APPENDIX

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Joint Legislative Committee on the Affordability of Energy in New Jersey

Remarks provided by Phillip Vavala, Region President Atlantic City Electric
April 25, 2025

Good morning Chairman DeAngelo, Chairman Sarlo and members of the Joint Legislative Committee. My name is Phillip Vavala, Region President for Atlantic City Electric and I appreciate the opportunity to speak to you today about Atlantic City Electric's affordability strategy and initiatives to address rising energy costs.

New Jersey has serious resource adequacy issues. Recent and anticipated PJM capacity auction results, local generation retirements, the urgent need for new transmission projects, and the prospects of significant new large load customers have highlighted these concerns.

Ensuring affordable and reliable energy service should not be controversial. We all agree that rising costs, such as those announced in February, are not sustainable. We owe it to our customers to work toward a solution. We need an all-in, broad approach to safely and efficiently generate and deliver energy.

Atlantic City Electric is committed to working with our fellow utility companies, as well as elected and regulatory officials, energy generators and our customers, to determine the best way to address energy needs and supply. Informed and transparent conversations, with the mutual understanding that we are all working for the best interest of New Jersey residents is critical.

As you are aware, the recent Basic Generation Service auction resulted in increases for all New Jersey electric utilities, including a 17.23 percent impact to an average customer bill for Atlantic City Electric customers beginning June 1, 2025. An average residential customer will see a total bill impact of about $23 per month as a result of supply cost increases. The supply rate, determined through this auction and the PJM Base Residual Auction, is the cost of electricity a customer uses, and that rate changes based on the purchase cost of electricity. The supply and demand of electricity influences the auction prices. The supply portion of a customer's bill is passed directly to the customer from the generators of electricity.

Atlantic City Electric agrees that new supply is not keeping pace with both the supply leaving the system and the forecasted increase in demand. Compounding the State's challenge and contributing to the rising energy costs is the fact that New Jersey is already a 43% net importer of power from its neighbors, has seen its own fair share of gas plants retiring off of the system consistent with state regulation, and does not have significant supply in or through the interconnection queue to make up for this imbalance.

Atlantic City Electric does not generate, set the price for electricity nor determine the supply portion of a customer's bill. Atlantic City Electric, however, delivers that electricity to our customers safely and reliably through its distribution system. All NJ customers also can choose another supplier besides ACE, as there is retail choice in NJ.

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The company is permitted to earn a return on distribution charges.

The distribution rate allows the company to continue investing in reliability and modernization upgrades to better serve customers. Some significant projects include:

- **Atlantic City/Brigantine Community Reliability Project**, which modernized an existing substation and rebuilt two critical transmission lines between Atlantic City and Brigantine.
- **Battery Storage Project**, the installation of a battery storage system at an existing substation to improve the quality of energy service.
- **Cape May Substation Reliability Project**, which modernized an existing substation to enhance service reliability for customers in Cape May, West Cape May and Cape May Point.
- **Greater Gloucester and Camden Counties Reliability Project**, includes local substation enhancements and upgrading 10 miles of transmission line between Monroe Township and Pine Hill to improve reliability in Gloucester and Camden counties.

Distribution rates also address severe storm damage and help us invest in making the grid more resilient against future storms along with appropriate investment in transmission infrastructure regulated by FERC.

Our customers are receiving value in the quality of their energy service through these ongoing investments to enhance the local and regional energy grid, resulting in a 31 percent decrease in outages over the past 10 years.

Atlantic City Electric understands that shifts in monthly bills can have significant impact to our customers, and that's why we work to empower customers to better manage their energy use and have programs supporting those who may be struggling to meet their energy needs or are facing financial hardship.

For example, Budget Billing averages a customers' annual energy cost to create a balanced and more predictable monthly bill that helps customers know what to expect each month in their bill and avoid seasonal peaks while still getting to view actual energy usage. We are exploring periodic budget true-up reviews and recalculations throughout the budget year and increasing Budget billing campaigns to increase customer participation.

Additionally, our recently deployed and activated smart meters enable tools that help customers save money and energy. Let me emphasize that Atlantic City Electric has found there is no correlation to higher energy bills and the installation of a new smart meter. In fact, the tools enabled by an updated smart meter can help customers better monitor their usage with features such as high bill alerts and have better insights with more detailed daily energy use information.

Smart meters enable tools such as high usage alerts that notify customers when their usage goes beyond a customer-set level, allowing customers to better predict bills and adjust energy usage with customized energy saving tips to keep costs down.

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Customers can also identify increased energy use by the hour and make adjustments at higher usage times such as adjusting the thermostat a few degrees, turning off unnecessary lights or devices, or closing blinds during direct sunlight in the summer.

Atlantic City Electric also works closely with community partners to connect customers with state and federal energy assistance grants. 29 thousand customers enrolled in NJ's Universal Service Fund are receiving a monthly benefit that helps make their bill more affordable. Additionally, over 9,800 customers are enrolled in the Fresh Start program, USG's arrearage forgiveness program that eliminates a customer's arrearage if they pay their bill in full and on time.

Energy Assistance enrollments have increased 6% in the last four years. In 2024, Atlantic City Electric helped more than 35,000 customers secure more than $60.6 million in energy assistance that helped customers pay their energy bills with no requirement to pay back. However, there are still opportunities for improving the enrollment and categorical eligibility that would help alleviate inefficiencies in the process for customers to gain access to available funding and we are working collaboratively with the other utilities and BPU in this regard.

We have also launched an Assistance Finder tool which allows customers to find personalized program recommendations for financial assistance, bill management and energy efficiency. We are also working with community partners to better support customers who may not have access to the internet get connected to energy assistance if needed.

