

ORIGINAL



0000162868

E-01345A-13-0248

Teresa Tenbrink

From: Nancy Saunders <ncypsaunders@gmail.com>
Sent: Friday, April 03, 2015 1:42 PM
To: BitterSmith-Web
Subject: Solar Power -E-01345A-13-0248

Solar customers are probably the most responsible citizens in AZ.
They do not deserve to be singled out or targeted for unjust reasons.
They are not using your panels in your fields. they have their own !
The upkeep is not on you !!! They do NOT deserve to pay for your new panels, nor your upkeep.
Leave those who have panels on their homes alone !!!!! They have taken own the responsibility themselves.
If they lease, they already are paying enough !!!! You are being UNJUST, and forcing them to pay more than anyone else !!!!

--
Nancy

Arizona Corporation Commission
DOCKETED
APR 13 2015

DOCKETED BY *PC*

RECEIVED
2015 APR 13 P 4:29
AZ CORP COMMISSION
DOCKET CONTROL

Teresa Tenbrink

From: Susan Bitter Smith
Sent: Saturday, April 04, 2015 6:37 PM
To: Teresa Tenbrink
Subject: Fw: 3 SRP PV Interconnection Reservations Since SRP Raised Net Metering Costs

Follow Up Flag: Follow up
Flag Status: Completed

This one too. Thanks.

Susan Bitter Smith
Chairman of the Arizona Corporation Commission
President of the Western Conference of Public Service Commissioners
1200 W. Washington
Phoenix, AZ 85007
602-542-3625

From: Greg Field <gregjfield@phoenixgreenteam.com>
Sent: Saturday, April 4, 2015 4:23 PM
To: Susan Bitter Smith; Doug Little
Cc: Clint Taylor; Bill Roush
Subject: 3 SRP PV Interconnection Reservations Since SRP Raised Net Metering Costs

Susan & Doug,

Please add to docket for net metering.

Only 3 interconnection reservations for pv since the SRP net metering fee hiked:

Details	Status	Technology	Incentive Program	System Size (kW)	Power Generation (kWh)	System Cost	Incentive Offered	Zip Code
[+]	2 - Reserved	PV - Solar Panels	Non-Incentive Residential	2.00	3,200	TBD	\$0	85208
	Application Date: 03/11/2015		Reservation Date:	Install Date:	Installer: SunHarvest Solar and Electrical LLC			
[+]	2 - Reserved	PV - Solar Panels	Non-Incentive Residential	3.50	5,600	TBD	\$0	85044
	Application Date: 02/25/2015		Reservation Date:	Install Date:	Installer: SunHarvest Solar and Electrical LLC			
[+]	2 - Reserved	PV - Solar Panels	Non-Incentive Residential	7.00	11,200	TBD	\$0	85296
	Application Date: 02/25/2015		Reservation Date:	Install Date:	Installer: One Way Electric			

Respectfully,

Greg Field
Phoenix Green Team
Solar & Energy Efficiency Consultant
602.363.7327 Cell
480.365.0957 Fax
www.phoenixgreenteam.com

Teresa Tenbrink

From: Susan Bitter Smith
Sent: Saturday, April 04, 2015 6:36 PM
To: Teresa Tenbrink
Subject: Fw: Grid Loss Is Greater With Distance, The Argument For Increasing Roof Top Solar Not Millions More For APS Solar Farms

Follow Up Flag: Follow up
Flag Status: Completed

Can we put in APS net metering docket?

Susan Bitter Smith
Chairman of the Arizona Corporation Commission
President of the Western Conference of Public Service Commissioners
1200 W. Washington
Phoenix, AZ 85007
602-542-3625

From: Greg Field <gregjfield@gmail.com>
Sent: Saturday, April 4, 2015 8:25 AM
To: Susan Bitter Smith
Cc: Clint Taylor; Bill Roush
Subject: Grid Loss Is Greater With Distance, The Argument For Increasing Roof Top Solar Not Millions More For APS Solar Farms

Susan

Please add to docket for net metering:

Grid Loss Is Greater With Distance, The Argument For Increasing Roof Top Solar Not Millions More For APS Solar Farms

The world's transmission lines are believed to have dropped approximately 1.4 trillion kilowatt-hours of electricity last year. That's around 1.2 trillion metric tons of CO2 dumped into the atmosphere. Though it is unlikely these losses can be eliminated in the near future, there are ways to reduce them.

