FirstEnergy

76 South Main Street
Akron, Ohio 44308

Kathy J. Kolich
Senior Attorney

330-384-4580
Fax: 330-384-3875

February 18, 2011

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

RECEIVED at 4:28 pm
FEB 18 2011
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

Dear Secretary Chiavetta:

**Re: Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Amendment of the Orders Approving Energy Efficiency and Conservation Plans and Petition for Approval of First Amended Energy Efficiency and Conservation Plans**
***(Docket No. M-2009-2092222, M-2009-2112952 and M-2009-2112956)***

Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power") (collectively, "Companies") hereby submit an original and three (3) copies of the above-referenced Joint Petition for approval of changes to the Companies' Energy Efficiency and Conservation ("EE&C") Plans currently in effect ("Current Plans") and approved by this Commission in an earlier phase of this proceeding in an Order dated February 26, 2011. Concurrent with this filing is a separate filing of a Joint Petition for an Expedited Ruling ("PFER") on three specific changes included in this filing.

In addition to the enclosed Joint Petition and the instant Transmittal Letter, this filing includes (i) Exhibits A, B and C (collectively "First Amended Plans"), which are copies of the Current Plans of Met-Ed, Penelec and Penn Power, respectively, black-lined to show all changes to the Current Plans being proposed in this filing; (ii) the direct testimony of Mr. George L. Fitzpatrick (including supporting exhibits GLF-1, GLF-2, GLF-3 and GLF-4, and Appendix A), who is supporting all proposed changes *other than* those involving the Companies' Riders EEC-C; and (iii) the direct testimony of Mr. Charles V. Fullem (including supporting Exhibits CVF-1 and CVF-2 and Appendix A), who is supporting the proposed changes to the Companies' Riders EEC-C.

In accordance with the September 1, 2010 Secretarial Letter, "Proposals to Change Energy Efficiency and Conservation Plans Approved by the Commission Pursuant to Act 129 of 2008," Section 1.1.1 of the First Amended Plans summarizes the changes being made, the reason for those changes, the primary location(s) in the plans where the changes can be found, and the impact these changes have on the remainder of the plans. Further, rather than filing separate testimony, Mr. Fitzpatrick's testimony being filed herein also supports the PFER being filed concurrent herewith.

For your convenience a disk of all of the aforementioned documents, including those related to the PFER is included. Please feel free to call me if you have any questions or require additional information.

Respectfully submitted,

Kathy J. Kolich
Attorney No. 92203
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308
(330) 384-4580
(330) 384-3875
kjkolich@firstenergycorp.com

cc: All Parties of Record

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Amendment of the Orders Approving Energy Efficiency and Conservation Plans and Petition for Approval of First Amended Energy Efficiency and Conservation Plans** | : | **Docket No. M-2009-2092222**<br>**M-2009-2112952**<br>**M-2009-2112956** |

---

# JOINT PETITION OF METROPOLITAN EDISON COMPANY, PENNSYLVANIA ELECTRIC COMPANY AND PENNSYLVANIA POWER COMPANY

---

**Kathy J. Kolich**
**Attorney No. 92203**
**FirstEnergy Service Company**
**76 South Main Street**
**Akron, OH 44308**
**(330) 384-4580 - Telephone**
**(330) 384-3875 – Fax**
**kjkolich@firstenergycorp.com**

**Dated: February 18, 2011**

**Counsel for:**
**Metropolitan Edison Company,**
**Pennsylvania Electric Company and**
**Pennsylvania Power Company**

## INTRODUCTION

Pursuant to 52 Pa. Code §§ 5.41 and 5.572, Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power") (collectively, "Companies") hereby file this Petition requesting that the Commission amend, consistent with this filing, its February 26, 2010 Order in which the Companies' Energy Efficiency and Conservation ("EE&C") Plans currently in effect ("Current Plans") were approved. Specifically, the Companies ask that the Commission approve the proposed changes to the Current Plans as set forth in attached Exhibits A (Met-Ed First Amended Plan), B (Penelec First Amended Plan) and C (Penn Power First Amended Plan) (collectively, "First Amended Plans"), including among other things, the amended Energy Efficiency and Conservation Charge Rider ("Rider EEC-C") for cost recovery purposes, as described herein.

The Companies also request that the Commission issue an Order approving this Joint Petition no later than May 19, 2011, so as to allow the Companies time to implement the changes described herein prior to the start of Program Year 3 ("PY 3") which commences on June 1, 2011.[1]

In support of this Joint Petition, the Companies state as follows:

## BACKGROUND

1. On October 15, 2008, Governor Edward G. Rendell signed House Bill 2200 into law as Act 129 of 2008 (Act 129). Act 129 became effective on November 14, 2008, and imposed new requirements on Pennsylvania's electric distribution companies ("EDCs") in the areas of energy efficiency and conservation, smart meters, electricity procurement and alternative energy sources.

[1] The Companies are also filing concurrent herewith a separate petition, seeking an expedited ruling on three specific changes, and asking that an Order approving those changes be issued no later than March 17, 2011.

2. Act 129 requires an EDC with at least 100,000 customers to adopt and implement a plan, approved by the Commission to reduce energy demand and consumption within its service territory.

3. The Companies filed their original EE&C Plans on July 1, 2009. On October 28, 2009, the Commission entered an Order approving in part and rejecting in part the Companies' EE&C Plans ("October 28, 2009 Order"). The Commission ordered the Companies to submit revised EE&C plans within 60 days.

4. The Companies timely submitted revised EE&C Plans ("Revised Plans"). By Opinion and Order dated January 28, 2010, the Commission approved in part and rejected in part the Revised Plans. The Commission ordered the Companies to submit further revised EE&C plans within 60 days.

5. On February 5, 2010, the Companies filed their Second Revised EE&C Plans ("Second Revised Plans"). On February 26, 2010, the Commission approved the Companies' Second Revised Plans, with implementation commencing immediately thereafter. The Second Revised Plans are those currently in effect and are referred to throughout this Joint Petition as "the Current Plans".

6. On January 15, 2009, the Commission adopted an Implementation Order establishing standards for the EE&C Plans, including a requirement to submit annual reports outlining the results from the implementation of their Current Plans. The Implementation Order did not contain a deadline for filing the annual reports.

7. On June 25, 2010, the Commission provided additional guidance to the EDCs regarding the annual reporting requirements and required the EDCs to submit

their annual reports by September 15, 2010. The Commission also permitted the EDCs to submit proposed changes to their EE&C Plans at that time.

8. On September 1, 2010, the Commission issued another Secretarial Letter providing the requirements for revised plans should the EDCs wish to revise their EE&C plans during the annual reporting process.

9. The September 1, 2010 Secretarial Letter also recognized that the orders approving the EDCs' EE&C plans stated that the EDCs may propose a plan change using the Commission's standard procedures for rescission and amendment of Commission orders under 52 Pa. Code §§5.41 and 5.5.72.[2]

10. On September 15, 2010, the Companies filed their annual reports with the Commission, but did not request changes to the Current Plans at that time for several reasons. First, because of the delay in receiving final approval of the Current Plans, the programs had only been in effect for approximately six months. The Companies believed that additional time was necessary to properly evaluate the programs before making changes thereto. By postponing their request for changes to the Current Plans the Companies were also able to (i) incorporate market insights provided by their program implementation Conservation Service Providers (CSPs); (ii) factor in the experience and process and impact evaluation recommendations offered by ADM Associates, Inc., the Companies' Evaluation, Measurement, and Verification CSP; and (iii) obtain further guidance from the Statewide Evaluator ("SWE") on certain measures and protocols.

11. The Companies recently evaluated the status of the Current Plans, concluding that, based on information available at the time of this filing, the Companies

appear to be on track to meet their 2011 Act 129 EE&C obligations. However, as will be discussed, *infra*, without the changes incorporated into the First Amended Plans, the Companies will not meet their post-2011 Act 129 targets.

12. Therefore, pursuant to 52 Pa Code §5.572 and the Commission's October 28, 2009 Order, and for reasons discussed below, the Companies respectfully request that the Commission amend its February 26, 2010 Order as necessary to approve the changes to the Current Plans as set forth in the First Amended Plans and further request that such Amended Order be issued no later than May 19, 2011.

**THE NEED FOR CHANGES TO THE CURRENT PLANS**

13. It is necessary to amend the Current Plans for several reasons. First, the Current Plans include an 11% transmission and distribution loss factor that was used to gross up all EE&C program savings calculations so as to reflect savings at the system generation level. After the Current Plans were approved, the SWE and the Commission's Bureau of Conservation Economics and Energy Planning clarified that EE&C savings projections should be calculated at the retail level for Act 129 compliance purposes, and at the system generation level for Total Resource Cost ("TRC") test purposes. As a result, all of the savings projections included in the Current Plans are overstated by approximately 11%. Therefore, the First Amended Plans recalculate projected savings, which, in turn, requires plan modifications to make up this 11% deficit. Second, certain programs are performing at energy or demand savings levels below those originally anticipated, partly due to (i) the downturn in the economy; (ii) updates to the Technical Reference Manual ("TRM"); and (iii) customer participation levels in certain

[2] *See e.g.* October 28, 2009 Order at p.126.

programs and measures different from those assumed in the Current Plans. And third, some programs are exceeding expectations, even to the point where the funding for the Commercial and Industrial ("C/I") Equipment Programs in the Large C/I Sector are fully committed for Met-Ed and Penelec, thus requiring their suspension until additional funding can be approved by the Commission.[3]

**THE FIRST AMENDED PLANS AND SUPPORTING TESTIMONY**

14. The First Amended Plans set forth the changes to the Current Plans with all such changes to the text of the Current Plans' black-lined; and the charts and tables highlighted by cell. Many of the tables and charts included in the body of the Current Plans are duplicates of those also included in the Current Plans' appendices. The First Amended Plans have eliminated these redundant charts and tables, instead referring the reader to the applicable appendices.

15. The changes set forth in the First Amended Plans can be categorized as: (i) changes that permeate throughout the entire plan; (ii) changes to the program portfolios included in the Current Plans; (iii) editorial changes intended to clarify or correct certain aspects of the Current Plans; (iv) changes incorporated in an effort to streamline the administration of certain programs; and (v) changes to the EEC-C Rider charges.

16. Section 1.1.1 of the First Amended Plans provides a summary of all changes to the Current Plans, explaining: (i) the nature of the change; (ii) the reason for the change; (iii) the primary location(s) in the plans where the change can be found; and (iv) significant impacts to the remainder of the plans as a result of the change.

[3] Based on current projections, Penn Power's funds will be fully committed in PY 3.

17. The Companies' Witness, Mr. George L. Fitzpatrick, Managing Director within the Management Consulting division of Black & Veatch Corporation, is testifying in support of all of the proposed changes included in the First Amended Plans, except those involving the changes to Rider EEC-C, which are being addressed by the Companies' Witness, Mr. Charles V. Fullem, First Energy Corp.'s Director of Rates and Regulatory Affairs – Pennsylvania. Mr. Fitzpatrick's testimony is set forth in Met-Ed/Penelec/Penn Power Statement No. 1; Mr. Fullem's, in Met-Ed/Penelec/Penn Power Statement No. 2.[4]

18. Prior to preparing this filing, the Companies conducted a stakeholder meeting in Harrisburg, Pennsylvania, on December 20, 2010 to discuss proposed modifications and associated rationale with key stakeholders. The Companies also completed a detailed plan modeling effort that updated key assumptions involving program participation, energy & demand savings, and cost assumptions.

## THE PROPOSED CHANGES TO THE CURRENT PLANS

### Changes - General

19. The changes that permeate throughout the First Amended Plans reflect changes in savings levels (mostly due to the loss factor adjustment discussed above and updates to the TRM) and customer participation levels, which are based on several factors including experience gained during the first year in which the Current Plans have been in effect. These changes are described in Section 1.1.1(A) in each of the First Amended Plans with the impacts of these

[4] The Companies reserve the right to introduce and offer additional witnesses and testimony during this proceeding, as needed.

changes summarized in Exhibits GLF-1, which is attached to Mr. Fitzpatrick's testimony.

**Program Changes**

20. The proposed changes to the current portfolios of programs are all based on either (i) an increase in the budget for large C/I programs; or (ii) a shift in funds from under-performing programs to other programs or components of programs.

21. Notwithstanding all of the program changes being proposed in this filing, the Companies remain below their statutory spending caps, and, as reflected in PUC Tables 7(A-E) in each of the First Amended Plans, the programs pass the Commission's Total Resource Cost test on both an individual and total portfolio basis.

22. All changes to program portfolios are discussed in Section 1.1.1 (B) of the First Amended Plans. Mr. Fitzpatrick also discusses these changes, and the impacts to the program portfolios caused by these changes, in his direct testimony and related exhibits.

*Large C/I Program Changes*

23. The First Amended Plans include an additional $ 4.5 million for the Large C/I budget for Met-Ed; $ 4 million for Penelec; and $ 400,000, for Penn Power. These budget increases are necessary primarily in order to make up the 11% deficit in peak demand reduction savings created by the loss factor adjustment and to add funds to the Large C/I Equipment Program - a program in which all currently approved funds for Met-Ed and Penelec are already fully committed, and for Penn Power, are expected to be fully committed in PY 3.

24. Without these budget increases, the Companies will not achieve their post-2011 Act 129 EE&C targets.

25. There are several other changes that affect the Large C/I programs. First, the Industrial Motors and Variable Speed Drive Program was consolidated with the Large C/I Equipment Program. This was done to leverage the success of the Equipment Program and raise customer awareness regarding the incentives offered for industrial motors. Also, because of the similarity in target markets, the consolidation creates both marketing and accounting synergies.

26. Second, the Companies changed both the incentive structure and incentive level for the large C/I lighting component of the C/I Equipment Program. In the current program, the lighting incentive is paid on a $/Watt ("W") basis. The First Amended Plans use a $/kWh incentive structure, which provides more consistency and a better correlation between the incentive paid and the energy savings contributed by the customer, and offers more predictability for purposes of managing the program budgets. The Companies have also established an incentive range not to exceed $0.09/kWh for this measure, with the initial incentive being set at $0.05/kWh based on recommendations by the Companies' program implementation contractor, SAIC Energy Environment & Infrastructure, LLC. These changes will take effect March 1, 2011, with a rebate true up mechanism incorporated should the Commission not approve them.

*Small C//I Program Changes*

27. The following changes have been made to the Small C/I programs:

    (a) The peak load reduction program has been expanded to include the Small C/I class.

(b) The incentive structure and incentive level for the Small C/I lighting measure within the C/I Equipment Program has been changed for the same reasons as, and in a manner identical to, that for the Large C/I customers discussed above.

(c) A new direct install component has been added to the Small C/I Equipment Program that will target strip malls, small grocery stores and certain restaurants in order to optimize EE&C savings from these high energy use customers.

(d) The Energy Audit and Technical Assessment Program has been consolidated with the Small C/I Equipment Program. Because an energy audit is the customer's logical first step towards developing an energy efficiency plan, the Company believes that this combination will provide a more effective introduction to the Equipment Program. It will also create marketing and accounting synergies and streamline the administration of the program.

(e) A new energy conservation kit is being added to the Small C/I Equipment Program through opt-in distribution. The kit will initially only offer CFL bulbs, partly to test market acceptance while also increasing market penetration for this popular measure, with the intent to include additional measures as market conditions warrant.[5]

28. All of the above changes are funded by shifting funds from existing program budgets within the Small C/I customer sector.

*Residential Program Changes*

29. Funds from under-performing programs, such as New Home Construction Program, Appliance Turn-In Program, and the Energy Efficient HVAC Equipment Program have been shifted to the Home Energy Audit and Outreach Program, the Energy Efficient Products Program and the Multi-Family Building Program in order to fund the following changes:

(a) The Residential Whole Building Comprehensive Program has been consolidated with the Home Energy Audit and Outreach Program

[5] This kit will also be offered to the Governmental & Institutional customer segment, with this change being the subject of a separate petition for expedited approval, which is being filed concurrent herewith.

(b) A new Behavioral Modification Program has been added to the residential sector to induce energy savings through the dissemination of benchmark usage data and tips for reducing energy consumption to participating customers.

(c) Incentives for residential air conditioner and heat pump tune-ups have increased from $25 to a maximum not to exceed $60, a change that is necessary in order to increase participation in this program. This change is the subject of a separate petition for expedited approval, which is being filed concurrent herewith.

(d) Upstream incentives for CFLs have been set at a range from $0.75 to $1.50/bulb, and at a level not to exceed $2.50/bulb for specialty bulbs. This change has been made to increase market penetration in the CFL market that has been relatively successful to date.

(e) Energy Conservation Kits for Multi-family residential and master-metered facilities have been added, partly to increase CFL market penetration and to also generate interest in other potential energy efficiency measures for Multi-family tenants.

(f) A variable speed pool pump replaces the "Pump and Motor Single Speed" incentive and increases the incentive level to $200 per pump in order to maximize savings for this particular measure.

