

Thank you for your comment, Terry Finefrock.

The comment tracking number that has been assigned to your comment is SolarS50029.

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Solar Energy Development PEIS
Comment ID: SolarS50029

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Attachment: SolarUtilityScaleDevelopmentProposal_061708.doc

Comment Submitted:

I applaud your efforts and strategy to facilitate the development of utility scale renewable energy sources by holding Hearings regarding the potential use of Public lands for that purpose.

The DOE Solar 5/27/08 forecast presentation is also very useful.

I believe that it is critical that governance collaborate with Utilities to develop and IMPLEMENT solutions. Attached is my proposal regarding that effort, which includes potential use of Public lands.

Thanks for the opportunity to comment and offer suggestions.

Terry Finefrock [See Attachment](#).

PROPOSAL TO FACILITATE THE DEVELOPMENT OF UTILITY SCALE SOLAR ELECTRICITY

Proposal:

Government Senior Leadership, including the Arizona Corporation Commission, shall convene a symposium with the executives of Arizona Electric Utilities to develop and document a Plan to implement solar utility scale capacity in Arizona and within a few years significantly reduce the cost of solar generated and other forms of renewable energy electricity.

The Plan shall identify and resolve the obstacles, solutions, actions and leaders for each action required to achieve the following phased and scheduled replacement of fossil fuel generated electricity with solar or renewable electricity generating facilities.

The Plan shall facilitate private sector development of the infrastructure required to significantly reduce the cost per kW using existing renewable energy technology; the intent and product of the collaboration will be documented and published in the form of a contract or agreement between government and define the general plan, schedule and amount of kW to be generated utilizing solar or other renewable energy technology, the material actions and leaders of each action required.

Commencing Y2009:

- Establish sufficient solar electricity facilities to replace the amount of electricity historically purchased, not self produced by Utilities, from other sources;

- Replace existing coal/gas generating facilities with facilities utilizing solar or other renewable energy technologies, as their capital investments are depreciated, or the cost of electricity generated by fossil fuels exceed or are projected to exceed the cost of solar or other renewable energy sources

- Prohibit the establishment of any incremental capacity utilizing fossil fuels; require the use of renewable energy technology

Objectives, conditions, benefits & other guiding considerations include:

- Primary objectives include the stabilization and reduction of energy costs to ratepayers.
 - Arizona demographics indicate an above average number of fixed or low income retirees and residents; constant and dramatic increases in energy costs have significant and negative impacts on their quality of life
 - Desirable & consequential secondary benefits include the generation of jobs, improvement of short and long term state economic environment, significant reduction on the dependence on fossil fuels and the subsequent improvement of homeland security and value of dollar relative to other currencies, and the sustainability of our ecosystem
- Collaboration between private sector and government to generate strategic, prompt and effective vs. tactical reactive actions.
- Recognize that the total costs of fossil fuel generated electricity are not reflected in ratepayer costs. For example, costs to repair environment(pending carbon tax) and fossil fuel investment tax credits of about \$1.7B per year.
- US Department of Energy forecasts the national need for an additional 386 gigawatts of electricity between now and 2015, and conservatively forecasts that the cost of fossil fuel generated electricity to Arizona ratepayers will increase from an average of 10 cents per kW to about 5 cents by 2010.

There is a need to take immediate actions. The expansion of Arizona capacity may include additional capacity to sell to the western USA or other regions as deemed feasible

- Consider the elimination of tariffs that allow fossil fuel surcharges or that cap the rates to lowest alternative renewable energy cost per kW available. These surcharges result in disincentives to actions and investments that result in continuous improvement, “total” cost reduction and do not support fundamental constitutional intentions to provide best benefit to ratepayers and residents of Arizona. The encouragement of continuous improvement actions will also support the sustainability of the utility business and shareholder interests.
- Recognition that the monopoly Utility environment and assured profits for responsible and prudent actions to continuously reduce total costs are of great value to Utility businesses; that the evolution to new products and the delivery of value is natural and can provide benefits to both Utilities and Ratepayers
- To promote the private sector investment of the resources required to provide the component cost reductions and technology applications to improve electrical output and significantly reduce cost per kW, the Plan shall define and commit significant demand for improved solar products and facilitate the initial development of mass production infrastructure
 - The Phased implementation of renewable energy capacity will allow for the initial development and subsequent implementation of improved lower cost generations of renewable energy technologies and products
 - For example, according to an APS Plant manager, solar components require a special glass that contains no metals and there are no suppliers in North America, the glass components are assembled, packaged and shipped from overseas. Cost of packaging and shipping is about equal to the cost of the module.
- Funding and initial incentive options include
 - Allow use of REST funds for utility scale projects; cost per kW generated is less for fewer larger capacity projects than for many small capacity projects, enhancing benefit to all ratepayers, instead of just a few.
 - Private sector Power Purchase Agreements; Ratepayers own the assets at conclusion of the payback period; available cash is abundant, risk is low, resulting in relatively low cost of capital
 - Department of Energy funding as a Demonstration project that could be used as a model for national, other regional initiatives
 - Share existing fossil fuel Federal Investment Tax Credits for fossil fuel exploration with Renewable energy development
 - Instead of Excessive Profits Tax
 - Fossil Fuel ITC is about \$1.7B per year; already paid by taxpayers but not obvious, hidden among payroll deductions

References:

Scientific American A Solar Grand Plan (Zweibel, Mason, Fthenakis); December 2007
DOE Solar Energy Forecast May 27,2007