Some examples of no or low-cost energy efficiency programs include Quick Home Energy Check-ups, appliance recycling, HVAC and Energy Star rebate programs and available discounts, and Atlantic City Electric's Marketplace that offers discounted energy saving products such as programable thermostats.

Finally, we've dedicated a portion of the Atlantic City Electric website to educating our customers and addressing their concerns. We ask our customers to visit atlanticcityelectric.com/BillSupport where they will find additional information on understanding their energy bill, rates and more. Customers can also contact.our Customer Care team by calling 800-642-3780.

In conclusion, Atlantic City Electric listens to our customers and understands their concerns. We continue to enhance and increase our proactive communication with customers to help them better understand their bill and tools that are available so that they can take control of their energy usage, save money and energy, and connect with energy assistance, if needed.

I thank you again for the opportunity to testify and welcome any questions.

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Jersey Central Power and Light
Teresa Reed, Vice President State Finance & Regulatory
Testimony before the Senate Select Committee and the Assembly Telecommunications and Utilities Committee
April 24, 2025

Introduction

Chairman Sarlo, Chairman DeAngelo, and members of the committee, good morning. Thank you for the opportunity to testify today on the critical issue of energy affordability in New Jersey. My name is Teresa Reed, Vice President of State Finance & Regulatory, and I am here on behalf of Jersey Central Power & Light (JCP&L) to provide insight into recent energy cost trends and their impact on customers across our service territory.

I joined JCP&L on December 30, 2024, and am responsible for developing and implementing JCP&L's financial strategy – including budgeting, forecasting, and long-term financial planning. I also lead the development of our regulatory strategy and oversee interactions with the Board of Public Utilities and its staff to support constructive regulatory outcomes.

Previously, I served as Director of Rates and Regulatory Planning, Rate Design, and Pricing Solutions at Duke Energy Corporation, where I led pricing strategy, rate design, and customer renewable offerings across the Carolinas. I have worked in the utility industry for over 17 years and prior to that, in the railroad information technology industry for over 14 years.

State Model Overview

Under the leadership of Brian Tierney, who was hired as CEO of FirstEnergy on June 1, 2023, the company has restructured nearly its entire senior leadership team and developed a state-driven model designed to bring decision-making and accountability back to the local level – closer to customers, employees, and regulators. The company hired new presidents last year to lead each state, including Doug Mokoid, who was born and raised here in New Jersey and has been at the helm at JCP&L since June 17, 2024. With Doug responsible for operational excellence, financial performance, and regulatory strategy and outcomes, it is our customers who most benefit from more targeted local investments, more efficient operations and a strategic direction driven by the people and communities we serve.

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Electric Bill

To understand the impact of energy policies and investments on affordability, it is essential to first break down what JCP&L customers see on their monthly electric bills. A clear understanding of these charges – what they represent and how they are calculated – helps customers manage their energy costs and make informed decisions about their usage. Each component of a JCP&L bill plays a role in ensuring the safe, reliable, and affordable delivery of electricity.

JCP&L customer bills are composed of three primary cost elements: supply, delivery, and customer charges. Supply Charges cover the cost of electricity itself. Customers can either accept JCP&L's default supply rate (Price to Compare, Basic Generation Service, or BGS) or choose a competitive third-party supplier. These charges are pass-through costs, meaning JCP&L does not mark up or have discretion over the price – it reflects the actual market cost of electricity procurement. Delivery Charges fund the maintenance and operation of the electric grid, including transmission and distribution infrastructure, ensuring electricity reaches homes safely and reliably. These charges are regulated by, and subject to the approval of, the Board of Public Utilities. Lastly, Customer Charges include a fixed monthly fee to support account management and customer service operations, ensuring continued reliability and service.

Energy Costs and Rate Changes

Over the past several months, JCP&L customers have faced rising energy costs due to multiple factors, including increased wholesale energy prices, higher capacity costs, and extreme weather conditions that have driven up electricity demand. These pressures have resulted in higher bills, affecting our residential, commercial, and industrial customers alike.

One of the primary drivers of these cost increases has been the rise in the BGS supply charge, which includes the cost of purchasing electricity from generation suppliers. The cost of generation supply is collected by JCP&L and is passed through to generation suppliers without markup, representing approximately 57% of a typical residential customer's monthly bill. Beginning in June 2024, the cost increase from generation suppliers led to an 8.5% rise in the monthly bill for JCP&L residential customers who do not shop for their power. Other utilities across New Jersey experienced similar increases.

On February 12, 2025, the New Jersey Board of Public Utilities certified the results of the auction for BGS rates, starting on June 1, 2025. Due to the increase in supply rates in this auction, the bill

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for JCP&L residential customers with BGS supply who use 650 kWh/month of electricity will see their monthly bill increase by 20.2%, from $112.25 to $134.92, a difference of $22.67. While the auction resulted in supply rates that are higher than our largest peers – albeit by a fraction of a cent per kWh – our lower delivery rates result in total bills for customers, using 650 kWh/month, that are 34% lower than Atlantic City Electric and 30% lower than PSE&G.

Resource Adequacy and Grid Reliability

"Resource Adequacy" centers on the concern that the available supply of electricity will be insufficient to meet the demand in the not-too-distant future. JCP&L believes that the growing resource adequacy challenges within PJM's footprint pose risks to affordability and reliability, and they are already reflected in the increases in electric supply charges that will be passed through BGS customers beginning in June 2025.

