
Memorandum

TO: EVERGREEN ACTION
FROM: SYNAPSE ENERGY ECONOMICS
DATE: JULY 6, 2026
RE: ELECTRIC BILL IMPACTS OF FOUR NEW JERSEY POLICIES

Summary

Synapse Energy Economics, Inc. (Synapse) calculated high-level estimates of annual electric bill savings achievable for New Jersey residential customers from four policies that Evergreen identified. These included (1) a policy where all electricity system costs posed by data centers are paid for by data centers, (2) a requirement for transmission owners operating in New Jersey to participate in PJM so they are no longer entitled to the 0.5 percent return on equity (ROE) adder incentive,¹ (3) PJM's temporary capacity auction price collar, and (4) increased Board of Public Utilities (BPU) oversight of transmission projects that currently escape meaningful regulation. Our bill impact estimates compare a future with each policy to a *status quo* future without the policy. Our analysis does not estimate the interactive or additive effects of each policy (therefore, policymakers should not present the sum of all four policies' impacts, to avoid double-counting of benefits).

We found the following:

- A **data center tariff** requiring data centers to pay for their own costs may save residential customers \$140 per customer per year or \$910 million statewide per year.²
- **Removing the ROE adder** may save residential customers \$5 per customer per year or \$20 million statewide per year.
- The **capacity auction price cap** in effect for the 2026/2027 and 2027/2028 auction years has saved residential customers \$130 per customer per year or \$440 million statewide per year. It will likely save a similar amount for the 2028/2029 and 2029/2030 delivery years.
- Savings could vary substantially with **enhanced BPU oversight of supplemental transmission projects**. It is challenging to predict how many projects could be avoided or how much costs could be reduced with increased oversight, as there is very limited

¹ Per the Federal Power Act

² In this section, we round to two significant figures for simplicity.

precedent to rely on for this portion of the analysis. However, if we assume that enhanced oversight reduces costs by 10 percent, the policy would save residential customers an average of \$8 per customer per year or \$30 million statewide per year. If we assume that enhanced oversight reduces costs by 25 percent, the policy would save residential customers an average of \$20 per customer per year or \$80 million statewide per year.³

We summarize these annual average findings in Table 1. We document our approach, methods, and key assumptions in the next section.

Table 1. Average annual findings for each policy in dollars-per-household and million-dollars statewide terms

	Average annual statewide savings for the residential class (2025 \$/year)	Residential average annual bill savings per customer (2025 \$/year)
Data center tariff	\$907 million	\$137
Elimination of the ROE incentive adder	\$19 million	\$5 <i>Impact by zone varies, \$3 to \$7</i>
Capacity auction price cap	\$436 million	\$126 <i>Impact by zone varies, \$96 to \$166</i>
BPU oversight of supplemental transmission projects	If policy reduces costs by: 10%: 32 million 25%: 81 million	If policy reduces costs by: 10%: \$8 <i>Impact by zone varies, \$4 to \$11</i> 25%: \$19 <i>Impact by zone varies, \$9 to \$27</i>

Source: Synapse analysis (see below for key assumptions and data sources). All dollars are in 2025 real dollars.

We provide four-year cumulative bill savings estimates in Table 2. Just as with annual average bill savings estimates, we do not advise summing any bill impacts across policies.

³ Rockland Electric (RECO) has not built or indicated it will build any supplemental projects between 2015 and 2030, meaning there would be no bill savings for customers in RECO's transmission zone.

Table 2. Four-year cumulative findings for each policy in dollars-per-household and million-dollars statewide terms

	Four-year cumulative statewide residential savings (2025 \$)	Residential four-year cumulative bill savings per customer (2025 \$)
Data center tariff	\$3.63 billion	\$550
Elimination of the ROE incentive adder	\$75 million	\$20
Capacity auction price cap	\$1.75 billion	\$504
BPU oversight of supplemental transmission projects	If policy reduces costs by: 10%: \$130 million 25%: \$324 million	If policy reduces costs by: 10%: \$32 25%: \$76

Source: Synapse analysis (see below for key assumptions and data sources). All dollars are in 2025 real dollars.

