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June 24, 2024

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
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 Charging
Docket No. M-2023-3044491**

Dear Secretary Chiavetta:

Pursuant to the Tentative Order and Opportunity to Comment issued by the Pennsylvania Public Utility Commission's ("Commission") on May 9, 2024, enclosed herewith for filing are the *Comments of FirstEnergy Pennsylvania Electric Company* regarding the above-referenced matter.

Please contact me if you have any questions regarding this matter.

Very truly yours,

A handwritten signature in blue ink, appearing to read "D. A. Garcia", with a long horizontal flourish extending to the right.

Daniel A. Garcia

DAG/mlr

Enclosures

cc: As Per Certificate of Service

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

Docket No. M-2023-3044491

**COMMENTS OF FIRSTENERGY PENNSYLVANIA ELECTRIC COMPANY TO
THE TENTATIVE ORDER REGARDING THE
2026 TECHNICAL REFERENCE MANUAL**

I. INTRODUCTION

On May 9, 2024, the Pennsylvania Public Utility Commission (“Commission”) entered a Tentative Order in the above-referenced matter seeking comments to the proposed updates to the 2026 Technical Reference Manual (“TRM”) that will be applied to electric distribution companies’ (“EDCs”) Phase V Energy Efficiency and Conservation (“EE&C”) Plans from June 1, 2026 through the duration of Phase V. The Commission directed that comments be submitted within thirty days of the publication date of the Tentative Order in the *Pennsylvania Bulletin* and that reply comments be filed within fifty days of publication. Notice of the Tentative Order was published in the *Pennsylvania Bulletin* on May 25, 2024.¹

The Commission previously adopted *Energy-Efficiency and DSM Rules for Pennsylvania's Alternative Energy Portfolio Standard, Technical Reference Manual*² to help implement the Alternative Energy Portfolio Standards Act, 73 P.S. §§ 1648.1 - 1648.8. Subsequently, the protocols for measurement and verification of energy savings and load reduction impacts associated with EDC EE&C Plans developed to meet the requirements of Act 129 were vetted through a collaborative process and specified in an updated TRM that was adopted in an Order in May 2009.³ The Commission recognized the need to review and update the TRM on a periodic basis and directed the Bureau of Technical Utility Services to oversee the implementation, maintenance and annual updating of the TRM for Phase I and Phase II. The Commission determined that the 2016 TRM would be applicable for the entirety of Phase III unless a mid-phase update was deemed necessary by the Commission.⁴ As in Phase III, the Commission determined that the 2021

¹ 54 Pa.B. 2910.

² *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-00051865; Order entered October 3, 2005).*

³ The TRM was adopted as a component of the EE&C Program in accordance with the Commission's Energy Efficiency and Conservation Program Implementation Order entered January 16, 2009.

⁴The TRM was adopted as a component of the EE&C Program in accordance with the Commission's Energy Efficiency and Conservation Program Implementation Ordered entered June 19, 2015.

TRM would be applicable for the entirety of Phase IV unless a mid-phase update was deemed necessary by the Commission. Additionally in Phase IV, the Commission adopted a new process for incorporating codes, standards, and ENERGY STAR specifications that change during phase IV without undertaking a full TRM update.⁵ Similar to Phase IV, the Commission proposes in its Tentative Order a mechanism through which the TRM will be updated for currently unknown changes to codes and standards that may occur through Phase V.

FirstEnergy Pennsylvania Electric Company (“FE PA”) appreciates the efforts of the Commission, Staff and Statewide Evaluator in striving to balance both the value of updating the codes and standard changes during Phase V with the potential issues of updating the TRM mid-phase. In general, FE PA believes the organization and documentation in the Tentative Order and Draft 2026 TRM are positive efforts and, to improve the TRM, the FE PA submits Appendix A, a seven-page document attached hereto, containing FE PA’s technical comments to the Commission's Tentative Order. FE PA’s comments and suggested corrections, clarifications, or revisions to improve the TRM are identified in the Comments column of Appendix A. Also included in Appendix A for ease of reference are volume, section, page and table numbers.

II. CONCLUSION

FirstEnergy Pennsylvania Electric Company appreciates the opportunity to provide comments on the Pennsylvania Public Utility Commission's proposed revisions to the Technical Reference Manual and look forward to collaborating with the Statewide Evaluator, program evaluation group and Commission Staff on this aspect of Act 129 compliance.

