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May 31, 2011

**DELIVERED ELECTRONICALLY**

James J. McNulty, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

Re: Investigation of Pennsylvania's Retail Electricity Market  
Docket No. I-2011-2237952

Dear Secretary McNulty:

Enclosed please find PennFuture's Comments in the above-referenced proceeding.

Please do not hesitate to contact me should you have any questions.

Sincerely,

Courtney Lane  
Senior Energy Policy Analyst  
Citizens for Pennsylvania's Future (PennFuture)  
Energy Center for Enterprise and the Environment

Enclosures

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION:**

Investigation of Pennsylvania’s : Docket No. I-2011-2237952  
Retail Electricity Market :

**COMMENTS OF**

**CITIZENS FOR PENNSYLVANIA’S FUTURE (PENNFUTURE)**

**I Introduction**

PennFuture is a statewide public interest membership organization, working to enhance Pennsylvania’s environment and economy, with offices in Harrisburg, Philadelphia, Pittsburgh and Wilkes-Barre. We appreciate the opportunity to provide comments on the Investigation of Pennsylvania’s Retail Electricity Market, Docket No. I-2011-2237952.

We commend the Commission for working to create a robust competitive retail market for electric generation in Pennsylvania. A thriving competitive retail electricity market can provide a variety of benefits to ratepayers. Electric generation suppliers (EGS) across the state are offering competitive prices on generation, enabling consumers that switch to save money on their electricity bills. Competitive markets also help drive the creation of new and innovative products that can help ratepayers save money and better manage their electricity usage.

While PennFuture supports competitive markets, there are several unintended interactions with the Alternative Energy Portfolio Standards Act (AEPS) that need to be addressed to ensure the future success of retail choice and renewable energy development in Pennsylvania.

One area of concern is that the AEPS does not require EGSs to offer net metering to their customers. If an EGS does not offer net metering, a customer-generator will no longer receive monthly credits for power produced at the full retail rate (distribution, generation and transmission). The customer-generator will only be credited by the EDC at the distribution rate and will no longer receive payment for any excess generation at the end of the year. This greatly reduces the customer’s ability to repay debt on the system and therefore creates a disincentive to switch to a competitive supplier. This also creates a barrier to those customers currently being served by an EGS to install a distributed clean energy system.

Interactions between increased shopping levels and AEPS compliance are also threatening to inhibit compliance with the AEPS and increase costs to ratepayers. The AEPS was drafted at a time when only a small percentage of electric load was served by alternative generation suppliers. Now that generation rate caps have expired across the state, an increasing amount of electric load is being served by EGSs. This has created a disincentive for AEPS compliance to be met through long-term contracts for alternative energy credits (AECs) and solar alternative energy credits (SAECs) which are critical to the development of both wind and solar energy projects.

EDCs are reluctant to acquire a large percentage of their AEPS requirements through long-term contracts due to the perceived risk of losing default load to EGSs, and in turn having an oversupply of AECs and SAECs. On the other hand, EGSs have an inherent disincentive to enter into long-term contracts since they tend to rely on shorter-term procurements to account for high levels of annual retail load migration. Proposals to remove default service from the EDC would only exacerbate this issue.

PennFuture believes Pennsylvania can have both a properly functioning competitive retail electricity market and a successful AEPS with full net metering benefits, but several regulatory and legislative changes are needed to ensure both succeed. These changes include: mandating that EGSs offer net metering; requiring EDCs to procure AECs and SAECs to meet the AEPS requirements for both their default service load and the load of any EGSs in its service territory, or changing the AEPS requirements so they follow the distribution charge. We will further highlight the above issues and possible solutions in our responses to the questions posed by the Commission below.

## **II Comments in Answer to Specific Questions Posed By the Commission**

### ***Questions 1 – 5***

PennFuture has no comments on these questions.

