**BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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| **Potential Regulations for Interconnecting Electric Loads** | **:** **:** | **Docket No. L-2025-3059032** |

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# COMMENTS OF THE JOINT ENERGY ADVOCATES

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**ALLIANCE OF NURSES FOR HEALTHY ENVIRONMENTS**
**CAUSE-PA**
**CHESTNUT HILL UNITED CHURCH**
**CLEAN AIR COUNCIL**
**CONSERVATION VOTERS OF PA**
**ENERGY EFFICIENCY ALLIANCE**
**ENVIRONMENTAL DEFENSE FUND**
**EVERGREEN ACTION**
**GENERATION180**
**MOMS CLEAN AIR FORCE - PA CHAPTER**
**NRDC**
**PA SOLAR & STORAGE INDUSTRIES ASSOCIATION**
**PENNFUTURE**
**PENNSYLVANIA SOLAR CENTER**
**PENNSYLVANIA STANDS UP**
**PHYSICIANS FOR SOCIAL RESPONSIBILITY PA**
**POWER INTERFAITH**
**SIERRA CLUB PENNSYLVANIA CHAPTER**
**THIRD ACT PENNSYLVANIA**
**VOTE SOLAR**

**July 24, 2026**

**TABLE OF CONTENTS**

## I. INTRODUCTION

The following comments are respectfully submitted by the undersigned organizations (collectively herein, Joint Energy Advocates),[1] in response to the Pennsylvania Public Utility Commission's (PUC or Commission) June 22, 2026 Secretarial Letter seeking public comment "regarding the possibility of promulgating regulations for interconnecting electric loads, including large loads."[2]

The questions presented by the Commission in its Secretarial Letter raise critically important issues at a time when the interconnection of hyperscale load threatens the resilience and affordability of our grid and demands increased interconnection of supply resources to serve that load. The Joint Energy Advocates strongly support the Commission's adoption of standardized rules governing the interconnection of load onto the grid, and recommend consideration of load curtailment and interruptible service tariffs, explicit tracking and reporting timelines, flexible service connections, cost assignment and fee structure, issues relating to energy storage, hosting capacity maps, process incentives, and integrated planning.

As an overarching premise, the Joint Energy Advocates submit that the Commission should not permit utilities to connect new load onto the grid unless and until that load can be reliably served—without shifting costs or reliability risks to other ratepayers. This can be accomplished through a variety of policy options, such as mandatory interruptible rates and curtailment rules, but should remain the guiding policy of the Commission. Throughout our comments, we recommend many ways that the Commission can encourage responsible load growth and enhance grid resiliency through the development of comprehensive load interconnection rules.

Given the complexity of the issues, and the long-term consequences of the outcome, the Joint Energy Advocates encourage the Commission to provide additional opportunities for the public to engage in helping to shape the regulatory path forward.

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[1] Alliance of Nurses for Healthy Environments; the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania; Chestnut Hill United Church; Clean Air Council; Conservation Voters of PA; Energy Efficiency Alliance; Environmental Defense Fund; Evergreen Action; Generation180; Moms Clean Air Force - PA Chapter; Natural Resources Defense Council; PA Solar & Storage Industries Association; PennFuture; Pennsylvania Solar Center; Pennsylvania Stands Up; Physicians for Social Responsibility PA; POWER Interfaith; Sierra Club Pennsylvania Chapter; Third Act Pennsylvania; and Vote Solar. For a description of each signatory organization, please see Appendix A.

[2] Pa. P.U.C., Load Interconnection Rulemaking Questions, at 1, *Revisions to Interconnection Rules*, Docket No. L-2025-3059032 (June 22, 2026).

## II. BACKGROUND

At the December 4, 2025 Public Meeting of the Pennsylvania Public Utility Commission, Vice Chair Kimberly Barrow made a motion directing the Law Bureau, in consultation with the Bureau of Technical Utility Services, to prepare a Notice of Proposed Rulemaking to address revisions to interconnection rules. On June 22, 2026, the Commission issued a Secretarial Letter seeking comments from all interested parties regarding the possibility of promulgating regulations for interconnecting electric loads, including large loads. The letter was published in the Pennsylvania Bulletin on July 4, 2026,[3] triggering a 20-day comment period.

## III. COMMENTS

### *1. What electric load interconnection issues should be addressed via regulation? Please list the specific issues and how a regulation would be beneficial.*

The Joint Energy Advocates recommend the Commission include the following issues in a load interconnection rulemaking:

a. Load Curtailment and Interruptible Service Tariffs

The Commission should adopt regulations establishing a baseline for emergency load curtailment and/or interruptible service tariffs to manage new large loads that outpace available supply. These constructs can avoid high prices, set clear expectations for firm service and fair procedures for curtailment, and ensure long-term reliability. In line with the emerging consensus at PJM and at FERC, an interruptible service tariff would limit the amount of firm service for large loads to the amount of new capacity that a given large load customer brings online. Large load customers seeking service in Pennsylvania would sign agreements with the relevant utility detailing the amount of firm and interruptible service they receive. The interruptible service provisions of these agreements would remain in effect until the large load brings online incremental new capacity (BYONC), as described below. The BYONC portion of a given customer's load subject to an interruptible service tariff would be curtailed 100% during system emergencies. This may not be a customer's entire load if the customer has brought on verified, deliverable new supply.