JCP&L is committed to making thoughtful policy and investment decisions that balance energy reliability, affordability, and sustainability. As older baseload power plants retire and new generation projects face delays, ensuring a stable and cost-effective power supply becomes more challenging. To protect customers from price volatility while supporting clean energy goals, JCP&L carefully evaluates infrastructure investments and regulatory strategies that promote long-term affordability and reliability. Ultimately, under the "Federal Power Act", it is the states that have the jurisdictional authority to direct that new generation is built on a timely basis. Thus, it is important that the Legislature consider Resource Adequacy as it explores the issues surrounding electric utility bills. We encourage legislators interested in further details on the magnitude of the problem and ideas for addressing Resource Adequacy to review testimony submitted to the Senate Legislative Oversight Committee submitted by my colleague Abigail Phillips, Vice President and Chief Risk Officer for FirstEnergy, on March 3, 2025.[1]

Grid Modernization

JCP&L recognizes that customer affordability is a key consideration as we modernize the electric grid. Customers' rates directly fund strategic investments that enhance reliability, efficiency, and long-term cost stability. Through these investments we aim to reduce service disruptions, strengthen grid resilience, and improve overall safety and performance – all while ensuring that customers receive the best possible value for their energy dollars.

[1] See, https://www.njleg.state.nj.us/archived-media/2024/SLO-meeting-list/media-player?committee=SLO&agendaDate=2025-03-03-10:00:00&agendaType=M&av=A

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We are very pleased that JCP&L's Infrastructure Investment Program (IIP), called EnergizeNJ, was approved by the BPU on April 23, 2025. EnergizeNJ will fund technology and system upgrades, enhance remote control capabilities for our Distribution Control Centers and, enable additional automatic restoration during outages. Additionally, JCP&L is prioritizing improvements to circuits that have experienced reliability challenges, ensuring that customers who have faced persistent service issues see measurable improvements in their electric service. These targeted investments are designed to maximize the benefits customers receive from their rates while building a smarter, more resilient grid for the future.

Beyond resilience, grid modernization provides economic benefits by creating jobs, stimulating the local economy, and attracting businesses that depend on reliable power. A modernized grid positions New Jersey as a leader in technology, clean energy, and other emerging industries.

Energy Efficiency Programs

Energy efficiency plays a critical role in managing energy costs. JCP&L, in partnership with the BPU, offers a range of energy efficiency programs that help customers reduce their energy use and lower costs. These programs provide incentives and rebates for HVAC systems, weatherization, energy-efficient appliances, and other home improvements.

Since the launch of JCP&L's energy efficiency programs on July 1, 2021, there have been nearly 1,896,442 instances of customer participation across various program offerings as of early 2025. This figure reflects total engagements, as customers may take advantage of multiple programs. JCP&L makes it easy for customers to find resources through our Save Energy website and tools like the Home Energy Analyzer, which helps track energy usage and identify opportunities for savings. Additionally, JCP&L provides regular energy conservation tips through press releases, social media, and public service announcements.

Customer Assistance Programs

JCP&L understands that rising energy costs place financial strain on households, particularly low- and moderate-income families. We remain committed to supporting our customers through energy assistance programs, flexible payment options, and energy efficiency initiatives designed to mitigate costs.

Through partnerships with the Board of Public Utilities and Department of Community Affairs, JCP&L helps customers access financial assistance programs, including the Low Income Home

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Energy Assistance Program (LIHEAP), Lifeline, Universal Service Fund (USF), PAGE, and NJ Shares. Additionally, the regulatory Winter Termination Program[2] prevents shutoffs for certain customers facing hardship during the colder months, and there are regulatory requirements that prevent discontinuance of service for non-payment when the temperature is forecast to be above or below certain thresholds.[3] In 2025, JCP&L has already helped more than 48,000 customers secure over $8 million in financial assistance, building on its support of more than 78,000 customers with over $38 million in aid in 2024. In that same year, New Jersey nonprofits received more than $740,000 through over 110 grants awarded by FirstEnergy Corp. and its Foundation.

January-March 2025	No. of Recipients	Amount of Benefits
USF Subsidy & Forgiveness	38,928	$ 5,474,836
SHARES Grants	155	$ 64,532
Lifeline Grants	6,481	$ 1,099,575
PAGE	304	$ 133,589
LIHEAP Grants	2,637	$ 1,450,186
Total	48,605	$ 8,222,719

January - December 2024	No. of Recipients	Amount of Benefits
USF Subsidy & Forgiveness	39,316	$ 23,144,845
SHARES Grants	703	$ 295,276
Lifeline Grants	20,932	$ 3,572,775
PAGE	1,020	$ 467,730
LIHEAP Grants	16,167	$ 10,774,893
Total Grants	78,138	$ 38,255,519

Conclusion

JCP&L remains committed to transparency and engagement as we navigate these challenges together. We appreciate the opportunity to participate in this important discussion and look forward to working with the legislature and the BPU so that that all New Jersey residents have access to affordable, reliable electricity. Thank you for your time and consideration. I am happy to answer any questions you may have.

[2] NJAC 14:3-3A.5.
[3] NJAC 14:3-3A.2(e).

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Rockland Electric Company

WRITTEN TESTIMONY

Senate Select Committee and the Assembly Telecommunications and Utilities Committee

Joint Legislative Hearing on Energy Affordability

Testimony of Rockland Electric Company (RECO)

April 25, 2025

Good morning. My name is Janette Espino, and I am the vice president of Customer Service of Rockland Electric Company (RECO), a subsidiary of Orange and Rockland Utilities. Thank you for the opportunity to testify before the Joint Senate Select Committee and the Assembly Telecommunications and Utilities Committee today to continue the discussion regarding the critical importance of energy affordability, the recent factors that have significantly impacted energy prices, and the steps we are taking to assist our customers.