Dated: June 24, 2024

Respectfully submitted,

By:  _____

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⁵ The TRM was adopted as a component of the EE&C Program in accordance with the Commission's Energy Efficiency and Conservation Program Implementation Ordered entered June 19, 2020.

Volume	Section	Page	Topic / Item	Comment
1	1.3	4	Table 1-2 footnotes	A comma in the superscript is needed between footnotes 6 and 7
1	Appendix E	23	Appendix E / DLC	LED lighting is a relatively mature technology now. In our experience there have been very few historical requests for exceptions to the DLC requirement. Therefore, can the DLC exception process be relaxed to allow EDCs to make case-by-case judgments in consultation with their EM&V vendors? For example, a customer may want to install LEDs with a higher color-correlated temperature (CCT) than the range allowed by DLC, for lamps that are intended for signage backlighting. The high CCT in this example would actually be a desirable attribute to the customer, since it achieves a neutral white background for signage.
2	2.1.1	2	Lighting Interactive Effects	We appreciate the EDC data gathering option for direct install applications where the heating / cooling system types are known for IE_kWh, IE_kWs and IE_kWw. It would be beneficial to also include guidance for a simplified and standardized calculation. For example, something like - 0.8/COP or (3.412x0.8)/EER for the kW factors, and something like -0.3/COP and (3.412x0.2)/EER for the kWh factors.
2	2.2.1	14-20	Technical terminology in tables and footnotes.	References to table 2-11 in the footnotes should refer to table 2-13. The PTAC and PTHP early replacement baselines are the same as the replace-on-burnout baselines. The PTAC and PTHP footnote "i" should refer to footnote "j". The GSER factor description in table 2-9 should read "Factor to convert EERg to SEER" not "HSPF".
2	2.2.1	18	High Efficiency Equipment: ASHP, CAC, GSHP, PTAC, PTHP: Table 2-10 GSHP baselines	For ROB or NC the baseline for a GSHP has been an ASHP through Phase IV unless they replaced another GSHP. In this table the efficiencies are higher than ASHP. If that is not the intention, the values in the ROB/NC columns should be changed to ASHP SEER/HSPF values. For early replacement it's fine as it is.
2	2.2.3	28-30	Suggested word deletion	In Table 2-16, CAPY_cool should omit the word "central". The reference to table 2-8 on page 30 should refer to table 2-10.
2	2.2.8	45	EER vs. CEER for RACs	We can't find EER_ee for RACs on EnergyStar databases or manufacturers' specification sheets for many models of RACs. Are we to use CEER_ee in place of EER_ee in such cases or apply a CEER to EER conversion formula?
2	2.2.9	47	Winter kW	The winter peak kW impacts are zero but based on the measure description there should be some winter kW impacts.
2	2.2.10	54	BPI web link; Table 2-41 values	The link to BPI's Distribution Efficiency table (source 6) is https://www.bpi.org/_cms/docs/Guidance%20on%20Estimating%20Distribution%20Efficiency.pdf . There may be an error in Table 2-41 - check if the distribution efficiency adders for heating-attic-R-8-50% should be 2%, for cooling-attic-R2-50% should be 4%, for heating-basement-R-0-80% should be 3%, cooling-basement-R-0-50% should be 2%.