*Government Program Changes*

30. The incentive ranges for incentives offered to the government sector have been increased to levels consistent with those being offered to the Large and Small C/I customer segments in order to generate or renew interest in these offerings. When the Current Plans were being developed, it was assumed that the Federal American Reinvestment Recovery Act ("ARRA") funds would further subsidize EE&C efforts in this customer sector. Because of limited funding, competition for the funds available to these entities and the expiration of ARRA grants, the Companies believe that these additional funds are necessary in order to renew or generate new interest in these offerings. This change is also the subject of a separate petition for expedited approval, which is being filed concurrent herewith.

**Editorial Changes**

31. Section 1.1.1(C) summarizes various editorial changes that were made to correct oversights or clarify portions of the Current Plans. These changes involve (i) corrections and clarifications to Met-Ed, Penelec and Penn Power Tables 5; (ii) clarification of the Companies' C/I demand response programs so as to be consistent with a January 12, 2011 Secretarial Letter; and (iii) a clarification through the addition of a footnote in Sections 3.2 through 3.5 of the First Amended Plans indicating that new measures may be added as appropriate as they are approved for inclusion in the TRM. None of these changes affect other aspects of the plans or program budgets.

**Changes to Streamline Administration**

32. All of the changes made to streamline administration have been discussed when discussing changes to the Current Plans: (i) consolidation of programs with similar characteristics; (ii) expanded use of incentive ranges; (iii) the addition of new measures as they are approved for inclusion in the TRM. However, it should be noted that these changes are designed not only to create administrative efficiencies, but, as more fully discussed in Section 1.1.1(D) of the First Amended Plans, to also allow future changes to programs without the need to seek further Commission approval.

**Changes to Rider EEC-C**

33. Act 129 directs the Commission to establish a cost recovery mechanism that ensures that approved measures are financed by the customer class that receives

the direct energy and conservation benefit of the measure and the EDC plans must include cost estimates for implementation of all measures.[6]

34. The current EEC-C charges were designed to be in effect through May 31, 2013. However, the Companies included a provision in the EEC-C Riders that would allow these charges to be changed if it was determined that the EEC-C charges would result in material over- or under-collections of recoverable costs incurred or expected to be incurred during the EEC Computational Period (March 1, 2010 through May 31, 2013). In such an instance, the EEC-C Riders allow the Companies to ask the Commission to approve interim revisions to the EEC-C charges.[7] Further, the EEC-C Riders provide that interim changes in the EEC-C charges may also address a re-allocation of program expenses for cost recovery among customer classes. Since the Current Plans do not exceed the two percent revenue cap, the Commission's Order accepting the Current Plans anticipated, not only the potential for increasing the allowable costs incurred up to the two percent revenue cap, but also the resulting change in charges should the increased costs become necessary to meet the Act 129 requirements.[8]

35. The First Amended Plans update each Company's revenue requirements, which result in changes to each customer class's EEC-C charge that would become effective June 1, 2011. In his testimony, Mr. Fullem provides an overview of the changes to Rider EEC-C that are necessary as a result of the changes being proposed in this filing. In essence, while rider charges are changing for all

---

[6] 66 Pa.C.S. § 2806.1(a) (11), 66 Pa.C.S. § 2806.1(b)(1)(i)(F).

[7] These EEC-C Riders appear in Met-Ed's Tariff Pa. P.U.C. No. 51, Penelec's Tariff Pa. P.U.C. No. 80 and Penn Power's Tariff Pa. P.U.C. No. 35.

[8] January 28, 2010 Order, pp. 42-44 and February 26, 2010 Order pp. 13-14.

customer classes as a result of revised sales and revenue collection projections, only the rider charge for Large C/I customers is increasing as a result of increases in program budgets.

36. The specific calculations of the proposed EEC-C charges are set forth in Exhibit CVF-1 attached to Mr. Fullem's direct testimony and also in Appendix H of each of the First Amended Plans. Page 1 of Exhibit CVF-1 shows the proposed EEC-C charges for Met-Ed; Page 2, the proposed EEC-C charges for Penelec; and Page 3, the proposed EEC-C charges for Penn Power.

37. Exhibit CVF-2, attached to Mr. Fullem's direct testimony, is a redline version of Penn Power's EEC-C Rider. The changes to this rider were made to reflect Penn Power's entrance into PJM. Beginning June 1, 2011, Penn Power's EEC-C would be charged based on a customer's PJM PLC as is currently being done at Met-Ed and Penelec. The change at Penn Power to PJM PLC is consistent with the Commission's October 28, 2009 Order. Inasmuch as this change in not necessary for either Met-Ed or Penelec, copies of their EEC-C Riders are not attached.

38. The proposed amendments to Rider EEC-C, in accordance with 66 Pa.C.S. §1307, will ensure full and current recovery of prudent and reasonable costs, including administrative costs, as approved by the Commission.[9]

39. The total costs of the Companies' First Amended Plans will not exceed 2% of the Companies' total annual revenue as of December 31, 2006 excluding: (i) Low Income Usage Reduction Programs pursuant to 52 Pa. Code § 58; (ii) expenditures included in the Companies' Consumer Education Program Cost

[9] 66 Pa.C.S. § 2806.1(b)(1)(i)(H).

Recovery Riders pursuant to Docket Nos. M-2008-2032261, M-2008-2032262, and M-2008-2032263; and (iii) costs associated with funding the SWE.

40. Following Commission approval, the Companies request that the Commission authorize the Companies to implement the revised EEC-C Riders consistent with this filing.

## REQUEST FOR AN EXPEDITED RULING

41. Because the Companies must implement the aforementioned changes in order to comply with post-2011 Act 129 EE&C targets, and they need time to incorporate the changes into current and new programs prior to the start of PY 3 on June 1, 2011, the Companies ask that the Commission address this petition on an expedited basis, issuing a final order as soon as is practically possible, and no later than May 19, 2011.

42. As indicated in a separate petition being filed concurrent herewith, the Companies are also requesting a separate expedited ruling on three specific changes affecting the Residential HVAC and Solar Equipment Program and C/I Equipment Programs involving Governmental & Institutional customers, with a request that an Order be issued approving these changes no later than March 17, 2011.

## BENEFITS OF THE FIRST AMENDED EE&C PLANS

43. As demonstrated in the First Amended Plans and related testimony, these plans remain consistent with Act 129, are in the public interest and should benefit consumers by providing them with cost effective opportunities to reduce electricity consumption.

44. The First Amended EE&C Plans include the following positive aspects:

- They continue to include a variety of EE&C measures and will provide the measures equitably to all customer classes pursuant to 66 Pa. C.S. §2806.1(a)(5).

- They continue to include a well-reasoned and balanced test of measures that are tailored to usage and to the potential for savings and reductions for each customer class.

- They continue to be cost effective, passing the Total Resource Cost test on both an individual program and total portfolio basis, and will provide a diverse cross-section of alternatives and reasonable mix of programs that should benefit consumers of all rate classes as required by 66 Pa. C.S. §2806.1(b)(1)(i)(I).

- They are designed to enable the Companies to meet or exceed the post-2011 Act 129 consumption and peak demand reduction targets based on currently available information, including current TRM savings values.

- The estimated costs of implementing the First Amended Plans are prudent and reasonable, are being reasonably allocated, and will be recovered from the customer class receiving the direct benefit of such measures.

45. The Joint Petitioner's attorney in this matter is identified below. All correspondence, notices, documents, orders or other communications with respect to the above-captioned proceedings should be addressed, with a copy (electronic if possible) to Kathy J. Kolich at the address provided below.

## CONCLUSION

**WHEREFORE**, the Companies respectfully request that the Commission amend its February 26, 2010 Order as necessary to (i) approve the changes to the Current Plans as set forth in the First Amended Plans; (ii) authorize Met-Ed, Penelec and Penn Power to implement the revised Rider EEC-C charges, to be effective on June 1, 2011, as described herein; (iii) approve the changes to Penn Power's Rider EEC-C to be effective June 1, 2011; and (iv) issue a final Amended Order as soon as practically possible and no later than May 19, 2011.

Dated: February 18, 2011

Respectfully submitted,

Kathy J. Kolich
Attorney No. 92203
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308
(330) 384-4580
(330) 384-3875
kjkolich@firstenergycorp.com

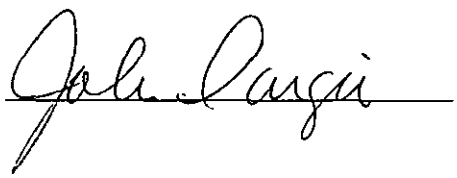
**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Amendment of the Orders Approving Energy Efficiency and Conservation Plans and Petition for Approval of First Amended Energy Efficiency and Conservation Plans** | : | **Docket Nos. M-2009-2092222**<br>**M-2009-2112952**<br>**M-2009-2112956** |

## VERIFICATION

I, John Dargie, hereby declare that I am Manager, National Accounts and Energy Efficiency Portfolio Management, FirstEnergy Service Company; that as such I am authorized to make this Verification on behalf of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company; that the facts set forth in the foregoing documents are true and correct to the best of my knowledge, information and belief; and that I expect that it will be able to be able to proved at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904, relating to unsworn falsifications to authorities.

Date: February 11, 2011



75193

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

| | | |
|---|---|---|
| **Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company for Amendment of the Orders Approving Energy Efficiency and Conservation Plans and Petition for Approval of First Amended Energy Efficiency and Conservation Plans** | : | **Docket No. M-2009-2092222**<br>**M-2009-2112952**<br>**M-2009-2112956** |

## CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing document upon the individuals listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

Service via Personal Delivery, as follows:

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

Service via First Class and Electronic Mail, as follows

Candis A. Tunilo, Esquire
Aaron Beatty, Esquire
Tanya McCloskey, Esquire
Office of Consumer Advocate
5th Floor, Forum Place
555 Walnut Street
Harrisburg, PA 17101
ctunilo@paoca.org
abeatty@paoca.org
tmccloskey@paoca.org

Daniel G. Asmus, Esquire
Office of Small Business Advocate
300 North Second Street, Suite 1102
Harrisburg, PA 17101
dasmus@state.pa.us

Charles Daniel Shields, Esquire
Carrie B. Wright, Esquire
Office of Trial Staff
Pennsylvania Public Utility Commission
Commonwealth Keystone Bldg., 2nd Fl. West
PO Box 3265
Harrisburg, PA 17105-3265
chshields@state.pa.us
carwright@state.pa.us

Service via Electronic Mail, as follows

Brian J. Knipe, Esquire
Buchanan Ingersoll & Rooney, PC
17 North Second Street – 15th Floor
Harrisburg, PA 17101-1503
brian.knipe@bipc.com

Harry S. Geller, Esquire
118 Locust Street
Harrisburg, PA 17101
hgellerpulp@palegalaid.net

Aspassia Staevska, Esquire
Scott Perry, Esquire
Dept. of Environmental Protection
400 Market Street, 9th Floor
Harrisburg, PA 17101-2301
astaevska@state.pa.us
scperry@state.pa.us

Barry Naum, Esquire
Charis Mincavage, Esquire
Shelby A. Linton-Keddie, Esquire
McNees Wallace & Nurick
100 Pine Street
PO Box 1166
Harrisburg, PA 17108
cmincavage@mwn.com
bnaum@mwn.com
skeddie@mwn.com

Christopher A. Sharp, Esquire
Christopher A. Lewis, Esquire
Melanie J. Tambolas, Esquire
Blank Rome LLP
One Logan Square
130 North 18th Street
Philadelphia, PA 19103-6998
sharp@blankrome.com
lewis@blankrome.com
tambolas@blankrome.com

Kevin J. Moody, Esquire
Eckert Seamans Cherin & Mellott
213 Market Street, 8th Floor
Harrisburg, PA 17101
kmoody@eckertseamans.com

Carolyn Pengidore
Clearchoice Energy
180 Fort Couch Road, Suite 265
Pittsburgh, PA 15241
carolyn@clearchoice-energy.com

Ruben S. Brown
The E Cubed Company LLC
1700 York Avenue, B1
New York, NY 10128
rsbrown@ecubedllc.com

Edward P. Yim, Esquire
Office of Representative Camille George
4 East Wing
PO Box 202074
Harrisburg, PA 17120
eyim@pahouse.net

Lee E. Hartz, Esquire
Assistant General Counsel
National Fuel Gas Distribution Corporation
PO Box 2081
Erie, PA 16512
hartzl@natfuel.com

Susan E. Bruce, Esquire
Vasiliki Karandrikas, Esquire
McNees Wallace & Nurick LLC
100 Pine Street
PO Box 1166
Harrisburg, PA 17108-1166
sbruce@mwn.com
vkarandrikas@mwn.com

Pamela C. Polacek, Esquire
McNees Wallace & Nurick
100 Pine Street
PO Box 1166
Harrisburg, Pa 17108-1166
ppolacek@mwn.com

Lillian S. Harris, Esquire
Hawke McKeon & Sniscak LLP
100 North Tenth Street
Harrisburg, PA 17105
lsharris@hmslegal.com

Scott H. DeBroff, Esquire
Rhoads & Sinon LLP
One South Market Square
PO Box 1146
Harrisburg, PA 17108-1146
sdebroff@rhoads-sinon.com

Dated: February 18, 2011

Kathy J. Kolich

Kathy J. Kolich
Attorney No. 92203
FirstEnergy Service Company
76 South Main Street
Akron, OH 44309
(330) 384-4580
(330) 384-3875
kjkolich@firstenergycorp.com

Met-Ed/Penelec/Penn Power Statement No. 1

**BEFORE THE**
**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**METROPOLITAN EDISON COMPANY**
**Docket No. M-2009-2092222**

**PENNSYLVANIA ELECTRIC COMPANY**
**Docket No. M-2009-2112952**

**PENNSYLVANIA POWER COMPANY**
**Docket No. M-2009-2112956**

**Petition of the Pennsylvania Utilities of FirstEnergy Corp.**

**For Approval of Changes to Their**

**Act 129 Energy Efficiency and Conservation Plans**

# Testimony
# of
# George L. Fitzpatrick

RECEIVED
FEB 18 2011
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**List of Topics Addressed**

1. Explanation of why the proposed changes are needed
2. Description of the proposed changes
3. Support for an expedited ruling on three specific changes
4. Concerns surrounding the current approval process for plan changes

## List of Exhibits

## I. Background

**Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

**A:** My name is George L. Fitzpatrick and my business address is Black & Veatch Corporation ("B&V"), 888 Veterans Highway, Suite 120, Hauppauge New York 11788.

**Q: PLEASE DESCRIBE YOUR CURRENT POSITION WITHIN BLACK & VEATCH CORPORATION.**

**A:** I am a Managing Director within the Management Consulting division of B&V. My current responsibilities include co-leading the Demand Side Management ("DSM")/Energy Efficiency ("EE") practice and leading the Regulatory Litigation Support practice within the Management Consulting division. I am also designated as a Subject Matter Specialist in a number of areas related to our electric and gas utility consulting practice.

**Q: PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE RELEVANT TO THE TESTIMONY YOU ARE NOW GIVING.**

**A:** My professional experience includes over 30 years within utility management and electric/gas technical and management consulting fields. My areas of expertise include: econometric and statistical analysis for energy and peak forecasting, load research, integrated resource planning, DSM/EE assessment, program design, implementation and evaluation, as well as generating plant life cycle economics, operating costs and performance modeling and overall utility investment prudence analyses.

I have testified extensively throughout the United States before state regulatory commissions. Areas in which I have provided testimony include:

- Integrated Resource Planning
- Electric and Gas DSM/EE Program Assessment, Implementation and Evaluation
- Comparative lifecycle economics of competing utility investments
- Econometric/statistical-based Load and Energy Forecasting
- Other Econometric and Statistical Studies on Utility- related Issues
- Weather Normalization Studies
- Strategic Planning
- Load Research Program Sample Design, Implementation and Analysis
- Rate Design
- Cost of Service Studies
- Renewable Program Evaluation
- Performance Standard design and statistical construction

A more complete description of my relevant experience is set forth in my professional resume which is provided as Appendix A to my testimony.

**Q. HAVE YOU PREVIOUSLY TESTIFIED AS A WITNESS BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION ("COMMISSION")?**

**A.** Yes, I previously testified as a witness in an earlier phase of this proceeding in which the Energy Efficiency and Conservation ("EE&C") Plans of Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power") (collectively, "Companies") currently in effect ("Current Plans") were approved by the Commission.

**Q. ARE YOU FAMILIAR WITH THE CURRENT PLANS?**

**A.** Yes. I, along with other members of B&V, worked closely with the EE&C team at FirstEnergy to develop each of the Companies' Current Plans. I also served as the Companies' witness supporting the approval of the Current Plans, providing direct, supplemental and rebuttal testimony during the evidentiary hearings, and overseeing the modifications necessary to ensure that the plans currently in effect were consistent with Commission directives.

