North Carolina Energy Policy Task Force

Interim Report

February 15, 2026

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Dear Governor Stein,

We are pleased to present the Interim Report of the North Carolina Energy Policy Task Force. Your Executive Order 23, signed on August 26, 2025, created the Energy Policy Task Force to "develop recommendations for how to manage increasing electricity demand while maintaining adequate reliable, affordable, and clean electricity for North Carolina."

This is a challenging task, given that the demand for energy continues to grow rapidly due to new data centers, advanced manufacturing operations, and a growing population. According to Duke Energy's load forecast in its 2025 Carolinas Resource Plan, total net load across its two North Carolina systems is projected to increase between 16% and 60% over the next 15 years, compared with just a 7% increase across the state over the last two decades.

This interim report includes a summary of the Task Force's activities to date and nine preliminary recommendations on policies and actions to manage increasing electricity demand while maintaining affordability, reliability, and carbon emissions reductions. Over the course of the next year, the Task Force will dive deeper into the recommendations, with a goal of delivering more refined and detailed recommendations in the next report due on February 15, 2027.

Task Force members, representing an array of leaders in the energy field, devoted considerable time and effort in researching, discussing, and developing the recommendations in this report. As Task Force Co-Chairs, we wish to thank all the Task Force members and staff who have worked so hard on this initiative. We look forward to continuing the Task Force's work in the years ahead to deliver affordable, reliable, and clean energy for all of North Carolina.

On behalf of the Energy Policy Task Force, thank you for the opportunity to serve our fellow North Carolinians in this way.

Sincerely,

D. Reid Wilson
Secretary,
N.C. Department of Environmental Quality

Kyle Hall
State Representative,
North Carolina District 91

Executive Summary:

In August 2025, North Carolina Governor Josh Stein created the North Carolina Energy Policy Task Force through Executive Order 23. Since then, the Task Force has focused on identifying technology and policy solutions to address the growing energy needs of large loads (i.e., individual facilities such as data centers or advanced manufacturing operations that consume large amounts of electricity) in ways that promote affordability, reliability, and continued emissions reductions. This report includes initial findings and recommendations developed by the members of the Task Force during its first 6 months of work.

North Carolina, like much of the country, is expecting significant load growth in the coming years. According to Duke Energy's load forecast in its 2025 Integrated Resources Plan, total net load across its two North Carolina systems is projected to increase between 16% to 60% over the next 15 years, representing a dramatic increase compared to just a 7% increase seen for all of the state over the last two decades. The Task Force meetings held in September and December of 2025 and January and February of 2026 included exploration and discussion of the opportunities and risks associated with load growth, along with policy approaches.

In their February 2026 meetings, Task Force members reviewed and deliberated upon the recommendations that surfaced over the course of their first six months of work. They ultimately selected the following recommendations:

1. Develop Options for Large Load Tariffs
2. Develop Options for "Bring Your Own Capacity" and Alternative Capacity Procurement Methods
3. Develop Options to Encourage Load Flexibility
4. Explore Reforms to Large Load and Generation Interconnection Processes
5. Assess the Dollar and Strategic Value of Existing Sales and Use Tax Exemptions for Data Centers
6. Explore Evaluation Process for Advanced Transmission Technologies and Grid-Enhancing Technologies
7. Explore Residential and Small Business Incentives for Energy Efficiency Improvements
8. Explore Development of a Third-Party Load Forecasting Process
9. Explore Energy and Water Usage Reporting for Data Centers

1. NC Energy Landscape

The electricity landscape in North Carolina, and across the United States, is undergoing significant changes due to load growth from data centers, expanded manufacturing, population growth, and electrification. These changes, if not well managed, pose risks to affordability and reliability of electricity, economic development, the health and safety of our residents, and the environment. Governor Stein created the North Carolina Energy Policy Task Force with the charge of developing recommendations for how to manage increasing electricity demand while maintaining adequate reliable, affordable, and clean electricity for North Carolina. Through the recommendations in this report, the Task Force has laid out approaches that can help capture the opportunities associated with load growth, better understand unknowns, and mitigate known risks.