*i. Interruptible Service Tariff Interface with PJM*

Any interruptible service tariff should harmonize, to the extent possible, with PJM rules. PJM is actively considering possible rule changes to develop a large load curtailment framework, but these rules will require robust state participation. This is because PJM can (and

[3] 56 Pa.B. 3865.

is likely to) allocate curtailments to different wholesale customers, but cannot take the next step of allocating curtailments to individual retail customers. Even if PJM files, and FERC accepts, a curtailment framework to address large loads that outpace supply, the Commission will also need an interruptible service or curtailment framework to ensure that the correct retail customers are enforceably curtailed and to avoid rolling blackouts that negatively impact all customers. Put simply, the Commission will need to promulgate rules that fairly and effectively allocate wholesale reliability decisions at the retail level.

It is also important to ensure that all load subject to interruptible service is not included in any load forecast submitted to PJM for the purposes of capacity procurement. To the extent such interruptible loads are included in such forecasts, they should be clearly identified as non-firm under specified conditions. Interruptible load should result in no net increase in the PJM Reliability Pricing Model (RPM) Reliability Requirement for utilities in Pennsylvania. If it does, PJM risks procuring capacity – and billing the entire Pennsylvania zone – for loads that are not firm and therefore don't need capacity resources procured to serve them in all hours of the year. Ratepayers should not fund capacity expansion for non-firm large load customers.

*ii. Trigger for Interruptible Service*

The Commission should decide on an appropriate, fair, and transparent trigger (or set of triggers) for load curtailments subject to interruptible service. One option would be to direct the relevant utility to curtail large loads subject to an interruptible service tariff prior to when PJM calls an Energy Emergency Alert Level 1 (EEA1). EEA1 is the first stage in PJM's progression of actions during emergency conditions. In addition to protecting from rolling blackouts, applying interruptions at this point is important to avoid high scarcity pricing periods, which directly impact ratepayers. Alternatively, the Commission could set a trigger based on high energy prices and curtail large loads subject to interruptible service once a specific level of energy prices is reached. In any case, curtailment triggers should be designed to avoid reliability risks, minimize high-price periods, and reduce the amount of peak load that Pennsylvania utilities submit to PJM to reduce the amount of capacity and transmission planned to serve non-firm loads.

*iii. Bring Your Own New Capacity*

If this rulemaking establishes a large load interruptible service tariff or curtailability framework as described above, it follows that large loads should also be given clear opportunities to receive firm service. Large loads can do this by demonstrating that they have brought their own new capacity, or BYONC. New capacity means any capacity recognized by PJM that is a) deliverable to the new large load customer's zone, and b) verifiably "new," meaning that it has not previously participated in a PJM capacity auction. This includes new

generation and storage resources, new demand response, and new aggregations of distributed energy resources (DERs). Any new capacity that meets these criteria should be considered BYONC. Large loads should pay the full costs of these new supply resources. Large loads may BYONC for their entire forecasted load, or for a portion of their load, so long as large loads take the interruptible service tariff for the remaining portion of their load that is not offset by a new deliverable capacity resource to reduce ratepayer risks and reliability impacts. As discussed below, we recommend that the Commission incentivize the introduction of new *clean* energy through interconnection process incentives.

b. Tracking and Reporting Timelines

The Commission should adopt regulations requiring utilities to track and report on load energization timelines. Tracking energization timelines provides valuable insight on why customers experience long waits by revealing where delays occur, how long they last, and who controls each step. Without such data, electric distribution companies (EDCs) and regulators cannot identify when and where known issues are affecting a particular customer segment. To be effective, timeline tracking should span from the date an application is filed through final connection; track a unified timeline with both utility-controlled and customer-facing steps; and be separated by customer segment. Relatedly, the Commission should require utilities to publicly report this data, on a cadence established through this rulemaking, to ensure transparency and accountability for delays. Transparent data will enable utilities, regulators, and policymakers to implement solutions that improve delays across the phases of energization, including application review, engineering design, permitting, construction, inspection, and connection. Further, governing bodies and the public can use this information to hold utilities accountable for delays within their control. Several states, including California, Colorado, and Illinois, have already enacted legislation requiring utilities to track and report on energization.[4]

c. Flexible Service Connections

As part of this rulemaking, the Commission should examine Flexible Service Connections (FSCs)[5] as a strategy to efficiently use existing grid capacity and infrastructure and

[4] *See, e.g.*, *CPUC Sets New Statewide Energization Timelines and Targets for Timely Grid Connections*, Cal. Pub. Utils. Comm'n (Sept. 12, 2024), https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-sets-new-statewide-energization-timelines-and-targets-for-timely-grid-connections; Colo. Rev. Stat. § 40-2-132.5 (2024); *Governor Pritzker Signs Clean and Reliable Grid Affordability Act into Law*, Nat. Res. Def. Council (Jan. 8, 2026), https://www.nrdc.org/press-releases/governor-pritzker-signs-clean-and-reliable-grid-affordability-act-law.

[5] "Flexible Service Connection" refers to a range of arrangements between a customer and EDC for optimizing the use of existing grid infrastructure when connecting the customer to the grid. *See generally* Casey Horan, Michael Zimmerman, Cole Jermyn, & Dakoury Godo-Solo, *Let's Get Flexible: Considerations for Unlocking Grid Capacity Using Flexible Interconnection*, Env't Def. Fund (2025), https://library.edf.org/AssetLink/q812pd5afr3hboi61cm503fprla5ge0p.pdf.

to expedite energization timelines where appropriate. FSCs place restrictions or conditions on load, in lieu of upstream system upgrades, to meet the bulk of a customer's demand through existing grid infrastructure. FSCs can accelerate energization, enhance grid efficiency, and place downward pressure on rates by increasing sales without capital investment. FSCs also benefit a wide variety of customer segments, and in particular, customers installing DERs who have the unique ability to reduce or avoid grid reliance during high demand periods. There is a growing number of jurisdictions implementing FSCs, including California, New York, and Colorado.[6]