1 **Q. WHAT IS YOUR ROLE IN THIS PROCEEDING?**

2 **A.** I am supporting the changes to the Current Plans that are being proposed by the
3 Companies in the Met-Ed First Amended Plan, Penelec First Amended Plan, and Penn
4 Power First Amended Plan (collectively, "First Amended Plans"), all of which are
5 included as Exhibits A, B and C, respectively, in the Joint Petition. The First Amended
6 Plans are copies of the Current Plans highlighted where appropriate to reflect the
7 proposed changes. Unless otherwise expressly stated, my testimony applies equally to all
8 three Companies and their respective plans. Moreover, instead of reiterating the contents
9 of the First Amended Plans in my testimony, I will, where appropriate, simply
10 incorporate relevant passages by reference.

11 **Q. *HOW ARE THE CHANGES REFLECTED IN THE FIRST AMENDED PLANS?***

12 **A.** The changes to the Current Plans have been prepared in accordance with the
13 September 1, 2010 Secretarial Letter, "Proposals to Change Energy Efficiency and
14 Conservation Plans Approved by the Commission Pursuant to Act 129 of 2008".
15 Specifically, Section 1.1.1 of the First Amended Plans summarizes the changes being
16 made, the reason for those changes, the primary location(s) in the plans where the
17 changes can be found, and the impact these changes have on the remainder of the plans.
18 Changes to the text have been black-lined and changes to tables and charts have been
19 highlighted by cell. Also, many of the tables and charts included in the body of the
20 Current Plans are copies of identical tables and charts included in the appendices of those
21 plans. These redundant tables and charts have been removed from the body of the First
22 Amended Plans, instead directing the reader to the appendices.

1 **Q. *DO THE FIRST AMENDED PLANS UPDATE ALL EVENTS THAT HAVE***
2 **OCCURRED SINCE THE CURRENT PLANS WERE IMPLEMENTED?**
3 **A.** No. The First Amended Plans are not intended to be updated plans that reflect all events
4 that have transpired since the Current Plans were implemented. As example only, the
5 First Amended Plans do not update the section in which contractor selection is discussed,
6 even though this process has been completed since the Current Plans were approved. To
7 make these types of changes in the First Amended Plans would convert each of the plans
8 to totally new updated plans. That is not the purpose of this filing. Rather, the First
9 Amended Plans simply highlight the proposed changes to the Current Plans that the
10 Companies believe are necessary in order to meet their statutory post-2011 EE&C
11 obligations.
12 **Q: WHAT METHODOLOGY WAS USED TO MODIFY THE CURRENT PLANS?**
13 **A:** As a starting point, the Companies reviewed the three Commission Orders (entered
14 October 28, 2009, January 28, 2010 and February 25, 2010) that ultimately shaped the
15 Current Plans. When modeling the First Amended Plans, ADM Associates, Inc.
16 ("ADM"), the Companies' program evaluator, used the same model as that used by B&V
17 to develop the Current Plans. Changes to the model inputs were made as necessary to:
18 (i) reflect insights gained through program implementation; (ii) reflect material revisions
19 to plan assumptions and/or savings algorithms arising from changes in the Technical
20 Reference Manual ("TRM"); and, based on the aforementioned information,
21 (iii) rebalance participation levels, incentive levels and budgets as appropriate to optimize
22 the program portfolio.

**Q. WHAT WAS B&V'S ROLE IN THE DEVELOPMENT OF THE MODEL USED TO DESIGN THE FIRST AMENDED PLANS?**

**A.** B&V developed the initial EE&C plan model on behalf of the Companies. The changes to the model inputs that were necessary when designing the First Amended Plans reflect the joint efforts of the Companies' EE&C program evaluation team, which consisted of FirstEnergy EE&C employees, professionals from ADM and members of the B&V team (including me) that designed the original EE&C plan and model. The Companies' program evaluator, ADM, worked closely with B&V staff to update the models. B&V staff, under my direct supervision, advised ADM and provided guidance on the use of the plan model during the development of the First Amended Plans, and also provided insights into the data and the underlying assumptions used in the model in order to ensure that the changes identified by the Companies' EE&C program evaluation team were properly reflected in the updated models and the results of those changes in model inputs were properly reflected in each of the Companies' First Amended Plans.

## II. Purpose of Testimony and Current Status

**Q: WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY AND RELATED EXHIBITS?**

**A:** I will (i) explain several factors that jeopardize the Companies' ability to meet post-2011 EE&C targets under the Current Plans; (ii) describe the changes included in the First Amended Plans that the Companies believe are necessary in order to meet those targets; (iii) explain why three specific changes included in the First Amended Plans must be approved on an expedited basis; (iv) explain other changes being proposed in the First Amended Plans that either clarify or correct parts of the Current Plans or streamline the

1 administrative process in an effort to minimize costs to customers and more effectively
2 use the funds that have been approved; and (iv) explain the Companies' concerns
3 surrounding the current approval process for plan changes. It should be noted that the
4 three changes for which an expedited ruling is being requested are the subject of a
5 separate petition being filed concurrent with the Joint Petition for approval of the changes
6 to the Current Plans. Because these three changes are included with all other changes
7 included in the First Amended Plans, rather than submit separate testimony in
8 conjunction with that separate petition, my testimony herein is incorporated by reference
9 into that separate filing to support the requested changes and the need for approval on an
10 expedited basis.

11 **Q. PLEASE DESCRIBE THE EXHIBITS THAT ARE ATTACHED TO YOUR**
12 **TESTIMONY.**

13 A. The following exhibits are included with my direct testimony:

- Exhibit GLF-1 — Summary of Impacts From Major Change Components to Post-2011 EEC Targets (All Companies)
- Exhibit GLF-2 — Summary of Program Budgets/Savings Level Impacts (Met-Ed)
- Exhibit GLF-3 — Summary of Program Budgets/Savings Level Impacts (Penelec)
- Exhibit GLF-4 — Summary of Program Budgets/Savings Level Impacts (Penn Power)

14

15 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECT**
16 **SUPERVISION?**

17 **A.** Yes, they were.

## III. Act 129 Target Compliance

**Q. ARE THE COMPANIES ON TRACK TO MEET THEIR 2011 STATUTORY TARGETS SET FORTH IN ACT 129?**

A. Yes. Based on information currently available, it appears that all of the Companies will meet their May 31, 2011 statutory energy efficiency targets.

**Q. ARE THE COMPANIES ON TRACK TO MEET THEIR POST-2011 EE&C TARGETS?**

A. Based on certain factors that have come to light since the implementation of the Current Plans, I do not believe that the Companies will meet their post-2011 targets without making the changes identified in the First Amended Plans.

**Q. WHAT ARE THOSE FACTORS?**

A. First, a key underlying savings assumption was changed in the First Amended Plans. The Current Plans include an 11% transmission and distribution loss factor that was used to gross up all EE&C program savings calculations so as to reflect savings at the system generation level. After the Current Plans were approved, the Statewide Evaluator ("SWE") and the Commission's Bureau of Conservation Economics and Energy Planning clarified that EE&C savings projections should be calculated at the retail level for Act 129 compliance purposes, and at the system generation level for Total Resource Cost ("TRC") test purposes. As a result, all of the savings projections included in the Current Plans are overstated by approximately 11%. Therefore, the First Amended Plans recalculate projected savings, which, in turn, requires Plan modifications to make up this 11% deficit. The impact from this change on the projected program results in both energy and demand savings as originally set forth in the Current Plans is summarized in

Exhibit GLF-1. Second, certain programs are performing at energy or demand savings levels below those originally anticipated, partly due to updates to the Technical Reference Manual ("TRM"), the impacts of which are also summarized in Exhibit GLF-1. Other factors, such as the downturn in the economy and customer participation levels in certain programs and measures different from those assumed in the Current Plans also contributed to these results. And third, some programs are exceeding expectations, even to the point where funding for certain programs has been fully committed, thus requiring program suspension until additional funding can be approved by the Commission.

In light of these factors, the Companies must make certain changes to their Current Plans in order to meet their post-2011 Act 129 targets. Moreover, except for the three changes for which the Companies are seeking expedited approval, all other changes included in the First Amended Plans should be incorporated prior to the start of Program Year 3 on June 1, 2011. Therefore, it is imperative that the Commission issue a final Order approving these changes no later than May 19, 2011.

## IV. Proposed Changes – General

**Q. WHAT ARE THE CHANGES BEING PROPOSED BY THE COMPANIES?**

**A.** The Companies must adjust the savings projections and customer participation levels included in the Current Plans and, as a result of these adjustments, certain changes to the program portfolio included in the Current Plans (and reflected in the First Amended Plans) are necessary in order for the Companies to meet their post-2011 Act 129 targets. Specifically, additional funding is needed for the Large Commercial Industrial ("C/I") programs; and existing funds must be shifted from various under-performing programs within a customer sector either (i) to programs and measures within that sector that have

proven to be more effective; (ii) to new programs or measures within that sector; or (iii) to programs and measures within that sector to increase incentives. In addition to these changes, the Companies are also making some minor editorial changes to correct or clarify the Current Plans; and incorporating changes, such as the consolidation of programs and the expanded use of incentive ranges, in an effort to streamline program administration.

**Q: PLEASE EXPLAIN THE CHANGES TO SAVINGS LEVELS AND PARTICIPATION LEVELS.**

**A.** The need for these changes is generally discussed in Section 1.1.1, and the changes are summarized in Section 1.1.1(A) of the First Amended Plans.

## V. Proposed Changes to the Program Portfolio

**Q. PLEASE EXPLAIN THE CHANGES TO THE PROGRAM PORTFOLIO INCLUDED IN EACH OF THE CURRENT PLANS.**

**A.** All of the changes to the Companies' program portfolios are summarized in Section 1.1.1(B) of the First Amended Plans. In essence, all of these changes arise either from (i) an increase in funds for the Large C/I programs; or (ii) a shift of funds from under-performing programs to other programs or components of programs.

**Q. HOW MUCH ARE THE BUDGETS FOR THE LARGE C/I PROGRAMS BEING INCREASED?**

**A.** The First Amended Plans include an additional $ 4.5 million for Met-Ed; $ 4 million for Penelec; and $ 400,000 for Penn Power, with the budget adjustments being broken out between the peak demand reduction program and the Large C/I Equipment Program as follows:

| Company | DR Program | LCI Equip Program |
|---|---|---|
| **Met-ED** | $ 2.5 million | $ 2 million |
| **Penelec** | $ 2.6 million | $ 1.4 million |
| **Penn Power** | $ - 1.5 million | $ 1.9 million |

I will explain why these funds are necessary and how they will be used. The Companies' Witness Mr. Charles V. Fullem, will explain the rate impacts resulting from these budgetary increases in his testimony set forth in Met-Ed/Penelec/Penn Power Statement No. 2.

**Q. WHY MUST THE COMPANIES ADJUST THEIR BUDGETS FOR THEIR RESPECTIVE PEAK DEMAND REDUCTION PROGRAMS?**

**A.** As already explained, the First Amended Plans reflect a recalculation of projected EE&C savings at the retail, rather than at the generation level. This results in an immediate 11% shortfall in projected program results. There are also significant reductions in estimated peak demand savings resulting from modifications to the TRM and customer participation levels in certain programs and measures different from those assumed in the Current Plans. In order to off-set the impacts of these factors, all three Companies had to significantly increase participation and budgets in 2012, which is the year that Act 129 peak demand reduction compliance will be measured. In order to conserve Act 129 program funding, the scope of this program and resulting budget in 2011 has been significantly reduced to only a pilot level. The net effect of these changes results in Met-Ed and Penelec needing greater load reduction commitments under contract during the combined 2011-12 period compared to their Current Plans, while Penn Power needs less under contract during the two-year period when compared to its Current Plan. Thus,

1 the peak demand reduction program budget for Met-Ed and Penelec requires an overall
2 increase, while Penn Power's comparable program budget is reduced.

3 **Q. WHY MUST THE COMPANIES INCREASE THEIR BUDGETS FOR THEIR**
4 **RESPECTIVE LARGE C/I EQUIPMENT PROGRAMS?**

5 **A.** The Large C/I Equipment Programs have proven to be extremely popular, with Met-Ed
6 and Penelec's approved funding already fully committed, which caused these programs to
7 be suspended until further funding can be approved. Based on current projections and
8 anticipated applications from customers, it appears that Penn Power's approved funding
9 for its Large C/I Equipment Program will be fully subscribed in Program Year 3. These
10 budget increases are necessary in order to continue each of the Companies' programs.
11 Without this additional funding, the Companies will not meet their post-2011 Act 129
12 EE&C targets.

13 **Q. WERE ANY OTHER CHANGES MADE TO LARGE C/I PROGRAMS?**

14 **A.** Yes. These additional changes are discussed in Sections 1.1.1(B)(3), (4) and (5) of the
15 First Amended Plans.

16 **Q. YOU ALSO INDICATED THAT CHANGES WERE BEING MADE AS A**
17 **RESULT OF A SHIFT IN FUNDS FROM UNDER-PERFORMING PROGRAMS.**
18 **WHY IS THIS NECESSARY?**

19 **A.** Based on demonstrated customer program preferences, changes to the TRM, and the
20 overall economic downturn, certain program results are below those anticipated at the
21 time the Current Plans were developed. If funds are not shifted from these under-
22 performing programs to more effective programs and program components, the
23 Companies will not achieve their post-2011 Act 129 EE&C targets.

**Q. WHAT TYPES OF CHANGES HAVE BEEN MADE AS A RESULT OF THESE SHIFTS IN FUNDS?**

**A.** The following changes have been made to the Small C/I programs as a result of a shift in program funds:

i. The peak load reduction program has been expanded to include the Small C/I class.

ii. The incentive structure and incentive level for the C/I lighting measure within the Small C/I Equipment Program has been changed.

iii. A new direct install component has been added to the Small C/I Equipment Program that will target strip malls, small grocery stores and certain restaurants so as to capture potential energy savings from these high energy use customers.

iv. A new energy conservation kit is being added to the Small C/I Equipment Program through opt-in distribution. The kit will initially offer only CFL bulbs, partly to test market acceptance while also increasing market penetration for this popular measure, with the intent to include additional measures as market conditions warrant.

v. The Energy Audit and Technical Assessment Program has been consolidated with the Small C/I Equipment Program. Because an energy audit is the customer's logical first step towards developing an energy efficiency plan, the Company believes that this combination will provide a more effective introduction to the Equipment Program. It will also create marketing and accounting synergies and streamline the administration of the program.

All of the above changes are funded through existing Small C/I program budgets with no need for an overall budget increase within this customer sector. Each of these changes is discussed in more detail in Section 1.1.1(B) of the First Amended Plans, with the impacts both to program budgets and projected energy and demand savings summarized in attached Exhibits GLF-2, GLF-3 and GLF-4.

Similarly, a shift in program funds have allowed for the following changes to residential and government programs:

(a) The Residential Whole Building Comprehensive Program has been consolidated with the Home Energy Audit and Outreach Program.

(b) A new Behavioral Modification Program has been added to the residential sector in which participating customers receive benchmark usage data and tips for reducing energy consumption.

(c) Incentives for residential air conditioner and heat pump tune-ups have increased from $25 to a maximum not to exceed $60, a change that is necessary in order to increase participation in this program.

(d) Upstream incentives for CFLs have been set at a range from $0.75 to $1.50/bulb, and at a level not to exceed $2.50/bulb for specialty bulbs. This change has been made to increase market penetration in the CFL market that has been relatively successful to date.

(e) Energy Conservation Kits for Multi-family residential and master-metered facilities have been added, partly to increase CFL market penetration and to also generate interest in other potential energy efficiency measures for Multi-family tenants.

(f) A variable speed pool pump replaces the "Pump and Motor Single Speed" incentive and increases the incentive level to $200 per pump in order to maximize savings for this particular measure.

(g) Government incentives have been increased to levels consistent with those being offered Large and Small C/I customers.

Each of these changes is funded by shifting currently approved budget dollars from programs within the applicable customer segment, thus requiring no increase in the overall budget for these segments. These changes have also been summarized in Section 1.1.1(B) of the First Amended Plans, with impacts to program budgets and projected savings levels summarized on attached Exhibits GLF-2, GLF-3 and GLF-4.

**Q. HAVE ANY OF THE CHANGES DESCRIBED IN SECTION 1.1.1(B) OF THE FIRST AMENDED PLANS BEEN IMPLEMENTED?**

**A.** No. However, effective March 1, 2011, the Companies will make the changes to the Large and Small C/I lighting component within their respective equipment programs.

1 **Q. PLEASE EXPLAIN THESE CHANGES.**

2 **A.** As discussed in Sections 1.1.1B(3), (4), (8) and (9) of the First Amended Plans, the
3 Companies changed both the incentive structure and incentive level for the Large and
4 Small C/I lighting component of their respective equipment programs. In the Current
5 Programs, the lighting incentive is paid on a $/Watt ("W") basis ("$0.65/W Rebate based
6 on TRM Table"). The First Amended Plans use a $/kWh incentive structure. Under the
7 current $/W structure, customer load factors affect the amount of incentive that is paid to
8 a customer. Depending on a customer's load factor, the $/W incentive would equate to a
9 $/kWh range of approximately $0.085/kWh for high energy use customers to $0.15/kWh
10 for lower use customers. In the First Amended Plans, this has been changed to a $/kWh,
11 basis, with a range not to exceed $0.09/kWh.

