

COMMISSIONER KRIS MAYES

ARIZONA LEAGUE OF WOMEN VOTERS 2007 CONVENTION DINNER

MAY 19, 2007

INTRODUCTION

Thank you for that kind introduction. It is an honor to be with you this evening and I thank you for the invitation to share some thoughts on how the Arizona Corporation Commission is advancing the use of renewable energy in Arizona.

I have to admit that recently my mother heard me introduced at an event and when someone afterward said that they thought I had an interesting career history she turned to them and said, “Not really, my daughter just can’t keep a job.”

CORPORATION COMMISSION

⇒ Constitutionally based; created in 1912 to protect consumers from the power of the monopolies of the day – railroads and big oil companies.

⇒ Today we regulate Arizona’s utilities. It’s very important to hold the utilities accountable because they don’t have competition – you don’t have a choice.

⇒ 5 commissioners; all republicans.

⇒ In a state that has been very progressive in electing women to office (Governor, Secretary of State, Attorney General, Superintendent of Public Instruction, and State Treasurer), the

Commission has had only five women Commissioners (including me!) in the 95 year history of the Commission.

⇒ We regulate electricity, natural gas, pipeline safety, corporate filings and civil securities.

You know, 96 years ago, a group of men, mostly transplants from across the country, sat in a room down near what would become the state Capitol, sweating through their heavy suit jackets while crafting what would become Arizona's Constitution.

A careful reader of the minutes of the Constitutional debates that summer will note that the founding fathers spent a great deal of their time and attention designing what would eventually come to be Article 15, the section of the Constitution laying out the Corporation Commission. The founding fathers – led by Morris Goldwater, who was the Mayor of my hometown of Prescott, and Barry Goldwater's uncle – wanted to create a bulwark for the people against what they perceived to be the dangerous power of monopolies. As the days dragged on, the convention delegates, conservative Democrats and Progressive Teddy Roosevelt Republicans – continued to debate the details of the Corporation Commission. They argued, they wheedled, they cajoled each other. When matters got really tense they broke down and broke out the bourbon – in the middle of the day. But there was never any question about their overarching purpose in crafting the Commission and lodging it in the Constitution: they wanted a separate branch of government tasked solely with the responsibility of challenging the powers that be at the powerful companies of the day.

What the delegates wound up with was an institution deemed to be one of the most influential of its kind in the nation. In 1914, the Arizona Supreme Court called the Corporation Commission “unique in that no other state has given its Commission, by whatever name called, so extensive power and jurisdiction.” The Court went on to describe the duties and responsibilities of the Commission as “one of the most vexatious as well as vital questions of government.”

Today, the Commission continues to grapple with the most vital and vexatious questions of government.

It is a Commission that has come through difficult times, and has emerged as one of the most respected utility regulatory bodies in the nation once again. A national financial firm has called this the most consumer friendly Commission in America, at a time when we have also managed to keep our utilities healthy. The East Valley Tribune called it the best Commission in 50 years.

In an era in which more and more voters are looking first and foremost for competence in their leaders, I am proud to be a small part of an institution that is not only competent, but capable of solving some of our state’s most difficult problems.

Indeed, I submit that there is other branch of government that calls on its elected leaders and its staff to stand in the breach and make difficult decisions on a more regular basis than the Corporation Commission.

GROWTH

⇒ Arizona recently surpassed Nevada as the fastest growing state in the nation

⇒ 12,000 new people are moving to AZ every month

⇒ By 2030 Arizona's population will exceed 10.7 million people – becoming the 10th largest in the country

It is imperative, and perhaps the question of our time, that we plan for the infrastructure needed to meet this growth.

It is equally imperative that we choose the right kind of infrastructure, and in the energy arena, that means deciding what is the appropriate mix of energy resources for Arizona: will it be natural gas, coal, nuclear or renewable, or will it be a mix of all of these energy sources.

On October 31, 2006, after four years of stakeholder meetings, hearings, debates, and sometimes heated testimony from all sides of this issue, the Corporation Commission, in what I believe was the most important decision made by the ACC or any other branch of government in 50 years, voted to turn the energy titanic. We passed the new Renewable Energy Standard (“RES”), which dramatically increases the amount of renewable energy that our utilities must produce over the next two decades and beyond and which will reduce our dependence on foreign sources of energy and fossil fuels.

History of Renewable Energy in Arizona

Before I talk about the RES that the Commission passed last October, I would like to walk you through the history of renewable energy policy by the Commission.

Arizona was a pioneer in developing a renewable energy requirement of its utilities, and in 1996 passed the Solar Portfolio Standard, which

required electric utilities to generate 1 % of their retail sales from solar electricity.