The Commission should include FSCs in this rulemaking because doing so will (1) allow the parties to address the relationship between FSCs and other interconnection issues under consideration here; (2) advance consistency among EDCs' service options; and (3) afford the EDCs time to formulate FSC implementation mechanisms (e.g., non-firm rates) ahead of future rate cases. This approach will also provide utilities with the opportunity to conduct stakeholder engagement that will inform thoughtful FSC framework and rate design.

d. Process Incentives

The Commission could incentivize large load behavior that promotes decarbonization, reduces air pollution, and/or reduces costs for other ratepayers. For example, the Commission could create an expedited processing pathway for large loads and new supply resources that fully offset the large load customer's demand with zero-emission resources. The Commission could also offer priority interconnection for large loads that contract with zero-emission capacity resources, or commit to utilizing fossil fuel alternatives as backup generation resources. Adopting regulations that incentivize deployment of clean energy and DERs for large load customers will help to prevent localized impacts associated with reliance on diesel generators, while also improving the introduction of new resources onto the grid.

e. Cost Allocation and Fees

The Commission should standardize parameters for cost allocation and fee structure for the interconnection of load onto the system through regulation, providing greater equity and consistency across the Commonwealth. Specifically, with regard to the interconnection of large loads, we recommend that the Commission incorporate the "but-for" causation principles in the Commission's recently finalized model large load tariff.

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[6] *See, e.g.*, Rulemaking 24-01-018, *Order Instituting Rulemaking to Establish Energization Timelines*, Decision 26-02-025, CAL. PUB. UTILS. COMM'N (Feb. 10, 2026); Docket 24-E-0165, *Proceeding on Motion of the Commission Regarding the Grid of the Future*, Order Instituting Proceeding, N.Y. PUB. SERV. COMM'N (Apr. 18, 2024); Docket 24-E-0364*, In the Matter of Proactive Planning for Upgraded Electric Grid Infrastructure*, Order Establishing Proactive Planning Proceeding, N.Y. PUB. SERV. COMM'N (Aug. 15, 2024); "Modernize Energy Distribution Systems Act," S.B. 24-218, 74th Gen. Assemb., Reg. Sess. (Colo. 2024).

f. Energy Storage

The Commission should also take this opportunity to address key issues raised by energy storage. First, with respect to load interconnection regulations, the Commission should require that load interconnection studies accurately account for flexible load, including from flexible load enabled by energy storage.

Second, the Commission should also, as it investigates load interconnection, take action to fill the gap in its existing interconnection regulations concerning energy storage. Such provisions should ensure that they address the unique load and supply characteristics of both short-duration and long-duration battery energy storage systems. As Vice Chair Barrow noted in her December 18, 2025 Motion, "Because of the connection of our regulations to our AEPS Act, they relate only to the interconnection of Alternative Energy Systems as that term is defined in the AEPS Act. This definition excludes battery storage technologies, an exclusion which must be addressed given the development of distributed storage since that time."[7] The Joint Energy Advocates recommend that the Commission consider the more detailed discussion of energy storage and load issues found in comments separately filed by the Energy Justice Advocates.

g. Hosting Capacity Maps

As discussed below in response to Question 15, the Commission should require EDCs to maintain hosting capacity maps. Such maps would enable the efficient identification of underutilized infrastructure for load interconnection. By avoiding unnecessary new construction, this would help contain costs. Regulatory oversight would be needed to ensure information quality, but statewide standards can address this concern.

h. Integrated Distribution Planning

As technological and market developments have led to distributed load and supply becoming more tightly integrated, the Commission should take action to ensure that planning is also integrated. The Joint Energy Advocates recommend that the Commission incorporate integrated distribution planning principles wherever possible in connection with its development of load interconnection regulations and its resolution of regulatory gaps concerning energy storage and flexible service. This requires considering projected and prospective load, load flexibility, and DERs together in order to identify the most efficient solutions for grid management, planning, and cost allocations.

[7] Pa. P.U.C., Motion of Vice Chair Kimberly Barrow, at 1, *Revisions to Interconnection Rules*, Docket No. L-2025-3059032 (Dec. 18, 2025).

***2. Should regulations concerning load interconnection be formulated and applicable by customer class, interconnection voltage or tariff rate?***

The Joint Energy Advocates recommend that the Commission generally formulate regulations for the interconnection of load based on system impact and peak demand, and encourage the Commission to ensure the rules support consistency across utility jurisdictions.

***3. Should load interconnection requests have different review levels based on load size, similar to generation interconnection review levels? If yes, please provide the load size range for each level of review and the rationale for these levels.***

Yes. The Commission should adopt tiered review levels for load interconnection because different load sizes have different impacts on the grid. The Commission should do so by regulation in order to ensure statewide consistency, which is critical to ensure accurate load forecasting, minimize the risk of stranded assets, and prevent EDCs from inappropriately subsidizing large load customers in order to attract them to their service territories.

a. Review of Large Load Interconnections

The highest tier of review should be for the interconnection of large loads, defined in accordance with the Commission's model large load tariff as loads at or over 50 MW individually or 100 MW in the aggregate.[8] This review should incorporate and strengthen the protections described in the Commission's large load model tariff. Several key principles bear emphasis.

First, potential large load customers must demonstrate, as part of their load interconnection review, that they can curtail their power consumption if needed to ensure the continuation of reliable service for existing customers. A potential large load customer should not advance through the load interconnection process if it cannot demonstrate its ability to meet this standard.