Access to clean, reliable and affordable energy is a guiding principle of RECO. Our most vulnerable customers should not have to choose between paying their utility bill and paying for food, rent, medical bills and other necessities. Building upon RECO's previous testimony before this Committee, as we navigate an increasingly complex energy landscape, it is essential to understand how various elements—including inflation, operational costs, tariffs, legislative mandates, and supply chain challenges—affect utilities and ultimately the rates our customers pay.

RECO's mission is to deliver energy in a safe, reliable, and sustainable manner while actively engaging with our customers to understand their needs. We are committed to offering tailored programs and services that empower our customers to manage their energy usage effectively and improve their overall quality of life in the communities we serve. We have and continue to invest in the electric grid to enhance its reliability. This includes $19.8 million in storm hardening and selective undergrounding investments over the last two years. We believe investments such as these are integral to a reliable and resilient grid.

Total charges on RECO customer bills are comprised of three key components: supply (50%), delivery (31%), and taxes (19%). The supply portion of the bill reflects the cost of electricity itself, and delivery charges cover the cost of transporting electricity from generation sources to customers. Finally, taxes are applied as required by state and federal regulations.

As a regulated utility, the delivery rates we charge our customers are established through a public rate case process. This process includes a thorough and detailed review of a utility's rate request, public hearings, and a determination as to whether the rates serve the public interest and maintain safe and reliable service.

In our service area, electricity rates have been shaped by numerous interconnected factors. Inflation has led to increased operational costs across the energy sector. Additionally, looking to the future, there are many unknowns. The PJM capacity market reforms have led to historically high-capacity prices after the 2024 auction, and reforms to improve these prices for consumers in the future are still underway. As PJM works to reform its markets for the future electric grid, the impacts of these changes on consumers are still forthcoming.

Moreover, extreme weather events have become more frequent, contributing to increased usage, particularly during this past summer—the third hottest since 1966—with typical RECO customers seeing usage rise by more than 15% on average. Together, these factors create a complex environment that increases costs and places upward pressure on rates.

We understand the challenges that higher energy bills can pose for our customers, and we are actively working to support them. We are committed to continuing to offer a range of programs that offer meaningful discounts and more flexible payment terms, including:

- Deferred payment agreements, which customers use to spread payments over time.
- Payment extensions, which provide additional time for customers to make payments.
- The Universal Service Fund, which provides discounts for low-income customers.
- Collaboration with customers and local and state government agencies to facilitate customers receipt of public assistance, including the Low-Income Home Energy Assistance Program, Fresh Start, NJ Shares, the Residential Energy Assistance Program, and NJ Lifeline.
- Budget billing plans, that allow customers to pay in equal monthly installments over the year even as their bills change, thereby reducing the impact of billing volatility.

We are also implementing 10 new NJBPU-approved clean energy programs designed to achieve substantial energy savings, reduce tons of greenhouse gas emissions, and invest $55 million in these programs between 2025 and 2027. These programs are strategically designed to benefit all customers, particularly low-to-moderate-income customers, with free home energy assessments and energy efficiency upgrades.

In addition to these initiatives, we encourage our customers to manage their energy usage as the most effective means of controlling costs. With the help of Smart Meters, customers have access to detailed daily usage information, high-bill alerts and get tips on how to avoid high bills. The Company is able to provide customers with weekly reports summarizing their utility usage.

We supplement these communications with a robust outreach initiative throughout the year via customer email, bill inserts, and social media posts. Bill inserts are deployed monthly and are tailored to provide critical information depending on the time of year, such as winter and summer bill assistance program information and energy conservation tips. At a minimum, customer

emails are also deployed monthly, but the frequency increases during the spring and fall months when we promote sales of energy-efficient products through our company marketplace website.

In conclusion, RECO remains steadfast in our commitment to our customers, so that we provide reliable electricity while managing the challenges posed by a dynamic energy environment. We understand that many customers are facing financial pressures, and we are dedicated to implementing programs and strategies that will help alleviate these burdens, particularly for our most vulnerable populations. By investing in infrastructure improvements, promoting energy efficiency, and enhancing our customer assistance programs, we aim to achieve a more sustainable and equitable energy future for everyone we serve.

Thank you, again, for the opportunity to talk about this important issue.

Contributing Factors to Increased Energy Prices in New Jersey, and Solutions

Written comments from Advanced Energy United to the New Jersey Legislature April 25, 2025

Introduction

Advanced Energy United is thankful for the invitation to testify in front of members of the New Jersey Legislature on the reasons for the recent increase in ratepayer energy costs, and on the solutions to this problem.

Why Energy Prices Have Been Going up in New Jersey

Electricity prices can be broadly bucketed into wholesale costs (for electricity generation and transmission) and distribution costs (for delivery of electricity to customers). This written testimony will focus primarily on wholesale costs, which are made up of electricity supply costs and transmission costs.

Wholesale electricity supply costs are set to increase in New Jersey and across the PJM Interconnection region this June when the prices from the last PJM capacity market go into effect. Average monthly bills in New Jersey are estimated to increase by 17-20%.[1] The PJM capacity market provides advance payment for resources to be available to generate electricity when needed. While a number of factors contributed to the higher clearing price in the last capacity auction, the fundamental cause of the price spike was rapidly increasing demand for electricity, coupled with tightening supply.