Methods, Assumptions, and Data Sources

General

- **Interactive effects:** This analysis does not assess the combined or interactive effects of these four policies, only each policy's individual effect. For instance, there could be interactive effects between the ROE adder policy and BPU oversight of supplemental projects policy: it is possible that after elimination of the transmission owner's ROE adder, the owners would make less money from supplemental projects and the potential for BPU oversight savings would also be affected. To avoid double-counting and/or misrepresenting interactive effects, policymakers should not present these bill savings as a four-policy sum.
- **Time period:** We generally analyzed the period 2026 through 2030 and then calculated annual averages. We present all bill savings numbers in real 2025 dollars.
- **Bill impacts:** We used U.S. Energy Information Administration (EIA) data on utility sales and revenues to convert annual statewide savings into customer bill impacts.

Data Center Tariff

Context: Data center development imposes electricity costs on non-data center ratepayers.

Policy: All new incremental costs imposed by new data centers (energy, capacity, new transmission, and renewable energy credit costs) are allocated to data centers rather than allocated across all customer types.

Methods:

- Synapse modeled bill impacts by comparing prospective future scenarios with and without data center load growth in PJM. We leveraged modeling results from a project conducted for Sierra Club in 2024 on this issue.⁴
- We analyzed electric system costs, new generating capacity, and residential bills under a Status Quo scenario in which data centers continue to connect to the electric power grid with minimal changes to supply-side resources compared to a Policy scenario in which data centers in the PJM zone must self-supply energy and capacity needs.⁵
- In the Policy scenario, we assumed data centers self-supply from *new* resources built entirely for data centers. Thus, in the Policy scenario, data centers are not procuring electricity from the energy and capacity markets or entering into bilateral contracts with existing resources. This means that in the Policy scenario, new data centers do not impact wholesale market prices.
- **Load projection:**
 - The Policy scenario load projection does not include future load due to new data centers because other resources “outside the market” meet the increased load. We based this scenario on PJM’s 2024 conventional load forecast combined with Synapse’s projections for electric vehicle and heat pump adoption. The Policy scenario load projection includes energy consumption from *existing* data centers, which are embedded within the PJM conventional load forecast.
 - The Status Quo load projection uses the same projections for load components shared with the Policy scenario (non-data center conventional load, electric vehicles, heat pumps, etc.) but also includes projections for new data center load in PJM, based on data from the Electric Power Research Institute and PJM utilities.⁶
- **Bill impacts:**
 - We calculated monthly bills using energy, capacity, new transmission, and renewable energy credit costs from capacity expansion modeling results from the Sierra Club data center load growth project. We hold other system costs (existing transmission, distribution, and other sunk costs) constant in both scenarios and assume that they do

⁴ Chavin, S., P. Knight, D. Glick, T. Gyalmo, I. Weiss. 2024. *Risks of Rapid Data Center Load Growth in PJM*. Synapse Energy Economics for Sierra Club. Available at <https://www.synapse-energy.com/risks-rapid-data-center-growth-pjm>.

⁵ The Status Quo future in this analysis is equivalent to the “Data Centers” scenario in the Sierra Club project, which examines a future with significant data center load growth. In this analysis, the Policy scenario that requires data centers to bring their own supply is equivalent to the Base case scenario in the Sierra Club project where there is no new data center load growth. The difference in costs between these scenarios represents the value of data centers self-supplying all electric capacity and energy needs.

⁶ Chavin et al., p. 17.



not contribute to bill impacts. We also include Regional Greenhouse Gas Initiative's (RGGI) revenues at the state level to account for RGGI revenue recirculation.

- In the Policy scenario, we allocate systemwide costs across two sectors: residential and commercial/industrial (C&I). We allocate costs based on recent historical cost allocation per data published by EIA Form 861 and adjusted for future years based on customer-sector share of load growth. In the Status Quo scenario, we allocate costs across three sectors: residential, C&I, and data centers.
- We scaled PJM zone savings to customers in New Jersey based on the share of energy sales between customers in New Jersey and the PJM zone.
- This analysis does not assess new proposed policies and initiatives within PJM such as the Expediated Interconnection Track (EIT) or the Reliability Backstop Auction (RBA).

