



Citizens for Pennsylvania's Future  
Energy Center for Enterprise and the  
Environment  
1500 Walnut St., Suite 502  
Philadelphia, PA 19102  
[info@pennfuture.org](mailto:info@pennfuture.org)  
[www.pennfuture.org](http://www.pennfuture.org)

December 10, 2012

**DELIVERED ELECTRONICALLY**

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

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

Dear Secretary Chiavetta:

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

cc: [ra-RMI@pa.gov](mailto:ra-RMI@pa.gov)

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

**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: End State of Default Service Tentative Order, Docket No. I-2011-2237952.

We commend the Commission for working to create a robust competitive retail market for electric generation in Pennsylvania. PennFuture has been an active participant in the Investigation of Pennsylvania's Retail Electricity Market. PennFuture submitted comments in response to the Phase I Secretarial Letter and the Tentative Order on Default Service Plans; testified at the En Banc Hearing on March 21, 2012, and; participated in all conference calls. PennFuture believes that a thriving competitive retail electricity market can provide a variety of benefits to consumers. Electric generation suppliers (EGS) across the state are offering competitive prices on generation, enabling consumers to save money on their electricity bills. Competitive markets also help drive the creation of new and innovative products that can help consumers save money and better manage their electricity usage.

While PennFuture supports competitive markets, we want to ensure that moving to the proposed end state model for default service does not harm existing policies including the Act 129 Energy Efficiency and Conservation Program and the Alternative Energy Portfolio Standard (AEPS). Specifically, PennFuture’s comments will focus on the need for electric distribution companies (EDCs) to continue providing energy efficiency and conservation (EE&C) services to

retail electric customers; the importance of long-term contracts in meeting the requirements of the AEPS; the Commission's authority to require long-term contracts for AEPS compliance; a proposed procurement model for long-term contracts that will not interfere with the competitive retail electricity market, and; the importance of providing more information to net metered customers switching to EGSs.

## **II COMMENTS ON TENTATIVE ORDER**

### **A. PROVISION OF ENERGY EFFICIENCY AND CONSERVATION PROGRAMS**

PennFuture supports the Commission's proposal for electric distribution companies (EDCs) to continue to provide energy efficiency and conservation (EE&C) services to retail electric customers as defined within Act 129.

As written in the law, the Commission is "to require electric distribution companies to adopt and implement cost-effective energy efficiency and conservation plans to reduce energy demand and consumption within the service territory of each electric distribution company in the Commonwealth." (66 Pa. C.S. § 2806.1.) Therefore it is clear that the Act 129 energy efficiency and load management programs must remain with the EDC.

In addition to the plain reading of the law, EDCs have been effective in meeting the requirements of Act 129 and designing EE&C programs that reach a wide variety of customers. The EE&C programs also benefit from uniform distribution that electric generation suppliers (EGSs) could not provide. Joint EE&C programs and statewide programs allow for energy savings to be captured more efficiently and at a lower cost by improving economies of scale, avoiding unnecessary program overlap that may cause confusion among customers and contractors, and increasing the effectiveness of marketing and branding. While there are no statewide Act 129 EE&C programs to date, EDCs have made gains by utilizing the same conservation service provider (CSP) for their appliance recycling programs and FirstEnergy offers the same programs and utilizes the same CSPs across its four EDCs. This type of coordination allows for Act 129 to be implemented more cost-effectively.

While PennFuture believes Act 129 will run more efficiently if it remains with the EDCs, we agree with the Commission that EGSs can and should be encouraged to provide energy efficiency services to their customers.

## **B. EXISTING LONG-TERM ALTERNATIVE ENERGY CREDIT CONTRACTS**

PennFuture supports the Commission's proposal to uphold all presently-effective alternative energy credit (AEC) contracts regardless of any changes to default service. PennFuture agrees with the Commission's recommendation to allow each EDC to provide a proposal for the management of existing long-term contracts in their next round of default service filings to be addressed on a case-by-case basis.