These rules were modified in 1998 to allow for the trading of solar energy, as well as green pricing programs and extra credit multipliers.

In 2000, the Commission once again changed the standard to increase the percentage to 1.1%, as well as establishing a surcharge, but also expanding the program to include landfill gas, wind, biomass, solar water heating and solar air conditioning.

In 2001, the Commission renamed the program to call it the Environmental Portfolio Standard (“EPS”), and mandated that 60% of the requirement come from solar electric and 40% from other renewable resources (such as landfill gas, biomass, solar A/C, solar water heating and wind).

In 2003, the Commission began the process of altering the EPS to make it more ambitious, and ultimately that led to the adoption of the Renewable Energy Standard in October, 2006.

SUPPORT FOR RENEWABLE ENERGY

In some ways the time that it has taken for the utilities to embrace renewable energy is not surprising. Utilities view renewable as competition to them, and as a long term drain on their revenues. After all, if you are producing your own energy through solar panels on your rooftop, then you are paying APS or SRP less money every month for the kilowatt hours that they produce at their big power plants sitting in the desert. But in other ways it is shocking that has taken this long to enact meaningful energy reform. Because overwhelmingly, voters want us to do more renewable energy.

Recently, Public Opinion Strategies, a leading national pollster, conducted a poll of Arizonans on their views on renewable energy and energy policy.

The poll found that 83% of Republicans, 89% of Independents and 91% of Democrats support a clean energy approach to address Arizona's energy needs.

89% of Arizonans said that they would be willing to pay more to increase the amount of renewable energy in Arizona.

Clearly Arizonans support increasing the amount of renewable energy that Arizona's utilities generate. The Arizona Corporation Commission has been the leader in implementing renewable energy policies in Arizona. We greatly expanded the use of renewable energy when we passed the RES last October.

Renewable Energy in Arizona – the new RES

On October 31, the ACC increased the amount of energy we use from renewable sources such as the sun, the wind and biomass to 15 percent by 2025.

Regretfully, I must inform you that while Arizona was the pioneer in solar energy requirements, a few states have actually now surpassed us in the grandeur of their renewable energy standards. For instance, New Jersey currently does more solar energy than Arizona.

Obviously, we could not allow this absurdity to stand, and Arizona is now reclaiming our role as a leader in solar energy.

On October 31, 2006, the ACC voted to amend the EPS rules to move Arizona forward on renewable energy.

The new RES rules require regulated utilities to generate 15% of their energy from renewable resources by 2025.

These rules do not have a dedicated solar set-aside, rather it has a specific set-aside for distributed generation.

The RES allows utilities to use solar, wind, biomass, biogas, geothermal and other similar technologies to generate “clean” energy to power Arizona’s future. The rules package outlines what technologies qualify and allow for new and emerging technologies to be added as they become feasible.

In addition to utility-owned projects such as Tucson Electric Power’s large solar installation in Springerville, Arizona, the Commission also required a growing percentage of the total resource portfolio to come from distributed generation – residential or non-utility owned installations.

The distributed energy requirement starts at 5 percent of the total portfolio in 2007 and grows to 30 percent of the total renewable mix after 2011.

RES Requirement

2006 - 1.25%	2016 – 6.00%
2007 – 1.50%	2017 – 7.00%
2008 – 1.75%	2018 – 8.00%
2009 – 2.00%	2019 – 9.00%
2010 – 2.50%	2020 – 10.00%
2011 – 3.00%	2021 – 11.00%
2012 – 3.50%	2022 – 12.00%
2013 – 4.00%	2023 – 13.00%
2014 – 4.50%	2024 – 14.00%
2015 – 5.00%	After 2024 – 15.00%

Funding for the RES

The Commission established a mechanism in the rules that require each utility to file a tariff to recover the costs of implementing the RES program.

This tariff filing ensures that the costs of meeting the RES goals do not go unchecked.

The new RES has a sample tariff to pay for the expansion of the program.

The monthly charge would be the lesser of \$0.004988 per kWh or

- Residential Customers: \$1.05/month
- Small Business: \$39.00/month
- Large Industrial: \$117.00/month

⇒ Utilities will be required to file these tariffs yearly with the Commission

Distributed Requirement

2007 – 5%

2008 – 10%

2009 – 15%

2010 – 20%

2011 – 25%

After 2011 – 30%

The rules also contain a requirement that a utility shall meet half of this requirement from commercial projects and half from residential projects.

Cost of Solar

The price of solar energy continues to decline as technology advances and more capital is invested in research and development of solar energy.

