

# Renew Home

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Submitted Via E-Filing

Matthew L. Homsher, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17120

**RE: Comments on the Energy Efficiency and Conservation Plan Template, Docket No. M-2025-3052826**

Dear Secretary Homsher:

Thank you for the opportunity to submit comments on the Act 129 Phase V Energy Efficiency and Conservation Plan Template. The PUC, in its June 18th Order, elevated daily load shifting as a priority component of Phase V. The Order made clear that the PUC's review of Phase V plans incorporating daily load shifting would emphasize flexibility. Renew Home agrees with the recognized value of daily load shifting, including Connected Thermostat Optimization, for achieving Act 129's peak load reduction goals as identified in the Statewide Evaluators' Phase V Demand Response Potential Study.

We want to make sure that the direction provided in the Order carries through to the template's minimum required information. The draft template makes reference to alternative daily load shifting performance windows. However, the template should better reflect the Order's direction, including clarifying the flexibility as to daily load shifting performance and evaluation.

**Incorporate flexibility as to daily load shifting performance windows.**

The template should more clearly prompt utilities to build alternatives into their daily load shifting approach. Currently, the draft states the following, in part, "1.6 Summary description of the EDC implementation strategy to acquire at least 75% of the portfolio MW compliance target in each season. (2025 IO at 142) If an alternative summer or winter performance window is proposed for daily load shifting programs, provide a rationale for the alternative window." Draft Template at 3. (emphasis added). Renew

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Home requests additional guidance via clearer instruction in the template as to the nature of alternatives envisioned, and we provide some examples of flexibility, below.

The Commission also provided the following, tying daily load shifting performance to the way energy efficiency is traditionally evaluated in PA: “The performance definition for load-shifting programs will match the definition as EE programs with respect to days (non-holiday weekdays in January, February, June, July, and August) and number of hours (four per day), but EDCs may propose an alternative performance window in their Phase V EE&C plans.” Order at 155. However, the Commission agreed that “the hour from 6:00 pm to 7:00 pm could be more important than the hour from 2:00 pm to 3:00 pm for substations or circuit feeders that predominantly serve the residential sector. EDC flexibility is a key theme in this Order...” Id. (emphasis added). The Order provided more rationale along these lines, stating the following:

As discussed in Section B.1 of this Implementation Order, we recognize that some days have greater need and value than others to the grid. If an EDC elects to shift load more aggressively on days or hours with greater perceived value to the bulk power system or their own distribution network, that tactic would increase the average performance under the Phase V measurement approach. Id.

The Commission’s Order implied individual hours and days may differ in terms of impact. The template, however, suggests the alternative would be singularly proposed for all of winter or summer events. In Renew Home’s experience, a daily, 4-hour load-shifting window will degrade the maximum impact from the residential connected thermostat resource in the hours that matter most, which may vary from 1 to 3 hours a day. This daily load shifting target and direction is new and the Commission’s flexibility can ensure this resource can conform to the needs of the system and customers throughout the seasons.

Renew Home requests additional direction on the flexibility embedded within the alternative window term, including whether days and events can divert from the 4-hour window construct, depending on locational and/or customer fatigue considerations. Renew Home requests the PUC revise the template to provide direction as to the alternatives, including whether the vision is for a daily 4-hour event or whether 1-, 2-, 3- and 4-hour events would be permissible depending on the day, location, bulk power and distribution needs, etc.

## **Incorporate flexibility as to daily load shifting evaluation.**

The template draft contains no direction, prompt or guidance regarding daily load shifting evaluation information. As discussed above, the Order tied daily load shifting to EE for performance evaluation purposes. Yet, the Order also identified its lack of

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direction on how best to evaluate the daily load shifting, opening the door to new evaluation approaches as an emerging opportunity required as part of Phase V.

The Commission concurs with PECO that the demand response measures in the 2026 TRM do not provide sufficient guidance to EDCs, CSPs, and evaluation contractors regarding the measurement of daily load shifting program impacts. If one or more EDC elects to propose a daily load-shifting program in its Phase V EE&C plan, we will direct the SWE to update the Pennsylvania Evaluation Framework with specific M&V guidance for the type(s) of programs proposed. EDCs are also encouraged to prepare Interim Measure Protocols for review and approval by the SWE at any time to promote alignment on estimation techniques. The Commission agrees that EDCs should be held harmless for load reductions they sacrifice in service of enhanced measurement accuracy, but this policy should not be used as a back door to deliver event-based DR programs. We will request the SWE author clear guidelines on this issue as part of updates to the Evaluation Framework. Order at 157.

Connected Thermostat Optimization depends on high satisfaction and minimal disruption to customer comfort. Because the interventions are near daily, they need to be smaller, and less noticeable, staying in line with customer preferences. Renew Home uses personalization to ensure customer comfort is maintained, reducing customer fatigue and opt-outs.

While event-based Demand Response can lead to larger per-user load impacts, these interventions are more noticeable and limit participation. By using Connected Thermostat Optimization with personalization, per-user impacts could be much higher and ensure comfort without the fatigue. While daily adjustments eliminate non-event like-days for measurement and verification (M&V), randomized control trials can accurately measure impacts and can allow customers to participate by turning on existing features of their devices with minimal hurdles. Ultimately, 100,000s of customers participating in Connected Thermostat Optimization will have a larger impact than fewer customers participating in event-based demand response programs.

Renew Home can match device telemetry to actual resource shifts, in tandem with the utility and regional planners. With over 100k customers already signed up in Pennsylvania, Renew Home has a real resource available today that could be redirected to days and times utilities and the grid need it most. However, this resource would not be maximized if the utility is required to re-sign-up each customer for utility linking. Additionally, a resource that varies day to day (at 1-, 2-, 3- and 4-hour events) should not be evaluated against a 4-hour window by default, but rather evaluation should match the performance period a particular customer or aggregation provides. There are M&V techniques that will prove the value of the resource while protecting

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customer privacy. Accordingly, Renew Home requests additional instruction or guidance language in the template that will elicit Order-compliant evaluation protocols.

We applaud the PUC for the Order's direction on load shifting, connected thermostat optimization and the commitment to flexibility. We thank the PUC for the opportunity to comment on the template draft. Connected Thermostat Optimization is a proven, verifiable daily load shift DR method, but given its nascency in PA, we want to ensure your review will appropriately value the resource.

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