Losses of 5–7% or so are the norm today in the United States, BC, and Ontario.

Capgemini, one of the world's foremost consulting firms, has been working with Ontario Power Generation since 2001. Larry Rouse, Director of Utilities at Capgemini, said, "The approximate amount of Transmission line losses in the Ontario system is 6.5%. Transmission losses do vary pending the demand on the system. Losses occur as a natural phenomenon when electricity is transmitted between two points. The physics of electricity means that losses rise exponentially as the current on a circuit increases. For the electricity grid, this means basically that losses are highest when power consumption or when the demand is the

highest. On an Ontario system with ~29,000 kilometers of transmission line, losses can be over 1000 MW (the size of a Bruce nuclear unit)."

The transmission losses appear to be slightly less on the West Coast. According to Mora Scott, of BC Hydro, they work out to about 5%:

"For fiscal 2013, line losses were 5,159 gigawatt hours, which represents approximately 10 per cent of domestic requirements. These figures are for the total amount of losses and system use, including legitimate technical losses on both the transmission and distribution system as well as theft. Transmission losses represent roughly half of this total and can vary greatly in any given year due to factors such as the volume of energy imported or exported and the amount of energy generated in the plants."

Utilities engineer Bill Powers says the Sunrise Powerlink, which carries energy from renewable projects to San Diego, loses an average of 7–8% and on a hot day it can rise to as much as 14%.

According to Environment California's report *Shining Cities: At the Forefront of America's Solar Energy Revolution* (p 14), "Many cities depend on electricity transmitted from hundreds of miles away to meet local needs. Roughly 5 to 7 percent of the electricity transmitted over long distance transmission lines is lost. Distributed solar energy avoids these losses by generating electricity at or near the location where it is used."

"Having the generation as close to the load center as possible, reduces losses due to the reduced requirement to transport generation over long transmission lines," Rouse said.

Powers has been arguing this for years. He believes that San Diego's power needs could be satisfied by developing 2/3 of the city's rooftop solar potential. As only 2% of this potential is presently being utilized, there is a great deal of room for the industry's expansion.

According to Dave Egles, the founder of HES-PV in British Columbia, the cost of solar now compares favorably with conventional energy.

While smart meters help to reduce wasted electricity, they do not help us eliminate electricity loss. Loss will continue to increase as demand for electricity increases – line loss is proportional to demand. Also, with or without the smart grid, electricity will still need to be transmitted over long distances and because of this, loss will occur."



Teresa Tenbrink

From: tlfinefrock@comcast.net
Sent: Sunday, April 05, 2015 6:02 PM
To: Stump-Web; RBurns-Web; BitterSmith-Web; Forese-Web; Little-Web; MAILBOX E-docket
Cc: info@dontkillsolar.com
Subject: Ratepayer Comment in re E-01345A-13-0248 APS Dark \$

Commissioners:

Please prohibit Utilities that the Commission regulates from making or enabling others to make any expenditures to influence ratepayers and the Commission. AZ Utilities should make their cases to you and in a public forum.

Even if the funds could be clearly separated from ratepayer revenues, the enormous amount of ratepayer revenues enable them to spend "other" funds, and allow them to exert undue influence and their conduct is designed to optimize shareholder versus ratepayer value which is in conflict with a fundamental responsibility of the ACC, intent of the AZ constitution, to optimize ratepayer benefit.

Ratepayers are becoming very disenchanted and frustrated with the constant increase in charges, guaranteed/no risk utility profits, excessively high utility wages and lack of equal or better value in exchange for their revenues.

I also recommend that you prohibit any Commissioner or ACC Staff person from acquiring employment with an AZ Utility, Supplier, Consultant or Organization employed, contracted or associated with the utility, within 4 years of termination of ACC employment.

Mr. Terry Finefrock
TEP Ratepayer

Teresa Tenbrink

From: Ray Murdock <mmurdock232@cox.net>
Sent: Sunday, April 05, 2015 11:46 AM
To: Forese-Web; Little-Web; BitterSmith-Web; Stump-Web; RBurns-Web
Subject: RE: Current Solar Customers Not Impacted by APS Filing

I had to make sure corrections:

Per the email below APS is going to file a proposal to adjust (increase) monthly grid access charges to new rooftop solar customers approximately \$21, which does not affect grandfathered customers. I just want to note that APS as already reduced our net metering amount by charging us an additional \$5 per month surcharge. It's not like we were getting rich and their additional monthly charge reduced our yearly net metering savings from \$200 to \$99 a year. I do not think it's fair to penalize new customers because APS's is losing money to solar uses. If APS wants to save money, cut all of their executives' pay by 5% a year which would help recoup lost revenue from new competition.