Second, potential large load customers must bear their own costs of interconnection. Consistent with the Model Tariff, this should include all distribution and transmission infrastructure needed to interconnect that would not have been constructed but for their interconnection application.[9] Large load interconnection review should include a complete determination of these projected costs, with flexibility to ensure any unanticipated costs that arise through the interconnection process will also be included.

[8] Pa. P.U.C., Final Order, at 12, *Interconnection and Tariffs for Large Load Customers*, Docket No. M-2025-3054271 (May 12, 2026).
[9] *Id.* at 42.

Third, advancing through large load interconnection review should require provision of collateral against the full cost of any necessary infrastructure upgrades, with release tied to timely payment and ongoing credit indicators rather than construction timelines and load growth alone. Non-payment by a large load customer must never be charged to other customer classes.

Fourth, every load interconnection application should proceed under the uniform tariff and review rules, without special contract terms that deviate from approved tariff provisions.

b. Review of Other Load Interconnections

Beneath the large load threshold, it will likely make sense to classify load into further tiers for differing levels of review proportionate to expected impacts from interconnection. At this preliminary stage, the Joint Energy Advocates do not offer any specific recommendations for where to draw the lines defining those tiers, a question which would benefit from further investigation and development of the record.

4. ***If there is generation collocated with the load, should there be an expedited process for the generation to be interconnected at the same time the load is interconnected?***

With respect to distribution-interconnected applicants, the Commission should allow collocated generation and load requests to apply through a hybrid interconnection process that utilizes one application instead of multiple sequential applications. The current interconnection process requires customers to submit separate applications for each project component, which utilities then review and conduct assessments for separately, usually under different departments. This bifurcated process increases the costs for project review, extends the review time for each project, results in disjointed grid buildout, and often requires applicants to coordinate between utility departments. Hybrid interconnection presents a viable solution to these problems—streamlining multiple applications into one will deliver efficiencies in the review process for utilities and applicants alike by reducing the costs and administrative burdens for project review.

Large load applicants may also qualify for a hybrid interconnection process. To determine if a large load applicant is eligible for a hybrid distribution interconnection process, the Commission should direct utilities to define a reasonable electrical radius for proximate large loads and supply resources. At the transmission level, FERC directed Regional Transmission Organizations (RTOs) to create new interconnection rules to prompt opportunities for "electrically proximate" load-supply pairs, recognizing that these operationally linked

arrangements could improve reliability and reduce system upgrade costs. FERC defined electrical proximity to mean load and generation connecting such that they are effectively located at the same substation.[10] This concept could extend to the distribution system. Just as PJM will need to evaluate transmission system constraints to create rules for electrical proximity of load-supply pairs, Pennsylvania utilities will need to evaluate distribution system constraints and create a definition of electrical proximity for load-supply pairs. Once this definition is established, large loads will be able to partner with new proximate supply resources at the distribution level. Large load customers may also benefit from reductions in actual service interruptions if using proximate or collocated supply resources during emergencies.

5. ***Some electric distribution companies (EDCs) provide online portals for the interconnection of distributed energy resources. Should the same be provided for load-interconnecting applicants to submit all applications and supporting documents? Please list the benefits or drawbacks.***

The Joint Energy Advocates do not have any comment on this issue at this time.

6. ***What are some methods that may be used to discourage applicants from submitting duplicative projects with different EDCs?***

Duplication can arise when a firm holds options on several sites in different EDC territories, or on land that straddles a boundary, and files parallel requests while intending to build one project. For large load customers, due to the size of the projected load at issue, speculative and duplicative requests can have a highly distortionary impact on load forecasting and infrastructure planning.

There are two broad ways to address this issue. The first is to have regulatory requirements on each large load interconnection request to discourage duplicative and speculative interconnection requests, and the second is to weed out duplicative and speculative large load requests via an auction to allocate limited grid resources to the most serious requests. While each option has its own pros and cons, these comments focus on the first approach. NRDC explains the auction approach via separately filed comments.

With regard to regulatory requirements, the load interconnection process should incorporate several key principles:

First, EDCs should be required to develop a robust pre-application process that can help reduce duplicative load interconnection applications. By means of a pre-application process,

[10] PJM Interconnection, L.L.C., 195 FERC ¶ 61,211 at ¶ 94 (2026).

developers can, after submitting a reasonable fee, obtain information about the projected requirements for load interconnection at a particular location.[11] This can help reduce the number of formal interconnection applications submitted for the purpose of obtaining basic information about interconnection at a site.

Second, large load interconnection applicants should be required to submit a supporting affidavit signed by a company officer. This affidavit should include confirmation, with documentation attached as an exhibit, that the applicant has site control, or an option for site control, for the site at issue. The affidavit should also include an attestation that the applicant has a good faith intention to develop the project described in the application at the interconnection site, and that the applicant has not submitted any other interconnection applications for load from the same project.

Third, EDCs should require, as part of an interconnection application, the payment of a nonrefundable fee up-front to cover the costs of application review and engineering studies. The fee should be calculated to fully cover those costs to prevent them from being subsidized by other ratepayers.

Fourth, once the interconnection study is completed, in order to move forward, EDCs should require the execution of a binding letter of intent accompanied by the posting of substantial collateral (in an amount reasonably calculated to ensure serious commitment by applicants, including well-resourced applicants). This can help protect the integrity of the application process by providing a disincentive for pursuing duplicative applications.

Fifth, the development of a public load interconnection queue, as recommended in response to Question 16, can also help deter duplicative requests. Utilities could, as part of their interconnection application review process, run a check for projects pending in other EDC territories with similar profiles. If any apparent duplication is discovered, this could be addressed with the applicant, and any instances of genuine duplication should lead to duplicative applications not advancing through the process.

