utah, up 157% in 2016 on an annual basis according to RMP own data, but is still only around 2% of all of RMP customers. The move to solar is a GREAT thing for Utah as we still get 74% of electrical energy from dirty coal which is slowly killing our kids. Utah's per capita CO2 emissions are double that of California. We are on a path to doing much better, lets stay on that path. RMP needs to move rapidly and at large scale to abundant clean solar and wind energy that Utah is blessed with and include large scale battery backup for 24/7 energy and phase out coal ASAP. To be fair to the coal communities in Utah, we need to provide for retraining to new solar and wind jobs and for early retirement.

There will be a hearing at the Public Service Commission (PSC) on Aug 9 at 2 pm to review this ill conceived plan to destroy solar and jobs in Utah. It will be at the Heber Wells building, 160 E, 300 S in Salt Lake City, UT 84111. We need thousands to show up at the hearing or outside the building. In addition, please write to the PSC with your views. (End)

In addition to the comments in the letter above, please tell RMP: NO to destroying net metering and the solar industry and jobs that it brings to Utah. Also tell them they need a revised business plan. They must stop seeing the world only through Fossil Fuel Glasses. I urge you and RMP to view the very very compelling Youtube video by Tony Seba of Stanford University on the near term future disruptive changes coming to Energy and Transportation including Solar, Battery storage and Electric Vehicles. Near term is 5 to 10 years.

#### https://www.youtube.com/watch?v=2b3ttqYDwF0

Thanks for considering our submission.

Dan and Carol Syroid Park City, Utah RMP Solar Customers and Power Providers

\* It is difficult to get a man to understand something when his income depends on his not understanding it. --- H. L. Mencken \* Solar Power, No Wars Required!

\* Do not squander time for that is the stuff life is made of. -- Ben Franklin



### Net metering

1 message

Guy Koretz <guykoretz@gmail.com> To: psc@utah.gov Thu, Aug 10, 2017 at 11:18 AM

Due the abundance of speakers at your hearing on Aug. 9, I was unable to read the following statement so I am emailing it in. In the past two years I have attained high risk status regarding air quality. This "promotion" is justified because I feel the physical effects of bad air due to my age and deterioration of air quality as well. I get sore throats and feel lower energy levels and my mood is affected negatively due to these factors. I am a renter and it is not my decision to make about installing solar panels at my home. Some people seem to feel that net metering will decrease subsidies for solar energy. My position is that I WANT to subsidize solar. When I am able to hike the Jordan Parkway and breathe clean air, I will consider that a good return on investment.

Thank you for taking my comment, Guy Koretz -- 3195 South 900 East -- 84106



### RE: Docket # 14-035-114

1 message

Arlo Hulick <ahulick@solcius.com> To: Psc@utah.gov Thu, Aug 10, 2017 at 12:08 PM

Utah has been especially hard hit by the rise in temperatures due to global warming (see chart below). Those increases will severely impact Utah's ski industry, our water supply, and our ability to fight fires and grow food.

(Source: EPA publication at https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-ut.pdf)

This state therefore has a vested interest in doing everything possible to reduce carbon emissions due to power generation, including investing heavily in solar energy.

Rocky Mountain Power's recent proposal is a major step backwards, going against the interests of every Utahn. Instead of rewarding homeowners for investing in solar energy, RMP wants to punish owners of solar arrays by charging more for energy used by the owners at night than the utility would pay for energy generated by solar panels during the day.

This is absolutely backwards and is incredibly unfair to those who have invested, or want to invest, in solar energy. Per the natural law of supply and demand, the energy generated by solar panels during the day is more valuable than the energy their owners use at night. In spite of this, RMP wants to turn the market on its head, entirely to its own advantage, and charge owners of solar panels more for energy used at night than it will pay for energy generated during the day.

