

## COMMISSIONERS

GARY PIERCE - Chairman  
BOB LUMB  
SANDRA D. KENNEDY  
PAUL NEWMAN  
BRENDA BURNS

2011 JAN 21

AZ CORP COMMISSION  
DOCKET CONTROL

ORIGINAL



ARIZONA CORPORATION COMMISSION



0000122161

EXECUTIVE DIRECTOR

Arizona Corporation Commission

DOCKETED

JAN 21 2011

DOCKETED BY

Re: 2011 REST Implementation Plan; Docket Nos. E-01345A-10-0262; E-01345A-10-0166

Dear Colleagues, Parties and Stakeholders:

I am writing to ask my colleagues and parties from the re-opened APS 2011 Renewable Energy Standard and Tariff (REST) plan to address some concerns I have. Your input on these important matters will assist me in my deliberations and contribute to a more full discussion.

**Re-consideration of Amendment Newman #6**

I submitted this amendment to disallow the \$1/watt "Rapid Reservation" program (total cost \$2.5 million) as I felt it would inject too much uncertainty into the market. Please address the following questions:

1. *Is it fair to allow the people who will use the \$1/watt program to 'jump ahead' of those who have been waiting for many months for rebates?*
2. *Does this allow companies with more cash to 'wait out' companies who are more dependent on timely cash flow? In other words, are we giving market participants with deeper pockets an advantage?*

**Re-consideration of Amendment Mayes #4**

Mayes #4 requires APS to study the water-energy nexus, including dry and hybridized cooling; as well as the costs and benefits of an expanded REST. Please address the following questions:

1. *Do you consider these studies valuable?*
2. *How much money and time do you estimate this research will take?*
3. *AZ imports all of the natural gas and two-thirds of the coal used for electricity generation. If fuel costs were to increase rapidly, as they did in 2006-2008, wouldn't payback time for renewable energy be reduced significantly?*

Climate change is real and this past year brought an unprecedented number of droughts, floods and extreme weather all over the world. Recent studies estimate the West has

already warmed by 1.7 degrees over 11 Western states<sup>1</sup> – and in Arizona, that figure is even higher – 2.2 degrees.<sup>2</sup> Energy production from fossil fuels requires water, and although most of Arizona's water is used to grow food and fiber, the energy-water nexus is clearly important.

Nearly 30 million people depend on the Colorado River.<sup>3</sup> The level of Lake Mead has fallen 130 feet in a decade and is within 15 feet of triggering drought restrictions. The amount of power generated by Hoover dam is down 23% since 1998.

This past year, record heat was recorded in 17 countries in 28 U.S. cities. We can ignore the laws of physics, but those laws will not ignore us.<sup>4</sup>

*I believe that AZ has more to gain from a clean energy economy than just about any other state.* In 2010, Arizonans spent about \$1.5 billion on natural gas for electricity production. Reducing fossil fuel imports means reducing risk *and* keeping more dollars in-state.

According to a recent study by the Lawrence Berkeley National Laboratory, the installed cost of grid-connected solar for *all* sizes and locations in the U.S. is down 40% in the past decade, while the cost of panels is down 40% in three years. Larger systems -- over 1 MW -- cost about 30% less than 2 kW systems. Installed solar costs are considerably lower in Germany and Japan than in the U.S.<sup>5</sup>

### **Re-consideration of Amendment Mayes #2**

Mayes #2 approved a small Feed-in Tariff (FIT) proposal: 2 MW/year for 3 years for a total of 6 MW. Interest in FITs has exploded across the U.S., in part because the policy

---

<sup>1</sup> *Warming felt more in Western U.S.*, by Margot Roosevelt, Los Angeles Times, March 28, 2008. An analysis of 50 studies finds that the region's temperatures are increasing faster than in the rest of the country and the planet as a whole.

<http://www.latimes.com/news/science/environment/la-na-climate28mar28,1,526909.story>

<sup>2</sup> See *Hotter and Drier: The West's Changed Climate*, by the Natural Resources Defense Council. <http://www.nrdc.org/globalwarming/west/fwest.pdf>

<sup>3</sup> See footnote 1.

<sup>4</sup> The oceans are 30% more acidic than when I was born, and 90% of the big fish are gone. The atmosphere is holding 5% more water vapor due to increased warming, which is creating more intense storms.

<sup>5</sup> *Tracking the Sun III: The Installed Cost of Photovoltaics in the U.S. from 1998-2009*

Galen Barbose, Naïm Darghouth and Ryan Wiser, December 2010 (Lawrence Berkeley National Laboratory).

has been so successful around the world, with 75% of the clean energy in the world from FITs. Studies show that Germany's FIT cost the average German household less than \$60 (U.S.) per year. Although Germany's cost of electricity is twice that of the average in the U.S., Germans use about half the energy per household and per dollar of Gross Domestic Product (GDP). I believe the FIT should be awarded a small pilot, and that is why I voted for the Mayes amendment.

I request that stakeholders answer these questions:

- 1. Although the FIT is relatively small, do you believe it's worthwhile? Why or why not?*
- 2. I understand the FIT has helped Germany build a manufacturing base. Could that happen in AZ?*

I appreciate your consideration of these questions and look forward to our discussion.

Sincerely,

A handwritten signature in black ink that reads "Paul Newman". The signature is written in a cursive, slightly slanted style.

Paul Newman  
Commissioner