These supply and demand trends were not unique to the last capacity auction and are expected to persist. As aging energy resources retire, new resources are not coming online quickly enough

[1] New Jersey Board of Public Utilities, "NJBPU Announces Conclusion of New Jersey's Annual Electricity Supply Auction" (Feb. 12, 2025), available at https://www.nj.gov/bpu/newsroom/2024/approved/20250212.html.

to replace them due to PJM's backlogged interconnection queue and slow state-level siting and permitting processes across the region. These circumstances have led PJM to declare we may see a reliability crisis as early as 2026.

PJM is North America's largest power market, with an installed generating capacity of 185 GW. PJM's Independent Market Monitor forecasts that as much as 31 percent (57 GW) of PJM's current generation will be retired by 2030.

This is a steep cliff to tumble down. But there's hope: PJM currently has nearly 290 GW of generation and storage projects that are actively seeking grid interconnection,[2] of which 98% are clean energy and/or battery storage projects,[3] the fastest forms of energy to deploy. While a gas generation plant can take years to come online – recent estimates are that a project may wait until 2029 or later for gas turbines[4] – a solar project can be built in 18 months, and a storage facility can be built in 15[5].

Yet many of these projects have been waiting five years or longer to clear the queue. The backlog first began in 2017, and in 2022, PJM closed the queue to new applications in order to allow them to work through some of the backlog and implement a reformed queue process, hoping to begin adding new applications again sometime in 2026. PJM's regulator, the Federal Energy Regulatory Commission, subsequently required all grid operators, including PJM, to make additional interconnection process reforms when it issued Order No. 2023.[6] PJM's compliance plan, which ignored several components of that order, is still pending at FERC.[7]

Recent analysis shows that consumers could have saved billions of dollars in the last auction if PJM had acted sooner and adopted more sweeping reforms.[8] Specifically, accounting for the capacity value of the resources sitting in the queue and the cost of transmission upgrades to bring them onto the system, the influx of additional supply had those resources been

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[2] Lawrence Berkeley National Laboratory, Maps of Projects by Region, State, and County, available at https://emp.lbl.gov/maps-projects-region-state-and-county (accessed April 24, 2025).
[3] Id.
[4] https://www.credaily.com/briefs/gas-turbine-shortage-threatens-data-center-power-plans/
[5] https://www.latitudemedia.com/news/renewables-developer-nextera-is-investing-in-gas-generation/
[6] 184 FERC ¶ 61,054 (2023) (FERC Order No. 2023).
[7] Protest of Advanced Energy United, American Clean Power Association, and Solar Energy Industries Association in response to PJM Interconnection, L.L.C.'s compliance filing under ER24-2045, available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20240620-5311.
[8] Grid Strategies, *Penny-Wise and Pound Foolish: PJM's Capacity Auction Demonstrates the Cost Imperative of Simplified and Speedy Interconnection* (Feb. 2025), available at https://blog.advancedenergyunited.org/reports/penny-wise-and-pound-foolish-pjm-report.

interconnected and eligible to bid into the last auction would have reduced costs by as much as $7 billion—more than half of the $12.5 billion price increase.[9]

PJM is now starting to move projects through its reformed process. A significant portion (38 GW as of August 2024) of the generation projects that PJM has successfully moved through the interconnection queue has yet to reach commercial operation.[10] There is a lack of transparency regarding the status of these projects and root causes of delays, but transmission upgrade delays, supply chain issues, financing, and local siting challenges are all contributors. Moving all projects through the interconnection queue as quickly as possible will make it easier for projects to clear other hurdles. Increasing transparency into delays and cost increases that occur after the interconnection process is complete and expediting state and local permitting and siting processes for those projects coming out of the queue will all help to speed projects from interconnection agreement to commercial operation.

Given the anticipated demand growth and still-backlogged queue, PJM has taken additional measures to bring new resources online quickly, but there are significant tradeoffs. PJM recently received FERC approval for an initiative that will allow up to 50 projects to enter its closed interconnection queue, bypassing clean energy projects that have been waiting for years. PJM has reported that it has received applications for this "Reliability Resource Initiative" (RRI) process from new build and uprates of nuclear and natural gas, as well as some new battery storage; PJM is now prioritizing which projects will be moved forward.[11] This extraordinary measure is an affront to fair and nondiscriminatory access to the grid, will harm projects that have been waiting in the queue for years, and lacks guardrails to ensure that the projects granted fast track grid access will actually come online in time to meet PJM's identified resource adequacy shortfall.[12]

Other steps PJM has taken to speed up the addition of new supply are more promising, but more must still be done. PJM has proposed, and FERC has approved, reforms to its "surplus" interconnection process, which allows new resources like storage to connect to the grid at the site of an existing resource.[13] PJM has also proposed a process for new resources to connect at

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[9] Id.

[10] PJM Inside Lines, "PJM Reaches Next Interconnection Milestone" (August 6, 2024), available at https://insidelines.pjm.com/pjm-reaches-next-milestone/.

[11] PJM Inside Lines, "Reliability Resource Initiative Draws 94 Applications" (March 21, 2025), available at https://insidelines.pjm.com/reliability-resource-initiative-draws-94-applications/.

[12] *See* Protest of Advanced Energy United, American Clean Power Association, Solar Energy Industries Association, and MAREC Action in FERC Docket No. ER25-712, available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250108-5114.