Utah needs sensible energy policy that recognizes and encourages the critical need for continued growth in solar energy. Acceting RMP's insane proposal is completely wrong for the future of every citizen in this state. Please do the sensible thing and reject this proposal.





www.solcius.com





## Docket 14-035-01

1 message

John Whittaker <jdwhitta@gmail.com> Reply-To: jdwhitta@gmail.com To: psc@utah.gov Thu, Aug 10, 2017 at 12:27 PM

Yesterday I attended the hearing concerning net metering but was not able to stay to present my testimony (105 on the list). I would like to submit my presentation if this is acceptable.

Attached is my testimony

Regards, John Whittaker Main: 801-582-4374



## Public Service Commission Hearing 9 Aug 2017

Thank you for letting me speak today. It is imperative that the PSC carefully regulate any public monopoly such as RMP to protect the taxpayers and consumers. There are several points I would like to make.

- 1. Local residential solar production benefits our community and RMP.
  - a. Solar power stays in our neighborhood and isn't lost in long distance transmission lines (1%/100 mile).
  - b. During high consumption periods, such as summer afternoons, Solar production prevents brownouts and reduces RMP's need to buy expensive outside power and charge local customers higher rates.
  - c. My system actually gives power back to the grid when I'm not using the power and each March, at no cost to RMP.
- 2. Infrastructure
  - a. <u>Large power customers require higher maintenance and infrastructure costs for RMP.</u> Why is RMP going after small residential Solar systems? RMP should be charging large industrial customers more instead of giving them price breaks, such as IKEA. New construction <u>should have</u> higher fees to pay for expanding infrastructure.
- 3. RMP's rate proposals assume that all solar systems are the same size.
  - a. Smaller solar systems pay higher penalties proportionally thru these proposals while large systems pay less. Any rate changes need to be <u>based on the size of the solar system</u> instead of RMP's complicated proposals.
  - b. Proposals are too <u>complicated</u> and cannot be easily deciphered so the customers do not know what they are being charged for.
- 4. Jobs & Environment
  - a. Solar industry and jobs will be negatively impacted by these proposals.
  - b. RMP should be doing more to promote solar in our State not destroy it.
- 5. RMP has always promoted conserving energy thru promotions & rebates. Why is solar any different?
  - a. RMP tries to install remote switches on A/C units so RMP can turn off customer's A/C units during PEAK load times of the day to prevent brownouts. The customer then has to pay again to bring their home back down to temperature. Solar systems help alleviate this problem.
  - b. RMP recently proposed giving price cuts to large residential users, then reversed course. If anything they should charge these customers more for power and infrastructure.
  - c. Solar customers contribute to the grid and reduce the stress on the infrastructure while lowering the rates charged to regular customers.
- 6. RMP relies on fixed <u>Returns On their Investments</u> when building customer improvements.
  - a. When RMP does any improvements to customer power systems they require the customer to sign a contract which guarantees that RMP has a return on their investment. Why can't residential Solar customers have the same guarantee for their investment when their Net Meter was installed?
  - b. Current net metering solar customers should be Grandfathered in per-pa-tu-ity to preserve our ROI.

RMP is a monopoly and is not State sanctioned, therefore the PSC needs to regulate RMP more than a normal business to protect the taxpayers and the consumers. RMP's argument that residential Solar customers don't pay their fair share of the infrastructure is not true. I buy power from RMP all the time, especially in the winter. My small system benefits both my community and RMP. I should be rewarded for conserving power, reducing my carbon footprint and pollution instead of being penalized.

I respectfully ask the Commission to <u>keep the current Net Metering program</u> for residential solar systems and allow RMP to assess fees on new and large solar customers to proportionately share in the costs to maintain and build the power infrastructure.

Please do not allow the RMP to kill the solar industry in Utah as was tried in Nevada.

Respectfully, John Whittaker



### Docket 14-035-114

1 message

Jordan Stephenson <jordankstephenson@gmail.com> To: psc@utah.gov Thu, Aug 10, 2017 at 1:33 PM

PublicService Commission <psc@utah.gov>

Dear Commissioners,

I am a utility regulatory affairs analyst in the state and a member of a local municipal power board involved in its own netmetering program change. I have followed this case with interest as it could have significant statewide implications. I wanted to share a few insights and some personal concerns related to the proposals in this docket.