Elimination of the ROE Incentive Adder

Context: Under the *Federal Power Act*, utilities that voluntarily join an RTO are entitled to a 0.5 percent adder to their allowed ROE.

Policy: Proposed legislation would require New Jersey transmission utilities to join and participate in PJM, thereby removing this adder.

Methods:

- Our methodology relied on publicly available Projected Transmission Revenue Requirement (PTRR) formula rate workbooks and 10-K U.S. Securities and Exchange Commission (SEC) filings for the *three* transmission owners in New Jersey (ACE, JCP&L, and PSEG).
 - Rockland Electric (RECO) PTRR workbooks were not available, so we could not complete the analysis for RECO (RECO represents the smallest zone in New Jersey and represents very little transmission spending in the state⁷).
- We obtained the allowed ROE (inclusive of the 50 basis-point adder) from Form 10-K filings for year ending December 31, 2025,⁸ specific to each transmission owner's transmission formula rates. We calculated the reduced ROE by subtracting 50 basis points (0.50 percent) to reflect the elimination of the PJM RTO incentive adder (Table 3).

⁷ RECO's transmission investments have been limited relative to the other New Jersey transmission owners. According to the PJM Transmission Cost Planner Database, RECO has built only four transmission projects totaling approximately \$27 million since 2009. Consequently, eliminating the 50-basis-point ROE incentive adder would likely have a negligible impact on RECO's transmission revenue requirements and associated ratepayer costs.

⁸ Annual Report Form 10-K. U.S. Securities and Exchange Commission. Available at: <https://www.sec.gov/>

Table 3. Transmission ROEs Under Allowed and Reduced-ROE Scenarios

	Allowed ROE (including Adder)	ROE without Adder
ACE	10.50%	10.00%
JCPL	10.20%	9.70%
PSEG	10.40%	9.90%

Source: SEC 10-K filings for each transmission owner.

- We used publicly available PTRR workbooks⁹ from 2025 for ACE, PSEG, and JCP&L to estimate the total changes in their transmission revenue requirements with and without the ROE incentive adder.
 - We substituted the reduced ROE for the existing ROE (i.e. cost of common stock) value while holding all other inputs constant.
 - After this change, the PTRR formulas recalculated the associated income taxes and the post-tax return in each utility workbook. This resulted in a reduced value for the pre-tax ROE (i.e. including the gross-up for taxes).
 - We then compared the difference in this final result both with and without the ROE adder.
- **Bill savings:**
 - Transmission projects are recovered through transmission enhancement charges (TEC) and network integration transmission service (NITS) charges. Since estimating new TEC and NITS charges was out of scope for this analysis, we took a simplified approach.
 - New Jersey customers only pay for a portion of the project costs for transmission projects built by ACE, JCPL, and PSEG, based on cost allocation methodologies and complex rate setting processes for transmission projects. We estimated the total weighted average percentage of baseline and supplemental projects built by these three transmission owners that are actually allocated to, and paid for, by customers within those zones. We used data on transmission projects and cost allocation from PJM's Transmission Cost Planner¹⁰ for projects already online or expected to be online between 2020 and 2030. This provides a cost allocation factor, which we used to scale total savings in utility return to customers within the three zones.

⁹ PJM Interconnection. Formula Rates. Available on the PJM website: <https://www.pjm.com/markets-and-operations/billing-settlements-and-credit/formula-rates.aspx>.

¹⁰ Data downloaded on July 1, 2026, from PJM's Transmission Cost Planner, available at: <https://www.pjm.com/planning/m/project-construction>.

- We scaled zonal transmission costs to New Jersey customers using the state's peak load contributions relative to zones' peak load.¹¹
- We allocated total New Jersey savings to residential customers based on EIA sales data (Form 861, 2024). In reality, transmission costs are allocated to customer classes based on each class's contributions to peak load, however utility peak load data by class was not readily available.

Capacity Auction Price Cap

Context: Capacity prices were expected to clear at all-time highs in PJM in 2026/2027 and 2027/2028, due to the tightening of supply and demand. Key factors were increased load (mostly from data centers) and limited new entry of supply-side resources due to the clogged interconnection queue.