Additionally, as noted above, the Joint Energy Advocates recommend that the Commission consider the auction concept described in detail in the comments of NRDC as a means of addressing this issue.

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[11] IREC has developed recommendations for a pre-application report for the interconnection of distributed energy resources. For a load interconnection pre-application report, the data provided should include circuit reliability information and planned system upgrades. *See* Interstate Renewable Energy Council, "Pre-Application Report," *Model Interconnection Procedures*, at 12-15 (2023) https://irecusa.org/wp-content/uploads/2023/08/IREC-Model-Interconnection-Procedures-2023-FINAL-8.23.23.pdf.

7. ***In order to establish a position in the EDC's queue, would requiring a load interconnection applicant to pay a fee, based on the level of review, be effective in minimizing duplicative projects with different EDCs?***

Yes. See above response to Question 6, which incorporates fees as part of an integrated set of mechanisms for deterring duplicative requests and protecting the integrity of the application process.

8. ***Should projects be able to move ahead of other projects in the queue based on completion of certain milestones? If so, please offer the criteria and conditions that should be considered and any that should not be a determining factor.***

Yes, within careful limits. It should be emphasized that payment of money alone should not advance a project. The Commission has already held in the model large load tariff proceeding that special treatment in exchange for voluntary contributions in aid of construction would be a departure from its long-standing commitment to non-discriminatory service.[12]

However, it can be appropriate for large load projects that meet readiness milestones, such as obtaining permitting, to move forward sooner. This can help enable genuine projects to advance, which moves speculative or duplicative projects further down the queue, serving as a disincentive for such projects.

The Commission should also require the use of cluster studies, where appropriate, as an additional means to efficiently advance genuine projects, instead of speculative projects. With respect to interconnection application reviews, there are two basic approaches: serial or cluster. As a general matter, serial means first-come, first-served or first-ready, first-served. Each request is studied individually, in queue order, assuming all earlier queued projects are built and ignoring later ones. That design produces restudy cascades whenever an early project withdraws or changes, and it allows speculative projects to sit for years while real projects wait behind them.

In contrast, a cluster approach provides a principled framework for advancing projects sooner that are ready sooner. Under this approach, all requests that pass readiness screens within a defined study window are studied together in a cluster. This cluster study identifies the transmission reinforcements the group requires, and the costs for such infrastructure are allocated among cluster members. The EDC then performs project-specific engineering for each

[12] Pa. P.U.C., Final Order, at 43, *Interconnection and Tariffs for Large Load Customers*, Docket No. M-2025-3054271 (May 12, 2026).

customer. The approach improves responsiveness, captures economies of scale in study and planning, and gives the EDC, the Commission, and the public a comprehensive view of collective demand growth, including interactions among nearby loads that individual studies cannot reveal.

The Commission should require the incorporation of a cluster study approach where EDCs receive a sufficient number of large load interconnection applications with the potential to affect each other. In the parts of the Commonwealth that have become hot spots for large load development, this can provide a means of ensuring that infrastructure investments are as efficient as possible.

Additionally, as noted in response to Question 6, the Joint Energy Advocates recommend that the Commission consider the auction concept described in detail in the comments of NRDC as a means of addressing this issue.

***9. What if any protocols should be in place for circumstances where an applicant can jump ahead in the queue?***

As described above in Question 1, the Commission could incentivize large load behavior that promotes decarbonization, reduces air pollution, and/or reduces costs for other ratepayers. For example, large loads that contract with new supply resources that *fully* offset their demand with zero-emission resources could receive priority processing for their own system upgrades, as well as priority processing for any new zero-emission supply resources that are built to serve them and paid for by the large load customer. The Commission should also incentivize large loads to contract with new zero-emission capacity resources, or commit to utilizing alternatives to fossil fuel backup generation resources.

10. ***For the load interconnection applications, should the EDCs charge an application fee? If yes, please answer the following:***
    a. ***Should a fee be required for load sizes above a certain minimum threshold and should such a fee increase based on the size of load? If so, what should that threshold be?***
    b. ***What payment methods should EDCs accept?***
    c. ***Should EDCs allow for electronic payments without administration fees?***
    d. ***Should an EDC's costs for processing load interconnection requests be aligned with the cost structure for load interconnection application fees?***
    e. ***Should there be more oversight of load interconnection application fees to avoid any potential arbitrary fees?***

As discussed in the response to Question 6, EDCs should charge a fee for load interconnection applications to help prevent speculative load applications that add administrative burdens and costs to ratepayers. The parameters for establishing an application fee should be specified in the Commission's regulations, including a requirement that application fees must reflect the costs incurred by the EDC to process load interconnection requests. Fee schedules should also ensure that interconnection applications requiring additional resources bear those unique costs.

11. ***Once a load interconnection request is submitted, what information should the EDC provide to the applicant, and by what means and frequency? Examples may include queue position, status of load study, anticipated timeline for completion, etc.***

Once a load interconnection application is submitted, EDCs should provide applicants with information about what distribution and transmission upgrades are needed, how the costs of those upgrades must be paid, an estimated timeline with a description of each step, the range of average costs for routine interconnection requests, and instructions for how the applicant can check on the status of their application. Reasonable updates should be provided to applicants, and general information about pending load interconnection requests, at a class level, should be standardized in regulation and disclosed to the general public. As noted above in response to Question 6, EDCs should also have a pre-application process that enables potential applicants

to obtain a pre-application report containing information about a potential interconnection at a particular site.