Although the current net-metering credit is too high, Rocky Mountain Power's proposal over-corrects the problem and results in an arrangement that is unnecessarily punitive to solar customers. Below are three specific areas of concern I believe RMP should address prior to approval of their proposal.

1- Rocky Mountain Power's proposal is unnecessarily discriminatory in that it targets a very small sample of residential customers and fails to provide appropriate cost signals to the remaining majority of residential customers. Customer costs (captured in an appropriately calculated customer charge) and higher peak-energy costs are factors that apply to all customers, not just net-metering customers. It is possible to maintain a single class for all residential customers yet still address subsidies through effective, cost-based rate design. Cost-based rate design can be achieved with very little impact to "typical" customers while eliminating subsidies to "low-use/high-peak" customers within the same class. I believe the most appropriate residential rate design would incorporate time-of-use energy rates that would benefit all customers by providing cost transparency. This would give customers the power to change their consumption patterns to save money while also reducing costs to the utility. This eliminates the "duck curve" problem without the need to create a new, discriminatory customer class.

2- Rocky Mountain Power's proposed demand-charge mechanism fails to appropriately compensate netmetering customers for the value of peak-period energy provided to the grid (whether through solar power production or released energy from battery storage). All energy provided by customers during the "peak-window" currently helps the utility avoid peak generation and transmission related costs (both long-run and short-run) and should be credited appropriately. For example, under RMP's proposal if a customer uses energy for one hour during the peak period and provides energy to the grid during every other hour of the peak period, that customer receives no credit for the peak-period production value, yet still pays the full demand amount. This results in a punitive rate design that fails to appropriately recognize avoided peak-period costs. I believe a time-of-use design for both the retail energy rate and the net-metering credit would be most appropriate. Back-feeding during the peak period should receive a higher credit than back-feeding during off-peak hours. This transparency would allow customers to make decisions as to battery storage, the direction of their array, etc. whereas RMP's current proposal severely limits customer options.

**3-** Rocky Mountain Power's proposal fails to provide credit for long-run variable (short-term fixed) costs related to generation and transmission. The net-metering credit should capture avoided long-run costs to the utility, not just short-term variable costs. Today the utility is charging customers a rate that includes long-run costs of generation, transmission, and distribution. In the long-run, some generation and transmission costs can be avoided when a customer provides his/her own energy to the grid. NARUC recognizes an appropriate cost-of-service method of allocating fixed costs to "total use" and "peak use" based on a system-wide load factor. As such, the net-metering credit could vary based on whether customers reduce "total-use" or "peak-use", but the generation and transmission fixed costs allocated to those functions should be included in the credit. Distribution costs, however, are appropriately excluded from the credit as they cannot be avoided.

I believe these concerns can be addressed while still eliminating long-run subsidies. I believe the current proposal is too punitive and not in the public interest.

Best regards,

Jordan Stephenson, CPA



# RMP's Arguments on Net Metering Make No Sense - Docket 14-035-114

1 message

Scott Raine <scott@rainefamily.com>

Thu, Aug 10, 2017 at 2:58 PM

To: psc@utah.gov Cc: bob.lively@pacificorp.com, yvonne.hogle@pacificorp.com, astilson@deseretnews.com, epenrod@sltrib.com, rolsen@utah.gov, mbeck@utah.gov, cmurray@utah.gov, ebishop@utsolar.org, chad@synergypowerpv.com, michael@healutah.org, dale@imwindandsolar.com, bburnett@kmclaw.com, rick@votesolar.org, elias.bishop@auricsolar.com, solar@trymike.com, pschmid@utah.gov, jjetter@utah.gov, Lowry Snow <vlsnow@le.utah.gov>, dennismiller@utah.gov, rmoore@utah.gov, sophie@utahcleanenergy.org, etedder@utah.gov, gwiderburg@utah.gov, crevelt@utah.gov, mreif@utah.gov, jsharvey@utah.gov, jholland@utah.go, Scott Raine <scott@rainefamily.com>, daniel.solander@pacificorp.com, cbrinker@swenergy.org

I am very surprised at how quickly RMP can change their position and rationale on subscriber owned

solar and net metering in Utah.