## **C. FUTURE LONG-TERM ALTERNATIVE ENERGY CREDITS CONTRACTS**

Long-term AEC contracts are critical to the successful implementation of the Alternative Energy Portfolio Standard (AEPS). Long-term contracts provide a valuable hedge to ratepayers against volatile alternative energy credit markets as portfolio standards ramp up in Pennsylvania and nine other states within PJM. Long-term contracts provide the certainty required for wind and solar developers to obtain financing to build projects and better reflect the marginal cost needed to build those projects, as they are not based on short-term supply and demand.

Over the past several years, EDCs have been the main entity entering into a limited amount of long-term contracts for Tier I AECs and solar alternative energy credits (SAECs) to comply with their AEPS requirements. However, with increased growth in retail competition, 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 and related AEPS compliance. The proposed end state model for default service will likely exacerbate this issue. Movement towards short-term electric power procurement by EDCs combined with even higher shopping levels will eliminate any incentive for load serving entities to enter into long-term AEC contracts. While reliance on shorter term procurements may facilitate retail competition, it is detrimental to the development of renewable energy resources needed to meet the AEPS.

This issue is not unique to Pennsylvania. Restructured states like Massachusetts, New Jersey, New York and Rhode Island have all seen increased retail competition and subsequent drops in the use of long-term contracts to meet renewable portfolio standard (RPS) requirements. These states have implemented mechanisms to ensure that long-term contracts continue to encourage the

development of renewable energy while not interfering with retail competition. For example, New York adopted a central procurement model, whereby a state agency issues solicitations for renewable energy credits (RECs) to meet its RPS. While New Jersey, Rhode Island and Massachusetts take a different approach by requiring EDCs to procure a specific amount of renewable energy or a certain percentage of their RPS obligation through long-term contracts with the costs recovered on the distribution charge. Depending on the state, EDCs either use the resulting procurements to meet RPS obligations, sell directly to competitive retail electricity suppliers or back into the wholesale market.<sup>1</sup>

As detailed further below, PennFuture believes an appropriate model for Pennsylvania is to place a percentage of the AEPS compliance on the EDCs to be procured through a mix of long and mid-term AEC contracts. Specifically, PennFuture recommends that 50% of the Tier I and solar AEPS requirements be procured by the EDC (regardless of whether it has a default service obligation) through a mixture of long-term (10 year) and medium-term (5 year) AEC and SAEC contracts. The costs of which would be recovered through a non-bypassable rider. This model ensures a certain amount of long-term contracts will continue and removes risk to the EDC related to customer migration since they are guaranteed cost-recovery. There is also precedent for this model in Pennsylvania. Met-Ed, Penelec, and Penn Power currently have mechanisms in place to allow for the purchase long-term solar contracts to meet AEPS obligations, regardless of whether or not they provide default service. This mechanism ensures cost recovery for the utility, as well as competitive neutrality between the default service provider and EGSs.

**i. Importance of Long-Term Contracts**

Pennsylvania made a policy decision to incent the development of renewable energy resources when the AEPS was signed into law on November 30, 2004. If Pennsylvania is to meet the AEPS, new renewable energy projects must be built. In order for new renewable energy projects to be built, developers must have access to long-term contracts.

---

<sup>1</sup> Rhode Island: Rules and Regulations Governing Long-Term Contracting Standards for Renewable Energy, at: [http://www.ripec.org/rulesregs/commrules/4069-LTCStandardsRules\(1-28-10\).pdf](http://www.ripec.org/rulesregs/commrules/4069-LTCStandardsRules(1-28-10).pdf).  
Massachusetts: 220 CMR 17.00: Long-Term Contracts for Renewable Energy, at: <http://www.mass.gov/eea/docs/dpu/cmr/220cmr1700.pdf>  
New Jersey: BPU Docket No. EOO6100744, at: <http://www.njcleanenergy.com/files/file/Board%20Orders/7-30-08-8E.pdf>

Like any major energy project, solar and wind facilities are major capital investments and need to recover their costs over a period of 10 years or more. It is nearly impossible to finance a project on just the sale of power alone. This is true for all forms of power generation. For example, a recent report by the American Public Power Association (APPA) and the Electric Market Reform Initiative (EMRI) found that nearly all of the generation built in 2011 utilized a long-term contract with a utility purchasing the power to serve customer load or ownership by an integrated utility to supply power to its customers. Only two percent of the new capacity built in 2011 was constructed for merchant power sales.<sup>2</sup>