- 6. Can/should the default service role be fulfilled by an entity, or group of entities, other than the EDC? If the default service role should be filled by an entity other than an EDC, what mechanisms could be employed to transition the default service role away from the EDC and onto competitive electric generation suppliers (EGSs)? Are different approaches appropriate for different customer classes? What criteria should be used to ensure that EGSs are qualified to assume the default service role and maintain reliable service?***

PennFuture does not have an opinion on whether or not the default service role is fulfilled by an entity, or group of entities, other than the EDC. However, the Commission must take into account the affect this proposal would have on both net metering customers and the successful implementation of the AEPS. If the Commission moves ahead with the removal of default service from the EDCs, it must require that any default service provider(s) and all EGSs offer full net metering compensation to their customers. The Commission also must ensure that any new default service provider(s) enter into long-term contracts of at least 10 years for a significant portion of its AEPS requirements, or conversely place full AEPS procurement requirements on the EDCs.

### NET METERING

If the Commission removes the default service role from the EDCs, the AEPS must be amended to require that EGSs and/or the new default service provider(s) offer full net metering benefits to customer-generators. This includes: ensuring the customer-generator receives credit at the full retail rate (distribution, generation and transmission) for each kilowatt-hour produced, up to the amount consumed; allowing for carry-over credits from one month to the next; and paying the customer-generator for any accumulated excess generation at the end of the year at the price-to-compare.

Under the current AEPS regulations, EGSs are allowed but not required to offer net metering to customers (52 Pa. Code §75.13(a)). Once a customer-generator switches to an EGS, the EDC is no longer required to credit them at the full retail rate (which includes distribution, transmission and generation) or pay for any excess generation at the end of the year. The EDC is only obligated to credit the customer-generator at the distribution rate for any power produced.

The difference between being credited at the full retail rate versus just the distribution rate is significant. For example, a 3 kilowatt (KW) solar system generates approximately 4,000 kilowatt-hours (kWh) per year. For the average residential customer, credit at the full retail rate of \$0.12/kWh would result in a savings of as much as \$480 per year. If that credit is reduced to just the distribution rate, the savings would only be \$160 per year. This is even more pronounced for a farmer who has installed a methane digester. A 100 KW anaerobic digester generating 700,000 kWh per year would receive a credit for power produced at the average full commercial retail rate of \$0.097 per kWh. This equals a savings of \$67,900 per year. If that farmer is only able to receive credit at the distribution rate, his annual savings would be reduced to \$28,000.

With only minimal state funding available for small-scale clean energy installations, customers rely on full net-metering credits to achieve a financial rate of return that encourages project development. Reducing compensation levels will make these projects unattainable for most customers and harm those trying to pay back the debt on their existing system. To make matters worse, there is little transparency surrounding this issue. There have been numerous complaints of customer-generators signing contracts with EGSs, only to discover they will no longer receive credit at the full retail rate.

Customer-generators that are aware of this issue are choosing not to shop in order to maintain access to credits at the full retail rate since there is a limited number of EGSs offering net metering. However, if default service was removed from the EDCs, these customers would no longer have the choice to keep their full net metering benefits and would automatically have their credits reduced to just the distribution rate. Therefore it is critical that any future default service provider(s) and all EGSs be required to offer full net metering benefits if default service is removed from the EDCs.

#### NEED FOR LONG-TERM CONTRACTS

Long-term contracts are critical to the successful implementation of the AEPS. Over the past several years, EDCs have been the main entity entering into long-term contracts for Tier I alternative energy credits (AECs) and solar alternative energy credits (SAECs) to comply with their AEPS requirements. The Commission has approved long-term SAECs procurements ranging from 8.5 to 10 years in length for Met-Ed, Penelec, PPL Electric Utilities and PECO.<sup>i</sup> The Commission has also approved long-term Tier I AEC procurements for 10 years in length for West Penn Power.<sup>ii</sup>

Although, EDCs have only been engaging in a modest amount of long-term procurements, they are generally the only entities that have been willing to go long in this market. As a result, a problem arises when the default service role is taken away from the EDCs. Compliance with the AEPS falls upon any EDC or EGS that sells retail electricity in Pennsylvania. The AEPS is tied to the generation portion of retail sales, as is the cost-recovery mechanism. Therefore, if you take away default service (generation and transmission) from the EDC, they would not be required to comply with the AEPS as they would no longer provide generation service. Instead, the full responsibility of meeting the AEPS would fall on the new default service provider(s) or EGSs since they would be responsible for all generation service in the state. This is problematic since

historically the EGSs have not been proactive in entering into long-term contracts for AEPS requirements. EGSs tend to rely on short-term procurements since their retail load is subject to a higher level of migration and can change every year. EDCs on the other hand, expect they will always have some amount of default load under the current market structure, and can therefore hedge some of their AEPS requirements long-term.