12 **Q. WHY WERE THESE CHANGES NECESSARY?**

13 **A.** The change to a $/kWh incentive structure provides more consistency and a better
14 correlation between the incentive paid and the energy savings contributed by the
15 customer, and offers more predictability for purposes of managing the program budgets.
16 The Companies also plan to set the initial $/kWh incentive level at $0.05/kWh which is
17 well within the not to exceed level of $0.09/kWh set forth in the First Amended Plans.
18 This will be done for several reasons. First, it's not unusual to reduce an incentive level
19 once a program is launched, especially when the measure has proven effective, as is the
20 case with lighting. More importantly in this instance, the Companies are relying on the
21 expertise of its program implementation contractor, SAIC Energy Environment &
22 Infrastructure, LLC, who believes that the incentive levels currently being paid are higher
23 than necessary given the current demand for this measure. The setting of the initial
24 incentive level at $0.05/kWh will be done in an effort to optimize the use of program

1 funds and contribute towards the conservation of funds remaining within the statutory
2 spending caps. Because the incentive is set as a range not to exceed $0.09/kWh, the
3 Companies can adjust the incentive payout within this range, should market conditions
4 warrant.

5 **Q. WHY DON'T THE COMPANIES WAIT UNTIL THE FIRST AMENDED PLANS**
6 **ARE APPROVED BY THE COMMISSION BEFORE IMPLEMENTING THESE**
7 **CHANGES TO THE LIGHTING INCENTIVE?**

8 **A.** Based on current projections, if these changes to the incentive level and structure are not
9 made immediately, the funding for the Large C/I Equipment Program will be prematurely
10 exhausted and a significant portion of the approved funding for the Small C/I Equipment
11 Program will be committed at incentive levels that if sustained, would jeopardize the
12 Companies' ability to achieve their post-2011 Act 129 targets within their 2% spending
13 cap. Other EDCs filed requests for amendments to their EE&C plans with approvals
14 taking on average approximately four months. The Companies cannot afford to
15 overspend for these measures during the regulatory approval process, especially if such a
16 process is expected to take approximately four months. However, because the
17 Companies recognize the Commission's need to review changes such as those made to
18 the lighting incentives, the Companies are making these changes contingent upon
19 Commission approval and are fully prepared to issue additional rebates should the
20 Commission not agree with these changes. Because there is a potential to overspend for
21 the lighting measures during the approval process -- especially when the Companies are
22 subject to a 2% spending cap -- the Companies attempted to meet their needs while
23 staying within the spirit of the Commission's review requirements by including a rebate
24 true-up mechanism should the need arise.

1 **Q. WHY DIDN'T THE COMPANIES FILE A SEPARATE REQUEST FOR THIS**
2 **CHANGE TO BE ADDRESSED ON AN EXPEDITED BASIS?**
3 A. While the Commission has suggested this approach, they provided no guidance on the
4 procedures to be followed or the time frame in which such a ruling would occur.
5 Therefore, the Companies could not risk waiting and felt that their contingency plan
6 provided the necessary protections.

7 **VI. Proposed Changes to the Program Portfolio Requiring Expedited Treatment**

8 **Q. ARE THERE OTHER ASPECTS OF THE FIRST AMENDED PLANS FOR**
9 **WHICH THE COMPANIES ARE SEEKING AN EXPEDITED REVIEW?**
10 A. Yes. The Companies are also filing a separate petition concurrent with this filing, asking
11 the Commission to amend its February 26, 2010 Order no later than March 17, 2011,
12 approving three specific changes: (i) an amendment to increase incentives paid for the
13 Residential HVAC and Heat Pump Maintenance/Tune-ups ("HVAC Tune-Ups"); (ii) an
14 amendment to add an Energy Conservation Kit offering to Governmental & Institutional
15 customers within the Small C/I Equipment Program; and (iii) an amendment to increase
16 incentives paid to Governmental & Institutional customers for various measures within
17 the C/I Equipment Programs.

18 **Q. PLEASE DESCRIBE THE CHANGE TO THE RESIDENTIAL HVAC TUNE-UP**
19 **PROGRAM.**
20 A. In the Current Plans, the incentive paid for HVAC Tune-Ups is $25 and up to $40 with a
21 qualified furnace fan replacement. In the First Amended Plans, this incentive is increased
22 to a maximum of $60 for HVAC Tune-Ups and up to $75 with a qualified furnace fan
23 replacement. The Companies believe that this change is necessary in order to increase
24 participation in the HVAC Program.

1 **Q. WHY ARE THE COMPANIES SEEKING AN EXPEDITED RULING FOR THIS**
2 **CHANGE?**
3 A. There are several reasons. First, studies show that most HVAC tune-ups occur in the
4 spring before the start of the cooling season. Therefore, the program must launch by
5 April 1, 2011 in order to maximize results from this measure. If the regulatory process
6 for approval of the First Amended Plans is consistent with past practice to date, the
7 Companies will miss a significant number of opportunities without expedited approval of
8 this change. And, second, unlike the lighting incentive already discussed, the Companies
9 believe that the HVAC Tune-Up rebate incentives are *too low*. If the Companies make
10 this adjustment to the HVAC incentive and the Commission rejects it, the Companies
11 would be forced to recoup monies already paid to customers – a situation that would
12 more than likely have negative repercussions with customers. Therefore, the Companies
13 cannot include a rebate true-up mechanism similar to the lighting rebate and must obtain
14 approval prior to making this change.
15 Q. **PLEASE DESCRIBE THE CHANGES TO THE GOVERNMENT AND**
16 **INSTITUTIONAL CUSTOMER SEGMENT FOR WHICH THE COMPANIES**
17 **ARE SEEKING AN EXPEDITED RULING.**
18 A. There are two changes in this customer segment for which the Companies are seeking an
19 expedited ruling. First, the First Amended Plans include an offering of an Energy
20 Conservation Kit to Governmental & Institutional customers within the Small C/I
21 Equipment Program through opt-in distribution. The kit will initially only offer CFL
22 bulbs, partly to test market acceptance while also increasing market penetration for this
23 popular measure, with the intent to include additional measures as market conditions
24 warrant. The second change increases the incentives for the Government & Institutional

customer segment to levels consistent with those being offered Large and Small C/I customers within both C/I Equipment Programs. When the Current Plans were being developed, it was assumed that the Federal American Reinvestment Recovery Act ("ARRA") funds would further subsidize EE&C efforts in this customer segment. Because of limited funding, competition for the funds available to these entities and the expiration of ARRA grants, the Companies believe that the Governmental & Institutional customers need the same level of incentive as other C/I customers in order to overcome these obstacles. The Companies believe that these changes will increase participation throughout this customer segment – a segment which, for the reasons previously mentioned, has, to date, been reluctant to participate in EE&C programs being offered by the Companies.

**Q. WHY IS AN EXPEDITED RULING NECESSARY FOR THESE CHANGES?**

A. The Companies believe that implementation of these changes as soon as practically possible will increase the probabilities of achieving Act 129 goals specific to this customer segment.

**Q. WILL ANY OF THE CHANGES FOR WHICH EXPEDITED APPROVAL IS BEING SOUGHT IMPACT OVERALL RATES?**

A. No. All of these changes will be implemented within the currently approved program budgets.

**Q. DOES THE REVISED PROGRAM PORTFOLIO INCLUDED IN EACH COMPANY'S FIRST AMENDED PLAN PASS THE COMMISSION'S TRC TEST?**

**A.** Yes, as demonstrated on PUC Tables 7(A-E) in each of the First Amended Plans, each Company's revised program portfolio passes the TRC test.

## VII. Other Changes to the Current Plans

**Q. DO THE FIRST AMENDED PLANS REFLECT OTHER REVISIONS?**

A. Yes, the First Amended Plans include certain editorial changes that clarify or correct the Current Plans, as well as certain other changes to improve administration of the plans.

**Q. PLEASE DESCRIBE THE EDITORIAL CHANGES.**

A. The Companies have made several corrections or clarifications to Met-Ed, Penelec and Penn Power Tables 5 which are discussed in Section 1.1.1(C)(1) in each of the First Amended Plans. They have also updated their C/I Demand Response Programs by removing references to "PJM Capacity Programs" so as to be consistent with the directive set forth in the Commission's January 12, 2011 Secretarial Letter. These changes are summarized in Section 1.1.1(C)(2) in each of the First Amended Plans. And finally, the Companies have added a footnote in Sections 3.2 through 3.5 of each of the First Amended Plans to clarify that the Companies will add new measures as appropriate to the various programs as new measures are approved for inclusion in the TRM. This change is more fully discussed in Section 1.1.1(C)(3) of the First Amended Plans.

**Q. PLEASE DESCRIBE THE CHANGES TO IMPROVE ADMINISTRATION OF THE PLANS.**

A. In an effort to streamline the administration of the plans generally and, more specifically, the various programs within the amended program portfolios, the Companies have made three changes, which are described in Section 1.1.1(D) of the First Amended Plans. First, they have combined several of the under-performing programs with more effective programs with similar characteristics. This action results in marketing and accounting synergies and provides a larger combined budget that will allow the Companies to more effectively direct the funds for changing market demand without additional Commission

1 approval. Second, while some of the incentive levels in the Current Plans were approved
2 as ranges, the First Amended Plans have restated *all* incentive levels as ranges, thus
3 providing the Companies with the flexibility to change incentive levels within those
4 ranges as market conditions warrant without further Commission approval, provided that
5 the program budgets do not exceed those approved by the Commission. And, third, the
6 Companies have added a footnote to clarify their intention to offer new measures within
7 existing programs and approved budgets as new measures are approved for inclusion in
8 the TRM. As designed, the Companies would not seek further Commission approval
9 prior to making the additions provided that the aforementioned conditions are met.

10 **Q. WHY DO THE COMPANIES BELIEVE THAT THESE EFFORTS TO**
11 **STREAMLINE THE ADMINISTRATION OF THE PLANS WILL ALLOW**
12 **THEM TO MAKE THE CHANGES WITHOUT FURTHER COMMISSION**
13 **APPROVAL?**

14 **A.** With regard to the consolidation of programs, the newly combined program will simply
15 include more features within a single budget. The Commission has never managed the
16 day-to-day operations of an EE&C program or its various components; nor has it ever
17 managed how program funds are to be allocated. To do so would shift responsibility for
18 program management and Act 129 compliance to the Commission. As for the expanded
19 use of incentive ranges, these are open to review in this proceeding, thus offering all
20 interested parties the opportunity to challenge these ranges. If the Commission approves
21 the range, then it stands to reason that any incentive level within that range has also been
22 approved. The same is true for new measures, albeit through a different approval
23 process. Before any new measure is added to the TRM, it must be approved by the
24 Commission after it has been fully vetted through a separate proceeding that offers all

interested parties the opportunity to challenge the measure and the savings value attributed to it. If the measure has been approved by the Commission and the use of the measure within a program does not exceed the Commission approved budget for that program, it is unclear what further review by the Commission is necessary. The submission of any of these types of changes for additional Commission approval would be redundant and a waste of time and resources for all involved, thus needlessly increasing compliance costs. With the statutory spending caps, no EDC can afford to spend money unnecessarily without jeopardizing its ability to meet post-2011 Act 129 targets.

**Q. WHY DID THE COMPANIES FEEL THAT THESE CHANGES WERE NECESSARY?**

**A.** These changes were necessary for several reasons. First, as I have already explained, they streamline the administration of the various programs, thus minimizing administration costs. More importantly, these changes build in much needed flexibility to manage the various programs. Based on recent Commission orders, it appears to be the Commission's policy to require any and *all* changes to an EDC's EE&C plan, no matter how small, to be submitted for review prior to their implementation. This approach is setting the Companies up for failure by (i) compressing an already small compliance window; (ii) unnecessarily increasing compliance costs by requiring the Companies to spend valuable time and resources preparing petitions for amendments for relatively minor plan adjustments; and (iii) hamstringing their ability to quickly adjust as market conditions warrant.

The window for compliance with post-2011 Act 129 requirements is relatively narrow, and the resources available to accomplish it are limited. Therefore these resources should

not be overburdened by requiring applications to make amendments for changes that have already been addressed by the Commission. Furthermore, the preparation of these petitions and supporting materials requires outside resources, which increases compliance costs and may threaten the Companies' ability to remain within the statutory 2% spending caps. And finally, the market is fluid and requires constant monitoring and "fine tuning", especially given the relative newness of most of the EE&C programs being offered in the Companies' service territories. If the Companies must wait for approval prior to making these minor changes, they could miss opportunities, or pay more for an opportunity than the market requires.

The Companies believe that all parties have an opportunity in this proceeding to fully vet the incentive ranges included in the First Amended Plans; and fully vet new measures and corresponding savings levels, through the TRM update process. This, when coupled with the two percent spending cap, the Commission's approval of overall program budgets and its prohibition against the shifting of funds among customer classes, provides sufficient safeguards without the need for redundant reviews of relatively minor adjustments to programs – especially when parameters have been established and already approved.

**Q. THE COMMISSION ALLOWS FOR AN EXPEDITED REVIEW PROCESS. WON'T THIS ALLEVIATE YOUR CONCERNS?**

**A.** While the Commission has provided for an expedited review process, it has not provided any details or timeframes on which the Companies can rely when planning for adjustments. Moreover, while the review process may be expedited, unless the Commission substantially reduces the amount of information and the format in which such information is presented, the expedited review process will not alleviate these concerns, primarily due to the time it takes and the costs required when preparing the

filings that would receive expedited review. Without more details on the Commission's expedited process, the only way to alleviate these concerns is to provide the Companies with the flexibility described in Section 1.1.1(D) and incorporated into the First Amended Plans.

**Q PLEASE DESCRIBE THE KEY FEATURES OF THE FIRST AMENDED PLANS?**

A. Like the Current Plans, the First Amended Plans:

- Continue to include a variety of EE&C measures and will provide the measures equitably to all customer classes pursuant to 66 Pa. C.S. §2806.1(a)(5).

- Continue to include a well-reasoned and balanced test of measures that are *tailored to usage and to the potential for savings and reductions for each customer* class.

- Continue to be cost effective, passing the Total Resource Cost test on both an individual program and total portfolio basis, and will provide a diverse cross-section of alternatives and reasonable mix of programs that should benefit consumers of all rate classes as required by 66 Pa. C.S. §2806.1(b)(1)(i)(I).

- Are designed to enable the Companies to meet or exceed the post-2011 Act 129 consumption and peak demand reduction targets based on currently available information, including current TRM savings values.

- Are designed in such a way that the estimated costs of implementing the First Amended Plans are prudent and reasonable, are being reasonably allocated, and will be recovered from the customer class receiving the direct benefit of such measures.

**Q: DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

**A:** Yes, it does.

Exhibit GLF-1
All Companies

**Summary of Impacts From Major Change Components to Post-2011 EEC Targets**

| Line No. | Company | Current Plan | | | Removal of 1.1% Loss True-Up* | | Update for Changes to TRM* | | First Amended Plan Summary** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Budget ($)*** | MWh | kW | MWh | kW | MWh | kW | Budget ($)*** | MWh | kW |
| 1 | Met-Ed | 85,208,473 | 458,243 | 128,590 | 407,836 | 115,545 | 381,956 | 108,346 | 89,708,473 | 478,202 | 126,306 |
| 2 | Penelec | 74,990,951 | 447,917 | 110,392 | 398,646 | 99,349 | 381,103 | 91,954 | 78,990,951 | 458,159 | 117,293 |
| 3 | Penn Power | 25,172,832 | 146,032 | 45,875 | 129,968 | 37,479 | 125,000 | 40,253 | 25,572,832 | 159,829 | 46,708 |

4 *Note that original Current Plan budget remains unchanged.