Financing the construction of new generation also requires market signals and incentives, which is true for all types of electricity generation. Market incentives like AECs and SAECs serve a similar financing function as PJM's Reliability Pricing Model (RPM) in that both markets provide incremental revenue streams beyond power sales, in order to support project finance. The AEC and SAEC market values environmental attributes, whereas the RPM market values capacity resources. Wind and solar projects qualify for minimal RPM revenue, while fossil-fuel based generation does not receive AEC or SAEC revenues. There is ample precedent for compensating a wide range of energy resources based on their valued advantages, in order to promote deployment.

For renewable energy, it is the regulatory marketplace that creates an additional revenue stream to cover the incremental cost difference between the revenue from power sales and the cost needed to build a project through the sale of AECs and SAECs. However, simply having a regulatory structure in place to create demand for the sale of AECs and SAECs is not enough to incent the development of renewable energy. It is critical to the successful implementation of the AEPS that EDCs be encouraged to continue to enter into new long-term contracts for AECs and SAECs. While short-term power procurement may facilitate retail competition, it is not amendable to encouraging new renewable energy development to meet the AEPS. Current over-supply of AECs and SAECs has lead to spot market prices that are not providing the incremental capital 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 obtain financing and 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

---

<sup>2</sup> American Public Power Association and the Electric Market Reform Initiative, *Power Plants are Not Built on Spec: An Analysis of New Electric Generation Projects Constructed in 2011*, March 2012.

make a new project economical, since they are based on the marginal cost to build that project, not short-term supply and demand.

Reliance on shorter-term contracts will not send the price signal needed to build projects which will create a shortage in AECs and SAECs and drive up prices. While there is ample supply of both AECs and SAECs in the market today, the AEPS will require approximately 2,135 megawatts (MW) of additional Tier I resources and 543 MW of additional solar to be developed over the next 10 years. In addition, there are nine other states in the PJM region that have renewable portfolio standards ramping up at the same time. This will create more demand and competition for any existing credits in the marketplace. PJM estimates that by 2020 a total of 34,000 MW of wind and 6,000 MW of solar will be needed to meet these RTO-wide requirements.<sup>3</sup> It is critical that EDCs continue to enter into long-term contracts for AECs and SAECs to meet a portion of their AEPS requirements to support the continued development of AEPS technologies. If long-term contracts are not utilized now to incentivize new development, there may be a shortage of AEPS resources in future years, which will lead to much higher AEC and SAEC prices that will be borne by ratepayers.

It is important to note that if there is a shortage of credits in the market, and EDCs have not sought out long-term contracts, they may not be granted force majeure. Act 35 of 2007 requires that before the Commission can grant force majeure, the EDC must provide a statement that it has made “good faith efforts” that include “seeking to procure alternative energy credits or alternative energy through long-term contracts”. (52 Pa. Code § 75.1).

**ii. Benefits of Long-Term Contracts to Ratepayers**

Procuring AEPS requirements through long-term contracts not only helps to incentivize new renewable energy development, it also benefits 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 ratepayers will be higher. Subsequently, if long-term contracts are utilized, it reduces risk to solar and wind energy developers, allowing them to borrow money with less expense or accept lower

---

<sup>3</sup> PJM Renewable Integration Study: Coordination Plan Presentation, January 24, 2011

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>4</sup>

**iii. Recommended Model**

In response to the Commission's request for comments on future long-term alternative energy credit contracts, PennFuture recommends that the EDC, regardless of whether it has a default service obligation, be the entity responsible for entering into new long-term contracts for Tier I AECs and SAECs to meet the AEPS.

EDCs have been the main entity entering into long-term contracts for Tier I AECs and SAECs to meet their AEPS obligations. To our knowledge, EGSs have not and do not want to enter into long-term contracts because their electric load and associated AEPS requirements are subject to a higher level of annual migration. In addition, some EGSs may not have the long-term balance sheet needed to engage in long-term contracts. Therefore, it is most prudent to have the EDC continue to be the entity entering into new long-term contracts for AEPS requirements.

