

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Comments Of  
BP Solar**

**Regarding**

**Docket No. M-00051865  
Implementation of the Alternative  
Energy Portfolio Standards Act of 2004**

**And**

**Docket No. L-00040169  
Rulemaking Re Electric Distribution Companies'  
Obligation to Serve Retail Customers at the Conclusion of the  
Transition Period Pursuant to 66 Pa. C.S. § 2807(e)(2)**

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BP Solar is a global company with over 2000 employees focused on harnessing the sun's energy to produce solar electricity. This includes the design, manufacture and marketing of quality solar electric systems for a wide range of applications in the residential, commercial and industrial sectors. With over 30 years of experience and installations in over 160 countries, BP Solar is one of the world's largest solar companies and has manufacturing facilities in the U.S., Spain, India and Australia. BP Solar is part of BP, one of the world's leading energy companies.

BP Solar has deployed a number of systems in Pennsylvania, including on the roof of the official residence of the Governor to provide basic electricity and back-up power for critical functions.

Solar electric power deployed on homes and businesses has multiple benefits:

- Solar electric power, almost fully coincident with peak power in Pennsylvania, can reduce overall demand and off-set the most expensive peaking electricity.
- Promotes grid reliability and reduces grid congestion by providing power at point of demand and when the power is needed most at peak times.
- Serves as a hedge against fuel price volatility and is an important element of a diverse energy portfolio.
- As an emissions-free generating source, solar helps improve air quality.
- Solar utilizes existing roof-top infrastructure, avoiding siting issues associated with many energy sources.
- Solar promotes consumer choice and participation, including for individual homeowners.
- As a relatively new high-growth, retail-oriented technology, solar investment encourages economic development and jobs.

If structured effectively, the Alternative Energy Portfolio Standard (AEPS) with a solar share, will not only diversify renewable energy supply, but will capture the full value of solar power and deliver its benefits for all Pennsylvanians.

With regard to the solar share, the most effective policy should:

- Encourage a balance of residential and commercial system deployments, leveraging investment of homeowners, businesses and others.

- At least 60% of installations should be dedicated to systems <10 kw and 40% dedicated to systems >10 kw to promote the most effective balance. Participation by homeowners promotes program visibility, equity, and, importantly, maximum economic development and job creation. This approach ensures broad participation and shared benefits in line with the supporting and affected rate-base.
- Encourage deployment in areas of high value, especially in areas of grid-congestion, air quality and development/growth issues to optimize the value of solar power. Investment in solar can help defer capacity/transmission expansion.
- Support stable and predictable competitive market and infrastructure development to most effectively promote market sustainability, long-term investment, system cost reduction, and economic growth and jobs.

## **Response to Questions**

BP Solar supports the comments of Citizens for Pennsylvania's Future (PennFuture). Below are important points of emphasis or further clarification on questions most relevant to solar power.

### **1 - A. Should Act 213 cost recovery be addressed in the Default Service regulations as opposed to a separate rulemaking?**

Act 213 cost recovery should be addressed in its own rulemaking and remain separate from the Default Service regulations.

### **1 - B. Is it necessary to consider Act 213 cost recovery regulations on a different time frame in order to encourage development of alternative energy resources during the "cost recovery period"?**

Yes. Act 213 cost recovery regulations need to be addressed on a different time frame to expedite their implementation and provide utilities with a structured time frame.

### **2 - A. Do the prevailing market conditions require long-term contracts to initiate development of alternative energy resources?**

Yes. Solar power systems typically operate for 30 or more years (solar modules are typically warranted for 25 years). Long-term contracts in the 10 to 20 year range are commensurate with the long-term life of systems and are important to support the deployment of solar.

**2 - B. May Default Service Providers employ long-term fixed price contracts to acquire alternative energy resources?**

Yes. Default Service Providers make up the vast majority of the mandated Environmental Distribution Companies (EDC) and should be allowed to employ long-term fixed price contracts if many solar energy projects are to be built.

**3- A. Should the force majeure provisions of Act 213 be integrated into the Default Service procurement process?**

No. The Act 213 force majeure provisions should be addressed in a process separate than that of Default Service procurement. The principles and rules that come out of the Act 213 process should flow down into the Default Service regulations.

**3- B. Should Default Service Providers be required to make force majeure claims in their Default Service implementation filing?**

No. Any claim of force majeure needs to be addressed in a separate docketed item.

**3- C. What criteria should the Commission consider in evaluating a force majeure claim?**

Act 213 clearly allows for full recovery of all costs incurred through the procurement of electricity from alternative energy sources. A claim of force majeure would only be viable if the utilities were not allowed to recover their costs. Since cost recovery is allowed, any argument that compliance was too expensive should be ruled as an unjustifiable claim.

**4. Given that Act 213 includes a minimum solar photovoltaic requirement as part of Tier I, should these resources be treated differently from other alternative energy resources in terms of procurement and cost recovery?**

Yes. The authors of Act 213 thought advancing the solar photovoltaic market was important enough for it receive a specific requirement under Tier I. Therefore, the terms of procurement and cost recovery for solar photovoltaics should also be distinct.

Solar is also a distributed generation technology most cost-effectively deployed when leveraging investment by homeowners, businesses and others for installation on their existing roof-top infrastructure. Procurement through an open and competitive market for photovoltaics therefore will likely require a different approach than other energy sources.

To optimize the value of solar power and most cost-effectively meet solar share requirements the policy should promote a competitive open market. There are a number of policy mechanisms available to do this consistent with the AEPS solar share, including incentives targeted at consumers and use of solar energy credits.

We would add that the solar share requirement in the first few years is quite modest and the cost of compliance should be minimal. Force majeure should not be an issue based on product availability or cost of compliance. Global solar manufacturing is increasing rapidly -- BP Solar will double manufacturing in the next year or so, and the model above promotes cost-effective deployment of solar, leveraging private investment and capturing the full value of solar power.

With regard to meeting solar share requirements and delivering the benefits of solar in Pennsylvania based on solar renewable energy credits (SREC's). The critical elements include allowing for aggregation, front-loading SREC payments, and, critically, setting the alternative compliance payment (ACP) at a level high enough to encourage solar installations. While statutory language on how the ACP should be calculated is specific:

(4) The alternative compliance payment for the solar photovoltaic share shall be 200% of the average value of solar renewable energy credits sold during the reporting period within the service region of the regional transmission organization.

The AEPS rule should make clear that the "average value" used in this calculation should include not only the SREC value received by solar project owners but also the levelized value of capital rebates received by the solar project owners. For example, in New Jersey an SREC trading for 20 cents/kWh actually has an average value of two-times that amount or 40 cents/kWh because of the subsidy that was provided.

**8. Does the Commission need to make any revisions to its proposed default service regulations to reflect the mandates of the Energy Policy Act of 2005?**

Yes. Section 1252 (a) (14) of The Energy Policy Act of 2005 requires that electric utilities in each state offer time-based rates and related metering technology, to each customer class upon request, within 18 months of enactment. The time-based rate schedule will help the electric customer to manage their energy use and costs through advanced metering and communications technology.