The 2006 Solar Roadmap report issued by the Solar Energy Industry Association notes that in 2004, the price of solar PV was 18.2¢/kWh, with no incentives. This price is estimated to decrease to 13.4¢/kWh in 2010.

Including a 10-percent Federal tax credit and a 10-percent State tax credit, in addition to the current Commission approved renewable funding; the price for commercial solar PV in Arizona is actually closer to 4¢/kWh. With the \$2,000 Federal tax credit, \$1,000 State tax credit and Commission approved renewable funding, the price for residential solar PV in Arizona is approximately 6.5¢/kWh.

Economic Benefit of Renewable Energy

The RES rules will be of benefit to Arizona's economy by spurring the development of large-scale wind projects in Northern Arizona, solar projects in Yuma and Tucson and geothermal projects in Southeastern Arizona. The development of these projects will have a "trickle-down" effect on Arizona's economy. Jobs will be needed to manufacture solar panels and windmills, as well as to sell and install these projects.

Empirical evidence demonstrates that the renewable energy industry generates more jobs per megawatt of power installed, per unit of energy produced and per dollar of investment than the fossil fuel industry.

Some small businesses in Arizona are also experiencing phenomenal growth due to the Commission's renewable energy policies. American Solar Electric, a small business located in Scottsdale installs 1.2 MW of solar PV a year and employs 30 people, up from 12 just last year.

A study done by the Arizona PIRG Education Fund found that the RES will create an annual average of 380 jobs in Arizona, for a total of 6,100 new jobs by 2020. The same study found that the rules will generate \$600 million in property taxes and will increase the gross state product by an average of \$200 million a year

Environmental Benefit from RES

According to one estimate, by 2020, the RES would reduce nitrogen dioxide emissions by 11,000 tons per year, 9,000 tons of sulfur dioxide and 8 million tons of carbon dioxide per year.

The carbon dioxide reduction alone is the equivalent of removing 1.5 million cars from Arizona roadways.

Challenges to Meet

Arizona will need to install over 3,000 3 kW systems next year to meet the RES goals. This number increases to 4,200 in 2008, 5,500 in 2009, 9,100 in 2010 and almost 12,000 in 2011.

To be sure, meeting this mandate will not be easy. The utilities are already predicting failure and have told Commissioners privately that they intend to seek a waiver of the solar panel portion of the RES because they don't believe enough Arizonans will be willing to put panels on their homes and because the cost of the solar panel rebate program will outstrip the funding that is provided for it through the surcharge.

My answer to the utilities is: don't give up before you have even tried, don't give up on Arizonans before they have had a chance to try solar and don't give up on the solar energy industry before it has had a chance to bring the price of solar panels down. And if the utilities need more money to meet the program, Arizonans have already said they are willing to pay for it.

That being said, we can't simply sit back and watch what happens. All of the stakeholders must look for ways to meet the RES standard.

First, I think we need aggressive marketing of the solar panel rebate program by utilities. Instead of paying to put their logos on the Suns and Cardinals stadiums, I'd like APS and SRP to spend their advertising dollars to explain to businesses, schools and local governments how they can take advantage of solar energy.

We also need to bring homebuilders into this effort by persuading more of them to make solar a regular feature of a new home, or at least an option that new homebuyers can choose when their home is being constructed. A few are already doing this, including VIP Homes, which has an agreement with SRP),

Continued R&D at the Federal level to help decrease costs

Continuation of federal and state tax credits for renewable energy

Continued financing – the projects are improving; we need to maintain and increase the reliability of renewable projects to continue to attract needed capital.

Continued regulatory support – Arizona utilities are required to make multiple filings regarding their renewable energy programs, we will need continued regulatory support to meet these ambitious goals.

Industry standards for installers.

Transmission line improvements

CONCLUSION

Arizona is well positioned to once again become a national leader in renewable energy. I am proud of the work the Commission has done to this point, but we still have a great deal of work to do to meet these ambitious goals.

We will be able to meet these goals, but we will need the help from people like you. You can help Arizona meet these goals and become a leader in renewable energy by taking advantage of these programs for your homes and businesses.

I hope you will talk with your family, friends and associates and tell them what they can do to harness the power of renewable energy for their benefit.

And this being the League of Women Voters, I hope also that you will vote for candidates – whether they be Republican, Democratic, or Party Not Declared – who support renewable energy policies, both at the Commission, at the Legislature and on the 9th floor.

I look forward to continuing to work with groups like the League of Women Voters, to educate Arizonans about the benefits of renewable energy.

Thank you again for having me with you tonight. I look forward to any questions that you may have.