[13] 190 FERC ¶ 61,083

the site of a retiring resource, although that proposal is still pending before FERC.[14] And PJM has announced a partnership with Google and Tapestry to integrate AI-enhanced tools into its interconnection process—a tactic that has shown promising results in other regions that have undertaken similar efforts.[15]

We cannot go back in time to fix the fact that PJM failed to proactively anticipate and prepare for a clean energy transition we all knew was coming. But given that the supply/demand dynamics that drove prices up in the last auction are not going away, we can and must do everything possible to accelerate the interconnection process. This means following through on reforms already underway while also ensuring full compliance with FERC Order No. 2023, increasing transparency into post-interconnection project delays, developing a fair fast-track process for new resources being brought online to serve new large loads, and exploring a faster, simpler "entry fee" approach to interconnection like the Southwest Power Pool is currently doing.[16]

In addition to interconnection delays that are constraining supply, wholesale electricity costs are also influenced by market rules. It is critical that PJM's markets accurately value and account for the contributions, attributes, and performance risks of all resources, and provide market certainty to enable efficient investment in resources needed to meet the region's needs. One of the smaller drivers of cost increases in the last auction was PJM's adjustment to the capacity value of natural gas fired plants to account for their performance risk during tight conditions. Such adjustments are necessary to ensure a reliable resource mix, and must be made transparently based on the best available data. Accurately valuing the contributions of clean resources is also critical. For example, PJM recently proposed an adjustment to how it treats demand response, recognizing that demand response resources can meet system needs at all hours of the day, not just during artificially constrained time windows.[17] If approved by FERC, this will increase the capacity value of demand response and should ultimately lower costs for consumers. A recent report by The Brattle Group for American Clean Power identifies key reforms to better value battery storage in PJM, including allowing storage to include opportunity costs in their bids to deploy storage more efficiently, and introducing ramping products to value

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[14] FERC Docket No. ER25-1128.

[15] Utility Dive, "PJM, Google partner to speed grid interconnection using AI" (April 10, 2025), available at https://www.utilitydive.com/news/pjm-google-tapestry-grid-interconnection-ai/744982/.

[16] For more discussion of the "entry fee" approach and other reforms to generator interconnection, *see* The Brattle Group and Grid Strategies, *Unlocking America's Energy: How to Efficiently Connect New Generation to the Grid* (August 2024), available at https://blog.advancedenergyunited.org/reports/unlocking-americas-energy.

[17] PJM Interconnection, L.L.C., *Proposal to Extend Demand Resource Availability Window*, FERC Docket No. ER25-1525, available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250306-5209.

the capabilities that storage brings to the grid.[18] These and other measures are critical to ensure efficient market signals to deliver a reliable resource mix in PJM.

In addition to supply cost increases, the PJM region has also seen transmission costs increase over the last decade as a result of the region's failure to undertake long-term, regional transmission planning, coupled with insufficient oversight of locally planned projects at either the state or regional level. A recent Complaint filed at FERC quantified the cost impact of locally planned projects in PJM:

> Between 2014 and 2022, incumbent transmission owners in PJM have planned $38.3 billion in locally planned transmission projects that went in the PJM Regional Transmission Expansion Plan without PJM Board approval. During that same period only $6.4 billion in regional projects were approved. The transmission component of consumer rates in PJM has increased 117% during that period.[19]

Without a planning process that looks ahead and accounts for drivers like demand growth, supply shifts, and policy mandates impacting the generation mix, the region will continue to invest in costlier short-term transmission upgrades instead of more efficient regional projects. PJM, along with other grid operators, now faces an obligation to develop a long-term regional planning process as it works to comply with FERC Order No. 1920.[20] That compliance process is currently underway, and states and stakeholders can engage now to make sure the planning process is set up to deliver maximum benefits to the region.[21]

Finally, to avoid unnecessary investment in both transmission infrastructure and generating resources, we need to get a handle on the level of demand growth we should actually be preparing for—otherwise we risk overbuilding and overspending, and continuing to take harmful emergency measures such as RRI, or potentially seeking to retain uneconomic and costly resources seeking to retire. While it is clear that demand from data centers and other large energy users is rapidly increasing, PJM's load forecasting process was developed long before

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[18] American Clean Power, "Energy Storage in PJM" (fact sheet, April 2025), available at https://cleanpower.org/wp-content/uploads/2025/04/PJM-Storage-Reforms-4.6.25.pdf; full report at https://cleanpower.org/wp-content/uploads/gateway/2025/04/Storage-Market-Reform-Roadmap-Analysis-4.6.25.pdf.

[19] *See* Complaint of Industrial Energy Consumers of America, et al. v. Avista Corporation, et al. under FERC Docket No. EL25-44 (Dec. 19, 2024), available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20241219-5368, at 70.

[20] 189 FERC ¶ 61,126 (2024) (FERC Order No. 1920).

[21] Advanced Energy United, "Checklist for States to Influence Transmission Outcomes Under Order 1920" (April 10, 2025), available at https://blog.advancedenergyunited.org/checklist-for-states-to-influence-transmission-outcomes-under-order-1920.

the current data center boom, and is not equipped to separate out load that is very likely to enter the system from more exploratory load requests. PJM's load forecast—which feeds into its capacity auction and transmission planning efforts—is essentially a rollup of utility forecasts. While PJM does take steps to vet the requests that it receives via transmission owners as part of its load forecasting process, a more standardized process that includes transparent mechanisms to discipline how large load additions should be accounted for in load forecasts would increase the responsiveness of the planning process. Specifically, requiring that new large loads be backed by some form of commitment before being included in load forecasts reported to PJM would help to ensure we are not over-building and over-paying to meet demand growth.[22]

How to Lower Energy Prices in New Jersey

In this written testimony, Advanced Energy United will not comment on specific legislation before the New Jersey Legislature. Conversation around specific bills can be incredibly nuanced, and the purpose of this hearing and this testimony is not to comment on or debate those nuances. We are instead using this testimony to write about broader policy principles that in our view, the State should either strive towards or avoid.

