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VIA ELECTRONIC FILING

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
2nd Floor, Room-N201
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 2026 Update
M-2023-3044491**

Dear Secretary Chiavetta:

Enclosed for filing please find Duquesne Light Company's Comments in the above referenced proceeding.

If you have any questions regarding the information contained in this filing, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'LBQ', is written over a light blue circular stamp.

Lindsay A. Baxter
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Enclosure

cc:
Regi Sam, rsam@pa.gov
Tiffany L. Tran, tiftran@pa.gov
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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Implementation of the Alternative Energy Portfolio :
Standards Act of 2004: Standards for the :
Participation of Demand Side Management : M-2023-3044491
Resources – Technical Reference Manual 2026 :
Update :

**COMMENTS OF
DUQUESNE LIGHT COMPANY**

I. INTRODUCTION

On May 9, 2024, the Pennsylvania Public Utility Commission (“Commission” or “PUC”) issued a Tentative Order seeking comment on proposed updates to the Technical Reference Manual (“TRM”) as part of a potential Phase V of the Act 129 Energy Efficiency and Conservation (“EE&C”) Program. In the Tentative Order, the Commission provided for interested parties to submit comments on the proposed TRM updates thirty days after notice of such proposed changes is published in the *Pennsylvania Bulletin*, with reply comments due twenty days thereafter. Notice of the Tentative Order and public comment period was published in the *Pennsylvania Bulletin* on May 25, 2024, at 54 Pa.B. 2910. Pursuant to that notice, Duquesne Light Company (“Duquesne Light” or “Company”) hereby submits the following comments.

II. COMMENTS

The Company has thoroughly reviewed the proposed TRM. While the Company is generally supportive of the updated document, it believes several proposed provisions could be enhanced through further refinement. In particular, a central theme of these comments is encouraging the Commission, wherever possible, to rely on the results of Pennsylvania-specific

studies, including the Act 129 2023 Pennsylvania Baseline Studies, rather than utilizing assumptions. Duquesne Light offers the following proposed edits for the Commission’s consideration. For the ease of the reviewer, these comments are presented in the order in which they appear in the document, rather than in order of priority or importance.

Comments on TRM Order:

Section B.5 Process for Code Change Updates

Duquesne Light recommends that the calendar for the code update process be updated to clarify that the effective date of any changes would be the start of the following program year, June 1st.

Section B.9 Lighting Interactive Effects Calculator

Duquesne Light recommends that the parameter "IF_{electric}" included in Table 4 (page 20) be changed to "IF_{energy}" for consistency with how IF_e is defined on page 17, as “interactive energy.”

Section E. 1—2.1.1 ENERGY STAR Lighting

In the closing paragraph, the proposed language states in-service rates (ISR) for non-direct install programs should come from "EDC Data Gathering." Duquesne Light requests clarification on the expectation for EDC data gathering to inform the ISR for non-direct install programs. Conducting statistically valid sampling to determine in-service rates for non-direct install delivery channels will inappropriately increase the complexity and costs of program implementation. The Company recommends the Commission establish applicable ISR assumptions. If not, the PUC should allow EDCs to adopt the ISR published in other states’ TRMs.

Section E.2--- 2.1.2 “Residential Occupancy Sensors”

The TRM Order proposes an ISR of “16% for plug-in occupancy sensors (based on a weighted average of evaluated PY13 and PY14 outlet gasket ISRs from FirstEnergy kits).” Duquesne Light questions whether the ISR for a plug-in occupancy sensor should be based on the ISR for outlet gaskets, as these are unrelated technologies and are installed in a significantly different manner (one is plug-in and the other requires removing the cover plate of an outlet to install). Duquesne Light suggests that a more appropriate ISR source be developed for plug-in occupancy sensors.

Section E.9--- 2.25 Air Conditioner & Heat Pump Maintenance

Because Section 2.2.5 - Air Conditioner & Heat Pump Maintenance only addresses maintenance of *existing* HVAC equipment, Duquesne Light recommends striking references to replace on burnout, new construction vintages, or federal standards. These vintages and standards would apply to the installation of new units but are not relevant to maintenance measures. The Commission should instead use the Statewide Evaluator’s (“SWE’s”) Baseline Study findings for representative equipment efficiencies.

Section E.11-- 2.2.8 Room AC Retirement

The Order inappropriately proposes applying federal standards as the default baseline efficiency for all vintages. Duquesne Light notes that this measure refers to room air conditioners which are being retired. It is unlikely that many of these units meet the current federal standards that apply to new units. In fact, some of these units may be older than 10 years and embody far less efficient standards than are currently prescribed. Duquesne Light recommends the Commission amend the proposed TRM to use the

results of the Act 129 2023 Pennsylvania Residential Baseline Study to assign a default baseline efficiency for retirement-only applications.