Volume	Section	Page	Topic / Item	Comment
2	2.2.11	55-56	Winter kW and Table 2-43.	Are 'winter kW' default values weighted averages over ASHP and Furnace or should they be broken down similarly to kWh? Since the kWh formulation concerns the fan only and not heating/cooling energy, then both gas and electric heating would have winter kW savings. The Cooling header on table 2-43 should only span kWh and summer kW. Or perhaps the Winter and Summer kW should be grouped together, and the condition for eligibility for the summer/winter kW savings is forced air cooling/heating.
2	2.2.13	66	Winter kW is needed	The measure should have a winter peak kW demand impact.
2	2.2.14	68	CFM ranges in Tables	Units 200 CFM and below are eligible, but there are EnergyStar models with higher CFMs that should be included.
2	2.3.5	87	Technical terminology in tables and default values	The description of L_vertical should be Length of pipe from water heating source which runs <i>vertically</i> . This is a low-impact measure, so perhaps it would be acceptable to assume a certain horizontal / vertical length ratio rather than requiring two distinct length measurements.
2	2.3.10	102	Default savings and cycles per year.	The default savings on table 2-79 for 'Elec w/CW' should be 80.29 instead of 47.65 (likewise, kW_s should be 0.00840 and kW_w should be 0.01409). The variable V_HW in table 2-78 should have the same default values as on table 2-67 under temperature setback. Should the Cycles_wash term be 210.5 instead of 178 (and if so should the value also be updated for the water heater temperature setback measure)? Source 8 should refer to page 42 instead of 44.
2	2.6.1	171-172	eligibility algorithms	In the second sentence, replace "a blower-door test. " with "blower door tests." to account for the initial and final tests. Consider removing the words "In addition" to the sentence before the impact formulas on page 171.
2	2.6.2	177-183	eligibility, algorithms	Add the word "exterior" to the eligibility bullets, so that weather stripping must be installed on exterior doors, etc. It may help to add some restrictions to limit the use of spray form cans, in agreement with the recent related guidance memo.
2	2.6.3	185-189	eligibility, algorithms	Clarify if multifamily buildings qualify and if they are restricted to under four stories. The reference to Table 12 for Rbase was likely intended for 2-145. Meeting the required Rvalue_ee (Energy Star Recs) seems limiting and high especially reaching R60 in existing homes. For homes with poor R_base values, most of the savings to R-60 can be obtained by reaching R-40 or R-50. Please consider removing that requirement, or relaxing it to R-39.

Volume	Section	Page	Topic / Item	Comment
2	2.6.4	190-193	eligibility, algorithms	Add "unvented" before "crawl spaces" in the first sentence. Consider changing "Heating savings will be produced from the entire insulation improvement, though in varying quantities depending on whether above or below grade." to "Heating savings will be produced from the entire insulation improvement, whether above or below grade." Use the word encapsulation instead of sealing. The Framing Factor choices should be "if continuous" and "if stud-cavity".
2	2.7.1	198	Multifamily definition	It would be helpful to delineate single-family and multi-family homes. For example, single-family is one or two units, or a townhome. Also, is the reference for DOE2.1 valid or is DOE2.2 intended.
2	2.7.3	210-214	Home Energy Reports - cohorts definitions	The HER protocol is largely identical to the Phase IV protocol. As with the clarification on Act 129 years versus calendar years that was added to the protocol, we ask that the SWE clarify its disposition on resurrecting cohorts that have ceased treatment for a total of three Act 129 years and whether this counts as 'resetting the clock' to Year 1 for said cohorts. Additionally, the two-year period without persistence adjustments should be counted from the date from the date that the program launched. This allows utilities the flexibility to make adjustments to the implementation of the program at any point during the year without having to over-apply the persistence adjustments.
2	2.8.3	222-226	PV Generation	See previously submitted comments on the Interim Measure Protocol, particularly those associated with ETDF and In-Situ losses, and the option of calculating peak kW directly from PVWatts hourly outputs with a simple Act 129 peak demand calculator spreadsheet.
3	3.1.5	24	Baseline Savings Control Factor	Refrigeration display case lighting can be controlled by occupancy sensors and the algorithm should incorporate that similar to the way that it's done in the retrofit and new construction sections. Including something like $[HOU \times (1-SVG_{base})]$ in the delta kWh algorithm would add this flexibility.
3	3.1.6	27	Midstream Lighting Baseline Savings Factor	It is unclear if the baseline control savings factors should be applied if the evaluator finds existing baseline controls, or if the default stand to account for baseline controls across the entire program.
3	3.1.6	27	Midstream Lighting: Baseline wattage	EDC data gathering should be included as an option for the kW base.
3	3.1.7	31-33	Horticultural Lighting Dimming	Suggest algorithms for dimming and no dimming be combined into one. The delta kWh algorithm is effectively the same for both, even though they are presented slightly differently.