There are several ways New Jersey can lower energy prices, through a multi-pronged approach.

Deploy More Clean Energy Generation and Storage

It can take new generation projects 5-8 years from the time it enters the PJM interconnection queue, until it is selling power to the grid. That time is longer than it needs to be. Although the slow PJM interconnection queue is a major factor in why the process takes so long, there are two other major contributing factors, which State decisionmakers have more direct authority over: Local and State permitting processes, and the time it takes for transmission owners to complete network upgrades that enable projects to send power to the grid. While PJM is in the midst of reforms that could reduce current timelines, there are complementary actions that State decisionmakers can pursue, including:

1. FERC recently approved PJM reforms that allows for surplus interconnection service (SIS), which fast-tracks the interconnection process for resources interconnecting at the site of existing generation facilities that are not increasing the total power injected to the grid. This has the potential to add new capacity quickly – for example, by adding battery

[22] See comments of Advanced Energy United in FERC Docket No. EL25-49, available at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20250423-5261.

storage or solar to an existing peaker plant that operates infrequently. In addition to passing legislation to set energy storage targets, **states can complement this PJM action by ensuring that these SIS projects also receive fast-tracking for state and local permitting.** Projects siting at or near an existing facility should face a more streamlined process than a new project. Decisionmakers should discuss this issue with their relevant siting agencies and assess whether this requires new legislation or regulatory changes.

2. Once projects sign their interconnection agreement with PJM, the local transmission owner must complete network upgrades that enhance the larger transmission system to integrate new generation resources into the grid. Project developers currently face lengthy and unpredictable timelines to physically interconnect to the system due to a lack of transparency in the cost, procurement, and construction timelines for these network upgrades. This leads to delays, increases financing costs, and ultimately raises energy costs for consumers. Given their jurisdiction over generating facilities, actions that state decisionmakers can take include:

    a. **Holding regular oversight hearings/meetings and requiring reporting from transmission owners on the time it takes to complete network upgrades following a signed interconnection agreement,** the reasons for any delays, how they plan to reduce the delays, and the cost of completing network upgrades; decisionmakers should also invite developers to share their perspectives and solutions;

    b. Decisionmakers should use the feedback to inform potential legislation or other state action. This may include but is not limited to **streamlining permitting for network upgrade facilities** or collaborating with stakeholders to address supply chain challenges.

3. Deploy more clean energy generation and storage more quickly with **siting and permitting reform**, and make sure solar generation owners can continue turning a profit.

    a. One of the larger drivers to costs in the state's internal process involves obtaining access to viable property. The effective caps and restrictions to building on conservation easements only adds to the cost of developing these projects. However, the restrictions around temporary access to these easements places the state in conflict with its energy targets. The state should **grant temporary access to conservation easements** to facilitate the construction of projects on permittable spaces.

b. **Direct a more coordinated effort to identify areas where efficiencies can be created.** We have seen this in other states. For example, the Governor for the Commonwealth of Massachusetts enacted an executive order that established a Commission on Energy Infrastructure on Siting and Permitting that addressed numerous and lengthy or redundant permitting and appeals processes. The result was an Energy Facilities Siting Board that streamlined the multiple permitting processes, established pre-filing requirements, timelines for decisions to be made, and actions that would occur should those timelines not be met. A New Jersey Commission could ideally recommend similar legislative, regulatory, and administrative reforms to reduce internal and external permitting timelines while ensuring that localities are engaged in a consolidated stakeholder process.

c. **Maintain incentive structures to promote large-scale forms of advanced energy generation.** These projects can be built in a much shorter timeline than fossil fuel energy generating plants and offer long-term cost savings to ratepayers. However, in order for these projects to offer economic sense to developers, they need front-end incentive mechanisms to counter some of the risk incurred through today's permitting and project development timelines.

d. **Promote the growth of large-scale battery storage projects** that address peak demand in a more cost-effective fashion than fossil fuel energy generation. Model ordinances can and should be used to fast-track the development of storage projects. Additionally, greater incentives should be provided for storage projects as they can limit the amount of land required for all types of energy generation.

Increase Distribution and Transmission as Efficiently as Possible

Improving the efficiency of transmission and distribution infrastructure can allow New Jersey to meet load growth, speed the interconnection of new generation, and address grid reliability on timelines that are considerably shorter than the status quo.

When we modernize the distribution grid with demand-side resources like demand flexibility, energy efficiency, virtual power plants (VPPs), and Distributed Energy Resources (DERs) like customer-sited solar, battery storage, bidirectional charging, smart thermostats, and smart panels, we increase the grid's carrying capacity and lower peak demand for electricity. This reduces the amount of new commercial or utility-scale generation and distribution that needs to be built.

Incorporating Advanced Transmission Technologies (ATTs) into the grid can maximize the power that can travel across the existing grid without having to build new generation and/or transmission lines. ATTs refers to a set of hardware and software technologies that increase the capacity, efficiency, reliability, or resilience of an existing or new transmission facility. ATTs include, but are not limited to, advanced conductors and grid-enhancing technologies (GETs). For example, Pennsylvania Power & Light deployed dynamic line ratings (DLR, a form of GET) in 2023. This created $23 million in annual congestion cost savings and increased the amount of power that can travel by about 20%[23].

Combined, these ways of modernizing the transmission and distribution system also increase the reliability of the grid, leading to fewer and shorter power outages.