From: Ray Murdock [<mailto:mmurdock232@cox.net>]
Sent: Saturday, April 04, 2015 6:59 AM
To: 'forese-web@azcc.gov'; 'little-web@azcc.gov'; 'bittersmith-web@azcc.gov'; 'stump-web@azcc.gov'; 'RBurns-web@azcc.gov'
Subject: FW: Current Solar Customers Not Impacted by APS Filing

ACCC Members,

Per the email below APS is going to file a proposal to adjust (increase) monthly grid access charges to new rooftop solar customers approximately \$21, which does affect grandfathered customer. I just want to note that APS as already reduced our net metering amount by charging us an additional \$5 a month. It's not like we were getting rich and their additional monthly charge reduced our yearly net metering savings from \$200 to \$99 a year. I do not think it's fair to penalize new customers because APS's is losing money to solar uses. If APS wants to save money, cut all of their executives' pay by 5% a year which would help recoup lose revenue from new competition.

From: APS [<mailto:APSnews@apsc.com>]
Sent: Friday, April 03, 2015 1:57 PM
To: Raymond Murdock
Subject: Current Solar Customers Not Impacted by APS Filing



Dear Raymond Murdock,

We want to keep you up to date with the latest information regarding your electric service.

We recently filed a proposal with the Arizona Corporation Commission to adjust the current monthly grid access charge for customers with rooftop solar. As a grandfathered customer, you do not pay this charge. But for **new rooftop solar customers**, the charge would be approximately \$21 per month.

Our proposal states that existing rooftop solar customers, like you, would not be impacted by this change.

[Read more](#)

If you'd like to review the proposal in full, please visit azenergyfuture.com. Or, if you have questions, please call our Green Team at 602-216-0318 or toll-free at 800-659-8148.

We sincerely thank you for your continued commitment to a sustainable solar future.

Sincerely,

Stacy Derstine
Chief Customer Officer

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Teresa Tenbrink

From: Philip Roark <pwroark@aol.com>
Sent: Saturday, April 04, 2015 12:28 PM
To: BitterSmith-Web; RBurns-Web; Forese-Web; Little-Web; Stump-Web
Subject: E-01345A-13-0248

Arizona needs to use its comparative advantage of sunny skies to produce solar energy to its maximum benefit. Rooftop solar systems must be a major part of this energy approach to reduce costs and the use of climate changing fossil fuels. I am dismayed at the efforts of APS and the Industrial Commission Board to undercut rooftop solar through additional taxes or fees. It make no sense in playing individual solar users against those without rooftop solar.

Thank you for interest,
Phil Roark

Teresa Tenbrink

From: Jack Grenard <jackgrenard1462@gmail.com>
Sent: Saturday, April 04, 2015 11:27 AM
To: RBurns-Web; Little-Web; info@dontkillsolar.com; Forese-Web; BitterSmith-Web
Subject: APS and dark money

Jack & Jane E. Grenard
Box 7162, Cave Creek, Arizona 85327 USA
480.488.1462

JackGrenard1462@GMail.com

4 April 2015

re: docket number E-01345A-13-0248

to:

BitterSmith-web@azcc.gov

RBurns-web@azcc.gov

Forese-web@azcc.gov

Little-web@azcc.gov

Stump-web@azcc.gov

People:

We write today to urge you to stop APS from spending customers' money on front groups attacking the solar alternative. We'd also like to know how much APS has spent paying the Taxpayer Protection Alliance and others working against solar.