Volume	Section	Page	Topic / Item	Comment
3	3.1.7	31-33	Horticultural Lighting Dimming	The peak demand calculations can be a little confusing since they have a base CF, and efficient CF, and a dimming factor. The efficient operation of the fixtures could be incorporated into the CF. It might be clearer to treat peak demand calculation the same way the energy reduction calculation is being used, and consider base and adjusted CF without a dimming factor. Then CF adj can be added in the same way that HOU adj is presented ($CF_{adj} = CF_{ee} \times DF$). Or one could remove the references for base and ee CF so it's assumed CF is same in base and efficient scenario, but the efficient scenario will be adjusted by the dimming factor.
3	3.2.1	36, 41, 42	HVAC Systems: Peak demand reduction formula and EDTF	In general, the EDTF formulation is very helpful. For HVAC it causes a tiny amount (relative to portfolio-level results) of inaccuracy for cases where the SEER/IEER is very high compared to EER. Consider adding subscripts "cool" and "heat" respectively in the delta kWh terms in the peak kW formulas. Clarify if kWh _{cool} is calculated with IEER or SEER, it is multiplied by EDTF rather than to recalculate delta kWh with EER and multiply by IEER. If that is not the case, then a note to calculate an alternate delta kWh with EER2 values would be helpful. The table of CFs should be removed so that the new Table 3-26 is the current Table 3-27.
3	3.2.1	39	PTAC / PTHP	A footnote should be added that describes a non-standard sized PTAC (ECFR 431.92: "Non-standard size means a packaged terminal air conditioner or packaged terminal heat pump with existing wall sleeve dimensions having an external wall opening of less than 16 inches high or less than 42 inches wide, and a cross-sectional area less than 670 square inches.")
3	3.2.1	40	HVAC Systems: Baseline efficiencies table 3-24	Move the note on subtraction of 0.2 from baseline efficiencies to above table 3-24 to avoid confusion or missing the note. Also consider an asterisk or note number to draw readers' attention to the note.
3	3.2.1	40	HVAC Systems: Baseline efficiencies table 3-24	Add a note that states or paraphrases: "Packaged terminal air conditioner or packaged terminal heat pump with existing wall sleeve dimensions having an external wall opening of less than 16

Volume	Section	Page	Topic / Item	Comment
3	3.2.2	48, 49	HVAC Systems for Midstream Delivery: Baseline efficiencies table 3-30	<p>Rather than recreate a table and cause possible mismatch, this section could point to Table 3-24.</p> <p>The IEER baseline for the > 760kBTU units differs from Table 3-24. Table 3-24 lists 12.5 IEER (for post-2023 in IECC) while Table 3-30 lists 11.2 (for pre-2023). It's hard to set a baseline here since the Federal standards don't cover these large units, but the higher 12.5 IEER baseline seems like a good choice.</p> <p>Table 3-30 has 3.2 - (0.026 x Cap/1000) from IECC as the baseline for the standard size PTHP baseline, but Table 3-24 has 3.7 - (0.052 x Cap/1000) federal standards.</p> <p>There should be a break in the first column in the last line of page 49 (the 12.5 EER baseline should correspond to the 135kBTU-240kBTU size).</p>
3	3.2.3	56	Electric chillers	The last sentence on page 56 is not completed "The "full load" efficiency from the appropriate ..."
3	3.2.4	62	Table 3-38	The table number is missing from efficiency of base case ground loop pump at design point, it should be table 3-40.
3	3.2.4 and 3.2.5	62 and 68	Note	The formula HSPF2= COPx3.412 is inconsistent with HSPF2 = 2.9 for electric resistance heating. While the actual relationship is likely more complicated, the value 2.9 would be more consistent with other HSPF2 formulations in the TRM.
3	3.2.5	68	Table 3-44	<p>To be consistent with Section 3.2.1, the HSPF2 for standard DHP and ASHPs should be 7.5 for split systems and 6.7 for packaged systems.</p> <p>PTHPs and PTACs should be categorized as standard and non-standard sizes as in section 3.2.1, rather than as New Construction and Replacement. The COP equation for non-standard sized PTHPs should be 2.9-(0.026*cap/1000), and 3.7-(0.052*cap/1000) for standard ones.</p>
3	3.2.8	79	Algorithms	Given that ETDF is now used to calculate peak demand reductions, is the statement "for units rated in both EER and IEER, use IEER for energy savings calculations and EER2 for peak demand savings calculations" still necessary? It would be convenient to absorb the EER/IEER differential into the ETDF.
3	3.2.8	81	Table 3-49	The row starting with SEER2base, the last sentence ("For units > 65,000" ...) should have the term IEER instead of EER.
3	3.2.18	137	Table 3-74	The water to air, ground water efficiency value should be 18 instead of 17.1, same as section 3.2.4.
3	3.2.21	149	Algorithms	h-conv and h-rad are to be calculated but there are no associated formulas.