12. ***Should there be prescribed timelines and timeframes for completing the various steps in the load interconnection application review process? If so:***

    a. **Please provide a list of steps in the process and a reasonable time to complete each step. Please include various studies that may be required as part of the review process.**

With respect to distribution-interconnected loads, the Commission should first establish timelines that measure the total duration from customer application to energization, rather than prescribing timeframes for specific process milestones. This framework would ease implementation of tracking and reporting requirements for utilities and provide flexibility for them to address inefficiencies in their individual review processes. Additionally, this approach would encourage utilities to prioritize the customer's desire for rapid energization by focusing on the total customer experience instead of compliance with specific review segment timelines. This approach does not preclude implementation of milestone-specific timelines as well. The Commission should assess the use of specific timelines where stakeholder comments illuminate points of high friction in the application review process. Where warranted, the Commission can subsequently develop a uniform framework of the steps in the energization process that would allow for consistent step-by-step timeline tracking across utilities.[13]

    b. **What is a reasonable timeframe to complete a load interconnection application review?**

The Commission should establish review timeframes based on what is reasonable for different utility sizes, customer segments, and project types. For example, the reasonable review time for a small residential project should be much shorter than the review time for a larger commercial project such as a supermarket or office building. Regardless of these differences, energization timelines should be measured from the date a customer files their application through final connection to allow for comprehensive information collection on how rapidly utilities process applications. The Commission could also consider including common pre-application steps in this timeline to capture more holistic data.

[13] *See generally* ENV'T DEF. FUND, CONSIDERATIONS FOR ENERGIZATION TIMELINE TRACKING (2025), https://library.edf.org/AssetLink/glr8184366kkn2w36h547i4mhh551c81.pdf?_gl=1*lcak3r*_gcl_au*MTUyNzM1MTk5OC4xNzgzNzIzOTk4*_ga*MTAyODYxMTM5NC4xNzgzNzIzOTk5*_ga_2B3856Y9QW*czE3ODM5NTg5MTYkbzMkZzAkdDE3ODM5NTg5MTgkajU4JGwwJGgw [https://perma.cc/LV83-2EAK].

**c. What timeline should exist for EDCs to complete the review of collocated load and generation requests, if any?**

We do not recommend a particular timeline for parallel review of collocated load and generation requests at this time, although we believe adoption of a specified timeline through regulation would be prudent. Consistent with our comments above, the Commission should consider process incentives—inclusive of certainty regarding maximum timeline—for load collocated with new clean generation.

**d. If an EDC exceeds its expected review timeline, what actions should the EDC be required to take?**

EDCs should take remedial actions when they exceed expected review timelines, but these actions should differ depending on whether the delays are on an individual application basis or an average review time basis. At a minimum, an EDC should be required to communicate anticipated delays to applicants as soon as it reasonably knows that a delay is likely. As part of such communication, the EDC should explain why it is exceeding the timeline, indicate how they are resolving these obstacles, and provide an updated timeline. Alternatively, if an EDC is not meeting review timelines on average for an identified group of customers, the Commission should consider an investigation to help the EDC identify and resolve process bottlenecks causing consistent delays. The Commission could perform such investigations as part of their periodic Management and Operations Audits of EDCs; or, where an EDC's reports suggest severe or systemic noncompliance, as standalone enforcement proceedings.

Importantly, whatever approach the Commission adopts should include proactive enforcement, instead of relying solely on reactive adjudication of complaints, to counteract structural factors that suppress applicant complaints. Applicants seldom file formal Commission complaints for several reasons. First, applicants have incentives—namely, timely energization—to maintain good relations with the EDC and keep the EDC focused on interconnection work. Second, such complaints would take months or years to resolve and would often become moot during their pendency. Third, the Commission cannot grant monetary damages to complainants, and so will often be unable to provide a meaningful remedy to applicants even where the EDC is clearly at fault. Finally, the paucity of relevant Commission case law is self-reinforcing: the Commission has offered little guidance for applicants to identify what constitutes unreasonable energization delay, which undermines applicants' ability and motivation to seek formal redress, and thereby perpetuates the lack of relevant precedent. Thus, the Commission can use this rulemaking to articulate how it will proactively direct remedial action where appropriate.

***13. Should there be separate queues for both generation and load interconnection requests? Why or why not?***

Interconnection studies identify distribution system upgrades associated with the load or generation request and appropriately allocate costs. As the Commission explores new load interconnection processes, it should seek to achieve these same goals. The record needs to be further developed to understand the circumstances under which load and generation interconnection requests should be combined or separate. For example, electrically proximate or collocated load and supply arrangements may proceed more efficiently through a joint interconnection process, recognizing electrical interactions between load and supply and/or any shared system upgrade costs. Alternatively, it may be efficient to keep some generation and load interconnection requests separate so that load or generation can proceed on separate timelines. New generation should not be constrained by load applicants, and vice versa. The Joint Energy Advocates support integrated distribution planning that maximizes efficiency, preserves reliability, and appropriately assigns costs.

***14. How should the Commission address situations where there are exigent circumstances delaying a project's review or approval to interconnect from proceeding? Examples of these circumstances may include unexpected developments, need for additional studies, changing guidelines, etc.***

As a threshold matter, the Commission should carefully distinguish between circumstances that are truly "exigent"—and therefore may excuse the utility from otherwise-applicable rules—from those that are merely unexpected or outside the utility's direct control. The examples identified in this question contemplate an overbroad definition of "exigent circumstances" that will be routinely encountered as a matter of normal course, particularly for larger and more complex projects. Adopting such an overbroad conception of "exigency" would significantly undermine the effectiveness of any underlying rule. Instead, the Commission should confine "exigencies" to scenarios analogous to *force majeure* events: circumstances that (1) are not reasonably foreseeable or avoidable and (2) demand immediate action; and therefore (3) reasonably excuse a degree of utility noncompliance with otherwise-applicable rules.