Cordially,

Jack & Jane E. Grenard

copy: info@dontkillsolar.com

Teresa Tenbrink

From: Bill Hranek <billhranek@gmail.com>
Sent: Friday, April 03, 2015 4:59 PM
To: BitterSmith-Web
Subject: Aps

Hi. My vote for conservatives seems to be going unappreciated. The grid access charge is ridiculous on its face. Customers supply energy to aps and have to pay for the privilege?
My system is grandfathered but that doesn't change the fact that this is a unfair tax on people who are actually helping provide more electricity.
Please do the right thing and help to stop these undo burdens on people who are already taxed and insured beyond belief.
Regards
William hranek

Sent from my iPad

Sent from my iPad

Teresa Tenbrink

From: William B <xxentre@gmail.com>
Sent: Friday, April 03, 2015 4:02 PM
To: Stump-Web; BitterSmith-Web; Forese-Web; RBurns-Web; Little-Web
Subject: Please, look into APS's suspicious spending

To Whom this may concern,

I protest any proposed increase in electricity charges for new or existing rooftop solar customers. APS should be a utility company for service to its customers, not to its stock holders. APS should not be a public traded company. They are a utility entity that is for a public service and should be treated as such.

Solar Customers did not invest in solar to pay more to APS for electricity. We invested to help the economy, our children's future, and the environment. By the customers investing in Solar we have helped APS to reduce the pollution being expelled into the air by their Coal or Fossil fuel plants.

If new charges are imposed on new solar customers, it could hurt people trying to sell their homes, and the solar companies trying to sell or lease solar panels. There are other entities that could be affected outside of APS, who does not care about anything except the bottom dollar.

Recently, it was revealed that the utility monopoly may have reached a whole new level of spending dark money to push their anti-solar agenda.

APS front group Taxpayer Protection Alliance has been going door to door seeking out negative experiences from solar customers. When a reporter asked APS if they had any connection to TPA's actions, they did not deny it.

Arizonans deserve to know if APS is spending more ratepayer money on front groups to attack solar. Ask your elected officials to demand that APS disclose how much money, collected from ratepayers like you, they've contributed to these shady tactics by C4 and political groups.

Thank You,
-William Banes
-"God Bless America"

Teresa Tenbrink

From: Dianne Post <postdlpost@aol.com>
Sent: Friday, April 03, 2015 3:23 PM
To: Forese-Web; Little-Web; RBurns-Web; BitterSmith-Web; Stump-Web
Subject: APS & solar

I got an email today saying that their proposal to force solar customers to pay \$21 a month would NOT affect me because I've had my solar since 2006 and would be, of necessity because I have a contract, grandfathered in.

Of course that is to make me not care about the proposed increase. I do care. Because I care more than just about myself - I care about my neighbors, my community, my city, my state, my country and in fact my globe. Because I care, I urge you not to grant them any right to add costs to solar purchasers.

If they were any kind of a business, they would hop out in front of the solar boom. Arizona is the place for it. We get the most sun (protons hitting the earth) of anyplace in the world except Saudi Arabia. But rather than capitalize on this natural resource, we stick our heads in the sand (like Saudi Arabia) and continue focusing on fossil fuels.

APS could help the economy boom in AZ if they would devote the money they are spending to defeat solar into promoting solar and doing research to come up with the next best thing. As representatives of all the people, please tell them that.

Dianne Post

Those who have the privilege to know have the duty to act. Albert Einstein

Teresa Tenbrink

From: Robert Binkley <rbinkley@earthlink.net>
Sent: Friday, April 03, 2015 3:30 PM
To: BitterSmith-Web
Subject: Fwd: Please Stop APS From Taxing Consumers

Ms Bitter-Smith:

Good afternoon.

I just received the below email from APS and I am outraged. Not only is APS determined to destroy our solar industry, but they are also determined to eliminate hundreds and even thousands of jobs in our State.

I am a current solar and alternative fuel vehicle owner and staunch advocate. I make every effort to conserve energy and to use clean energy sources in my home and on the road. I am determined to practice responsible energy usage no matter the position that our public utility provider APS's supports. They continue to pour money into anti-solar campaigns while taxing those of us who work hard to help clean up the air and water through our use of renewable, alternative energy.

Please see what APS is trying to do to our State and to its future in the business of providing renewable energy to its residents. It is no wonder that more and more responsible people in our State are discussing the concept of getting off the grid completely, when we hear over and over again the APS chants for more taxes. Do you ever wonder why APS wants to destroy an entire industry and put honest people out of their jobs just to further line their pockets?

APS's history is littered with shady tactics. Recently, it was revealed that the utility monopoly may have reached a whole new level of spending dark money to push their anti-solar agenda.