Volume	Section	Page	Topic / Item	Comment
3	3.3.1	157-159	Table 3-87 - Table 3-91	The location in the final column of these tables should be Williamsport.
3	3.4.2	189	Low Flow Pre-Rinse Sprayers for Retrofit Programs and Time of Sale Programs: ETDF in Definition of Terms Table	The EDTFs listed in Table 3-113 are the default values, but it would be better to point to 3-112 instead.
3	3.5.1	198	Table 3-122	The kWh formula for solid-door freezers is supposed to be $0.21 * V + 0.9$ and not $0.021 * V + 0.9$.
3	3.5.2	199	Eligibility	There is an "3)" just above the heading "Algorithms" that should be deleted.
3	3.5.7	215	Algorithms	In the formula for kWh savings, the efficiency should be in denominator to calculate kW from HP.
3	3.5.8	220	Table 3-135	Some of the energy savings per square foot values (e.g., grocery freezer) do not match the source values from the RTF.
3	3.5.12	229	Table 3-144	The deemed values in Table 3-144 should be Cooler=104 kWh and freezer=678 kWh.
3	3.5.14	235	Table 3-147	"Coefficient" is misspelled in the COP box.
3	3.5.15	238	Table 3-148	"Coefficient" is misspelled in the COP box.
3	3.7.10	294	Table 3-194	Table 3-194 has "EnergyToFood" values of 0.0308, but the source is missing. Source #3 could be cited for that variable, but the value in that workbook is 0.038 instead of 0.0308.
3	3.8.1	297	Building Shell: description, eligibility	Broaden eligibility to buildings with ground-source heat pumps, ductless air conditioners, and chillers. Currently, significant savings have not been generated from insulation in the commercial sector, and it would be beneficial to use the TRM rather than to run simulation models for buildings with these HVAC types. Also consider adding a framing factor like in residential buildings and updating the description to be more like the residential section 2.6.3.
3	3.10.1, 3.10.2, 3.10.3, and	309,313,318,321	Tabl 3-206,3-212-3-217, 3-219	The winter CF should be different than summer CF, during summer only one our of four peak hour fall into single shift but during the winter two hours fall into 7 a.m. to 3 p.m. (hours ending 8 a.m. and 9 a.m.). If the shift were 8 a.m. to 4 p.m., the two CFs would still differ.
3	3.11.3	343	Table 3-237	The definition for the term "Cree" should be the Efficient charge return factor, not the efficient power conversion efficiency.
3	3.11.6	351-355	PV Generation	See previously submitted comments on the Interim Measure Protocol, particularly those associated with ETDF and In-Situ losses, and the option of calculating peak kW directly from