5 ** Reallocation of "within class" funding and Overall Increases to Plan Budgets

6 *** Budgets reflect Program-specific costs. Common costs are not included and have not changed between the Current and First Amended Plans

**Summary of Program Budgets/Savings Level Impacts**

| Line No. | Sector | Program | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|---|
| 1 | RES | Residential Direct Load Control | $0 | (265) | (5,303) |
| 2 | | Home Energy Audits and Outreach$_1$ | $4,032,871 | 1,799 | (704) |
| 3 | | Appliance Turn-In | ($3,744,621) | (19,839) | (1,376) |
| 4 | | Energy Efficient HVAC Equipment | ($739,607) | (3,833) | (4,363) |
| 5 | | Energy Efficient Products | $3,244,852 | 30,555 | (3,818) |
| 6 | | New Construction | ($5,748,794) | (11,605) | (12,016) |
| 7 | | Behavioral Modification and Education | $2,846,686 | 34,014 | 846 |
| 8 | | Multifamily Building | $108,612 | 790 | (14) |
| 9 | | WARM Plus | $0 | 2,289 | 365 |
| 10 | SCI | PJM Demand Response | $600,000 | 0 | 5,332 |
| 11 | | C/I Equipment$_2$ | ($625,633) | (32,176) | (18,002) |
| 12 | | Governmental & Institutional - SCI | $25,633 | (2,836) | (2,765) |
| 13 | LCI | C/I Equipment$_3$ | $1,424,046 | 17,980 | 266 |
| 14 | | PJM Demand Response | $2,500,575 | 0 | 40,305 |
| 15 | | Governmental & Institutional - LCI | $575,379 | 4,186 | (710) |
| 16 | STL | Street Lighting | $0 | (764) | 0 |
| 17 | NP | GS/Public Service, MS | $0 | (336) | (327) |
| 18 | | **All Programs** | **$4,500,000** | **19,959** | **(2,284)** |

| | Rate Recovery Sector | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|
| 19 | Residential Total | $0 | 33,904 | (26,384) |
| 20 | Non-Profit Total | $0 | (336) | (327) |
| 21 | Commercial Total | $0 | (35,011) | (15,435) |
| 22 | Streetlighting Total | $0 | (764) | 0 |
| 23 | Industrial Total | $4,500,000 | 22,166 | 39,861 |
| 24 | **All Sectors** | **$4,500,000** | **19,959** | **(2,285)** |

As fully explained in George L. Fitzpatrick's Testimony, this filing proposes consolidation of certain programs. For purposes of comparison in this Exhibit, the programs footnoted above are compared against combined contributions of the following programs as filed in the Companies' Current Plans:

1 Home Energy Audit (Residential & Residential Low Income) and Whole Building Comprehensive
2 Energy Audit and Equipment (Small Commercial/Industrial)
3 Industrial Motors and VSD and Equipment (Large Commercial/Industrial)

**Summary of Program Budgets/Savings Level Impacts**

| Line No. | Sector | Program | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|---|
| 1 | RES | Residential Direct Load Control | $0 | (146) | (3,050) |
| 2 | | Home Energy Audits and Outreach[1] | $3,099,901 | (6,494) | (1,692) |
| 3 | | Appliance Turn-In | ($1,674,919) | 6,463 | 639 |
| 4 | | Energy Efficient HVAC Equipment | ($749,329) | (1,603) | (1,568) |
| 5 | | Energy Efficient Products | $1,151,838 | 8,166 | (3,422) |
| 6 | | New Construction | ($3,821,258) | (8,213) | (7,567) |
| 7 | | Behavioral Modification and Education | $1,926,556 | 23,360 | 401 |
| 8 | | Multifamily Building | $67,212 | 314 | (29) |
| 9 | | WARM Plus | $0 | 1,916 | 298 |
| 10 | SCI | PJM Demand Response | $250,000 | 0 | 2,223 |
| 11 | | C/I Equipment[2] | ($210,473) | (29,519) | (14,973) |
| 12 | | Governmental & Institutional - SCI | ($39,527) | (897) | (2,194) |
| 13 | LCI | C/I Equipment[3] | $1,070,770 | 14,700 | (2,053) |
| 14 | | PJM Demand Response | $2,590,000 | 0 | 41,133 |
| 15 | | Governmental & Institutional - LCI | $339,230 | 2,845 | (1,042) |
| 16 | STL | Street Lighting | $0 | (580) | 0 |
| 17 | NP | GS/Public Service, MS | $0 | (70) | (201) |
| 18 | | **All Programs** | **$4,000,000** | **10,242** | **6,901** |

| | Rate Recovery Sector | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|
| 19 | Residential Total | ($0) | 23,763 | (15,991) |
| 20 | Non-Profit Total | $0 | (70) | (201) |
| 21 | Commercial Total | $0 | (30,416) | (14,944) |
| 22 | *Streetlighting Total* | $0 | (580) | 0 |
| 23 | Industrial Total | $4,000,000 | 17,545 | 38,038 |
| 24 | **All Sectors** | **$4,000,000** | **10,242** | **6,902** |

As fully explained in George L. Fitzpatrick's Testimony, this filing proposes consolidation of certain programs. For purposes of comparison in this Exhibit, the programs footnoted above are compared against combined contributions of the following programs as filed in the Companies' Current Plans:

1 Home Energy Audit (Residential & Residential Low Income) and Whole Building Comprehensive
2 Energy Audit and Equipment (Small Commercial/Industrial)
3 Industrial Motors and VSD and Equipment (Large Commercial/Industrial)

**Summary of Program Budgets/Savings Level Impacts**

| Line No. | Sector | Program | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|---|
| 1 | RES | Residential Direct Load Control | $0 | (14) | (303) |
| 2 | | Home Energy Audits and Outreach[1] | $316,530 | (3,994) | 187 |
| 3 | | Appliance Turn-In | ($331,976) | 462 | (39) |
| 4 | | Energy Efficient HVAC Equipment | ($478,754) | (718) | (1,544) |
| 5 | | Energy Efficient Products | $1,297,143 | 11,949 | (315) |
| 6 | | New Construction | ($1,422,170) | (2,907) | (3,002) |
| 7 | | Behavioral Modification and Education | $586,908 | 7,050 | 169 |
| 8 | | Multifamily Building | $32,318 | 236 | (4) |
| 9 | | WARM Plus | $0 | 476 | 64 |
| 10 | SCI | PJM Demand Response | $250,000 | 0 | 2,211 |
| 11 | | C/I Equipment[2] | ($196,781) | (18,364) | (8,172) |
| 12 | | Governmental & Institutional - SCI | ($53,219) | (1,373) | (1,295) |
| 13 | LCI | C/I Equipment[3] | $1,474,642 | 16,980 | (545) |
| 14 | | PJM Demand Response | ($1,490,000) | 0 | 13,742 |
| 15 | | Governmental & Institutional - LCI | $415,358 | 4,099 | (303) |
| 16 | STL | Street Lighting | $0 | (75) | 0 |
| 17 | NP | GS/Public Service, MS | $0 | (10) | (19) |
| 18 | | **All Programs** | **$400,000** | **13,798** | **833** |

| | Rate Recovery Sector | Change In Budget (New - Old) | Change in MWh (New - Old) | Change in kW (New - Old) |
|---|---|---|---|---|
| 19 | Residential Total | $0 | 12,540 | (4,787) |
| 20 | Non-Profit Total | $0 | (10) | (19) |
| 21 | Commercial Total | $0 | (19,737) | (7,256) |
| 22 | Streetlighting Total | $0 | (75) | 0 |
| 23 | Industrial Total | $400,000 | 21,079 | 12,894 |
| 24 | **All Sectors** | **$400,000** | **13,797** | **832** |

As fully explained in George L. Fitzpatrick's Testimony, this filing proposes consolidation of certain programs. For purposes of comparison in this Exhibit, the programs footnoted above are compared against combined contributions of the following programs as filed in the Companies' Current Plans:

1 Home Energy Audit (Residential & Residential Low Income) and Whole Building Comprehensive
2 Energy Audit and Equipment (Small Commercial/Industrial)
3 Industrial Motors and VSD and Equipment (Large Commercial/Industrial)

**Managing Director**

*DSM Planning, Implementation and Evaluation*

*Nuclear Lifecycle Economic, Cost and Performance Analyses*

*Load & Energy Forecasting*

*Econometric & Statistical Analysis*

*30 Years of Expert Testimony Experience*

**Education**

St. John's University, M.B.A., Economic Theory, 1972

St. John's University, B.A., Economics, 1969

C.W. Post College, course work toward an MS, Management Engineering

Mr. Fitzpatrick has also completed course work in Engineering Economics, Load Research, Demand Forecasting, Box-Jenkins Forecasting Techniques, logistic curve analyses; two and three stage multiple regression techniques; advanced econometric modeling and the utilization and interpretation of multiple regression models and associated analytical techniques

**Total Years Experience**

30

**Professional Associations**

Association of Energy Engineers

American Statistical Association

American Economic Association

Mathematical Association of America

Omicron Delta Epsilon

Advisor to American Management Association

Mr. Fitzpatrick's professional experience includes over 35 years within the utility management and electric/gas management consulting fields. Mr. Fitzpatrick's areas of expertise include: economic and econometric analysis for energy and peak forecasting, load research, integrated resource planning, demand side management and related areas, as well as nuclear and fossil generating plant life cycle economics, operating costs and performance modeling and overall utility investment prudence analyses. He has testified extensively throughout the U.S. before the FERC and state regulatory commissions, in both direct and rebuttal roles. Areas in which he has provided testimony include:

- Lifecycle economic analysis of nuclear generation investments
- Nuclear generation operating costs and performance modeling
- Nuclear and total utility operating performance standards
- Integrated Resource Planning
- Electric and Gas Demand Side Management / Energy Efficiency (DSM/EE) Program Assessment, Implementation and Evaluation
- Comparative lifecycle economics of competing utility investments
- Econometric/statistical-based Peak Load and Energy / Sales Forecasting
- Other Econometric and Statistical Studies on Utility- related Issues
- Weather Normalization Studies
- Strategic Planning
- Load Research Program Sample Design, Implementation and Analysis
- Rate Design
- Cost of Service Studies
- Renewable Program Evaluation
- Performance Standard design and statistical construction
- SAIDI / SAIFI-related statistical investigations

During Mr. Fitzpatrick's consulting career he has provided services to over 50 electric and gas utility clients both in the U.S. and abroad. However, there are a number of clients that have utilized his services on an ongoing basis over the years as a senior management consultant and/or expert witness. These clients include:

- American Electric Power Corp.
- Arizona Public Service Company (Pinnacle West)
- Bermuda Electric Light Company Limited
- Consolidated Edison Company of New York
- El Paso Electric Company
- Entergy
- FirstEnergy
- Freeport Electric

- Georgia Power Company (Southern Company)
- KeySpan Energy
- National Grid
- New England Electric System
- Niagara Mohawk Power Corp. (National Grid)
- New York Power Authority
- Public Service Company of Oklahoma
- San Diego Gas & Electric
- TXU Electric (TXU)
- Union Gas Co. Ltd.
- United Illuminating Co.
- Westar Energy (and its three predecessor companies)

He has also served his client base as a negotiator, often playing a key role in the negotiation of multi-million dollar, short and long term utility power supply and franchise contracts (e.g., Ft Bliss, White Sands Missile Range, University of Texas, and El Paso Water Utilities and El Paso Electric Vs. the City of Las Cruces).

## Professional Experience

***Expert Testimony & Regulatory Support (Selected Assignments)***

**American Electric Power and Public Service Company of Oklahoma**
Docket Nos. 200500516, 200600030, and 200700012
Provided direct and rebuttal expert testimony on the overall prudence of AEP's Integrated Resource Planning processes and results with specific focus on AEP's load forecasting processes and comparative lifecycle economic analyses of supply and demand side alternatives.. Also provided an analysis of the short and longer term potential for cost effective Demand Side Management in the PSO service territory based upon my earlier work on this subject for the entire AEP system and its 11 operating companies.

**Arizona Public Service Company**
Docket Nos. E-01345A-05-0816, E-01345A-05-0826, E-01345A-05-0827
Provided rebuttal testimony on the practical and statistical considerations to address when designing a nuclear plant operating performance standard. This testimony presented the results of his non-linear multiple regression models as they apply to this subject. Further, it referenced his prior work on behalf of Georgia Power Company developing an operating performance standard for Plants Vogtle and Hatch.

**United Illuminating Company**
July 2007 Connecticut Siting Council Filing:
Developed econometric-driven peak load and energy sales by class forecasts for the company. Performed a multi-year weather normalization analysis of

UI's summer peaks and energy sales. Provided support for UI witnesses in the 2007 Siting Council hearings held in June 2007.

**United Illuminating Company**
October 2008 Connecticut DPUC Docket 08-07-04, "Application of the United Illuminating Company to Increase its Rates and Charges"—provided direct testimony concerning UI's long term econometric-based kWh sales and system peak forecasts and UI's 2000-2008 normalized system peak analyses. Offered perspectives on the structural differences between, and objectives of, long term planning forecasts vs. short term financial forecasts.

**FirstEnergy Pennsylvania Operating Companies**
Metropolitan Edison Company / Docket No. M-2009-2092222; Pennsylvania Electric Company / Docket No. M-2009-2112952; Pennsylvania Power Company / Docket No. M-2009-2112956:
Provided direct and supplemental testimony presenting, updating and supporting the Energy Efficiency and Conservation Plans of the Companies developed in response to the requirements of PA Act 129. Also provided rebuttal testimony on a variety of related issues raised by the other parties in the three dockets.

**FirstEnergy Ohio Operating Companies**
Cleveland Electric Illuminating Company / Docket No. Docket No. 09-1947-EL-POR Docket No. 09-1942-EL-EEC Docket No. 09-580-EL-EEC; Ohio Edison Company / Docket No. 09-1948-EL-POR; Docket No. 09-1943-EL-EEC; Docket No. 09-581-EL-EEC; Toledo Edison Company / Docket No. 09-1949-EL-POR; Docket No. 09-1944-EL-EEC; Docket No. 09-582-EL-EEC.
Provided direct testimony presenting, updating and supporting the Energy Efficiency and Peak Demand Reduction Plans of the Companies developed in response to the requirements of S.B. 221.

**Freeport Electric**
1995 Docket No. 95-E-0676, 2001 Docket No. 01-E0965, 2003Docket No. 03-E-0686:
Provided direct testimony supporting Freeport's KWH sales and peak demand forecasts in four NYPSC proceedings. Constructed econometric models based forecast methodology by calls along with weather normalization of the test year sales. Provided testimony on the selection of Freeport-specific DSM programs to meet Commission requirements.

**Arizona Public Service Company**
Palo Verde 1, 2, & 3 / Docket Nos. U-1345-85-156 and U-1345-85-367:
Provided direct testimony presenting comparative economic analysis of Palo Verde vs. hypothetical coal unit alternative. Provided econometrically developed estimates of Operation and Maintenance Costs, as well as Capital Additions Costs. Provided independent statistically derived estimates of lifecycle Capacity Factors for the Palo Verde units. Participated in the training of APS witnesses.

**El Paso Electric Company**
Palo Verde 1 & 2 / Texas - Docket No. 7460:
Provided direct testimony on lifecycle economics of nuclear vs. coal alternative. Provided direct testimony on decisional prudency of company to enter into nuclear investment. Provided load forecast of company's future energy and peak demand needs. Participated in the training of Company witnesses.

**El Paso Electric Company**
Palo Verde 1, 2, & 3 / Docket Nos. 8892, 9069 and 9165:
Provided Direct Testimony presenting comprehensive industry analysis and statistical analysis of Nuclear Performance Standards. Presented statistically derived optimal Performance Standard for Palo Verde Units 1, 2, and 3. Provided Rebuttal Testimony discussing theoretical and statistical flaws in intervener's Performance Standard proposal.

**Georgia Power Company**
Plant Hatch and Plant Vogtle / Georgia - Docket Nos. 3554-U and 3673-U:
For the Vogtle Financing Case, the Vogtle Rate Case and the Hatch Rate Case: Provided rebuttal testimony on comparative economics of Plant Vogtle, provided rebuttal testimony (with presentation to Commission) on Vogtle's economics, and statistically derived projections of Vogtle's performance and Hatch O&M Costs, participated in witness training, and developed internal statistically-based O&M and Capital Additions "Targets" for Plant Hatch and Plant Vogtle.

**Georgia Power Company**
Plant Hatch and Plant Vogtle / Docket No. 3840-U:
Provided Rebuttal Testimony that pointed out methodological and statistical flaws in Staff consultant's Performance Standard proposal. Presented parameters for a statistically unbiased, optimal Performance Standard.

**Long Island Lighting Company**
Shoreham / New York-Docket No. 28252
Provided rebuttal testimony on most likely performance of Shoreham Unit. Provided testimony on most likely Operation and Maintenance Cost levels and Capital Additions Cost level for Shoreham based upon econometric analysis of nuclear industry. Provided testimony on demand-side vs. supply-side alternatives for the Long Island Lighting Company.

**Westar Energy**
2005-2007 KCC Docket Nos. 05-WSEE-981-RTS and 07-WSEE-616-PRE
In the 2005 docket, provided direct and rebuttal testimony on the subjects of distribution reliability and reliability-based performance standards. Developed a series of statistical analyses that set performance standards for five utility performance metrics: SAIDI, SAIFI, EFOR, Answered Calls and Meters Read. Developed daily 1998-2004 SAIDI and SAIFI non-linear multiple regression-based weather normalization models for use by the Company.

In the 2007 docket provided both direct and rebuttal testimony on the subjects of peak and energy forecasting, DSM program potential and budgeting, and peak and energy weather normalization analyses.

**Western Resources**
1996 KCC Docket No. 193,307-U96-WSRE-101-DRS
Provided expert testimony and supporting statistical analysis for test year, class weather normalization, as well as, primary and secondary economic benefits of key customer discounted contracts.

