



Duquesne Light
Our Energy...Your Power

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March 12, 2010

VIA OVERNIGHT MAIL

James J. McNulty, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

**Re: Implementation of the Alternative Energy Portfolio Standards Act of 2004
Standards for the Participation of Demand Side Management Resources –
Technical Reference Manual Update
Docket No. M-20051865**

Dear Secretary McNulty:

Enclosed for filing are an original and fifteen (15) copies of the Comments of Duquesne Light Company in the above-referenced proceeding. Please do not hesitate to contact me if you have any questions.

Sincerely yours,

Kelly L. Geer

Enclosure

cc: (via email)
Gregory A. Shawley
Kriss Brown

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Re: Implementation of the Alternative :
Energy Portfolio Standards Act of 2004 : **Docket No. M-00051865**
Standards for the Participation of Demand
Side Management Resources – Technical :
Reference Manual Update :

**COMMENTS OF
DUQUESNE LIGHT COMPANY**

I. Introduction

In implementing the Alternative Energy Portfolio Standards Act (“AEPS Act”), 73 P.S. §§ 1648.1-1648.8, the Pennsylvania Public Utility Commission (“Commission”) had previously adopted an Energy Efficiency and Demand Side Management (“DSM”) Rules for Pennsylvania’s Alternative Energy Portfolio Standard, Technical Reference Manual (“TRM”) at Docket No. M-00051865. In adopting the original version of the TRM, the Commission directed the Bureau of Conservation, Economics and Energy Planning (“CEEP”) to oversee the implementation, maintenance and periodic updating of the TRM in an Order entered January 16, 2009 implementing the energy efficiency and conservation (“EE&C”) program requirements of Act 129 of 2008, 66 Pa. C.S. 2806.1 (“Implementation Order”).

Soon after the Implementation Order, the Commission staff initiated a collaborative process to review and update the TRM with the purpose of supporting both the AEPS Act and the Act 129 EE&C program that culminated in the adoption of the 2009 version of the TRM at the May 28, 2009 Public Meeting. Adopting the 2009 version of the TRM also made the Commission

recognize the importance of updating the TRM on an annual basis. By a Tentative Order entered February 2, 2010 at Docket No. M-00051865, the Commission advanced the annual update of the TRM to be applied beginning with the 2010-2011 AEPS Act and Act 129 EE&C program compliance years.

Duquesne Light Company (“Duquesne”) submits the following comments in response to the Tentative Order.

II. Overall Comments

Duquesne supports the comments filed by the Energy Association of Pennsylvania (“EAPA”) and provides hereby further insight on the Tentative Order draft TRM as discussed in more detail below. There is an issue about when the proposed changes should become effective. It is acceptable to adopt the changes in the January 28, 2010 draft TRM (“Draft TRM”) and apply them retroactively, that is to the program year starting in 2009 and ending May 31, 2010, as well as prospectively for the program year starting June 1, 2010 and ending May 31, 2011. Duquesne has been using the Draft TRM as issued January 28, 2010 for calculation of custom rebates. Therefore, applying the proposed changes retroactively will simplify the administration of the energy efficiency programs which have been underway since December 1, 2009. However, Duquesne respectfully requests the Commission to abstain from applying any future revisions to the TRM retroactively. Other areas of concern are listed below.