Policy: PJM implemented a capacity auction price collar for the last two annual auctions (2026/2027 and 2027/2028) and recently extended it to the next two auctions (2028/2029 and 2029/2030). This capped the clearing price at \$325/MW-day.

Methods:

- We calculated the total cost of capacity for residential customers in New Jersey, and associated bill savings, for two scenarios:
 - One where the entire RTO clears at the current FERC-approved price cap, and
 - One where each zone clears at the RTO's maximum price.¹²
- We used PJM's Planning Period Parameters for Base Residual Auction¹³ to determine the non-capped maximum price for each zone. We assume the only change between the scenarios was the clearing price (i.e., we assumed no change to the quantity of cleared capacity, capacity obligations for each zone, etc.).
- We first estimated the total cost of capacity for each scenario, for each New Jersey zone, using PJM's auction results workbooks for 2026/2027 and 2027/2028 delivery years, and assumed those savings would be similar for the future auctions (with the price cap) that have not yet occurred (2028/2029 and 2029/2030).
 - For 2026/2027, we used the results inclusive of both the base residual auction and incremental auction, while for 2027/2028 we only used the base residual

¹¹ Since the vast majority of the service territories are located within New Jersey, 95 to 99 percent of costs for each of these four zones are allocated to that state.

¹² Without the price collar, the maximum clearing price is the maximum of either Gross Cost of New Entry (CONE) or 1.5 times Net CONE.

¹³ PJM. ND. Planning Period Parameters for Base Residual Auction; <https://www.pjm.com/markets-and-operations/rpm>.

auction workbooks as PJM has not yet conducted the incremental auction for that year.

- To estimate annual average savings, we took the average between the two delivery years for each zone.

- **Bill savings:**

- We calculated the difference in total cost of capacity between the two scenarios and allocated those savings to residential customers based on EIA sales data (Form 861, 2024). In reality, capacity costs are allocated to customer classes based on each class's contributions to peak load, however utility peak load data by class was not readily available.

BPU Oversight of Supplemental Transmission Projects

Context: Utilities in PJM are increasingly shifting transmission investments to “supplemental transmission projects,” a category of investment that currently suffers from little regulatory oversight.

Policy: A current bill proposes directing authority to the New Jersey BPU to allow for more oversight of supplemental transmission projects built within the state. It is our understanding that this increased oversight could take the form of more prudency reviews and evaluating the need for supplemental projects and requiring transmission owners to demonstrate cost-effectiveness and that they considered lower-cost alternatives during Certificate of Public Convenience and Necessity (CPCN) proceedings.

Key Assumptions: Although it is challenging to determine the achievable level of savings from this policy, we assumed that BPU oversight of supplemental projects will save between 10 percent and 25 percent in total transmission spending on average per year.

Methods:

- We used data on supplemental transmission spending from PJM's TC Planner.¹⁴
- We calculated average spending per year for projects already online or expected to be online between 2020 and 2030 for each of *three* transmission owners in New Jersey: Atlantic City Electric (AEC), Jersey Central Power & Light (JCPL), Public Service Electric and Gas Company (PSEG).
 - We did not include Rockland Electric (RECO) in the analysis, as it has not built any supplemental transmission projects during this period.

¹⁴ Data downloaded on July 1, 2026, from PJM's Transmission Cost Planner, available at: <https://www.pjm.com/planning/m/project-construction>.

- We calculated the difference between the current supplemental project cost spending and the potential reduction in spending associated with increased oversight (see key assumption above).
- Supplemental projects are paid for entirely by the customers within their zones, including if those zones span multiple states. We scaled project spending from each of the three transmission owners/zones to New Jersey customers using the state's peak load contributions relative to zones' peak load.¹⁵
- **Bill savings:**
 - We allocated those savings to residential customers based on EIA sales data (Form 861, 2024). In reality, transmission costs are allocated to customer classes based on each class's contributions to peak load, however utility peak load data by class was not readily available. We then used the same EIA Form 861 data to estimate total bill savings. Since each transmission owner/zone has a different level of supplemental transmission spending, bill impacts vary by transmission zone.

¹⁵ Since the vast majority of the service territories are located within New Jersey, 95 to 99 percent of costs for each of these four zones are allocated to the state.