**Western Resources Inc. and Kansas Gas and Electric Company**
2000 KCC Docket No. 01-WSRE-436
Sponsored two adjustments necessary to normalize operating revenues and expenses for the test year. Performed a review of KPL's and KGE's sales and peak demand forecasting methodology. This review was performed to evaluate its accuracy and unbiaseness since this forecast, in part, supports the Company's decisions to install new capacity. Also performed a statistical review of KPL's and KGE's peak demand normalization methodology, which is necessary to analyze the accuracy of the KPL's and KGE's peak demand forecasts.

**Kansas Gas and Electric Company**
Wolf Creek / Kansas City Power and Light Company/Kansas-1984 Docket Nos. 84-KG&E-197-R-142, O98-U / Missouri Docket #ER-85-128, EO-85-185
Provided rebuttal testimony on lifecycle economics of nuclear vs. coal alternative. Provided first-year and lifecycle statistically based estimates of Wolf Creek's Operation and Maintenance Costs and Capital Additions Costs. Provided first-year and lifecycle estimates of Wolf Creek's Capacity Factors. Participated in the preparation of KG&E witnesses on the subjects of statistics, econometrics, forecasting, and engineering economics.

**Atlanta Gas Light** - Georgia (1997)
Worked with senior management to develop testimony for a performance based rate plan in support of the unbundling of gas service.

**El Paso Electric Company** - Texas (1997-1998)
Developed unbundling strategy and performance based rate plan in support of ongoing Texas PUC workshops on the unbundling of electric service.

**Empire District** - Missouri (1992)
Provided econometric rebuttal testimony critiquing MPSC Staff's direct testimony on Empire District's forecast. Staff accepted rebuttal testimony and the Company's forecast was accepted for use in the rate case.

**Minnegasco**
Docket No. G-008/GR-92-400 (1993 - 1994)
Developed a set of econometrically derived, short run forecasts for Minnegasco's major customer classes. Provided direct expert testimony regarding the use of these forecasts as a factor in determining the need for

and magnitude of Minnegasco's requested rate increase. Assisted in preparation of cross-examination of intervening parties.

On rebuttal, supported the implementation of weather normalization adjustments and discussed the effects of an adjustment on varying classes of customer use.
All testimony was accepted by Staff.

**Missouri Public Service** (MOPUB) - (1992)
Provided econometric-based rebuttal testimony critiquing MPSC Staff's direct case criticizing MOPUB's forecast. Rebuttal testimony resulted in Staff stipulating to the use of the Company's forecast.

**Arizona Nuclear Power Project** - Palo Verde
Developed computer software to facilitate budget tracking and comparison. Developed econometric-based target estimation models of Operation and Maintenance Costs. Developed target estimation of Capital Additions Costs based upon econometric modeling. Developed forced and planned outage statistical models to be used in regulatory proceedings for all participants as well as for internal outage planning. Acted as Advisor to Palo Verde Participant's Engineering and Operating Committee on Palo Verde Cost and Performance budget targeting.

**Long Island Lighting Company** (1974-1979)
Testified as an expert witness, usually in both the direct and rebuttal phases, in the following New York State Public Service Commission proceedings: Docket Numbers:, 26733, 26829, 26985, 27136, 27154, 80003, 27319, 27374, 27375, 28223, 28252, on subjects such as econometric and econometric-end use Electric and Gas Peak and Energy Forecasts, Load Research studies for cost-of-service analysis, Load Management, Cogeneration, Conservation and statistical studies for weather normalization of gas send out and electric energy requirements data.

***Demand-Side Management Program Design, Implementation, & Evaluation***

**Overview**
George Fitzpatrick has over 35 years experience in performing DSM/EE technical and economic potential assessments, program implementation and program evaluations for his electric and gas utility clients. His strong economic, statistical and ESCO business background has enabled him to advise clients on effective DSM/EE initiatives, provide unbiased evaluations of both electric and gas supply and demand side resources, operate successful ESCO's on behalf of his utility clients and finally manage the evaluation of over 300 DSM/EE programs.

Over this same 35 year span he has served as an expert witness on a number of subjects related to the DSM/EE practice area. It should be noted that his long professional career as an expert witness attests to the fact that he is a knowledgeable professional who has and continues to offer reasonable

perspectives on the subjects to which he provides expert testimony. This same ethic carries over to his conduct of consulting assignment for clients.

The following paragraphs provide a representative sample of the DSM/EE work that he has performed over his professional career:

**American Electric Power**
In 2004-5 he directed an eleven operating company DSM/EE measure assessment that included the estimation of the economic and load/energy impacts of over 80 measures, customized where appropriate to each of AEP's operating companies. As part of this assignment, he directed the development of conditional demand analyses for the purpose of developing individual service territory-specific impacts for certain weather sensitive measures. This work served as a basis for AEP's decision to more fully engage in DSM/EE activities. Mr. Fitzpatrick also served as AEP's overall IRP prudency and DSM/EE witness in PSO's 2007 Oklahoma IRP-related docket.

**Bermuda Electric Light Company, Ltd.**
Directed a 1990-1991 multi-faceted evaluation of the potential for DSM on Bermuda. Conducted in-depth research of various customer classes to determine likelihood of adoption of available DSM technologies. Building on this research, developed a series of pilot programs that were implemented in 1993, as well as evaluation strategies to be employed at the programs' conclusion. Designed and served as the responsible officer for the creation and staffing of a full service energy services company, BESCO, that commenced operation in 1995 and provides, to this day, a full range of energy efficiency, energy security and power protection products and *services to residential, commercial and industrial customers in Bermuda.*

**Consolidated Edison Company of New York, Inc.**
Project Manager for a 1981 Conservation Assessment Study which included designing a methodology and performing analysis to impact Conservation measures in the residential and commercial sectors to meet requirements imposed by New York PSC in Case No. 28223.

**El Paso Electric Company's Energy Service Business Unit (ESBU)**
From 1996-2001, Mr. Fitzpatrick served as the General Manager of El Paso Electric's ESBU, a full service ESCO that he conceived, staffed and managed until this unit was spun off as a wholly-owned subsidiary of EPE. Although a consultant to EPE, Mr. Fitzpatrick had full operating authority and served as authorized agent of the company for contracting and procurement matters. This profitable business unit designed and negotiated long term power supply contracts that had value adding components such as large chilled water storage plants (University Of Texas-El Paso), emergency backup generation for water and wastewater facilities (El Paso Water Utilities), innovative time of use rates that provided for increased security for military installations and pipeline operations (e.g., Ft Bliss, Holloman Air Force Base, White Sands Missile Range, NASA, Diamond Shamrock, shopping centers, office parks and the like.

Jersey Central Power & Light (JCP&L)
Performed a 2006-7 assessment and recommended a portfolio of targeted peak load management initiatives to achieve significant reductions of electric loads on both a substation and system wide basis. These programs served as a significant component of JCP&L's submission to the New Jersey Energy Master Plan (2007).

**Long Island Lighting Company (LILCO)**
Directed a 1993 research project focusing on the right-sizing of LILCO's DSM program in the face of maturing market conditions, as well as on the measurement of the extent to which LILCO's programs had successfully moved the market to energy efficient technologies. Research includes an assessment of the impacts of pure market forces on DSM and the role of rebates and information in overall market capture for DSM technologies.

Project Manager for LILCO's 1992 Research and Development Initiative entitled, "Institutional Barriers to Conservation in Master-Metered, Tenant-Occupied Commercial Office Space." The project involved estimating the market conservation potential, identifying institutional barriers through focus groups and interviews with landlords and tenants, and establishing a pilot program and blueprint lease to implement in order to enhance DSM measures in the relevant market.

Directed the comprehensive evaluation of LILCO's 1987 Conservation and Load Management Programs. This evaluation is contained in a three-volume report, which has been called the "most comprehensive" effort to date in this area.

Directed the evaluation of LILCO's 1988 and 1989 Conservation and Load Management Programs. Directed the preparation of a June 1988 Load Management Study. Specific responsibilities included estimating Load Management reductions included in LILCO's Load Forecasts by major components.

**Minnegasco**
Served as the Senior Management Advisor to Minnegasco's DSM/Load Research Program from 1993 through mid-1995. Responsibilities included contract negotiations with consultants, supervision of consultant's activities, and resolution of technical issues, and on-site presence as required to effectively oversee all Load Research-related activities.

**New York Power Authority (NYPA)**
Served as the Senior Management Advisor (1992-present) for NYPA's $1 Billion High Efficiency Lighting Program (HELP) and its successor programs having primary responsibility for drafting and negotiating DSM cost sharing umbrella contracts with New York State and New York City, serving as project executive during the program's 18 month startup and directing multiple implementation contractor management and quality assurance efforts.

*Analysis on behalf of NYPA of Energy Systems Research Group's* (ESRG) Conservation Assessment Report submitted in FERC Case No. 2729: Prattsville Pumped Storage Facility.
Supervised the development of an evaluation of potential Load Management strategies for the NYPA's municipal customers, including a cost/benefit analysis and specific Load Management test programs.

**New York Power Pool**
Analyzed the conservation forecasts contained within the Member Systems' individual long-range forecasts and evaluated all parties' conservation forecasts and analyses.

**New York State Electric & Gas Corporation (NYSEG)**
Served as Responsible Officer for NYSEG's 1991 & 1992 Commercial / Industrial Process and Impact Evaluations. Served as Responsible Officer in the development of NYSEG's *June 1994 DSM Market Transformation Study.*

**Orlando Utilities Board**
Directed a 2007 comprehensive assessment of the maximum and technically feasible potential for DSM/EE measures in the OUB service territory. Measures were evaluated based upon lifecycle economics from varying stakeholder perspectives. Developed a short list of most applicable measures for the OUB service territory and directed the development of 8,760 hour load shapes for each short-listed measure. This work was utilized in OUB's 2007-2008 IRP filing.

**Orange and Rockland Utilities (O&R)**
Assessed the potential for and designed an Energy Cooperative Program for O&R's commercial customers. Directed project to assess new regulated and unregulated business opportunities to diversify O&R from its core business.

**Rochester Gas & Electric Corporation**
Served as Responsible Officer for RG&E's 1990-94 DSM Evaluations. Represented RG&E in all DSM-related interactions with PSC Staff.

**Westar Energy**
Developed the initial 2006-2007 DSM/EE program menu that included program by program projected impacts and lifecycle economics for consideration by Company senior management. Further developed Westar's peak load and energy forecasts that included both programmatic and free market substitution DSM/EE effects. Worked with the Company and Commission to explore appropriate mechanisms for DSM/EE program implementation and predetermined cost recovery

## Selected Consulting Assignments

**Westar Energy**
Mr. Fitzpatrick served as the Principal statistical consultant on a joint Distribution Reliability project with Davies Consulting. This project had as its objective the evaluation of Westar's distribution integrity and repair

metrics (i.e., SAIFI and SAIDI) and the development of non-linear multiple regression models to normalize these metrics over time for those major weather elements affecting SAIFI and SAIDI performance. The results of this analysis were presented to both Westar Senior Management and the Kansas Corporation Commission.
Generation Investment Analysis (Westar La Cygne 2 and SDGE SONGS related analysis.)

**Westar La Cygne 2 Sale Leaseback Analysis**
Provided an industry based statistical study of lifecycle availability and O&M cost Expectation in connection with Westar Sale/Leaseback of the La Cygne 2 Unit.

**San Diego Gas & Electric**
SONGS O&M and Capital Additions
Served as the technical project manager for the development of several non-linear multiple regression analysis developed to evaluate SONGS mayor cost components as compared to a focused sample of like plants.

**Freeport Electric**
Served as the principal-in-charge of the statistical analysis to develop the Freeport Electric 2005 Normalized System Peak and the estimation of Freeport's 2006 ICAP peak responsibility for the New York ISO. Also served as the project manager for the development of Freeport Electric's 2005 Load & Energy Forecasts.

**Duquesne Light Company**
Served as the Principal-in-charge of the statistical analysis to develop Duquesne Light's 2005 Normalized Summer Peak as well as the development of the major rate class contribution to that peak.

**El Paso Electric Company**
Developed a business plan for and then implemented an Energy Services Business Unit (ESBU) that had as its mission key customer retention contracting and the provision of value added products and services in the areas of energy efficiency, power quality, standby generation, and "behind the fence" maintenance and support services.

***Planning & Forecasting*** (Selected Projects)

**New York State Electric & Gas Corporation** (NYSEG) - (1994 -1997)
Served as Responsible Officer for AEG's development of a Multi-Equational Small Area Forecast Modeling System. This system is used to track monthly sales geographically in the NYSEG system, identifying significant weather normalized monthly variances almost in "real time" so that NYSEG can recognize and react to significant changes in a shorter elapsed time.

**Western Resources/Westar** (1984 - 2004)
Provide continuing advisory services to Western Resources (now Westar) on potential methodological upgrades to their forecast and weather normalization methodologies.

**Long Island Lighting Company** (LILCO)
Directed the preparation of LILCO's Annual Long Range Peak and Energy Forecasts during the years 1974 - 1979. Constructed the first Engineering End Use and Econometric End Use models for electric forecasting in New York State; utilized Box-Jenkins stochastic and multiple transfer functions for short run electric forecasts; employed two and three stage regression techniques in SIC-based commercial-industrial forecasting.

In 1994, provided advisory services to review adequacy of the econometric methodologies for the capture of "market transformation" DSM and efficiency effects.

**Saudi Arabia SCECO East** (1995)
Selected from an international list of experts to perform a comprehensive review of Saudi Arabia's largest utility's overall planning and forecasting procedures, methodologies, and results. This two-phase project also called for the reengineering of these processes once the analytical and fact-finding phase was complete.

**Bermuda Electric Light Company, Ltd.** (BELCO) - (1994)
Reviewed BELCO's existing forecasting process and provided a "phase in" solution for enhancing their forecasting systems.

**Freeport Electric** (1995-2004)
Have and continue to prepare Freeport's short and long-term electric peak and energy forecasts. Have presented and defended Freeport's forecasts and weather normalization studies in its last three rate cases.

***Innovative Market Segmentation & Profitability Studies***

**Western Resources**
Served as Responsible Officer for a Competitive Assessment of Western Resources key customer's responses to cost competition.

**Union Gas Limited** 2004
Performed a detailed evaluation of the Union Gas forecasting methodology and results. Developed a written report containing an evaluation opinion and forecast improvement suggestions. This report was filed with the Ontario Energy Board.

**CINergy**
In 1995, advisor to senior staff in a multi-phase project that had as its objective the meaningful (from a risk-profit perspective) segmentation of CINergy key customer markets and the analysis of profitability of the segments. This was followed by the development of strategies to optimize the use of CINergy's marketing resources to maximize shareholder returns while ensuring the long-term viability of the company.

*Load Research*

**Westar Energy** 2006-2007
Redesigned Westar's load research program to account for new rate classes and the emerging need to perform conditional demand analyses to support DSM assessment in the future. Redesigned and administered a residential and commercial appliance/ed uses study that linked to the new load research sample designs.

**Electric Power Research Institute**
Advisor to EPRI's Demand Program. Author of RP 1588-3 "Load Data Management and Analysis"; co-author of EPRI Rate Design Study Topic Paper 3: "Issues in Load Research."

**Elizabethtown Gas Company**
Asked by Senior Management to assess Elizabethtown's Load Research Program and develop a set of recommendations that would result in full cost-effective utilization of the Load Research resource, developed study plan, conducted in-depth technical interviews of potential load research clients, and presented findings and recommendations to all levels of Management.

**Iowa Power Company**
Directed weather normalization analysis on historical system peak demands. Results from analysis will be utilized in future system peak demand forecasts.

**Long Island Lighting Company**
Designed and implemented stratified sampling software that employed Dalenius-Hodges and Neyman Allocation techniques with stratum optimization and validation. Also directed LILCO's Load Research Program.

**New England Power Service Company**
Reviewed NEPSCo's Load Research Data Management and Analysis System from analytical and data perspectives and developed a NEPSCo-specific computer hardware and software plan for implementation.

**New York Power Authority**
Directed the review of the existing Load Research Program and formulated a Management Plan to specify future needs in the areas of sample design, hardware, software, and staffing.

Assisted in the development of specifications for a microcomputer-based Load Research Data Collection, Editing and Analysis System.

**New York State Electric & Gas Corporation**
Served as Technical Advisor to the Manager of NYSEG's Load Research Department.

**Northeast Utilities Service Company**
Performed a comprehensive audit of the technical, software, and organizational aspects of the Northeast Utilities Load Research Program, including the identification of current uses and recommended future cost-effective uses within the company.

Supervised development of a study to analyze load research, weather, and attribute data for the small Commercial and Industrial customer group.

**Northern States Power Company**
Directed the review of all aspects of NSP's load research process and presented findings in a comprehensive presentation to senior management.

**Pacific Gas & Electric Company**
Performed a comprehensive audit of the PG&E Load Research Data Management and Analysis System. Also, assessed the value of Load Research to all relevant departments in the company including recommendations for more cost-effective uses of Load Research data for both current and future applications.