This conception of "exigent circumstances" is intentionally narrower than "circumstances outside the utility's control." For several reasons, the Commission should not excuse utility nonperformance simply due to the existence of factors outside the utility's control. First, such an exception would swallow the rule, as <u>every</u> interaction between a utility and customers involves

factors outside the utility's control. Second, it would be inconsistent with Commission precedent. The Commission can (and does) hold utilities responsible for outcomes affected by factors outside their control. For example, utilities do not control the weather. But the Commission still reasonably holds utilities accountable for system reliability, including where reliability is affected by non-exigent storms, as well as how utilities anticipate, prepare for, respond to, and learn from weather events. Third, simply because a factor is outside the utility's control does not mean it is outside the utility's influence. The path to an optimal customer experience may certainly include factors within the utility's direct control (e.g., internal application processes, IT systems, staffing levels), but may also include external factors that a utility can influence (e.g., customer education, electrician training). The Commission's rules should not be limited to utility-controlled factors; they should focus on outcomes to encourage utilities to think creatively about how to best accomplish those outcomes.

Where an EDC's noncompliance with an interconnection requirement is attributable to a true exigency as defined above, the Commission should exclude such an instance from the calculation of the EDC's interconnection timeline metrics, akin to how Major Events are excluded from EDCs' reliability metrics under 52 Pa. Code § 57.192. EDCs should be required to explain such exigencies as part of their routine reporting (see response to Question 12 above). In deciding whether to accept any given instance as an excludable exigency, Commission Staff should also consider the degree to which the EDC could reasonably have mitigated the exigency's likelihood or severity.

Where a utility's noncompliance is not attributable to true exigencies, the Commission should apply an enforcement approach consistent with its applicable policy statement at 52 Pa. Code § 69.1201.

***15. Should EDCs be required to provide hosting capacity maps?***

- **a.** ***If yes, what are the benefits, if any, of requiring EDCs to develop hosting capacity maps containing EDC feeder data and locations for substations, distribution transformers, line voltage, and related distribution assets?***
- **b.** ***What are the concerns regarding this requirement, if any?***
- **c.** ***What aspects should be considered for these hosting capacity maps? Examples may include the frequency of updates, transparency, filtering and toggling mechanisms, size and number of applications for a certain location, identified system constraints, complaint process, etc.***

Yes. Hosting capacity maps would help achieve two overarching goals. First, hosting capacity maps would enable developers to efficiently identify areas with underutilized infrastructure capacity. When developers can see what is already interconnected and queued at a given point of interconnection, they can identify locations with available capacity instead of spending months of site diligence on a location that's already spoken for. More efficiently utilizing existing infrastructure will help avoid unnecessary additional construction, which will help contain costs. The information provided via hosting capacity maps may also help reduce the use of duplicative interconnection applications as a means of information-gathering.

Second, these maps provide a needed layer of grid transparency that refines regulatory and public scrutiny of EDC grid planning and modernization efforts. Regularly updated hosting capacity maps that visualize geographic distributions of load and infrastructure can be used to critically examine EDC spending and grid planning decisions in regulatory proceedings. For example, these maps can be compared with EDC filings in rate cases and Long-Term Infrastructure Improvement Plans to evaluate EDC asset utilization and least-cost approaches to meeting system needs. To this end, hosting capacity maps—when done effectively—can leverage more transparent, integrated, and cost-effective distribution planning.

A key concern would be EDCs producing low-quality maps that do not serve their intended purpose. However, with appropriate regulatory oversight, it is likely that this concern could be adequately addressed. The following design aspects for hosting capacity maps should be incorporated:

- Uniform statewide requirements to ensure consistency and comparability
- Monthly updates
- Public accessibility

- Inclusion of loads that are 25 MW and greater
- Granularity at the nodal/line-section level rather than circuit/substation averages
- Available capacity
- Substation location
- Line voltage
- Aggregate existing load less the sum of all load served by existing DERs
- Aggregate queued load
- Circuit/substation reliability data
- Inclusion of information on specific limiting criteria for constrained circuits (e.g., voltage vs. thermal)
- Harmonization with the public queue discussed in response to Question 16, including the use of a single project identifier for both
- Inclusion of the ability to, via toggle, view the projected changes to hosting capacity if selected projects (including any associated infrastructure upgrades) in the queue are built

16. ***Should EDCs be required to publish a public list of projects in an EDC's load interconnection queue?***
    a. ***What are the benefits, if any, of requiring EDCs to post on its website a list of projects in its load interconnection queue that includes the project's queue position, nameplate capacity, and circuit identifier in a manner that protects the identity of the project owner and the location of the project?***
    b. ***What are the concerns regarding this requirement, if any?***
    c. ***What aspects should be considered for these public lists of projects? Examples may include timing for updates, transparency, filtering and toggling mechanisms, complaint process, etc.***

Yes. A public queue provides many of the same transparency and efficiency benefits as described above in response to Question 15. It also helps provide information necessary to discourage duplicative and speculative projects, as discussed in response to Question 6. It may also help with efficient queue management and avoiding/mitigating churn relating to restudy applications. If a later applicant can see an earlier applicant's project status, they can better anticipate whether that project is likely to withdraw and trigger a restudy of everyone behind it.

