

May 15th, 2025

Secretary
Pennsylvania Public Utility Commission
400 North Street
Commonwealth Keystone Building, 2nd Floor
Harrisburg, Pennsylvania 17120

RE: Electrification Coalition Comments on Docket Number M-2025-3054271

Thank you for the opportunity to submit comments in relation to the en banc hearing on interconnection and tariffs for large load customers. As the Commission considers how to balance reliability, cost allocation, and transparency, we urge explicit inclusion of the electric vehicle (EV) charging sector particularly high-capacity direct current fast chargers (DCFCs)—which are increasingly falling into the category of large load interconnections.

The [Electrification Coalition](http://www.ElectrificationCoalition.org) is a nonpartisan, nonprofit organization dedicated to advancing policies that support widespread adoption of plug-in EVs to address the national security, economic, and public health challenges linked to our dependence on oil. As more charging infrastructure is deployed to serve public and fleet needs, developers are encountering delays and cost uncertainties tied to interconnection processes. These challenges are largely due to inconsistent utility timelines, difficult upgrade requirements, and lack of transparency in cost recovery policies.

In our comments, we plan to address the following issues outlined by the Commission:

- **Transparent cost structures for interconnection**
- **Large customers bringing primary or back-up generation to serve their load, and any prudent standby rates.**
- **Best practices learned from other jurisdictions**
- **Any other procedures, rules, or tariff designs that can facilitate the efficient and timely interconnection of this unique category of electric customers.**

Preparing for EV Charging Infrastructure in Pennsylvania

EV adoption in Pennsylvania continues to steadily increase. In Q4 2024, EV sales increased to 11,063 EVs (7.5% market share) compared to 8,700 EVs (6.5% market share) in Q4 2023. In addition to this, EV charging deployment is increasing, as of the end of Q4 2024, Pennsylvania boasts nearly 5,000 total ports in 2,000 locations. DC fast charging is available at 1,000 ports in 334 locations, while Level 2 Charging is available in another 4,000 ports at 2,000 locations.

As of the end of Q4 2024, PennDOT has awarded over \$60 million for the first, second and third rounds of its [NEVI program](#) to expand non-proprietary DC fast charging at 85 sites along major transit routes. There are currently [13 operational sites](#), with ten sites in progress. Pennsylvania will also fix, replace, or update 293 public chargers statewide through the Federal Highway Administration's Electric Vehicle Charger Reliability and Accessibility (EVC-RAA) Program, which awarded \$5 million to the state.

Further, [Pennsylvania Executive Order 2019-01](#) calls for the replacement of 25% of the state passenger fleet with plug in electric hybrid cars by 2025. These growth trends are projected to continue, with EV sales representing increasing share of the overall Pennsylvania vehicle market.

Alongside the infrastructure needed to support Pennsylvania's growing light-duty EV fleet, the state must also [prepare for the increasing adoption of medium- and heavy-duty \(MHD\) vehicles](#). These vehicles have unique charging demands compared to light-duty (LD) EVs—many will require higher-powered charging due to their larger battery capacities and more demanding duty cycles.

Pennsylvania is already seeing tangible progress for the rollout of MHD EVs, driven by both private sector leadership and state-supported initiatives. Major companies such as IKEA and Amazon are beginning to electrify their MHD fleets within the state, signaling strong industry momentum. IKEA's North American headquarters is located in Conshohocken, PA, and the company [has committed to achieving zero-emission heavy-duty deliveries by 2040](#). Other companies are also piloting electric truck use in Pennsylvania. [Wawa, in partnership with Penske](#), is testing a battery-electric heavy-duty truck for regional deliveries in the Philadelphia area. In addition to corporate action, the Pennsylvania Department of Environmental Protection has supported adoption through its [MHD ZEV Pilot Grant Program](#). The program awarded over \$39 million to 16 applicants to replace aging diesel fleets—primarily with electric vehicles.

We urge the Commission to recognize that EV charging infrastructure is crucial public-serving infrastructure that supports state and federal transportation priorities while also advancing U.S. economic competitiveness and energy security and diversifying the nation's transportation energy sources. As such, it should be treated distinctly from other types of large load customers, such as data centers. Interconnection and tariff rules must reflect this difference to avoid unintentionally penalizing projects that are advancing EV adoption.

Interconnection and Planning Challenges

EV charging infrastructure, particularly for high-capacity and fleet-focused sites, [can often be deployed within months](#). However, the distribution grid upgrades needed to support this load typically take years—creating a persistent gap that results in interconnection and energization delays. These delays

discourage private investment and hinder EV adoption across both LD and MHD vehicle classes. To accelerate deployment and meet state and federal transportation electrification goals, utilities must be empowered and held accountable to proactively plan and invest in grid capacity ahead of demand. This includes integrating EV adoption forecasts into distribution planning processes and creating clear metrics to track interconnection performance.

Cost Allocation Inequities and the Role of Tariffs

Existing line extension and cost allocation policies often [place disproportionate financial burdens on charging infrastructure developers](#), especially in unspecified growth areas. This structure fails to account for the broader system and economic benefits of EV infrastructure, such as increased grid utilization. An alternative approach is needed—one that recognizes EV charging as an essential public-serving infrastructure and allows for equitable cost sharing, particularly in fleet depot zones where upgrades are often substantial but widely beneficial.