In approximately 2012, RMP requested that the PSC allow RMP to introduce a rebate program for customers

who install their own rooftop solar. I understand \$50 million of <u>ratepayer funds</u> were budgeted

(and approved by the PSC) for use with this program between 2013 and 2017.

Why is it that in 2012 RMP had no problem budgeting \$50 million in <u>ratepayer</u> <u>funds</u> as rebates to encourage

homeowners to purchase rooftop solar and have the benefits of net metering, but today RMP is

claiming that non-solar customers shouldn't "subsidize" any portion of rooftop solar?

Many incorrect and misleading statements have been made about net metering. RMP doesn't really "buy"

excess solar power. RMP provides a credit for excess power produced by rooftop solar users. In the

research I've done, most of the excess power produced by rooftop solar users and put into the grid occurs

during the May to September timeframe. Much of this time is during RMP's peak summer rates, allowing

RMP to quickly sell that excess solar power to non-solar customers at their highest rate level.

It's during the September to April timeframe that rooftop solar customers tend to use the net metering

"credits" they have built up, as solar production is lower during this time of the year. This is also the time

of year when RMP's rates are the lowest.

This means that RMP receives the excess solar from rooftop solar customers during the summer, when they

can take that power and immediately sell it for about 14 cents per KWH. But when rooftop solar customers

use their credits, the rate charged at that time by RMP is about 9 cents per KWH. Sounds like a great deal for RMP.

And what about the credits that are wiped off the books in mid-March each year? That's 100% free power

that RMP receives (and has already used), all courtesy of rooftop solar customers. Shouldn't that "windfall"

received by RMP count towards something?

Why did RMP change its position so dramatically between 2013 and 2017? My guess is that executives at

Berkshire Hathaway decided that rooftop solar was a threat to their long term business model and they told

their operating companies to do whatever was necessary to put a stop to it.

I sincerely hope that the Utah PSC will not change the rules related to net metering. When you really look at the facts, RMP already has a great deal from the financial benefits they receive from rooftop solar

customers.

Thanks,

D. S. Raine

Ivins, Utah

Source of information about RMP's solar rebate program:

http://programs.dsireusa.org/system/program/detail/2707



# Please Reject the Rocky Mountain Power Roof-Top Solar Proposal!

1 message

### **desert** <desert\_\_dreamer@hotmail.com> To: "psc@utah.gov" <psc@utah.gov>

Thu, Aug 10, 2017 at 3:54 PM

Dear Public Service Commission,

I urge you to reject the initiative that Rocky Mountain Power has proposed to increase rooftop solar fees in Utah! Rocky Mountain Power has been very aggressive with their anti-solar initiatives, which hurt the state of Utah and its citizens. Rocky Mountain Power is a monopoly, as such most of Utah's citizens are forced to use their services and we are forced to pay their fees. Rocky Mountain Power would like to punish those who have taken it upon themselves to offset their monopoly by utilizing the sun to have an impact on energy usage. If their proposal is allowed to pass, it will unfairly force its will on folks that have no options but to use their services. This will kill solar energy in Utah.

Utah prides itself on work ethic and innovation. The solar industry now employs more than 4,400 Utahns and has an economic impact of more than \$350 million in our state. Energy independence is crucial on a global basis, but we must act locally to fulfill the act of global independence. Solar is one more ingredient to the energy independence portfolio. If Rocky Mountain Power passes this initiative, it will stifle technological innovation, jeopardize Utah jobs and hurt the nation's quest for energy independence.

Much of Utah's energy currently comes from burning coal. Utah's valleys are filled with smog on a regular basis which causes health hazards for Utah's citizens. Rooftop solar is a clean way to create energy, decrease hazardous emissions, thereby improving health-related hazards.

I strongly urge you to reject Rocky Mountain's Proposal and allow rooftop solar to remain an excellent energy option for our community, for our state and for our country! Thanks for your time.