The transparency provided by such a queue will also help promote fairer and more efficient market competition. Opacity favors sophisticated, well-resourced companies who can informally get information through back-channels, but transparency can help create a level playing field. Transparency also reduces the negotiating leverage arising from a utility's asymmetric access to information. In contrast, when queue position and capacity data are not transparent, the utility has more discretion and more leverage over which projects get prioritized.

As with hosting capacity maps, a key concern is the quality of the information reflected in the public queue. Appropriate regulatory oversight should also be able to adequately address this concern. Confidentiality concerns would also need to be adequately addressed through redaction where appropriate. The following design aspects for public queues should be incorporated:

- Monthly updates
- Public accessibility
- Inclusion of loads that are 25 MW and greater
- Harmonization with the hosting capacity map discussed in response to Question 15, including the use of a single project identifier for both
- Uniform statewide requirements to ensure consistency and comparability
- Inclusion of detailed information on withdrawals
- Inclusion of information on the parent company of project companies to enable better identification of potentially duplicative requests
- Inclusion of information on readiness milestones reached by a project

## IV. CONCLUSION

The Joint Energy Advocates urge the Commission to move forward with plans to develop comprehensive load interconnection regulations, consistent with our comments above. We recommend the Commission provide further opportunities for public engagement to help shape the critical and nuanced policies to improve the reliability, resiliency, and affordability of our grid.

Respectfully submitted,

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[14] POWER Interfaith, Sierra Club, Vote Solar, Physicians for Social Responsibility Pennsylvania, Clean Air Council, Pennsylvania Stands Up, and Third Act Pennsylvania (collectively, the "Energy Justice Advocates").

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## Appendix A.
## Descriptions of Signatory Organizations

**The Alliance of Nurses for Healthy Environments** is the only national nursing organization focused solely on the intersection of health and the environment. The mission of the Alliance is to support nurses in promoting planetary health and equity globally by educating and leading the nursing profession, advancing research, incorporating planet-safe practice, and influencing policy.

**CAUSE-PA** (The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania) is an unincorporated association of low and moderate income individuals that advocates on behalf of its members to enable consumers of limited economic means to connect to and maintain affordable water, electric, heating, and telecommunication services.

**Chestnut Hill United Church**, located in Philadelphia, has been committed for decades to environmental and social justice. Our members are fully supportive of making renewable energy as abundant and affordable as possible.

**Clean Air Council** is a member-based environmental organization, headquartered in Philadelphia and working across Pennsylvania and the Mid-Atlantic region to protect everyone's right to a clean and healthy environment.

**Conservation Voters of PA** is an environmental advocacy organization dedicated to protecting our air, water and land.

**The Energy Efficiency Alliance** is a 501(c)(3) nonprofit that advances energy efficiency in Pennsylvania and New Jersey by educating, partnering, and advocating to collaboratively advance policies that prioritize and increase the deployment, funding, and market adoption of energy efficiency as an integral part of a clean, just, and resilient energy economy.

**Environmental Defense Fund** (EDF) is a 501(c)(3) nonprofit corporation, with over 160,000 members in Pennsylvania, whose mission is to preserve the natural systems on which all life depends.

**Evergreen Action** is a national climate policy organization dedicated to advancing policies that lower energy costs for consumers, strengthen grid reliability, and accelerate the deployment of clean energy through practical, evidence-based solutions.

**Generation180** is a national nonprofit organization inspiring and equipping individuals to take action on clean energy. We lead national campaigns to electrify homes, buildings, and transportation and reduce carbon emissions. We give people meaningful ways to take action toward a cleaner, healthier, and more equitable energy future.

**Moms Clean Air Force - PA Chapter** is a community of more than 109,000 Pennsylvania moms, dads, and caregivers united against air pollution - including the urgent crisis of our changing climate - to protect our children's health.

**NRDC** (Natural Resources Defense Council) is an international nonprofit environmental organization with more than 3 million members and online activists. Established in 1970, NRDC uses science, policy, law and people power to confront the climate crisis, protect public health, and safeguard nature.

**PA Solar & Storage Industries Association (PASSIA)**, which is the PA Division under the Mid-Atlantic Solar & Storage Industries Association (MSSIA), is dedicated to advancing solar energy and energy storage as the primary energy sources in the Mid-Atlantic region, to create a sustainable energy future for all segments of the population while generating economic growth and high-quality jobs.

**PennFuture** is a nonprofit environmental advocacy organization that advances equitable environmental outcomes for all Pennsylvanians through advocacy, legal action, public education, and civic engagement at the local, state, and federal levels.

**The Pennsylvania Solar Center** is a nonprofit, nonpartisan organization that works to lift up the benefits of solar to all Pennsylvanians through solar consulting services to the commercial sector, education to the public and decision makers, and advocacy for robust solar policy to create a sustainable and resilient future.

**Pennsylvania Stands Up** is a diverse advocacy organization focusing on justice – economic, racial, social, and environmental – in order to create a Pennsylvania that works for all of us.

**Physicians for Social Responsibility PA** is a public health nonprofit advancing its mission through programs focused on health, environmental justice, and youth empowerment.

**POWER Interfaith** is a Pennsylvania grassroots organization of congregations and individuals committed to racial justice, economic justice, and a livable planet.

**The Sierra Club** is America's largest and most influential grassroots environmental organization, with millions of members and supporters.

**Third Act Pennsylvania** is an organization that mobilizes Americans over the age of sixty to act on climate change and to protect democracy.

**Vote Solar** is a 501(c)(3) not-for-profit organization that advocates for an affordable and 100% clean energy future that supports the needs, health, and well-being of everyone.