If Pennsylvania wants to ensure it meets its AEPS goals, new renewable energy projects must be built. In order for new renewable projects to be built, developers must have access to long-term contracts.

Like any major energy project, commercial-scale solar and wind are major capital investments and need to recover their costs over a period of 10 years or more. The main source of revenue needed to fund these projects comes from both the sale of power and AECs or SAECs produced. With falling wholesale electricity prices, it is nearly impossible to finance a project on just the sale of power alone. In addition, developers cannot rely on spot market sales of AECs or SAECs. Current over-supply of these credits in the short-term market has led to prices that are not reflective of the amount needed to build a new solar or wind project.

Due to these market conditions, developers must obtain long-term contracts for the sale of AECs and SAECs to build projects. The guaranteed revenue stream from these long-term contracts can help reduce risk and aid the developer in obtaining financing. In addition, long-term contracts better reflect the price needed to make a new project economical, since they are based on the marginal cost to build that project, not short-term supply and demand.

The Commission clearly recognizes that entering into long-term contracts is an important tool in meeting the AEPS requirements. Before the Commission will grant an EDC or EGS force majeure, it must provide a statement that it has made “good faith efforts” including “seeking to procure alternative energy credits or alternative energy through long-term contracts. (52 Pa. Code § 75.1).

#### BENEFITS OF LONG-TERM CONTRACTS TO RATE-PAYERS

Long-term contracts for AECs and SAECs not only aid in the development of wind and solar projects, they also benefit the ratepayer. Without access to long-term contracts, developers and investors require higher rates of return to compensate for taking on more risk in the current market.

As a result, the long-term cost of achieving AEPS targets and the cost borne by the ratepayers would be higher. Subsequently, if long-term contracts are utilized, it reduces risk to solar and wind energy developers, allowing them to borrow money more cheaply or accept lower rates of return if they are self-financing a project. In the long-run, this will result in lower long-term AEC and SAEC prices which will benefit ratepayers.

Current AEC and SAEC prices reflect short-term supply and demand, not the true cost of new renewable energy development. While these low prices may seem beneficial to ratepayers today, they will ultimately need to rise in order for developers to recover their marginal costs. For example, let's assume a new renewable energy project needs to sell AECs at an average price of \$20 over a ten year period to cover its marginal costs. If the average AEC price is only \$1 in some years, it will need to rise to \$39 in future years to average \$20. On the other hand, since there is less risk associated with long-term contracts, that same renewable energy project may be willing to accept a 10 year contract for \$18 AECs instead of \$20, lowering the cost passed on to ratepayers.<sup>1</sup>

It is clear that the Commission understands the value of long-term contracts for meeting AEPS requirements. The Commission has followed-through with this view by approving several EDC plans to procure both AECs and SAECs through contracts of up to 10 years in length. In addition, the Commission stated in its Policy Statement in Support of Pennsylvania Solar Projects that it "sought to provide longer term revenue stability likely needed to support both small scale and large scale solar development".<sup>2</sup>

It is critical that the Commission continue this support by requiring any future entity or entities with the default service role to enter into long-term contracts for AECs and SAECs for a significant portion of its AEPS requirements.

***7. How can Pennsylvania's electric default service model be improved to remove barriers to achieve a properly functioning and robust competitive retail electricity market? Are there additional market design changes that should be implemented to eliminate the status quo bias benefit for default service?***

PennFuture has no comments on these questions.

***8. What modifications are needed to the existing default service model to remove any inherent procurement (or other cost) advantages for the utility?***

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<sup>1</sup> These prices are only to illustrate the point and do not necessarily reflect actual prices in the AEC or SAEC markets.