North Carolina ratepayers are served by a variety of entities. Duke Energy is the largest electricity provider in the state, serving 3.9 million meters (meaning individual meters that serve a single home, business, etc.) currently divided into two territories. Approximately 1.1 million meters are served by 26 different Electric Membership Corporations (EMCs) headquartered in NC, with 6 EMCs based outside of NC also serving a limited additional number of meters in the state. Municipal and university-owned electric distribution systems serve around 660,000 meters. Duke Energy serves as the wholesale supplier of electricity for many of these EMCs and other distribution utilities. Lastly, Dominion Energy serves around 128,000 meters in northeastern North Carolina and is also a member of PJM Interconnection Regional Transmission Organization.[1]

In 2024, approximately 41% of North Carolina's electricity generation came from natural gas, 32% from nuclear, 13% from coal, 9% from solar, 4% from hydroelectric, 1% from wood, and 0.4% from wind.[2]

Affordability

Between 2010 and 2020, the average monthly residential electricity bill in North Carolina was relatively stable but has increased by approximately 22 percent between 2020 and 2025.[3] From

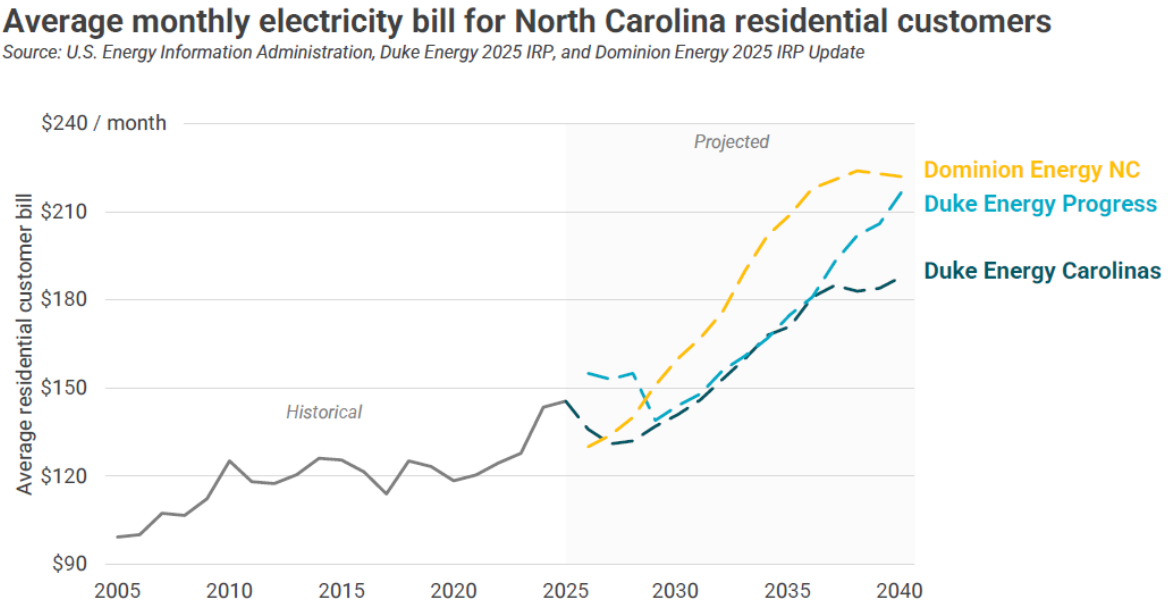
[1] https://www.ncuc.gov/documents/overview.pdf, https://rea.nc.gov/Portals/REA/Reports/2024_Biennial_Report.pdf, and https://news.duke-energy.com/releases/duke-energy-proposes-new-investments-in-north-carolina-to-boost-reliability-and-support-economic-growth-across-the-state

[2] https://www.eia.gov/electricity/state/northcarolina/

[3] https://www.eia.gov/electricity/data/browser/#/topic/7?agg=0,1&geo=g0000004&endsec=vg&linechart=ELEC.PRICE.NC-RES.A&columnchart=&map=&freq=A&start=2001&end=2024&ctype=linechart&ltype=pin&rtype=s&pin=&rse=0&maptype=0

2017 to 2024, nearly two-thirds of the increase in residential bills was due to increasing fuel costs, principally natural gas.[4]

In their latest Integrated Resources Plans (IRPs), the major investor-owned utilities serving North Carolina all project significant further increases in residential bills ranging from 40% to 70% over the next 15 years. Although these numbers rely on numerous assumptions and do not capture all potential changes in residential bills,[5] load growth is one of many factors impacting expected increases in rates. Recently requested rate increases have been faster than those projected in IRPs, at least in part because IRP projections do not include all system costs. For example, Duke Energy recently requested a proposed rate increase between 13.5 and 13.9 percent by January 1, 2027,[6], compared to a 2.1 percent average annual increase over the next decade projected by Duke Energy's latest IRP.[7]