State lawmakers can consider the following with respect to transmission and distribution:

1. **Require regulators to open a proceeding to independently study the deployment of ATTs,** which would include:

   a) **An evaluation of the technical feasibility and cost-effectiveness** of ATTs to address congestion and constraints, facilitate the interconnection of new generation and loads, and meet other State goals in both distribution and transmission system planning.

   b) **Identification of jurisdictional and coordination issues** associated with the regulation, cost recovery, and implementation of ATTs and potential solutions on the transmission and distribution system.

   c) **A survey of utility performance incentive mechanisms** (PIMs) which could be designed to provide incentives for the cost-effective deployment of ATTs, including consideration of implementation pathways for PIMs, where applicable.

2. **Require transmission owners and distribution utilities to report on their evaluation of and plans for deploying ATTs as part of existing grid planning processes** (e.g., Integrated Resource Plans (IRPs), rate cases, distribution or transmission planning, siting, regional system planning, and Certificate of Public Convenience and Necessity (CPCN) proceedings). Where ATTs are not included in a grid planning process, require utilities or other entities conducting those processes to explain why they have not been included. Where state regulators and siting agencies have jurisdiction, require them to determine whether ATTs have been adequately considered before granting approval of relevant permits and/or

[23] *Pathways to Commercial Liftoff: Innovative Grid Deployment*, U.S. Department of Energy, April 2024.

funding and empower those agencies to deny approval or modify proposals if ATTs were not properly considered.

3. **Require distribution utilities and where applicable, transmission owners, to conduct periodic market efficiency analyses of their systems** to identify the highest congested system elements; for elements over a certain threshold (e.g., highly congested for more than 25% of hours per year) conduct a cost-benefit analysis to determine if deploying ATTs would reduce overall system costs, in conjunction with or instead of transmission expansion; grant regulators the authority to approve cost-effective ATT deployments.

4. **Develop policies to increase opportunities** for customer-sited energy management, including but not limited to the use of DERs and VPPs.

Several states have recently passed legislation to promote ATTs, including but not limited to Maine, Massachusetts, Minnesota, New Mexico, and Virginia.

Manage Large Loads Effectively

The PJM region is experiencing significant economic growth from large-load customers such as data centers and advanced manufacturing that seek to locate in the region. Fortunately, State policymakers have discretion on how to accommodate these large loads. This includes the following:

1. **Require utilities to provide additional transparency** around large-load interconnection by:

    a) **Reporting to regulators the methodology used** to develop load forecasts for large-load interconnections; regulators should ensure that the utility forecasts have a standard discounting methodology for addressing uncertainty related to the likelihood that the large loads are ultimately going to materialize.

    b) **Providing large-load customers with information on any specific constraints** (i.e., locational, capacity, times of the day, system elements) which may be delaying or preventing interconnection to their systems when large loads seek to interconnect; regulators should require utilities to provide large loads with options for addressing the constraints (see item number 2 below), which could then expedite interconnection or reduce the costs of interconnection.

c) **Reporting to regulators a summary of constraints** which are delaying or preventing large loads from interconnecting to the system and the options they are giving those customers for addressing the constraints.

d) **Reporting to regulators on the actions distribution utilities/transmission owners are taking to facilitate new large load interconnections** in a timely manner while minimizing the construction of new transmission infrastructure for the purposes of serving new large loads Reporting should include but not limited to a list of approved, pending, and expected applications of infrastructure for interconnecting large load customers at PJM and in other state and federal regulated proceedings, the estimated cost of this new infrastructure, and the expected time it will take to bring this infrastructure in service.

e) **Creating public hosting capacity maps** which show where there is available capacity to connect large loads.

2. **Direct utilities to file new tariff designs, including flexible interconnections,** which allow large-load customers to invest in a portfolio of solutions instead of, or in addition to, traditional utility infrastructure upgrades to address the constraints that are delaying or preventing their interconnection and/or that improve grid reliability and affordability, including:

    a. **On-site generation, energy storage, and load management solutions** to reduce on-site grid consumption in response to grid conditions.

    b. **Off-site clean distribution-connected generation and Virtual Power Plants** that can be dispatched at times that will address constraints caused by the interconnection of the large loads and/or that improve grid reliability and affordability.

    c. **Off-site clean transmission-connected generation and energy storage** to meet incremental resource adequacy needs created by the new loads.

    d. **Advanced Transmission Technologies** to better utilize existing infrastructure.

3. Direct utilities to file **clean transition tariffs** to provide customers with options for access to, and to support investment in 24/7 clean energy.

Conclusion

There are multiple factors contributing to the rise in energy prices that New Jersey has witnessed and will continue to see. Supporting the expansion of advanced energy solutions such as clean energy generation and storage and increasing the capacity and efficiency of the grid will make energy more affordable for New Jerseyans.

About Advanced Energy United

Advanced Energy United educates, engages, and advocates for policies that grow robust markets for advanced energy technologies. As we navigate the challenges and opportunities of New Jersey's energy future, Advanced Energy United is committed to advancing policies that support the integration of innovative energy solutions to benefit the state's economy, strengthen reliability, attract new business investments, and enhance the quality of life for all New Jerseyans.

The businesses we represent are lowering consumer costs, creating thousands of new jobs, and providing the full range of clean, efficient, and reliable energy.

By harnessing the power of advanced energy technologies, our member companies are building a reliable and resilient energy future for New Jersey, driving economic growth while alleviating energy costs for millions of hard-working New Jerseyans.

Advanced Energy United is committed to actively collaborating with New Jersey's executive leadership, policymakers, industry leaders, and community stakeholders to achieve our shared energy goals.

We believe we can make progress in an "all of the above" policy approach at a time when we need every available kilowatt available on the grid by harnessing the forces of truly competitive markets that allow the most cost effective and economic solutions to rise to the top.

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