Algorithm for Calculating Peak Demand Savings or Reductions for Energy Star CFLs

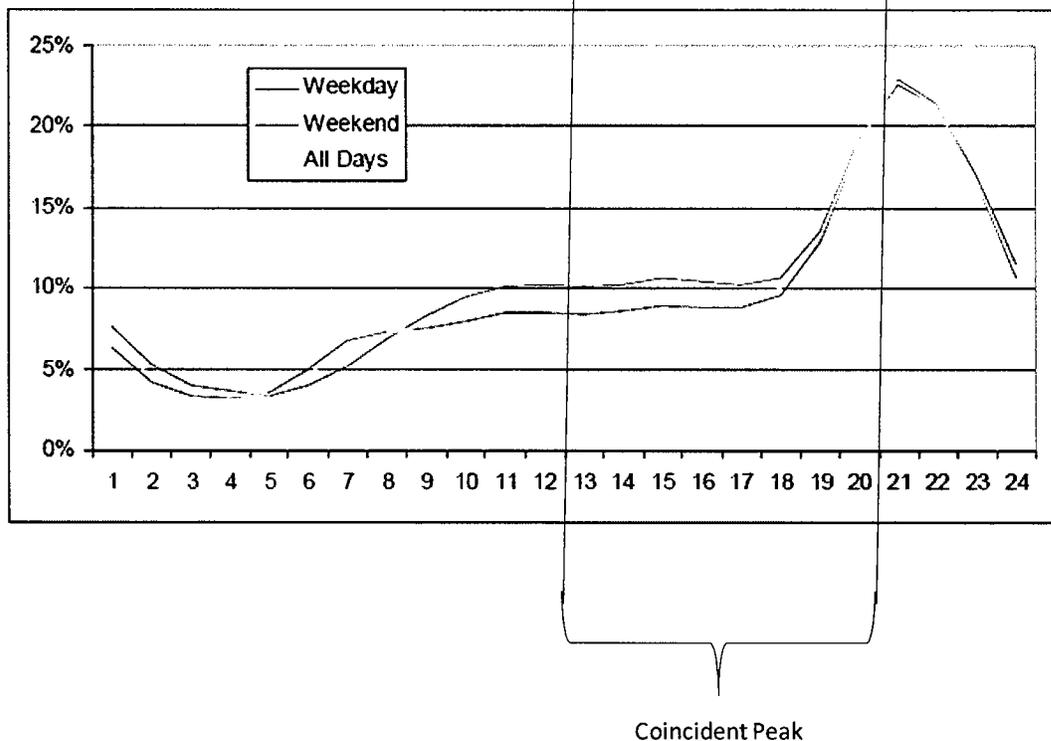
Coincidence factor (“CF”) is the ratio of the “installed unit’s connected load to its demand at time of system peak.” Draft TRM at 15. Duquesne believes that the 5% CF adopted in Draft TRM Table 4-3 (on page 31 of the Draft TRM) is too low. As can be seen in the chart provided below, residential CFLs are used throughout the system coincident peak period as defined in

TRM Table 1-1. The 3 average hours of use per day for residential CFLs also set forth in Table 4-3 are likely to occur between noon to 8 p.m., which coincides with the period of system peak. Accordingly, Duquesne finds the 5% extraordinarily low in view of this demonstrated use pattern. A more appropriate treatment would be to consider the 3 hours to be within the 8 hours and afford the measure to be 37.5% (3/8). Please see Table 1-1 from the Draft TRM and Figure 4-13 from the KEMA CFL Metering Study Final Report below for reference.

Table 1-1: Periods For Energy Savings and Coincident Peak Demand Savings

Period	Energy Savings	Coincident Peak Demand Savings
Summer	May through September	June through September
Winter	October through April	N/A
Peak	8:00 a.m. to 8:00 p.m.	12:00 p.m. to 8:00 p.m.
Off-Peak	8:00 p.m. to 8:00 a.m.	N/A

**Figure 4.13
Indoor CFL Load Shapes by Day Type**



Source: CFL Metering Study Final Report, KEMA, February 25, 2005

Based on this reference, residential CFLs operate across all 8 hours of the system coincident peak demand period. Accordingly, the stated daily 3 operating hours should be treated as occurring during the peak period 3 out of 8 hours or 37.5%.

Prescriptive Lighting Savings Table

The current version of the TRM includes a Prescriptive Lighting Savings Table 12. It provides a simple tool to calculate kilowatt savings for common lighting upgrades. This table is particularly useful for calculating savings for small projects because it is prescriptive and saves on administrative costs for estimating and measuring savings. Establishing reasonable and prototypical baseline assumptions for use when calculating savings associated with prescriptive

lighting measures facilitates implementation of mass-market focused mail-in rebate programs. If the Commission deems it necessary, use of baseline assumptions such as those described in Table 12 can be limited by policy to projects below a given size threshold (i.e., projects with total kW reductions below 50 kW). Duquesne recommends and requests Table 12 be retained as an option for discretionary use by EDCs for lighting projects below 50 kW and procedures be adopted to update the table to ensure table values are comprehensive and accurate.