Examples from other states

[New Jersey's line extension tariff](#), as implemented by Jersey Central Power & Light (JCP&L), offers a structured and predictable framework that supports efficient infrastructure development for projects like EV charging. Aligned with New Jersey's Smart Growth regulations, the policy helps ensure that extension costs are distributed fairly and transparently based on the location of development.

In designated growth areas, JCP&L allows developers to pay a refundable deposit for new line extensions. This deposit can be recouped over a 10-year period, depending on the actual distribution revenue generated by new customers—a mechanism that reduces upfront capital risk and encourages EV charger deployment in targeted development zones. Projects outside designated areas typically require a full, non-refundable contribution, maintaining equity while discouraging inefficient or speculative siting.

[For residential subdivisions, where many Level 2 charging installations are expected](#), extensions are provided underground, and refund eligibility is also tied to growth area designation. Additionally, the utility outlines clear, up-front initiation requirements, which bring transparency to the process and enable developers to better plan and align EV charging projects with utility timelines. This tariff structure offers a replicable model that can help streamline EV interconnection by providing cost clarity, incentivizing development in strategic areas, and aligning utility investments with growth.

Other states have implemented similar effective reforms. For example, [Colorado's Interconnection Reform Act](#) requires utilities to follow standardized timelines and imposes penalties for delays, while also mandating public access to grid constraint data. Similarly, California has reformed its [Rule 21](#)

interconnection process to include Fast Track pathways and queue transparency, reducing uncertainty for large-scale electrification projects.

Several states have demonstrated that collaborative, non-judicial stakeholder processes can effectively advance regulatory updates in the field. Engaging utilities, fleet operators, technical experts, and local governments in collaborative forums can improve policy design, clarify cost allocation frameworks, and identify workforce development needs. As part of this effort, utilities should be encouraged to align internal planning and operations teams and support capacity building among local permitting authorities.

Considerations for MHD Fleet and Rate Structures

Planning for MHD electrification must also reflect the unique demands of this sector. MHD fleets face steep operational costs from high rates and demand charges, which can undermine the business case for electrification. Tailored rate structures, managed charging incentives, and targeted investments in high-priority depot areas will be critical to achieving cost parity with diesel alternatives and unlocking widespread MHD deployment.

Interconnection and energization delays remain a critical challenge, particularly for MHD fleet infrastructure. These delays create uncertainty for fleet operators, disrupt vehicle procurement and site readiness, and often result in idle vehicles and stranded capital. Utilities should be directed to streamline these processes, coordinate permitting and inspections more effectively, and be held to performance standards that reflect the urgency of transportation electrification.

Cost structures must also be transparent and predictable. A lack of access to grid constraint data and clear cost estimates has led to uncertainty that delays development and raises costs. Standardizing timelines, ensuring visibility into hosting capacity, and clarifying the need of make-ready investments are essential steps to ensure EV infrastructure can be deployed efficiently and equitably.

Integrating DERs and Enabling Grid Flexibility

Across the country, EV infrastructure developers are increasingly integrating distributed energy resources (DERs) such as solar and battery storage to manage load profiles and reduce grid dependency. Fleet operators are building depots with on-site generation and storage to mitigate demand charges and ensure service continuity. Public charging hubs are incorporating energy storage to shift peak loads and minimize exposure to inflexible tariffs. Transit agencies are deploying microgrids to electrify bus fleets while maintaining reliability and reducing strain on the grid. In urban centers like New York, charging hubs are being designed with backup generation to ensure service during grid outages. These practices

reflect the need for flexible interconnection and tariff frameworks that accommodate hybrid energy systems and treat them as integral parts of EV infrastructure deployment.

Enabling V2G and Managed Charging Capabilities

Emerging technologies [like vehicle-to-grid \(V2G\)](#) also offer tremendous potential. With proper interconnection protocols, EVs can provide grid services such as voltage and frequency regulation, peak shaving, and even emergency backup power. Fleets, especially school districts, municipalities, and commercial operators are exploring V2G not only to enhance resilience but to participate in grid markets. However, the viability of these solutions depends on utility approval, interconnection studies, and the availability of appropriate tariff structures, including standby rates that do not disincentivize flexible, grid-supportive behavior.

Managed charging programs offer similar benefits. By shifting charging to off-peak hours, utilities can reduce stress on the grid and defer costly infrastructure upgrades. However, for utilities to recover costs associated with these programs, it is essential that they demonstrate measurable system benefits and ratepayer savings to justify their investments.

We encourage the Commission to explicitly incorporate the needs and characteristics of EV charging infrastructure in any proceeding related to large load interconnection and tariffs. This includes developing interconnection pathways tailored to EVs, ensuring tariff structures support technologies like DERs and V2G, and treating EV infrastructure as critical public-serving investment rather than speculative load. Transparent, predictable processes will help Pennsylvania meet its transportation goals while protecting ratepayers and enhancing grid resilience.

The Commission has a pivotal opportunity to modernize grid planning and rate structures in ways that reflect the evolving demands of transportation electrification. By prioritizing proactive investment, equitable cost recovery, and expedited processes, the Commission can foster an environment that supports ambitious EV adoption targets and delivers meaningful benefits to customers, and utilities

We appreciate the opportunity to provide these comments and welcome continued engagement on this important issue.

If you have any questions, please feel free to reach out to Celia Kosinski, Policy Manager at ckosinski@electrificationcoalition.org or 860-480-6120.

Thank you for your consideration.

Sincerely,



1111 19th Street NW, Suite 406
Washington, DC, 20036

www.ElectrificationCoalition.org

Celia Kosinski

Policy Manager
Electrification Coalition