Section E.14--- 2.2.12 Furnace Maintenance

Because Section 2.2.12 – Furnace Maintenance only addresses maintenance of *existing* HVAC equipment, Duquesne Light suggests striking the sentence “[T]he Commission also suggests updating default baseline efficiency requirements for all vintages to be based on applicable updates made with the federal standards,” as updates to federal standards will apply to only new equipment.

Section E.30--- 2.4.12 ENERGY STAR Air Purifiers

Section 2.4.12 of the proposed TRM gives a constant of one watt for the baseline partial-on wattage (POW_{base}) parameter. The ENERGY STAR specification for non-connected air purifiers sets a maximum POW_{base} of one watt. However, ENERGY STAR allows for a POW_{base} of two watts for connected units. Duquesne light has confirmed this higher allowance through a review of the ENERGY STAR qualified products list. As such, Duquesne Light recommends that the default POW_{base} be one watt and two watts for non-connected and connected units, respectively.

Section E.40 Measure Number Changes

Duquesne Light cautions against renumbering sections of the TRM as proposed for Phase V. In Phase IV, the SWE used the TRM’s section numbers as an identifying code for measure activity following standard TRM algorithms. Renumbering these measures in Phase V will complicate SWE’s and EDC’s comparison of program activity across phases and impose tracking system modification costs on EDCs. Should the Commission move forward with renumbering as proposed, Duquesne Light recommends that Table 6: Proposed Measure Number Changes for Residential Measures include both

renumbered/deleted sections and newly added sections. For example, the table should include both that Phase IV measure number 2.2.2 was renumbered to 2.2.3, but also the insertion and name of the new Phase V Section 2.2.2.

Section F.35—2.5.17 Refrigerated Case light Occupancy Sensors

The draft TRM proposes to remove demand reductions resulting from measure 3.5.17 – Refrigerated Case Light Occupancy Sensor, based on the “assumption that savings occur during off-peak periods.” Duquesne Light respectfully disagrees with this approach.

Depending on the specific application, the Company believes peak demand reductions could result from the implementation of this measure. The TRM should allow for EDCs to provide data validating demand reductions claimed for implementation of this measure, rather than a blanket prohibition. If the Commission chooses to move forward with banning any demand reductions resulting from this measure, it should amend the Order to provide the basis and reference for this assumption.

Section F.38—3.7.1 High-Efficiency Ice Machines

Duquesne Light suggests that only published federal standards, not proposed rules, be used for establishing baseline efficiencies, with regard to high-efficiency ice machines. In the event that a standard is finalized and published, Duquesne recommends incorporating it in accordance with the timeline established on Order page 13.

Comments on Proposed 2026 Technical Reference Manual, Volume 1

Definitions

For clarity, Duquesne Light recommends the Commission consider the following edits to proposed definitions:

Replace on Burnout (ROB) Measure- ROB describes end-of-life replacement, in contrast to “Early Replacement,” which occurs even though a device has remaining useful life. Duquesne recommends instead using the term “Normal Replacement,” as a more common term to reduce the potential for confusion.

Early Replacement Measure (EREP)- Duquesne Light asserts that the statement, “Incremental cost is the full cost of equipment replacement,” is incorrect and should be revised. Applying the full cost ignores the fact that the customer would have eventually needed to replace the equipment. If we assume that, at the end-of-life of the existing equipment, the customer would have to replace it with the baseline standard equipment available at that time, a more accurate method for calculating incremental cost would be as follows: apply *full* measure cost *minus* the present value (PV) of the cost for the baseline code standard efficiency equipment, discounted over the remaining useful life (RUL) of the existing equipment to be replaced. This methodology more accurately assesses the incremental cost of the early replacement.

Duquesne Light believes this methodology is aligned with the Total Resource Cost (“TRC”) test, which reflects life-cycle benefits divided by life-cycle costs, by accounting for the cost of eventually replacing the equipment at end of life, which the customer would have borne absent the program.

1.15 Transmission and Distribution System Losses

Duquesne Light requests that the line loss factors included in Table 1-4 on page 13 of the Proposed 2026 Technical Reference Manual, Volume 1 be updated to reflect more current

projections for Small C&I and Large C&I line loss factors. Specifically, the Company recommends changing these factors to the values below, to be consistent with the line loss factors included in the Company’s Commission-approved Tariffs.¹

Table 1-1: Line Loss Factors Used in the EE and DR Potential Studies

EDC	Residential LLF	Small C&I LLF	Large C&I LLF
Duquesne	1.0741	1.065	1.0308

For accuracy and transparency, it is important that the TRM include current data that is consistent with publicly available information.