<sup>2</sup> *Policy Statement in Support of Pennsylvania Solar Projects*, Docket No. M 2009 214026. Public Meeting held September 16, 2010.

PennFuture has no comments on this question.

**9. *What changes, to Regulations or otherwise, can the Commission implement on its own under the existing default service paradigm to improve the current state of competition in Pennsylvania?***

Retail electric competition and the AEPS marketplace would both be better served if the EDCs were directed to procure AECs and SAECs to meet the AEPS requirements for both their default service load and the load of any EGSs in its service territory.

As mentioned in our response to question six, long-term contracts for AECs and SAECs are critical to the successful implementation of the AEPS and are currently underutilized due to risks associated with customer migration as part of competitive retail electric markets. EDCs are reluctant to procure a large percentage of their AEPS requirements through long-term contracts due to the risk of losing electric load to EGSs, which in turn reduces their level of AEPS compliance. Additionally, EGSs have an inherent disincentive to enter into long-term contracts since they are subject to yearly fluctuations in electric load.

The Retail Energy Supply Association (RESA) indicated in previous testimony “to the extent the Commission determines such contracts are appropriate to support the policy of promoting the development and use of renewable energy, RESA urges the Commission to consider competitively neutral structures to ensure that the procurement of long-term contracts does not adversely impact the development of retail competition.”<sup>3</sup>

Requiring the EDCs to procure AECs and SAECs to meet the AEPS requirements for both their default service load and the load of any EGSs in its service territory would address this concern and create a more competitively neutral market structure. This procurement model could be set up in the following manner. The EDCs would issue RFPs for AECs and SAECs needed to cover their default service load and the load of any EGSs in its service territory. The AECs and SAECs would then be distributed on a pro-rata basis to each EGS depending on their retail load, with costs recovered through a nonbypassable charge.

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<sup>3</sup> Rebuttal Testimony of Richard J. Hudson, Jr., witness for the Retail Energy Supply Association (RESA). *Joint Application of West Penn Power Company (doing business as Allegheny Power, Trans-Allegheny Interstate Line Company and FirstEnergy Corp. for a Certificate of Public Convenience under Section 1102(a)(3) of the Public Utility Code approving a change of control of West Penn Power Company and Trans-Allegheny Interstate line Company*, Docket Nos. A-2010-2176520, A-2010-2176532. September 13, 2010.

There is already precedent for this type of model. The Commission approved a petition by Met-Ed and Penelec to conduct an RFP for SAECs designed to meet the solar AEPS requirements for default service, including the solar requirements associated with any customer load served by an EGS. The solar RFP will solicit bids to obtain 10,000 PSAECs over a ten-year period, divided into separate tranches of 500 SPAECs that will then be distributed to EGSs.<sup>4</sup>

This method helps level the playing field between EDCs and EGSs. This change will also essentially remove any risk to the EDC related to customer migration since they are now procuring for all retail load in their service territory. This in turn will help to increase the amount of long-term contracts utilized for AEPS compliance than would have otherwise occurred.

If needed, this model could be taken one step further by placing the full AEPS compliance on the EDC through distribution rates, rather than generation rates, which are not subject to customer migration and would not be affected by any future regulatory changes to default service. In turn, the cost of AEPS compliance would no longer be included in the price-to-compare, allowing for more accurate price signals in the market.

In order to implement this change, the AEPS would need to be amended to allow for compliance costs to be recovered on the distribution charge. Currently the law mandates that costs be recovered by an automatic energy adjustment clause under 66 PA.C.C. 1307 as a cost of generation supply under 66 PA C.C. 2807.

***10. What legislative changes, including changes to the current default service model, should be made that would better support a fully workable and competitive retail market?***

PennFuture believes two legislative changes are needed: 1) requiring EGSs to offer net metering; and 2) changing the cost recovery mechanism for the AEPS from the generation charge to the distribution charge.