Met-Ed/Penelec/Penn Power Statement No. 2

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

METROPOLITAN EDISON COMPANY
Docket No. M-2009-209222

PENNSYLVANIA ELECTRIC COMPANY
Docket No. M-2009-2112952

PENNSYLVANIA POWER COMPANY
Docket No. M-2009-2112956

ENERGY EFFICIENCY AND CONSERVATION PLANS

# Testimony
# of
# Charles V. Fullem

RECEIVED
FEB 18 2011
PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

**List of Topics Addressed**

***Cost Recovery and Reconciliation of Program Costs***

## I. Introduction and Background

**Q. Please state your name and business address.**

A. My name is Charles V. Fullem and my business address is FirstEnergy, P.O. Box 16001, Reading, Pennsylvania 19612-6001.

**Q. Mr. Fullem, by whom are you employed and in what capacity?**

A. I am employed by FirstEnergy Service Company ("FESC") as Director, Rates and Regulatory Affairs – Pennsylvania. The Pennsylvania Rate Department of FESC provides regulatory support for Metropolitan Edison Company ("Met-Ed"), Pennsylvania Electric Company ("Penelec") and Pennsylvania Power Company ("Penn Power") (collectively, the "Companies"). I report to the Vice President of Rates and Regulatory Affairs and am responsible for the development, coordination, preparation and presentation of the Companies' Pennsylvania related accounting and financial data in all their rate-related matters before the Pennsylvania Public Utility Commission ("PUC" or "Commission"); the preparation of statements and reports addressing, among other things, stranded cost recovery, energy costs, non-utility generation ("NUG") costs, quarterly earnings, and other financial matters; the administration of the Companies' tariffs and the development of retail electric rates, rules and regulations ensuring uniform administration and interpretation; and the development of the Companies' default service plans.

1 **Q. Please describe your educational and professional background?**

2 A. I received a Bachelor of Science degree in Mineral Economics from the Pennsylvania
3 State University in November 1981. I have over twenty-eight (28) years of experience
4 with FirstEnergy Corp. ("FirstEnergy") and its predecessor companies. My work
5 experience is more fully described in Appendix A.

6

7 **Q. On whose behalf are you testifying in this proceeding?**

8 A. I am testifying on behalf of Met-Ed, Penelec, and Penn Power. Unless otherwise
9 expressly stated, my testimony equally applies to all three companies and their respective
10 First Amended Plans, which are set forth as Exhibits A, B and C, respectively, to the
11 Joint Petition.

12

13 **Q. Have you previously testified in this proceeding?**

14 A. Yes, I previously provided oral rejoinder before the PUC as a witness in an earlier phase
15 of this proceeding.

16

17 **Q. What is the purpose of your direct testimony?**

18 A. The purpose of my testimony is to sponsor changes to the Companies' Energy Efficiency
19 and Conservation Charge ("EEC-C") Riders to be effective June 1, 2011, that result from
20 the updated sales forecasts and modifications to the costs expected to be incurred by the
21 Companies during the planning and implementation of their respective Energy Efficiency
22 and Conservation ("EE&C") Plans (as amended in this proceeding and referred to
23 collectively as "First Amended Plans") which are required by Act 129 of 2008, 66 Pa

C.S. § 2806.1 ("Act 129"). These EEC-C Charges appear in Metropolitan Edison Company's Tariff Pa. P.U.C. No. 51, Pennsylvania Electric Company's Tariff Pa. P.U.C. No. 80 and Pennsylvania Power Company's Tariff Pa. P.U.C. No. 35.

**Q. Mr. Fullem, have you prepared exhibits to accompany your testimony?**

A. Yes. Attached Exhibits CVF-1 and CVF-2 were prepared by me or under my supervision and are described in detail later in my testimony.

## II. Rider Cost Recovery and Reconciliation

**Q. Mr. Fullem, do the Companies currently have a cost recovery mechanism in place to recover the costs associated with the development and implementation of the EE&C Plans currently in effect?**

A. Yes. As permitted by Act 129 and 66 Pa. C.S. § 1307 and approved by the Commission on February 26, 2010, the Companies have in place an EEC-C Rider for each Company.

**Q. Please describe the EEC-C Rider.**

A. For all classes except the industrial customer class, the EEC-C charges are expressed as a price per kilowatt-hour ("kWh"). For the industrial customer class in the Met-Ed and Penelec territories, the EEC-C charges are expressed on a kilowatt ("kW") basis using customer Peak Load Contribution ("PLC"). For the industrial customer class in the Penn Power territory, the EEC-C charges are expressed on a Kilovolt-ampere ("kVA") basis at Penn Power using billed kVA and billed on that basis. The EEC-C charges will continue to be calculated and stated separately on each rate schedule for the residential, commercial, non-profit, street lighting and industrial customer classes.

1 Q. **Please identify the rate schedules that apply to each customer class for each of the**
2 **Companies.**
3 A. For Met-Ed and Penelec, the rate schedules that comprise the residential customer class
4 are the same, Rate Schedules RS and RT. For Penn Power, the residential customer class
5 is comprised of Rate Schedules RS; RS Optional Controlled Service Rider; RH; RH
6 Water Heating Option; and WH.
7
8 Met-Ed's non-profit customer class includes Rate GS – Volunteer Fire Company, and
9 Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate and Rate
10 MS. Penelec's non-profit customer class includes Rate GS – Volunteer Fire Company,
11 and Non-Profit Ambulance Service, Rescue Squad and Senior Center Service Rate and
12 Rate H. Penn Power's non-profit customer class includes Rate Schedule GS Special
13 Provision for Volunteer Fire Companies, Non-Profit Senior Citizen Centers, Non-Profit
14 Rescue Squads, and Non-Profit Ambulance Services, and Rate PNP.
15
16 Met-Ed and Penelec's commercial customer classes are comprised of Rate Schedules GS-
17 Small, GS-Medium, and Outdoor Lighting Service. Penn Power's commercial customer
18 class is comprised of Rate Schedules GS, GS Special Rule GSDS, GS Optional
19 Controlled Service Rider, GM, GM Optional Controlled Service Rider, PLS, OH With
20 Cooling Capabilities, OH Without Cooling Capabilities, and WH Non-Residential.
21
22 Met-Ed's street lighting rate class includes Street Lighting Service and Ornamental Street
23 Lighting. Penelec's street lighting rate class includes High Pressure Sodium Vapor Street

Lighting Service and Municipal Street Lighting Service. Penn Power's street lighting rate class includes Rate Schedules SV, SVD, and SM.

Met-Ed's industrial customer class is comprised of Rate Schedules GS-Large, GP, and TP. Penelec's industrial customer class is made up of Rate Schedules GS-Large, GP, and LP. Penn Power's the industrial customer class consists of Rate Schedules GP and GT.

**Q. Are you proposing any changes to the rate schedules contained in each customer class?**

A. No, the rate schedules contained in each customer class are remaining the same. Only the charges will change.

**Q. How often were the charges included in the EEC-C rider designed to be changed?**

A. The current EEC-C charges were designed to be in effect through May 31, 2013. However, the Companies included a provision in their approved EEC-C Riders that would allow these charges to be changed if it was determined that the EEC-C charges would result in material over or under-collections of recoverable costs incurred or expected to be incurred during the EEC Computational Period (March 1, 2010 through May 31, 2013), with these changes becoming effective thirty days after filing. In such an instance, the EEC-C Riders allow the Companies to ask the Commission to approve interim revisions to the EEC-C charges. In addition, the EEC-C Riders provide that interim changes in the EEC-C charges may also address a re-allocation of program expenses for cost recovery among customer classes. Given the current sales and revenue

1 collection levels, as well as the changes being proposed in this filing, the Companies
2 believe that it is appropriate to modify the rider charges as described in my testimony.
3 **Q. Did the Commission's Orders approving the EE&C Plans also anticipate the**
4 **potential for increasing the allowable costs incurred up to the two percent revenue**
5 **cap, and resulting changes in charges, should the increased costs become necessary**
6 **to meet the Act 129 requirements?**
7 A. Yes, the Commission Orders dated January 28, 2010, on pages 42-44, and February 26,
8 2010, pages 13-14, allow the Companies to modify their current EE&C Plans and
9 increase spending with Commission approval.
10
11 **Q. How are the EEC-C Riders structured?**
12 A. The EEC-C charges to be billed to the residential, commercial and industrial classes
13 consist of two principal components. The first is the $EEC_C$, or "current cost" component;
14 the second, the reconciliation component, or "E" factor.
15
16 **Q. Is the Company proposing any changes to the existing EEC-C Rider structure or**
17 **tariff language?**
18 A. No, the Companies are not proposing any changes to the EEC-C Rider structure or
19 language for Met-Ed or Penelec. For Penn Power, the text of the EEC-C Rider is being
20 updated to reflect Penn Power's entrance into PJM. Beginning June 1, 2011, Penn
21 Power's EEC-C would be charged based on a customer's PJM PLC as is currently being
22 done at Met-Ed and Penelec. The change at Penn Power to PJM PLC is consistent with
23 the Commission's October 28, 2009 order. A redline version of Penn Power's EEC-C

Rider is included as Exhibit CVF-2. Please note that redline versions of Met-Ed and Penelec EEC-C Riders are not attached because the Companies are not proposing any changes to the EEC-C Rider structure or language. Rather, the only changes to the Met-Ed and Penelec EEC-Riders are to the rates, which, along with Penn Power's are illustrated in attached Exhibit CVF-1.

**Q. Are the Companies proposing any changes to the EEC-C charges at this time?**

A. Yes. The Companies have updated the revenue requirements associated with each Company's First Amended Plan, which results in changes to each customer class's EEC-C charge that would become effective June 1, 2011. The specific calculations of the proposed EEC-C charges are set forth in attached Exhibit CVF-1 and also in Appendix H of each Company's First Amended Plan. Page 1 of Exhibit CVF-1 shows the proposed EEC-C charges for Met-Ed; Page 2 shows the proposed EEC-C charges for Penelec; and Page 3 shows the proposed EEC-C charges for Penn Power. The change in charges is due to the modification of costs associated with each Company's respective EE&C programs as are being reviewed and approved by the Commission in this proceeding, as well as an updated sales forecast through May 31, 2013 and a reflection of revenues collected or expected to be collected through May 31, 2011.

**Q. Why aren't the Companies asking for the new EEC-C charges to be effective thirty days from the date of the filing?**

A. The Companies are asking for charge changes as a result of modifications included in the First Amended Plans and increasing the total cost of the plans. The 30 day effective date

would be utilized if it were for reconciliation purposes only. Therefore, the Companies believe a June 1, 2011 effective date allows sufficient time for approval of each Company's plan changes.

**Q. With the newly proposed charges, are the Companies still within the Act 129 mandated 2% capped limit based on 2006 revenue for each Company cap?**

A. Yes. With the proposed charge changes, these charges adhere to the Act 129 mandated 2% capped limit based on 2006 revenue for each Company. Based on the details of both the current and amended plans, as well as Exhibit CVF-1, the table below shows the 2% spending cap and the proposed spending subject to the 2% cap.

| | 2% Spending Cap | Proposed Spending Subject to 2% Cap |
|---|---|---|
| Met-Ed | $ 99,467,576 | $ 93,785,135 |
| Penelec | $ 91,898,968 | $ 83,003,392 |
| Penn Power | $ 26,639,156 | $ 26,617,151 |

**Q. Are the EEC-C Riders subject to Commission review?**

A. Yes. As stated in each Company's respective EEC-C Rider, an annual report that sets forth the revenues billed and costs incurred will be filed with the Commission by June 30th of each year. These reconciliations will be provided by customer class and will be subject to annual review and audit by the Commission.

**Q. Mr. Fullem, does this complete your direct testimony?**

A. Yes, it does.

## Calculation of Metropolitan Edison Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
## Effective June 1, 2011

| Line No. | Description | Met-Ed Residential Customer Class (1) | Met-Ed Non-profit Customer Class (2) | Met-Ed Commercial Customer Class (3) | Met-Ed Street Lighting Customer Class (4) | Met-Ed Industrial Customer Class (5) | Met-Ed Total (6) | |
|---|---|---|---|---|---|---|---|---|
| 1 | 2% of Met-Ed's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery | | | | | | $ 24,886,894 | (A) |
| 2 | 2% of Met-Ed's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years) | | | | | | $ 99,467,576 | |
| 3 | Met-Ed's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5 x 4 years) | $ 58,676,942 | $ 308,227 | $ 12,954,699 | $ 3,639,122 | $ 7,868,907 | $ 83,447,897 | |
| 4 | PJM Peak Demand Program (PUC Table 6A) | $ - | $ - | $ 600,000 | $ - | $ 5,660,575 | $ 6,260,575 | |
| 5 | Met-Ed's Common Costs Allocated to Applicable Customer Sector (PUC Table 6B) | $ 2,861,963 | $ 14,100 | $ 620,065 | $ 166,473 | $ 413,057 | $ 4,075,658 | |
| 6 | Met-Ed's Estimated PJM Economic Load Response Program Costs | $ - | $ - | $ - | $ - | $ 1,005 | $ 1,005 | |
| 7 | Met-Ed Subtotal subject to 2% cap (Sum Lines 3-6) | $ 61,538,905 | $ 322,327 | $ 14,174,764 | $ 3,805,595 | $ 13,943,544 | $ 93,785,135 | |
| 8 | Met-Ed's Share of Statewide Evaluator Costs | $ 706,171 | $ 3,479 | $ 152,997 | $ 41,076 | $ 101,919 | $ 1,005,642 | |
| 9 | Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8) | $ 62,245,076 | $ 325,806 | $ 14,327,761 | $ 3,846,671 | $ 14,045,463 | $ 94,790,777 | |
| 10 | EEC-C Revenue collected through January 31, 2011, net of PA Gross Receipts Tax) | $ 15,680,551 | $ 70,454 | $ 3,819,848 | $ 1,078,631 | $ 2,245,257 | $ 22,894,741 | |
| 11 | Budgeted EEC-C Revenues February 1, 2011 - May 31, 2011 | $ 6,470,784 | $ 34,784 | $ 1,388,993 | $ 410,193 | $ 1,170,918 | $ 9,473,672 | |
| 12 | Remaining EEC Costs to be collected June 1, 2011 - May 31, 2013 (Line 9 - Lines 10-11) | $ 40,093,741 | $ 220,568 | $ 9,120,920 | $ 2,357,847 | $ 10,629,288 | $ 62,422,364 | |
| 13 | Customer Class Projected Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW") for June 1, 2011 - May 31, 2013 | 11,151,188,060 kWhs | 186,502,346 kWhs | 5,626,663,833 kWhs | 68,760,000 kWhs | 23,599,488 kWs | | |
| 14 | EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 12 / Line 13) | $ 0.00360 per kWh | $ 0.00132 per kWh | $ 0.00162 per kWh | $ 0.03429 per kWh | $ 0.45040 per kW | | |
| 15 | Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T) with T = 5.90% Pa Gross Receipts Tax in Base Rates] | 1.062699 | 1.062699 | 1.062699 | 1.062699 | 1.062699 | | |
| 16 | Proposed EEC-C Rates Effective June 1, 2011 (Line 14 X Line 15) | $ 0.00383 per kWh | $ 0.00140 per kWh | $ 0.00172 per kWh | $ 0.03644 per kWh | $ 0.48 per kW | | |

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006.