Comments on Proposed 2026 Technical Reference Manual, Volume 3

Sections 3.1.1. and 3.1.6

The Commission proposes that non-residential downstream lighting (Section 3.1.1 – Lighting Retrofits) be limited to measure vintage Early Replacement. Conversely, non-residential midstream lighting (Section 3.1.6 – Lighting Incentives) is assigned measure vintage "Replace on burnout".

The implications are significant because this very different treatment assigns measure vintage, and associated cost-effectiveness cost treatment, according to the measures’ program engagement channel. Commercial downstream lighting is treated as

¹ Duquesne Light Company Electric Generation Supplier Coordination Tariff, effective June 17, 2021. See Table 1: Real Power Distribution Losses and Section 4.7.1 Transmission Losses. www.duquesnelight.com/docs/default-source/electrical-generation-suppliers/tariff_3s_29.pdf?sfvrsn=bd96a942_2

Early Replacement, but the same equipment incented through a midstream program is assigned Measure Vintage “Replace on burnout.”

Duquesne Light asserts that Early Replacement should not be the default vintage for commercial downstream lighting measures. Normal Replacement, that is end-of-life replacement, ROB, should be the C&I lighting default. Early Replacement should be proven and verified; it is the exception rather than the rule.

Default treatment as Early Replacement for C&I downstream Lighting does not reduce the complexity of program implementation, it adds complexity. It does not avoid the need to establish a baseline measure cost and, if done properly, requires the use of dual baseline life-cycle savings calculations (or adjusted EULs, that require the establishment of the prototypical case for each measure). Using early replacement as the default assumption conflicts with industry standard practices.

All four of Duquesne Light’s EE&C Plans, along with subsequent authorized modifications, as well as 13-years of cost-effectiveness reporting treat C&I lighting fixture and lamp measures as end-of-life, normal replacement/ROB measures. This default planning and reporting assumption is consistent with standard practice in energy efficiency planning, reporting and evaluation nationally, as demonstrated by the following excerpts from several jurisdictions:

California:

For new equipment that is Replace on Burnout (ROB), Normal Retrofit and Remodeling (NR) and New Construction (NC) baseline equipment should be determined by the regulation, code, or industry standard. Early Retirement: Compelling evidence must demonstrate the replacement was a program induced Early Retirement. A dual baseline must be utilized for program-induced early retirement measures. Incremental measure costs is applied in either case.²

² California Energy Efficiency Policy Manual R.09-11-014, updated 2020 adopted terms “Accelerated Replacement” in-place of Early Retirement.

Illinois:

Measures installed in new construction, natural installation, investment, or replacement use incremental cost . . . retrofit Measure (e.g., air sealing, insulation, tank wrap, controls) where appropriate baseline is zero expenditure, and the Incremental Cost is the full cost. Early Replacement of functioning equipment where the customer would not have otherwise replaced functioning equipment must use dual baselines and apply full incremental costs.³

New York:

Early replacement is the replacement of equipment before it reaches its Effective Useful Life (EUL) whereas end-of-life or normal replacement refers to the replacement of equipment which has reached or passed the end of its measure-prescribed EUL. An evaluator charged with verifying savings associated with early replacements must first verify that a given installation is actually a case of early replacement. Early Replacement dual baseline requirements apply incremental cost treatment.⁴

Duquesne Light recommends the TRM adopt Normal Replacement, End-of-Life Replacement (colloquially “Replace on Burnout or ROB”) as the default replacement vintage for C&I lighting measures (standard practice in CA, IL, NY). Early Replacement is the exception and requires additional evidence. Efforts should be made to align TRC methodology with industry standard practice.

³ 2023 IL TRM v11.0 Vol. 1_September 22, 2022_FINAL, Effective: January 1, 2023, Section 3.10 Measure Incremental Cost Definition. C&I Lighting TOS Program Incremental Costs are Provided at pages 666-673.

⁴ CE-05-EMV Guidance Final 11-1-2016, TIMING OF THE PURCHASE

III. CONCLUSION

The Company supports the Commission's continuing efforts to modify and update the TRM to provide effective and accurate guidance towards implementation of energy efficiency and conservation programs. Furthermore, Duquesne Light supports many of the provisions included in the draft 2026 TRM Update. The amendments proposed in these comments will further strengthen the 2026 TRM. The Company appreciates the opportunity to participate in this proceeding, leading towards more beneficial programming for Pennsylvania electricity consumers.

Respectfully submitted,



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