E-00005-14-0023

## ORIGINAL Arizona Corporation Commiss



**Investigator:** Mary Mee

Phone: <<< REDACTED >>>

Opinion Date: 7/5/2016

**Opinion Number: 2016 - 132753** 

Priority: Respond within 5 pusiness days: 30

**Opinion Codes:** 

Other - Net Metering

Closed Date: 7/5/2016 4:33 PM

Other - Solar

AZ CORP COMMISSION
DOCKET CONTROL

First Name: Steven

Last Name: Lesh Account Name: Steven Lesh

Address: <<< REDACTED >>>

Arizona Corporation Commission

City: Tucson

State: AZ

Zip Code: 85715 DOCKETED

Home: <<< REDACTED >>>

Email: <<< REDACTED >>>

JUL 6 2016

Company: Unisource \*\* Energy Services (UNS)\*

**Division:** Electrid

**DOCKETED BY** 

**Nature Of Opinion** 

**Docket Position:** Against

The Value of Distributed Generation (Including Net Metering) There may indeed be the "cost shifting" alleged by the state's utilities. But it is onto the public at large and future generations - not from rooftop solar to nonsolar customers. My experience as a Tucson Electric Power (TEP) rooftop solar customer for 12 years is used as the basis for this conclusion. But it most likely applies to all the state's utilities. My rooftop solar system was sized to produce enough to cover our home's yearly electricity consumption. On the hottest summer days we air condition a 50's vintage home without drawing power from TEP's grid until about 4:30 pm. I also charge an electric vehicle battery for about 6000 miles a year of driving. The system, in fact, produces a substantial surplus from early morning, peaking about noon and then declining until about 4:30 pm when we become a net consumer of grid power. However, instead of using the contribution systems like mine makes towards reducing demand for grid power during the interval between when their production peaks and when the demand for grid power peaks, TEP values the production of those systems only to the extent they help reduce demand for grid power when that demand is at its peak: DG capacity is valued for long-term planning purposes based on the extent to which its output is coincident to the utility's summer peak loads.\* TEP's 2014 Integrated Resource Plan estimates the cost of running their 'peaker' generators at \$.28 / kWh. Grid level storage can be purchased now from Aquion (http://aquionenergy.com/ ) at a levelized cost of between \$.10 - \$.17 / kWh. Buying storage rather than 'peakers', TEP could be adding up to \$.15 / kWh to the value of my solar. (I suspect that figure goes a lot higher occasionally when TEP has to purchase power from regional grids.) The exact figures are certainly relevant to the central issue of this docket. In addition to capturing the excess production of rooftop solar systems, this storage could be used to capture for retail customers the power production of much less expensive night-time base-load generators, currently being sold to large users at deeply discounted rates However, customer-owned rooftop solar currently provides a small percentage of the power provided to the grid. TEP does not need storage to make use of my system's excess power production. They can sell it to my non-solar next door neighbor - without the cost of generating power and transmitting it from remote locations. For anyone with a basic working knowledge of rooftop solar, the arguments advanced by the state's utilities for ending net metering don't add up. These privately owned businesses are granted monopolies for their respective service areas on the assumption they will do a better job reducing costs than publicly owned utilities by e.g. responding to technological change. To some degree this is happening in other states, e.g. California, where the utilities and their regulators have seen the writing on the wall and appear to be embracing technologies like electrical storage and regional grids to help facilitate the transition to distributed electricity generation using solar, wind and other renewable sources. The state's electrical utilities have much better uses for their money than purchasing seldom used 'peaker' power generators and installing utility-owned west-facing rooftop solar on their customers' roofs. Their attempts to cling to an outdated business model awarding them profits for running up costs by competing with customers willing to accept a lower rate of return on their rooftop solar

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investments than the utilities currently receive threaten the financial viability of the utilities much more than the revenues they would lose to customer-owned rooftop solar electricity generation. We need those utilities (and apparently a Corporation Commission to regulate their profit-seeking business practices) for the provision of services required for the transition to distributed electricity generation from clean renewable sources, e.g. storage and grid management. Let's not let the state's utilities (and the Corporation Commission) become 'stranded (i.e. worthless) assets' because they failed to do their job. \* RE: Inquiries re: Value and Cost of Distributed Generation Docket No. E-00000J-14-0023, Carmine Tilghman, February 14.2014

Investigation

Date:

Analyst:

Submitted By:

Type:

7/5/2016

Mary Mee

Telephone

Investigation

Comments noted for the record and docketed. CLOSED