However, given the fact that many EGSs use different AEPS hedging strategies to gain a competitive advantage in the marketplace, it is not appropriate to place the entire AEPS obligation on the EDC. Therefore, PennFuture recommends that the Commission require EDCs to procure 50% of the expected Tier I and solar AEPS requirements for all electric load in its service territory each year through a mixture of 50% long-term (10 year) and 50% medium-term (5 year) Tier I AEC and SAEC contracts. Under this proposal, the EDC would conduct competitive, Tier I AEC and SAEC procurements on an annual basis for its service territory. The acquired Tier I AECs and

---

<sup>4</sup> These prices are only to illustrate the point and do not necessarily reflect actual prices in the AEC or SAEC markets.

SAECs would be retired on behalf of itself and the EGSs on a pro-rata basis depending on the distribution of retail load in the service territory. The costs would be recovered by the EDC through a non-bypassable rider.

There is already precedent for this model in Pennsylvania. The Commission originally approved this cost-recovery mechanism as part of the 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, and has since been approved for Penn Power. Under this model, Met-Ed, Penelec and Penn Power procure 40% of their AEPS solar requirements through long-term contracts. The EDCs issue a request for proposals for SAECs needed to cover their default service load and the load of any EGSs in its service territory. The SAECs are then distributed on a pro-rata basis to each EGS depending on their retail load, with costs recovered through a non-bypassable rider (Solar Photovoltaic Requirements Charge Rider).<sup>5</sup> The rider is applied to all delivery service customers, ensuring that FirstEnergy recovers its costs regardless of whether a customer is being served by an EGS.

PennFuture believes this model creates a reasonable mix of contracts lengths. In total 50% of the AEPS compliance requirement would remain with EGSs to be met through short-term and spot market procurements. While the EDCs would enter into a modest amount of long-term contracts to help facilitate the successful build-out of renewable energy resources to meet the AEPS. The mix of contract lengths offered in this model will also help protect the ratepayer from future AEC and SAEC price spikes as demand for alternative energy credits grows across the PJM region in the next five years. Lastly, this model ensures that EDCs are held harmless against any future fluctuations in AEPS requirements due to customer migration and enables them to retain the right to claim force majeure if needed.

It is also important to note that this model will not adversely impact or distort the wholesale electricity market or retail competition. The AEPS requires that 8% of the electricity sold at retail in Pennsylvania come from renewable energy resources like wind and solar. PennFuture's model is not intended to increase the amount of renewable energy above and beyond what is required by the AEPS. The use of long-term contracts in this model will only ensure that the existing AEPS

---

<sup>5</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.

mandate is met cost-effectively. For this reason PennFuture's proposed model will not create any additional impacts to the wholesale electricity market than would have otherwise occurred through the existing AEPS requirements.

Encouraging a modest amount of long-term contracts to support accurate pricing in the AEC market will not distort the wholesale market and, by extension, the retail market. These long-term contracts are for AECs not generation and are needed to meet an existing statutory requirement. Requiring the procurement of a certain percentage of long-term AEC contracts only allows for this existing mandate to be met. In addition, since the proposed cost-recovery mechanism will not be considered a cost of generation it will not distort the price-to-compare.

iv. **Legal Authority**

First and foremost it is important to establish the fact that PennFuture's proposed model is to require long-term contracts for credits not generation. PennFuture is not asking the Commission to influence or create favoritism towards a particular fuel type or generation resource procured for default service. PennFuture is requesting that the Commission implement a model for procuring AECs and SAECs through long-term contracts to facilitate the implementation of the AEPS.

The Commission has the statutory authority to require EDCs to procure a certain percentage of AECs and SAECs through long-term contracts. Under Act 213 of 2004, pertaining to alternative energy credits, the Commission "shall establish an alternative energy credits program ***as needed*** to implement this act." (P.L.1672, No.213 §3(e)(1)) This language allows the Commission to use its discretion in developing an AEC program to ensure the AEPS is met. Therefore, if the Commission determines that long-term AEC contracts are needed to implement the AEPS, then it has the authority to require EDCs to enter into those contracts. In addition, there is nothing in the statute that prohibits the Commission from requiring long-term contracts for AECs or SAECs.