Volume	Section	Page	Topic / Item	Comment
3	4.1.2	361	Dairy Scroll Compressors kWh formula	The way the energy savings formula and definition of terms is written suggests that there could two choices for the CBTU, when there should only ever be one choice. Factoring the CBTU term out as follows might reduce potential data entry errors: kWh = CBTU*(1/EERbase-1/EERee)/1000*days*cows.
3	4.1.3	364-365	High Efficiency Ventilation Fans w/ and w/out Thermostat: Equation descriptions	Consider including equation descriptions/titles written out above each set of equations. This is the case most of the time but not all of the time. Description/titles could be more concise so that they are easier to read and understand: like "Fan replacement" , "Thermostat installation", and "Fan replacement and thermostat installation".
3	4.1.5	372-374	High Volume Low Speed Fans: Description and eligibility, table 4-9 column name	The reference to 3.2.14 in "For all other building types please refer to measure 3.2.14" should be updated to 3.2.15. Edit the start of this sentence "With qualifying fans meeting Federal..." to be "Qualifying fans meet Federal...". Table 4-9's second header should have CFM/W units instead of W/CFM.
3	4.1.6	375	Livestock Waterer: Description and eligibility	Consider writing the eligibility section as follows: "This protocol applies to the installation of energy-efficient livestock waterers. In freezing climates no-energy or low-energy livestock waterers are used to prevent livestock water from freezing. These systems keep the water in a closed, well-insulated container until livestock extract water to drink. Models use available heat from the ground or minimal amounts of electric resistance to keep water from freezing. This measure requires the installation of an energy-efficient livestock watering system that is either energy-free or thermostatically controlled, and has factory-installed insulation with a minimum thickness of two inches. Savings algorithms are for one unit. "
3	4.1.8	383	Low Pressure Irrigation System: title, vintage,	This protocol requires a baseline pressure measurement, but the measure vintage includes replace on burnout and new construction. The M&V protocol appears to limit the measure to early replacement / retrofit. The title could be changed to "Irrigation System Pressure Reduction" to convey that this is a change to an existing system rather than an alternative purchase / project like <u>in new construction</u> .
3 and Appendix C	3.1.1 & Appendix C	Pg 4, and Lookups Tab	Industrial/Manufacturing - 1 Shift and Industrial/Manufacturing - 2 Shift regarding CF. Found in Table 3-3, and Cells 13D and 14D.	The CF for 1 and 2 shift industrial manufacturing is the same as 3-shift manufacturing. From experience of monitoring at these facilities, 1 and 2 shift manufacturing generally have much lower CFs. In the current phase, verbal verification or on-site monitoring has produced significantly lower CF for projects where ICSPs are using the TRM in good faith. The CF for 1 and 2 shift manufacturing would be reconsidered and lowered to a more appropriate value for these facility types. For 1-shift we often find CFs closer to 0.4 or 0.5 since operation generally starts in the morning and ends around 4pm at the latest. 2-shift can be similar depending which shifts they operate.

Volume	Section	Page	Topic / Item	Comment
3 and Appendix C	3.1.1 & Appendix C	Pg 4, and Lookups Tab	Industrial/Manufacturing - 1 Shift and Industrial/Manufacturing - 2 Shift regarding CF. Found in Table 3-3, and Cells 13D and 14D.	The exterior photocell controlled HOU changed from 4,306 to 4,305 in the TRM, but not updated in Appendix C.
Appendix C	Lighting Inventory tab	Columns AB:AK	Cell Shading when NC selected in General Info	When the project is new construction, and that is selected in the General Information Tab, columns AB through AK are shaded in the lighting inventory. Those columns are used whether the project is retrofit or new construction.
Appendix D	Appendix D	3.3.1 Tab	Column Headers	The column headers for Columns AF and AG are identical, column AG should be "Peak Demand, Winter (kW)".
Appendix D	Appendix D	3.3.2 Tab	formula errors	Cells I11 and K11 pull data for the LF and RHRS respectively, however the cells that these formulas reference in the Lookup Tab omit the section of Table 3-68 referencing Supply Fans. The cell I11 references AG20:AG71 in the Lookup tab but should reference AG7:AG71 and similarly for K11, the full useable table data (3-68) is not accessed by the lookup.
Appendix D	Appendix D	Lookups Tab	Tables 3-68 to 3-72	The location in the final column of these tables should be Williamsport.
Appendix D	Appendix D	Lookups Tab	Table Names	The table names in the calculator were not updated to reflect the new table names in Phase V, Tables 3-65 to 3-73 and 3-75 to 3-77 should be renamed to match the tables in the Phase V TRM numbers: 3-84 to 3-92 and 3-94 to 3-96.
Appendix D	Appendix D	Lookups Tab	Table 3-84 through Table 3-86 (Table 3-65 to 3-67 in the excel Appendix D)	These tables are missing the kW equivalent that is present alongside HP in Phase V.
Appendix D	Appendix D	Lookups Tab	Table 3-67 (should be 3-86)	This table is missing the Column Label "HP".

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Implementation of the Alternative Energy :
Portfolio Standards Act of 2004: : Docket No. M-2023-3044491
Standards for the Participation of :
Demand Side Management Resources - :
Technical Reference Manual 2026 Update :**

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).

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Dated: June 24, 2024



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