APS front group Taxpayer Protection Alliance has been going door to door seeking out negative experiences from solar customers. When a reporter asked APS if they had any connection to TPA's actions, they did not deny it.

Arizonans deserve to know if APS is spending more ratepayer money on front groups to attack solar. Demand that APS disclose how much money, collected from ratepayers, they've contributed to these shady tactics by C4 and political groups.

Please act responsibly to quash any requests by APS to tax roof-top-solar owners.

Thank you,

Robert Binkley

Robert Binkley
29645 North 45th street
Cave Creek, AZ 85331

PH: (480) 206-9334

E-mail: rbinkley@earthlink.net

Begin forwarded message:

From: "APS" <APSnews@apsc.com>
To: Robert Binkley <rbinkley@earthlink.net>
Subject: Current Solar Customers Not Impacted by APS Filing
Date: April 3, 2015 at 1:57:03 PM MST



Dear Robert Binkley,

We want to keep you up to date with the latest information regarding your electric service.

We recently filed a proposal with the Arizona Corporation Commission to adjust the current monthly grid access charge for customers with rooftop solar. As a grandfathered customer, you do not pay this charge. But for **new rooftop solar customers**, the charge would be approximately \$21 per month.

Our proposal states that existing rooftop solar customers, like you, would not be impacted by this change.

[Read more](#)

If you'd like to review the proposal in full, please visit azenergyfuture.com. Or, if you have questions, please call our Green Team at 602-216-0318 or toll-free at 800-659-8148.

We sincerely thank you for your continued commitment to a sustainable solar future.

Sincerely,

Stacy Derstine
Chief Customer Officer

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Teresa Tenbrink

From: Eric Reinert <eric@val-pete.com>
Sent: Friday, April 03, 2015 1:12 PM
To: BitterSmith-Web; RBurns-Web; Forese-Web; Little-Web; Stump-Web
Subject: Docket Number E-01345A-13-0248 - APS Killing Solar

To all concerned,

I writing to ask you to please stop APS from killing solar. We all know it's a good thing especially here in Arizona. I personally have a friend who owns a solar company and it's his sole livelihood. He's expressed to me that he is about to go under and have to claim bankruptcy. His business was doing well until APS started there attacks on solar. The ability for one business to kill off so many other businesses just because they have money to blacken the eyes of those businesses is not fair. It's not fair competition.

Sincerely,
Eric Reinert

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited.

Teresa Tenbrink

From: Jim Allen - LBEHOA <jha6100@gmail.com>
Sent: Sunday, April 05, 2015 2:19 PM
To: Forese-Web; Little-Web; BitterSmith-Web; Stump-Web; RBurns-Web
Subject: Oppose APS fees for SOLAR: Current Solar Customers Not Impacted by APS Filing
Attachments: APS Notice dated 04-03-2015.pdf

Commissioners Tom Forese, Doug Little, Susan Bitter Smith, Bob Stump, and Bob Burns,

Greetings. I am writing to you to express dissatisfaction with APS and their desire to assess fees to solar customers. Although APS claims that they are supportive of the green energy, they have attempted to create financial consequences for those that invest in solar which truly demonstrates their lack of support for this valuable resource. Although I am "exempted" from the current proposed fee, the fact that APS is promoting to create disincentives to supporters of green energy is wrong. We understand that APS wants to preserve their margin and monopoly over electricity, yet, a reasonable person will look at this and state "If APS needs to purchase electricity, why not purchase it locally from homeowners that can produce it?" Instead, APS wants to penalize people that have invested in their future, whether in the past or in the future.

This is one more attempt for APS to attack competition. This time they propose to be implemented for any homeowner after 01/14/14. Therefore people that have already invested thousands of dollars will be penalized. Those in the future will be penalized all in the name of corporate profits. What will be the next "plan" that APS puts in front of you. It appears that APS' "Green Team" isn't about "green energy", but rather the "green" of the US Dollar.

You are to protect the citizens of Arizona. Please don't accept the corporate agenda over the rights of people wanting & needing to do the right thing for our environment.

Kind regards,

James H. Allen
3038 W. Altadena
Phoenix, AZ 85029
Email: jha6100@gmail.com

From: APS [<mailto:APSnews@apsc.com>]
Sent: Friday, April 3, 2015 1:57 PM
To: Jim Allen
Subject: Current Solar Customers Not Impacted by APS Filing



Dear Jim Allen,

We want to keep you up to date with the latest information regarding your electric service.