Sincerely,

Douglas Buchanan



# Our Comments on docket 14-035-114

1 message

**Bill Hanewinkel** <br/>bhanewin@comcast.net><br/>To: psc@utah.gov

Thu, Aug 10, 2017 at 6:28 PM

To: Utah Public Service Commission

Comments regarding docket 14-035-114

Our family installed rooftop solar, first in 2009 (panel cost at that time was +\$3.25 per watt) and again in 2011. I think we could be considered first adopters taking advantage of the RMP net metering agreement and state and federal tax credits. Our main motive for installing the system was to decrease our carbon footprint and reduce air pollution. So much was the first installation cost that when I responded to my neighbor of the cost he quipped "Well, I guess there is always a return on investment if you live long enough".

In the past year we have changed our water heater to electric. The reason for this is that we also replaced our furnace with high efficiency unit and there was no room in the flue for the gas water heater vent. While we realized utility cost savings it is also the case that the electric water heater does not give off NOx gases to the local air shed and we heat the water using the electricity generated off of our collectors.

In the past 3 years we have given up metering credits at the end of the March billing cycle. Are these metering credits taken into account when the PSC is reviewing RMP's cost model? These metering credits (electrical power generated and delivered) is a direct benefit that RMP derives from solar customers as this power goes to another customer and are duly tracked.

It seems unusual that the electric utilities operated as a subdivisions to Bircher Hathaway Corporation have an east vs. west differential to their net metering philosophy. In the western states of nothern-CA, OR, WA, PacifiCorp encourages rooftop solar while in the eastern divide states consisting of ID, UT, WY, PacifiCorp seems to be fighting rooftop solar. This issue seems to be more a political policy divide than an economic one but RMP is pitching their rate request as one of economics. This doesn't make sense.

As a first adopter, we as a state, nation, and world have collectively invested in solar energy and now public utilities are installing these in large clusters. First adopters led the way and helped reduced prices for manufacturing scaling up. RMP is even recognizing that the cost of planning/building, ROI, and no fuel cost is economically viable. But from their standpoint, the complaint is that first adopters and others are taking advantage of the system. I don't loose sleep thinking that I am taking advantage of the system. If we live long enough, we will see a return on our investment.

Sincerely,

Bill Hanewinkel 1332 S. Dover Road Salt Lake City, UT 84108 801.897.5241



# Docket#14-035-114

1 message

**Tom Rentz** <tomwrentz@gmail.com> To: PSC@utah.gov Thu, Aug 10, 2017 at 7:52 PM

I am shocked, quite frankly, that the Utah Public Service Commission claims to represent public interests if it does not consider environmental impacts and public health in it's decision making process. This is counter to the designation of Public Service. I ask the commission, the Utah state legislatures and the governor to re-examine the commission's role because of overwhelming evidence regarding the rate of environmental degradation. It is HIGHLY RELEVANT to public health and life support systems in Utah as well as worldwide. What we did yesterday and today IS affecting life support systems for your children as well as mine. Is destruction of our air quality unimportant to you and yours? Are you willing to leave a legacy of destruction in our historical wake? I sense that real world events are fictional or of little importance in the eyes and conscience of corporate interests and those charged with public accountability.

Please take heed and an update on the current state of our life support environment here in Utah and elsewhere for which we contribute our negligence to!

Google: ucsusa.org /protect our forests (beetle destruction due to a warming planet and FIRES!) /stop deception (oil company propaganda) /tidal flooding /global\_warming/science\_and\_imp /half the oil /progress /electric cars

Google: the state of coral reefs (20% dead, 70% threatened) pollution in our national parks air pollution and Alzheimers (nutritionandhealing.com) melting permafrost (methane, up to 82 times the global warming effect)

At this point it is immoral to discourage solar technologies. And, thousands of jobs would be lost from a thriving and beneficial industry.

Mankind's existence is subject to very real threats!

Tom W. Rentz

---

IS THERE SUCH A THING AS A "COMMON SENSE?"