## Calculation of Pennsylvania Electric Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
Effective June 1, 2011

| Line No. | Description | Penelec Residential Customer Class (1) | Penelec Non-profit Customer Class (2) | Penelec Commercial Customer Class (3) | Penelec Street Lighting Customer Class (4) | Penelec Industrial Customer Class (5) | Penelec Total (6) | |
|---|---|---|---|---|---|---|---|---|
| 1 | *2% of Penelec's Annual Revenues for 12 Months Ended* 12/31/2006 for Maximum Annual Cost Recovery | | | | | | $ 22,974,742 | (A) |
| 2 | 2% of Penelec's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years) | | | | | | $ 91,898,969 | |
| 3 | Penelec's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5 x 4 years) | $ 47,612,600 | $ 243,353 | $ 13,809,905 | $ 2,762,575 | $ 8,262,518 | $ 72,990,951 | |
| 4 | PJM Peak Demand Program (PUC Table 6A) | $ - | $ - | $ 250,000 | $ - | $ 5,750,000 | $ 6,000,000 | |
| 5 | Penelec's Common Costs Allocated to Applicable Customer Sector (PUC Table 6B) | $ 2,616,227 | $ 12,393 | $ 724,561 | $ 142,514 | $ 515,984 | $ 4,011,679 | |
| 6 | Penelec's Estimated PJM Economic Load Response Program Costs | | | | | $ 762 | $ 762 | |
| 7 | *Penelec Subtotal subject to 2% cap (Sum Lines 3-6)* | $ 50,528,827 | $ 255,746 | $ 14,784,466 | $ 2,905,089 | $ 14,529,264 | $ 83,003,392 | |
| 8 | Penelec's Share of Statewide Evaluator Costs | $ 542,718 | $ 2,571 | $ 150,305 | $ 29,564 | $ 107,036 | $ 832,194 | |
| 9 | Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8) | $ 51,071,545 | $ 258,317 | $ 14,934,771 | $ 2,934,653 | $ 14,636,300 | $ 83,835,586 | |
| 10 | EEC-C Revenue collected through January 31, 2011, net of PA Gross Receipts Tax) | $ 13,213,258 | $ 58,663 | $ 3,914,399 | $ 792,349 | $ 2,639,891 | $ 20,618,560 | |
| 11 | Budgeted EEC-C Revenues February 1, 2011 - May 31, 2011 | $ 5,564,712 | $ 34,440 | $ 1,600,189 | $ 314,926 | $ 1,346,892 | $ 8,861,161 | |
| 12 | Remaining EEC Costs to be collected June 1, 2011 - May 31, 2013 (Line 9 - Lines 10-11) | $ 32,293,575 | $ 165,214 | $ 9,420,183 | $ 1,827,378 | $ 10,649,517 | $ 54,355,865 | |
| 13 | Customer Class Projected Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW") for June 1, 2011 - May 31, 2013 | 8,818,603,436 kWhs | 121,970,119 kWhs | 7,340,443,260 kWhs | 82,501,124 kWhs | 23,768,686 kWs | | |
| 14 | EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 12 / Line 13) | $ 0.00366 per kWh | $ 0.00135 per kWh | $ 0.00128 per kWh | $ 0.02215 per kWh | $ 0.44805 per kW | | |
| 15 | Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T) with T = 5.90% Pa Gross Receipts Tax in Base Rates] | 1.062699 | 1.062699 | 1.062699 | 1.062699 | 1.062699 | | |
| 16 | Proposed EEC-C Rates Effective June 1, 2011 (Line 14 X Line 15) | $ 0.00389 per kWh | $ 0.00143 per kWh | $ 0.00136 per kWh | $ 0.02354 per kWh | $ 0.48 per kW | | |

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of *December 31, 2006.*

## Calculation of Pennsylvania Power Company's Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") Rates
Effective June 1, 2011

| Line No. | Description | Penn Power Residential Customer Class (1) | Penn Power Non-profit Customer Class (2) | Penn Power Commercial Customer Class (3) | Penn Power Street Lighting Customer Class (4) | Penn Power Industrial Customer Class (5) | Penn Power Total (6) | |
|---|---|---|---|---|---|---|---|---|
| 1 | 2% of Penn Power's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery | | | | | | $ 6,659,789 | (A) |
| 2 | 2% of Penn Power's Annual Revenues for 12 Months Ended 12/31/2006 for Maximum Annual Cost Recovery for 48 months ending May 31, 2013 (Line 1 x 4 years) | | | | | | $ 26,639,156 | |
| 3 | Penn Power's Estimated EEC Program Costs for 48 Months Ending May 31, 2013 (PUC Table 5 x 4 years) | $ 12,917,611 | $ 15,251 | $ 4,295,597 | $ 328,255 | $ 4,516,117 | $ 22,072,831 | |
| 4 | PJM Peak Demand Program (PUC Table 6A) | $ - | $ - | $ 250,000 | $ - | $ 3,250,000 | $ 3,500,000 | |
| 5 | Penn Power's Common Costs Allocated to Applicable Customer Sector (PUC Table 6B) | $ 548,134 | $ 617 | $ 184,041 | $ 13,291 | $ 298,237 | $ 1,044,320 | |
| 6 | Penn Power Subtotal subject to 2% cap (Sum Lines 3-6) | $ 13,465,745 | $ 15,868 | $ 4,729,639 | $ 341,546 | $ 8,064,354 | $ 26,617,151 | |
| 7 | Penn Power's Share of Statewide Evaluator Costs | $ 74,618 | $ 84 | $ 25,054 | $ 1,809 | $ 40,599 | $ 142,164 | |
| 8 | Total EEC Costs for 48 months Ending May 31, 2013 (Sum Line 7 + 8) | $ 13,540,363 | $ 15,952 | $ 4,754,692 | $ 343,355 | $ 8,104,953 | $ 26,759,315 | |
| 9 | EEC-C Revenue collected through January 31, 2011, net of PA Gross Receipts Tax) | $ 3,294,027 | $ 7,744 | $ 1,268,365 | $ 88,923 | $ 2,075,658 | $ 6,734,717 | |
| 10 | Budgeted EEC-C Revenues February 1, 2011 - May 31, 2011 | $ 1,423,584 | $ 3,691 | $ 503,593 | $ 36,960 | $ 786,579 | $ 2,754,407 | |
| 11 | Remaining EEC Costs to be collected June 1, 2011 - May 31, 2013 (Line 9 - Lines 10-11) | $ 8,822,752 | $ 4,517 | $ 2,982,734 | $ 217,472 | $ 5,242,716 | $ 17,270,191 | |
| 12 | Customer Class Projected Kilowatt-Hours ("kWh") Delivered or Peak Load Contribution Kilowatt ("kW") for June 1, 2011 - May 31, 2013 | 3,424,504,646 kWhs | 10,977,721 kWhs | 2,650,013,650 kWhs | 13,203,306 kWhs | 4,899,249 kWs | | |
| 13 | EEC-C Rates Before Pa Gross Receipts Tax Gross-Up Factor (Line 11 / Line 12) | $ 0.00258 per kWh | $ 0.00041 per kWh | $ 0.00113 per kWh | $ 0.01647 per kWh | $ 1.07011 per kW | | |
| 14 | Pa Gross Receipts Tax Gross-Up Factor [1 / (1-T) with T = 4.40% Pa Gross Receipts Tax in Base Rates] | 1.046025 | 1.046025 | 1.046025 | 1.046025 | 1.046025 | | |
| 15 | Proposed EEC-C Rates Effective June 1, 2011 (Line 13 X Line 14) | $ 0.00270 per kWh | $ 0.00043 per kWh | $ 0.00118 per kWh | $ 0.01723 per kWh | $ 1.12 per kW | | |

(A) Pennsylvania's Act 129 of 2008 states that the maximum annual cost recovery for Energy Efficiency and Conservation Programs cannot exceed 2% of the electric distribution company's total annual revenue as of December 31, 2006.

Pennsylvania Power Company

ENERGY EFFICIENCY AND CONSERVATION CHARGE RIDER

An Energy Efficiency and Conservation ("EEC") Charge ("EEC-C") shall be applied to each Billing Unit during a billing month to Customers served under this Tariff. Billing Units are defined as follows:

| | |
|---|---|
| Residential, Non-profit, Commercial, and Street Lighting Customer Classes: | Per kWh |
| Industrial Customer Class: | Per ~~kVA~~kW |

Residential, Non-profit, Commercial, and Street Lighting Customer Class rates will be calculated to the nearest one-thousandth of a cent per kWh. Industrial Customer Class rates will be calculated to the nearest one-hundredth of a dollar per ~~kVA~~kW. The EEC-C rates shall be calculated separately for each Customer Class according to the provisions of this rider.

For service rendered ~~March~~ June 1, ~~2010~~ 2011 through May 31, 2013 the EEC-C rates billed by Customer Class are as follows:

Residential Customer Class (Rate Schedules RS; RS Optional Controlled Service Rider; RH; RH Water Heating Option; and WH):

0.270 ~~248~~ cents per kWh.

Non-profit Customer Class (Rate Schedule GS Special Provision for Volunteer Fire Companies, Non-Profit Senior Citizen Centers, Non-Profit Rescue Squads, and Non-Profit Ambulance Services, and Rate PNP):

0.043 ~~225~~ cents per kWh.

Commercial Customer Class (Rate Schedules GS, GS Special Rule GSDS, GS Optional Controlled Service Rider, GM, GM Optional Controlled Service Rider, PLS, OH With Cooling Capabilities, OH Without Cooling Capabilities, and WH Non-Residential):

0.118 cents per kWh.

Street Lighting Customer Class (Rate Schedules SV, SVD, and SM):

1.723 ~~689~~ cents per kWh.

Pennsylvania Power Company

Industrial Customer Class (Rate Schedules GP and GT):

$ 1.12~~0.62~~ per ~~kVA~~kW.

Pennsylvania Power Company

The EEC-C rates by Customer Class shall be calculated in accordance with the formula set forth below:

$$EEC\text{-}C = [(EEC_C - E) / S] \times [1 / (1 - T)]$$

$$EEC_C = EEC_{Exp1} + EEC_{Exp2} + EEC_{Exp3}$$

Where:

EEC-C = The charge in cents per Billing Unit by Customer Class as defined by this rider applied to each Billing Unit for the Rate Schedules identified in this rider.

$EEC_C$ = The Energy Efficiency and Conservation Costs by Customer Class projected to be incurred by the Company for the EEC-C Computational Period calculated in accordance with the formula shown above.

$EEC_{Exp1}$ = Costs incurred associated with the Customer Class specific EEC Programs as approved by the Commission for the EEC-C Computation Year by Customer Class. These costs also include an allocated portion of any indirect costs to be incurred associated with all the Company's EEC Programs for the EEC-C Computational Period.

$EEC_{Exp2}$ = An allocated portion of incremental administrative start-up costs incurred by the Company through February 28, 2010 in connection with the development of the Company's EEC Programs in response to the Commission's orders and guidance at Docket No. M-2008-2069887. These costs to design, create, and obtain Commission approval for the Company's EEC Programs include, but are not limited to, consultant costs, legal fees, and other direct and indirect costs associated with the development and implementation of the Company's EEC Programs in compliance with Commission directives. These costs shall be amortized over the 3-month period ending May 31, 2010.

$EEC_{Exp3}$ = An allocated portion of the costs the Company incurs to fund the Commission's statewide evaluator contract which shall be excluded in the final determination of the Act 129 limitation on the Company's EEC Programs costs.

E = The cumulative over or under-collection of EEC costs by Customer Class that results from the billing of the EEC-C rates (an over-collection is denoted by a positive E and an under-collection by a negative E).

S = The Company's projected (kWh sales delivered to all Customers in the specific Customer Class or ~~kVA~~ kW demand based on PJM Peak Load Contribution)

T = The Pennsylvania gross receipts tax rate in effect during the billing month expressed in decimal form as reflected in the Company's base rates.

All capitalized terms not otherwise defined in this rider shall have the definitions specified in the Definitions of Terms section of this tariff. For the purpose of this rider, the following additional definitions shall apply:

1. EEC-C Computational Period – The 39-month period from March 1, 2010 through May 31, 2013.

2. EEC-C Reconciliation Year – The 12-month period ending May 31 each year for the duration of this rider.
3. Peak Load Contribution – A Customer's contribution to a zone's normalized summer peak load, as estimated by the Company.

Upon determination that the EEC-C rates, if left unchanged, would result in material over or under-collection of all recoverable costs incurred or expected to be incurred by Customer Class, the Company may request that the Commission approve one or more interim revisions to the EEC-C rates to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

The Company shall file an annual report of collections under this rider within thirty (30) days following the conclusion of each EEC-C Reconciliation Year.

At the conclusion of the duration of this reconciliation rider, the Company is authorized to recover or refund any remaining amounts not reconciled at that time under such mechanism as approved by the Commission.

Application of the EEC-C rates shall be subject to annual review and audit by the Commission.

**Appendix A**

**Biography**
**Charles V. Fullem**
**Director –Rates & Regulatory Affairs / Pennsylvania**

**Charles V. Fullem** is Director- Rates & Regulatory Affairs / Pennsylvania a position he was appointed to on January 22, 2006. In that capacity he is responsible for developing the default service plans of Met-Ed, Penelec and Penn Power, as well as all retail tariff filings and financial reports to the Pa Regulatory Commission. He has over 28 years experience in the energy industry, with a background in rates & regulation, marketing, unregulated retail pricing and regulated tariffs, contract development and negotiations of both wholesale and retail electric service contracts.

From December 2000 through January 2006, he served in various positions, including Director of Energy Consulting Operations, for The E Group, the energy consulting company of FirstEnergy. As Director, he managed technical staff teams and was responsible for delivering all aspects of The E Group's client services for over a $ 1 billion dollar client energy spend, including energy management , bill and rate analysis, development of energy procurement strategies, preparation of requests for proposal, evaluation of bids, contract development and implementation, open market analysis, and negotiations with suppliers and utilities and utility bill payment.

From November 1999 through December 2000, Mr. Fullem was Director, Pricing and Regulatory Affairs in FirstEnergy's rate department, where he was responsible for tariff administration and pricing programs serving over 2.2 million customers in Ohio and Pennsylvania. In this capacity, Mr. Fullem developed and implemented the unbundled tariffs designed to implement Customer Choice in Ohio, also coordinated the development of FirstEnergy's Supplier Tariff, Net Metering Rider and participated in the OSP workgroups.

From December 1994 through November 1999 Mr. Fullem served in various roles in First Energy's marketing department, including Director Planning and Strategy and Director of Centerior Energy's Competitive Analysis department where he developed and implemented successful marketing programs targeted to C&I Customers and mass market customers in competitive retail electric markets in both competitive generation markets and in traditional area's of competition between fully integrated electric utility providers.

From 1982 through December 1994 served in various roles in rates & regulation at Centerior Energy and Cleveland Electric Illuminating Company including the roles of Director Planning & Strategy, and Director of Rates & Contracts. In these roles Mr. Fullem managed and performed cost of service studies, load research, customer requirements analyses, designed rates and tariffs, participated in the development of revenue requirements and performed financial analysis.

Mr. Fullem holds his Bachelor of Science degree in Mineral Economics from the Pennsylvania State University. Mr. Fullem is a Certified Energy Procurement Professional by The Association of Energy Engineers. He has provided expert testimony before the Public

Utilities Commission of Ohio, The Pennsylvania Public Utilities Commission, and The Federal Energy Regulatory Commission.

Mr. Fullem has prepared and presented testimony in the following rate-related cases:

**P.U.C.O. Cases:**

| *Case Nos.* | |
|---|---|
| 85-521-EL-COI | (In the Matter of the Investigation into the Perry Nuclear Power Station) |
| 88-170-EL-AIR | (In the Matter of the Application of the Cleveland Electric Illuminating Company for Authority to Amend and to Increase Certain of its Filed Schedules Fixing Rates and Charges for Electric Service) |
| 88-171-El-AIR | (In the Matter of the Application of the Toledo Edison Company for Authority to Amend and to Increase Certain of its Filed Schedules Fixing Rates and Charges for Electric Service) |
| 91-1528-EL-CSS | (In the Matter of the Complaint of Toledo Premium Yogurt, Inc., dba Freshens Yogurt, Complainant, v. Toledo Edison Company, Respondent) |
| 91-2308-EL-CSS | (Board of Education, Cleveland City Schools v. Cleveland Electric Illuminating Company) |
| 92-504-EL-CSS | (Board of Education, Cleveland City Schools v. Cleveland Electric Illuminating Company) |
| 95-02-EL-ABN | (In the Matter of the Application of the City of Clyde Requesting Removal of Certain Electric Distribution Facilities of the Toledo Edison Company from Within Clyde's Corporate Limits) |
| 01-174-EL-CSS | (In the Matter of the Complaint of the City of Cleveland and WPS Energy Services, Inc., Complaints, v. The Cleveland Electric Illuminating Company and FirstEnergy Corp., Respondents) |

**Pa P.U.C. Cases:**

| | |
|---|---|
| R – 850267 | (Pa P.U.C. et al. v. Pennsylvania Power Company) |
| R – 860378 | (Pa P.U.C. et al. v. Duquesne Light Company) |
| ***Case No.*** | |
| 87-1160 | (Duquesne Light Company & Pennsylvania Power Company, Appellants v. David M. Barasch, etc., et al) |
| ***Docket Nos.*** | |
| P-00072305 | (Petition of Pennsylvania Power Company for Approval of Interim Default Service Supply Plan) |

| | |
|---|---|
| P-2008-2066692 | (Voluntary Prepayment Plan) |
| P-2009-2093053 | (Metropolitan Edison Company Default Service Programs) |
| P-2009-2093054 | (Pennsylvania Electric Company Default Service Programs) |
| I-2009-2099881 | (Compliance of Commonwealth of Pennsylvania with Section 410(a) of the American Recovery and Reinvestment Act 2009) |
| M-2009-2092222 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, & Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| M-2009-2112952 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, & Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| M-2009-2112956 | (Petition of Metropolitan Edison Company, Pennsylvania Electric Company, & Pennsylvania Power Company for approval of its Energy Efficiency and Conservation Plans) |
| A-2010-2176520 | (Joint Application of West Penn Power Company, Trans-Allegheny Interstate Line Company & FirstEnergy Corp.) |
| A-2010-2176732 | (Joint Application of West Penn Power Company, Trans-Allegheny Interstate Line Company & FirstEnergy Corp.) |

**FERC Cases:**

| ***Docket Nos.*** | |
|---|---|
| ER93-471-000 | (COS – FERC Rate case: Cleveland Electric Illuminating Company v Cleveland Public Power) |