[4] https://www.edf.org/sites/default/files/documents/Issue_Brief_Narrative_4_22_24.pdf

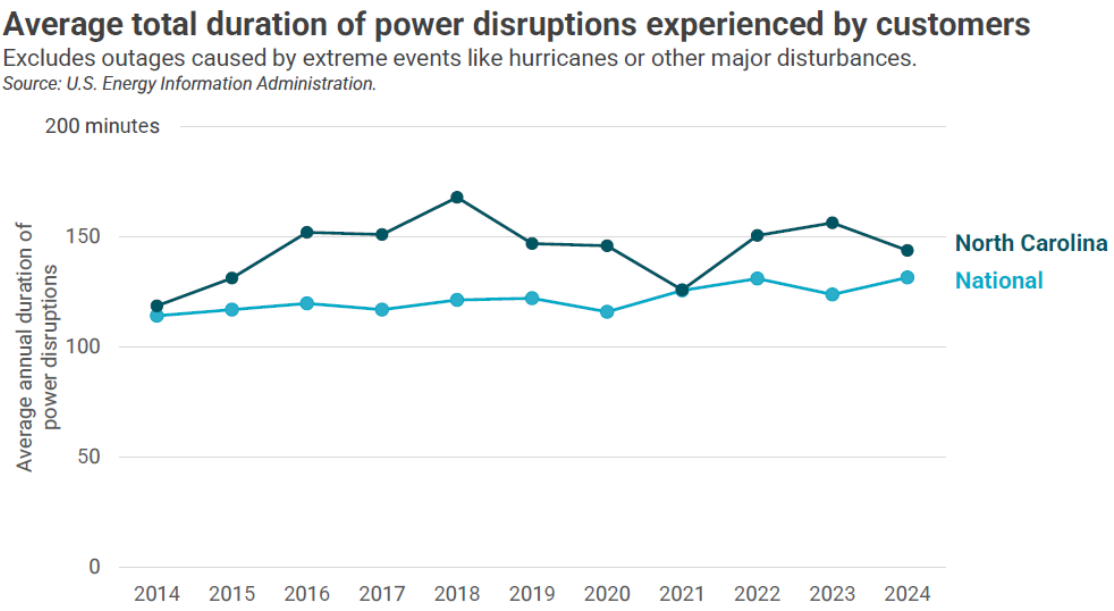
[5] https://www.duke-energy.com/our-company/about-us/irp-carolinas. https://cdn-dominionenergy-prd-001.azureedge.net/-/media/content/about/our-company/irp/pdfs/2025-integrated-resource-plan-update.pdf?rev=c656e4bd80184dbc80d4531cb6e9e975.

[6] https://www.duke-energy.com/home/billing/dec-nc-rate-case

[7] https://news.duke-energy.com/releases/duke-energy-files-2025-carolinas-resource-plan-continues-modernizing-energy-infrastructure-to-support-future-growth

Reliability

Since 2013, the average North Carolina electricity customer has experienced between 112 and 168 minutes of power disruptions per year, excluding major weather-related and other events.[8] Statewide this number has remained relatively constant but varies widely across the state each year. Significant storms in recent years, such as Hurricanes Matthew, Florence, and Helene, have led to widespread regional losses of power, outages that are not reflected in the numbers shown below.