**NET METERING**

PennFuture believes a legislative change is required to mandate that EGSs offer full net metering benefits to their customers. This includes: ensuring the customer-generator receives credit at the full retail rate (distribution, generation and transmission) for each kilowatt-hour produced, up

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<sup>4</sup> *Joint Petition Of Metropolitan Edison Company And Pennsylvania Electric Company For Approval Of Their Default Service Programs*, Docket Nos. P-2009-2093053 & P-2009-2093054, Joint Petition for Settlement dated August 12, 2009 at 12.

to the amount consumed; allowing for carry-over credits from one month to the next; and paying the customer-generator for any accumulated excess generation at the end of the year at the price-to-compare.

As detailed in our response to question six, EGSs are currently not required to offer net metering. We have found that some EGSs are voluntarily providing net metering to their commercial and industrial customers but there are very few extending this benefit to residential customers.

This is causing a disincentive for customer-generators to switch to an EGS. Customers that have already invested in a small-scale alternative energy system like solar, depend on the monthly reductions on their electric bills from net metering credits to help pay-back the upfront cost of the system. Likewise, this is creating a financial barrier to EGS customers that want to install a distributive energy system.

In order to promote grid-tied distributive generation and customer choice, the AEPS should be amended to require EGSs to offer full net metering benefits. According to the Interstate Renewable Energy Council, five states legislatively mandate that competitive suppliers offer net metering.<sup>5</sup> This change will protect existing net metering customers, level the playing field to promote customer choice and promote further investments in distributed generation.

#### AEPS COST-RECOVERY MECHANISM

Electric competition and the AEPS marketplace would benefit from changing the AEPS so that the full requirements rest solely on the EDCs.

As mentioned in our response to question six, long-term contracts for AECs and SAECs are essential to cost-effectively meeting the AEPS. However, EDCs are reluctant to procure a large percentage of their AEPS requirements through long-term contracts due to the risk of losing electric load to EGSs, which in turn reduces their level of AEPS compliance. Additionally, EGSs have an inherent disincentive to enter into long-term contracts since they are subject to yearly fluctuations in electric load.

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<sup>5</sup> Barnes, J., and Varnado, L. (2010) *The Intersection of Net Metering & Retail Choice: An Overview of Policy, Practice, and Issues*. Interstate Renewable Energy Council.

One possible solution to address this issue is to place the full AEPS compliance on the EDC through distribution rates, rather than generation rates, which are not subject to customer migration and would not be affected by any future regulatory changes to default service. In turn, the cost of AEPS compliance would no longer be included in the price-to-compare, allowing for more accurate price signals in the market.

In order to implement this change, the AEPS would need to be amended to allow for compliance costs to be recovered on the distribution charge. Currently the law mandates that costs be recovered by an automatic energy adjustment clause under 66 PA.C.C. 1307 as a cost of generation supply under 66 PA C.C. 2807.

This change would help to increase the amount of long-term contracts utilized for AEPS compliance in a competitively neutral manner, benefiting both competition and renewable energy development.

***11. Are there, or could there be, potential barriers being created by the implementation of the EDC Smart Meter plans?***

PennFuture has no comments on this question.

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<sup>i</sup> Examples of long-term SAEC Procurements:

- Met-Ed and Penelec procurement of 10,000 SREC's annually for a 10-year period. *Joint Petition of Metropolitan Edison Company And Pennsylvania Electric Company For Approval Of Their Default Service Programs*, Docket Nos. P-2009-2093053 & P-2009-2093054.
- PECO procurement of 8,000 solar Tier I credits annually for a 10-year period. *Petition of PECO Energy Company for Approval to Procure Solar Alternative Energy Credits*, Docket No. P-2009-2094494.
- PPL Electric Utilities long-term SAEC procurement of 70,500 SRECs in three solicitations for 7 years, 8 years and 8.5 years. *PPL Electric Utilities Corporation Default Service Program and Procurement Plan for the Period January 1, 2011 through May 31, 2013 for Approval to Modify its Procurement of Solar Alternative Energy Credits*, Docket Nos. P-2008-2060309 and R-2010-2170296.

<sup>ii</sup> Examples of long-term Tier I AEC Procurements:

- West Penn procurement of 775,000 Tier I AECs in 10-year contracts. *West Penn Power Company d/b/a Allegheny Power Default Service Program and Competitive Procurement Plan Results of Request for Proposals Process and Rules – AEC Procurement*, Docket No. P-00072342.