We recently filed a proposal with the Arizona Corporation Commission to adjust the current monthly grid access charge for customers with rooftop solar. As a grandfathered customer, you do not pay this charge. But for **new rooftop solar customers**, the charge would be approximately \$21 per month.

Our proposal states that existing rooftop solar customers, like you, would not be impacted by this change.

[Read more](#)

If you'd like to review the proposal in full, please visit azenergyfuture.com. Or, if you have questions, please call our Green Team at 602-216-0318 or toll-free at 800-659-8148.

We sincerely thank you for your continued commitment to a sustainable solar future.

Sincerely,

Stacy Derstine
Chief Customer Officer

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Dear Valued Customer,

We want to keep you up to date with the latest information regarding your electric service.

We recently filed a proposal with the Arizona Corporation Commission to adjust the current monthly grid access charge for customers with rooftop solar. As a grandfathered customer, you do not pay this charge. But for **new rooftop solar customers**, the charge would be approximately \$21 per month.

Our proposal states that existing rooftop solar customers, like you, would not be impacted by this change.

As highlighted in our proposal, customers who signed up for solar before Jan. 1, 2014 would be grandfathered under the agreements you originally signed.

You may be wondering why we are proposing this change. It's simple: The way customers use electricity is changing. Arizona needs a modern, reliable grid that supports more renewable energy and enables more innovation.

Currently more than 30,000 of our residential customers have rooftop solar. The electricity grid will increasingly need to support the two-way flow of electricity and ensure reliability while accommodating the variable nature of solar power. *We are already investing \$170 million in advanced technologies over the next three years to make the grid more flexible and dynamic.*

Along with a modernized grid, the century-old pricing model for electricity must evolve to keep pace. Electricity rates should reflect customers' changing energy choices like electric vehicles, rooftop solar and whatever technology comes next.

Solar energy should and will continue to play a growing role in our state's energy future. That's why we continue to promote a sustainable solar future for Arizona.

If you'd like to review the proposal in full, please visit azenergyfuture.com. Or, if you have questions, please call our Green Team at (602) 216-0318 or toll-free at (800) 659-8148.

We sincerely thank you for your continued commitment to a sustainable solar future.

Sincerely,

Stacy Derstine
Chief Customer Officer

Teresa Tenbrink

From: Craig Murphy <cryanm89@gmail.com>
Sent: Friday, April 03, 2015 7:45 PM
To: BitterSmith-Web
Subject: Utility Rate increases seen as Discriminatory

Dear Chairman Bittersmith,

I take time to write you today in hopes of providing a perspective on increases and proposed increases to Utility rates for customers who have adopted rooftop solar in our State.

In the spirit of open disclosure, I will tell you that I am a project manager for a small (20 employee) solar installation company located in Phoenix. I have been in the industry since August of 2007; just about one year before President Bush signed the bill to remove the cap on the federal subsidy, after which we saw the tremendous growth of our industry.

I enjoy a seat on the North American Board of Certified Energy Practicioners and am considered an expert within the Photovolatics industry.

During the time working in this industry I have personally worked with thousands of customers who have adopted rooftop solar. Most (I'd guess nearly 95%) of our installtions have been on the homes of retirees and older folks who are trying to ease their reliance on utilities and the high bills asociated with delivery of power to their homes. Most of these people are on fixed incomes and have adopted solar as part of their retirement plan and have carefully calculated the costs and benefits of producing some or all of the energy their households consume.

Solar customers and industry people are very aware of the arguments for increasing the demand fee, or grid fee, as some have called it. But the sentiments I have heard are unanimous in the understanding that it is just not American to force a customer to pay an additional fee simply for using less of a given product... and even more so when there is not alternate company from which to purchase said product.

APS claims that they have fixed costs and the infrastructure of the power grid to maintain. We can all agree that this is the case. We can all agree that there should be a fee to connect to the grid. But where it begins to get murky is in the equity of the proposed fees.

But before we get into some numbers and questions about these details I'll ask you to ponder a few scenarios.

Is it discriminatory for APS to only charge this fee to customers utilizing rooftop photovolataic technology? Less than 2% of APS customer base.