In addition, the Commission is directed to "conduct an ongoing alternative energy resources planning assessment for this Commonwealth. This assessment will, at a minimum, identify current and operating alternative energy facilities, the potential to add future alternative energy generating capacity, and the conditions of the alternative energy marketplace. The assessment will identify ***needed methods to maintain or increase the relative competitiveness of the alternative energy market within this Commonwealth.***" (P.L.1672, No.213 §7(a)) The Commission identifies a

method needed to increase the relative competitiveness of the alternative energy market on page 37 of the Tentative Order, whereby either the EDC or DSP satisfies a portion of their service territory's AEPS requirements to help facilitate a successful capacity build-out of AEPS-qualified generation facilities. It is clear the Commission has the authority to implement such a model to help ensure the AEPS is met.

#### **D. NET METERING**

Throughout the Commission's Retail Market Investigation, net metering has been a topic of discussion. However, the issue of net metering is not addressed in the Tentative Order. While the proposal for EDCs to remain the default service provider (DSP) protects net metered customers that do not shop, there is nothing in the Tentative Order to protect those customers that switch to an EGS.

To date there has been minimal consumer education and transparency surrounding the issue of shopping and net metering benefits. Few electric customers are aware that under current net metering regulations, EGSs are allowed but not required to offer net metering. If a customer-generator switches from an EDC to an EGS that does not provide net metering benefits, they will no longer receive monthly net metering credits at the full retail rate. 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 which greatly reduces the customer's capacity to repay debt on their system. Additionally, many of the EGSs that offer net metering do not do so at the same level as an EDC. This includes not carrying over excess credits on a monthly basis and not compensating the customer-generator for excess generation at the end of the year.

PennFuture has been informed of numerous complaints from customer-generators that did not understand the potential consequences of switching to an EGS, nor were they informed by the EGS about cessation of the customer's existing net metering benefits. As a result these customers were negatively impacted when they switched to an EGS and suddenly stopped receiving full net metering benefits.

PennFuture believes that in order to have a properly functioning competitive retail electricity market, EGSs must fully disclose net metering information to customers to aid them in making an educated decision. PennFuture recommends that the Commission maintain a listing of EGSs

offering net metering on the PAAPowerSwitch website; require EGSs to disclose net metering benefits before a customer enrolls; and require EDCs to inform the customer-generator of the potential loss of benefits when switching to an EGS that does not provide net metering at the time a net metering contract is signed. The adoption of these measures will help to encourage more net metered customer to shop and aid in the development of an even more robust competitive retail electric market in Pennsylvania.

### **III CONCLUSION**

We commend the Commission for working to create a robust competitive retail market for electric generation in Pennsylvania. While PennFuture supports competitive markets, we want to ensure that moving to the proposed end state model for default service does not harm existing policies including the Act 129 EE&C Program and the AEPS.

PennFuture is concerned The Commission's Retail Markets Investigation will bring about changes to default service that will create a disincentive for load serving entities to enter into new long-term contracts for Tier I AECs and SAECs. While movement towards shorter-term power procurements may facilitate competition in the current retail electric market, it will be detrimental to the AEPS. Short-term AEC and SAEC prices do not reflect the incremental capital needed to build a new solar or wind project. Without access to long-term contracts, the cost of capital escalates and the new investment is discouraged. While there is ample supply of both AECs and SAECs in the market today, a shortage is expected in the PJM marketplace as early as 2015, leading to price spikes that will be borne by Pennsylvania ratepayers. It is critical that the Commission not wait until there is a shortage to encourage long-term contracts.

If Pennsylvania wants to meet the AEPS, a mechanism must be implemented to encourage the further use of long-term contracts for Tier I AECs and SAECs. PennFuture believes that placing a percentage of the Tier I and solar AEPS requirements on the EDCs to be procured through long-term contracts and recovered through a non-bypassable rider is the most appropriate means to facilitate the build-out of AEPS qualified generation while not interfering with the competitive electric retail market.