

PowerPair Impact Report

Small pilot program brings big returns to North Carolina

Every \$1 invested in Duke's PowerPair program attracts ~\$3.7 in private capital – meaning public incentives were the catalyst for a much larger wave of private investment in solar and energy storage, which saves ratepayer dollars and strengthens the grid.

The Program's Impact

- Since its launch in 2024, 6,297 NC households have enrolled in PowerPair, adding 54 MW of solar and thousands of paired batteries to the grid. Eligible customers receive up to \$9,000 toward installation, and most also participate in a virtual power plant program that lets Duke dispatch their batteries during periods of peak demand.
- Total program costs have reached \$48.7M – but the full value of the systems installed is an estimated \$227M. That gap represents \$178M in private capital mobilized by PowerPair, meaning that every \$1 of ratepayer investment attracted approximately \$3.7 in private spending on distributed solar and storage.
- Because ratepayers only pay the incentive – not the full system cost – PowerPair resources come online at a fraction of what Duke would pay for utility-scale alternatives: approximately 80% cheaper per MW than equivalent utility-scale gas resources.
- This matters now. Duke is in dire need of new generation, faces multi-year timelines to build large-scale resources, and recently raised rates to cover \$800M in fuel costs. PowerPair is adding fuel-free, quick-to-deploy, and dispatchable energy to the grid today – all while leveraging private dollars to do so.

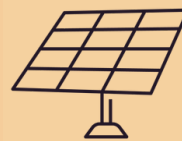
BENEFITS



Uses local installers to build North Carolina's economy.



Bill savings for households and a hedge against rising electricity rates.



Accelerates clean energy adoption without new infrastructure costs.



Reduces overall load and strain on the electrical grid, ultimately reducing costs for all ratepayers.

The Bottom Line

North Carolina faces a significant and growing electricity demand challenge, driven in large part by rapid data center development that is straining the grid. Duke Energy's pursuit of 12+ new large and small gas plants— at a cost of upwards of tens of billions of dollars— is years away and is loaded with long-term fossil fuel price risk.

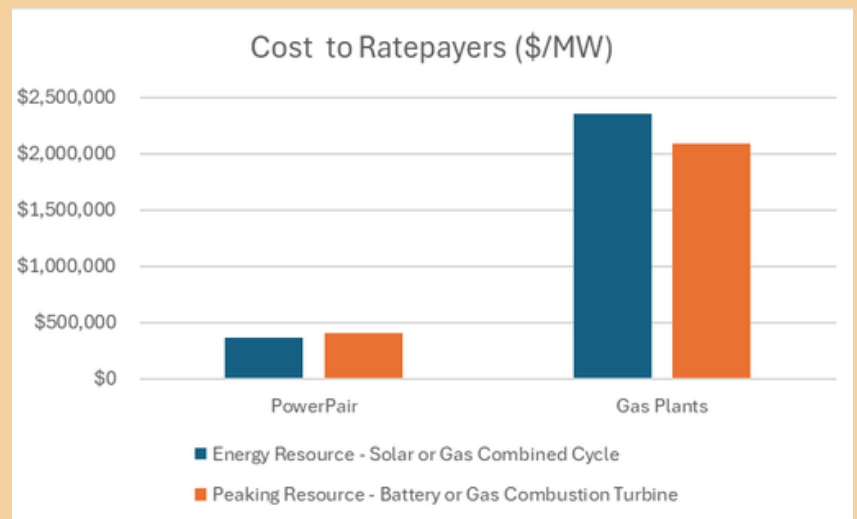
The PowerPair program offers a better alternative. For every \$1 spent, it's catalyzed an estimated \$3.7 in private solar and storage investment – fuel-free resources that are quick to build and can be harnessed through VPP programs to be dispatched as grid assets exactly when North Carolina needs them the most.

PowerPair is a pilot that has more than earned the case for expansion.

Resource Costs Compared

We compared the cost to ratepayers of the PowerPair program against publicly available data on Duke's latest gas plants. To ensure an apples-to-apples comparison, we compared energy-producing resources by evaluating solar against the Anderson combined cycle gas plant, and peaking resources by evaluating battery storage against the Smith combustion turbine peaker plant.

The solar and storage brought online by PowerPair are cheaper to Duke's ratepayers than both utility scale renewables and gas plants. This is because ratepayers only pay the incentive payment while ratepayers ultimately pay for the entirety of utility scale power plants.



Key Assumptions

- Solar capacity is drawn directly from Duke's May 2026 program filing. Since battery capacity is not reported, each participant is assumed to have a 11.5kW/13.5kWh battery.
- Installed costs are sourced from recent EnergySage market data: \$2.35/W for solar and \$1,178/kWh for batteries.
- Annual solar production is estimated assuming a 15% capacity factor and a 30-year asset life.
- Solar and battery costs are leveled to compare to publicly-reported utility-scale resource costs.
- We assume all batteries in the process of enrolling are successfully enrolled.
- We use cost data on gas plants from publicly available filings.

Sources

- Duke's PowerPair report - <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=fc5dcd29-517a-4c3c-92ed-59bc2ce86b87>
- Residential solar costs - [https://www.energysage.com/local-data/energy-storage-cost/nc/\(May,2026\)](https://www.energysage.com/local-data/energy-storage-cost/nc/(May,2026))
- Residential battery costs - [https://www.energysage.com/local-data/solar-panel-cost/nc/\(May,2026\)](https://www.energysage.com/local-data/solar-panel-cost/nc/(May,2026))
- Smith gas plant costs – <https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=3ad59057-ddac-4c18-b95c-ed040fde218>
- Anderson gas plant costs – <https://dms.psc.sc.gov/Attachments/Order/b9a9edb1-9bd0-45a2-b96d-cab5ad33f7c4>
- Duke fuel cost rate increase request – Docket E-7, Sub 1334