TRM Revision Draft Dated January 28, 2010 Appendix C: Lighting Inventory Form

The following comments address corrections and omissions from the TRM Revision Draft Dated January 28, 2010 Appendix C: Lighting Inventory Form, Table of Standard Wattages:

1. The Lamp Codes do not always match the Description in Appendix C. For example, the Lamp Code CFS7W does not match the Description, which states Compact Florescent, spiral. Rather, CFS7W is pin-based (not spiral). CFS9W is also pin-based, not spiral as the Description states. Duquesne requests that these codes be checked to ensure there are not other discrepancies between the Lamp Code and Description.
2. Additional CFL lamps are necessary for 13 Watt and 26 Watt spiral lamps.
3. Additional lamps are needed for Display Lighting, Cold Cathode Fluorescent Lamps 2W, 3W, 5W, 8W, 13W and 18W.
4. Additional lamps are needed for Display Lighting, Screw-in CFL Reflector - R20, R30 and R40 lamps (14-26 Watts).
5. LED Lighting: Other than Light Emitting Diode (LED) Exit Signs, no LED lighting technologies are addressed. At a minimum Duquesne recommends adding:
 - a. 10 Watt LED PAR 30 and PAR 38 reflector lamps.

- b. LED Channel Signage (Red – 80% of applications) signage height up to 2 feet and signage height greater than 2 feet.
- c. LED Street and Security Lighting.

6. Addition of the 125 Watt Metal Halide Pulse Start lamps (LR and SCWA).

Revisions to Section 7 Demand Response Programs

Duquesne proposes the following revisions to Section 7.

1. Relocate the following paragraph from Section 7.1 to Section 7.0:

“The required application information is the minimum requirement for submitting a program. If a submitter relies on PJM protocols for participation in the PJM market, the PJM methodology will be accepted as a reporting method.” This relocation is necessary because as currently written the PJM option applies only Commercial and Industrial Applications. PJM protocols are also available for residential demand response programs. By relocating the paragraph, the protocol would apply to both residential applications as well as commercial and industrial applications.

2. In Section 7.1, the second sentence appears to relate to Alternative Energy Credits (AECs) and, if so, should be shaded grey. The shading convention is specified in footnote 11 on page 5 of the Draft TRM. Also, modify the second sentence to include demand response measures as, “An application must be submitted, containing adequate documentation fully describing the energy efficiency or demand response measures installed or proposed and an explanation of how the installed facilities qualify for AECs.” Also in Section 7.1, Duquesne suggests modifying the number six (6) to delete “per measure” data and rely on per facility data in the list of required information to read as follows:

Estimated demand reduction value (kW) including supporting documentation (i.e. engineering estimates or documentation of verified savings from comparable projects)

3. In Section 7.2 Residential Applications, Duquesne suggests inserting new paragraphs as lead in to the section as follows:

Load reductions from demand response resources will vary by type of resource, number of units, nature of control (e.g., level of cycling, use of temperature reset or dynamic algorithms), duration of control, time, temperature, and other factors.

The tables and formulas in this section may be supplemented by PJM protocols found in PJM Manuals 18 and 19. More specifically, load reductions associated with conventional cycling strategies for central air conditioners or heat pumps, and domestic water heating may be based on research conducted for PJM, including the following study: Lawrence Berkeley National Laboratory, "Deemed Savings Estimates for Legacy Air Conditioning and Water Heating Direct Load Control Programs in PJM Region," April 2007.

Finally, measurement protocols may be adopted based on load research conducted in Pennsylvania and in other jurisdictions with similar program and participation characteristics.

4. In Section 7.2.2, Definition of Terms, Duquesne suggests changing line three to read, "Hours = Number of hours."

III. Conclusion

Duquesne thanks the Commission for the opportunity to comment on this matter.



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