Many people reduce the amount of power they consume from APS using different technologies such as EnergyStar appliances, installation of High Density Foam Insullation in attics, Compact Flourescent Lighting, On Demand Hot Water Heaters, Variable Speed Pool Pumps. Replacing electric H2O heaters with Solar H2O heaters etc..etc. Many of these technologies have enjoyed subsidization from both the Federal government and the Utilities. APS has a program in place right now to pay \$250 toward the purchase of the variable speed pump. These pumps can save a customer \$20-50/month during summertime and cost upwards of \$1000 to install.

These technologies all decrease the demand from the utility and reduce the utility bill that would be paid without them.

I ask, is it right to also charge these customers an increased fee for simply using less energy/kWh from APS? After all, some solar customers are also only saving about \$20/month. A customer with a modest installation such as this would actually be paying more than they did before they put solar on their roof.

It could be argued that a company like Safeway or Bashas also has a large infrastructure to maintain. Should customers who grow their own produce in order to reduce their grocery bill be charged an additional fee at the checkout counter?

Should people who choose to purchase a car with wonderful fuel economy be forced to pay more for each gallon of gasoline purchased?

Forgive me for straying from the question at hand, but I do so to illustrate the socialistic philosophy and arguments that the proposed utility fees begin to introduce.

Some have argued that perhaps part time AZ residents, who are also connected to the grid year round, should be charged a similar fee for their lack of financial contribution to APS infrastructure.

Of course I don't agree with any of the scenarios mentioned.

APS's fees are inequitable. The current fee does not discern between a 2kW solar installation that produces 300kWh, with a monthly savings of less than \$50 and a 20kW system that produces 3000kWh, with a monthly savings of perhaps \$500.

The proposed fees would increase this disparity.

APS's proposed fee does nothing to advance the state of Arizona or benefit the non-solar customer. It only serves to eliminate competition and alternative ways for people to derive their own power production.

APS has recently been granted the right to install rooftop solar on 3000 homes in Arizona with the promise of reducing a rate payer bill by \$30/mo.

Basically APS will be renting a customer's roof for 20 years at the rate of \$30 a month, negating any chance that these customers will be able to take advantage of the even more energy efficient technologies in the future. These installations will be part of their grid, part of APS infrastructure and APS admits as much.

Private rooftop installations are also part of the grid, delivering power at a less than 2% voltage drop from rooftop to the utility transformer. Current long distance utility power lines can have upwards of a 50% voltage drop from power plant to transformer and massive upkeep costs.

APS obviously sees the advantage of installing rooftop solar owned by the utility, as it decreases overall demand, reduces power needed to be produced during peak hours and has a much lower rate of voltage drop. These installations are physically no different than privately owned installations.

The difference between privately owned solar and utility owned solar is clear. The utility does not pay for the installation, the monitoring, or the maintenance this segment of the grid. The customer does. And the utilities benefit from this relationship.

Many disruptive technologies introduced over the last few decades have caused major corporations to adapt, streamline and innovate. Those that do not suffer losses and many have failed. The solar industry now employs more people nationwide than the coal industry. Solar installations have surpassed all expectations and the introduction of new batteries from Tesla and other innovative companies will continue to change the formula for grid parity. Some of these new batteries that are capable of powering entire homes will be rolling out within

six months. At some point the argument will be presented to you and people in your position across our great nation, that customers should not be allowed to disconnect from the utility, that they must buy their power from monopolies that failed to embrace new ideas. They will argue that their business model is too big to fail and could be subsidized and protected from the need to make major changes that actually benefit their customers.

We look to you and the ACC to look at the hard numbers, the facts and the inevitable future. Arizona is poised more than any other state in the country to make a real change and lead the way in making modern technology the norm. APS has vilified solar customers in the press. But the solar industry is not small and we are not alone. Elon Musk and Google and Goldman Sachs, numerous major international companies and organizations are pushing hard against utilities who are trying to kill the industry, because they are visionaries and understand the potential and all of the good the solar industry has already done for the country and the world at large.

But there is one simple solution to APS' s need for grid fees and end all of the bickering.

If APS truly wants to have an equitable way of paying for maintenance of the power grid that we all rely upon, then they should agree to a simple line item fee for every single home that is connected to the grid.... solar or not....Put that fee on the bill of each and every customer next to the words "Grid Maintenance Charge".

Thank You,
Respectfully,

Craig Murphy
NABCEP Certified PV Professional.