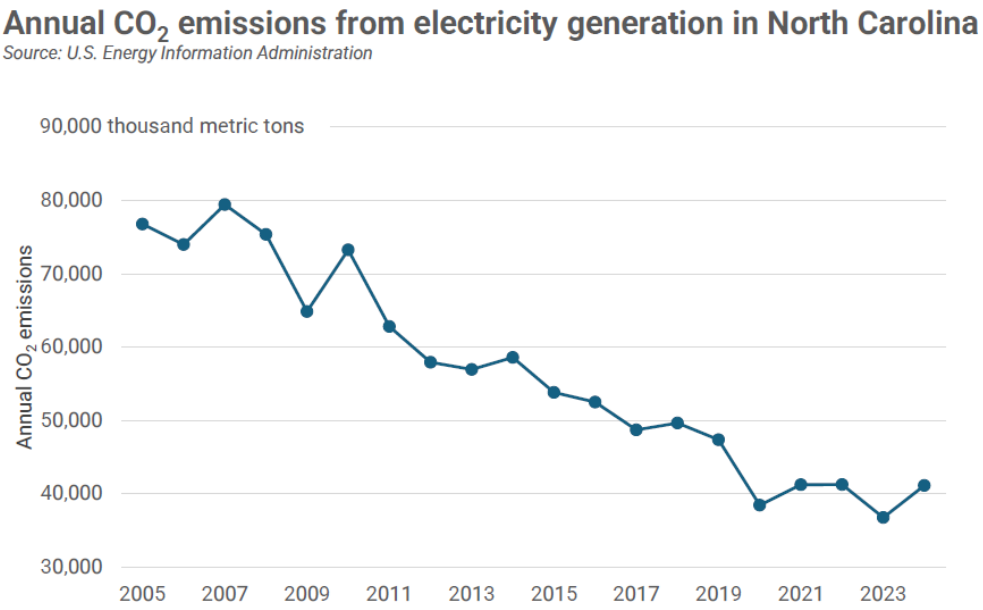
Like most systems across the country, parts of North Carolina's electric grid infrastructure are approaching the end of their useful life. At the same time, North Carolina will continue to face an increase in the frequency and intensity of extreme weather events, which increasingly pose risks to the reliability of the electricity system.[9] Load growth will also strain North Carolina's electricity system if not well managed.

[8] These numbers and the metric plotted below are the system average interruption duration index (SAIDI), which provides the total minutes of power interruption experienced by the average customer in a year, excluding major weather-related and other events. Data from EIA. https://www.eia.gov/electricity/state/northcarolina/

[9] NC Energy Security Plan. https://www.deq.nc.gov/state-energy-office/2025-nc-energy-security-plan-final/open

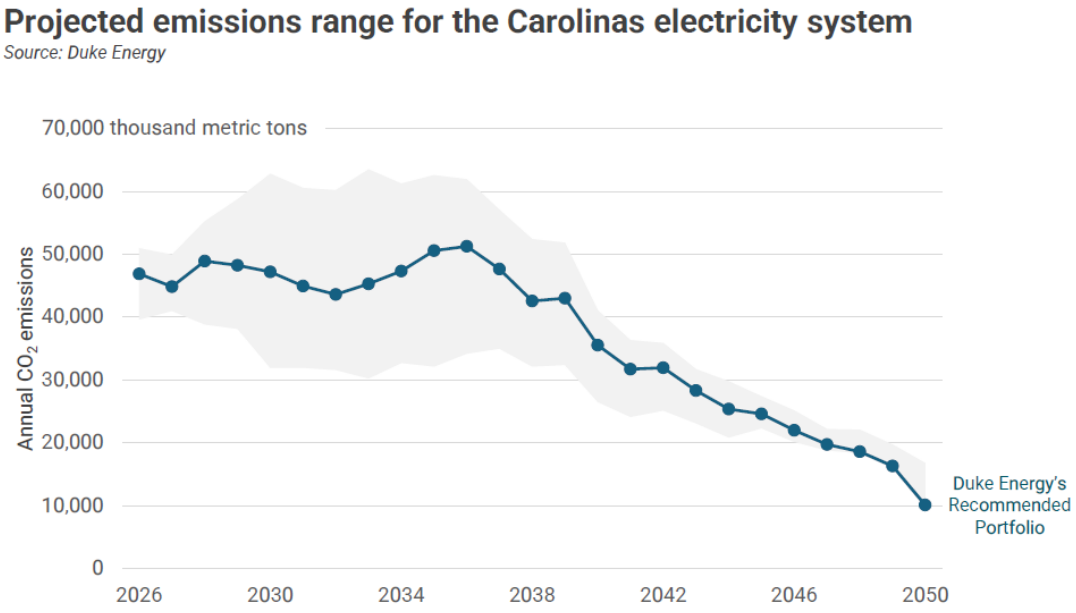
Emissions

Since 2005, carbon dioxide (CO_2) emissions from the electricity sector in North Carolina have declined by around 50%.[10] However, with the generation mix Duke Energy is now proposing to meet forecasted load in its latest IRP, Duke Energy is projecting that CO_2 emissions will plateau through the mid-2030s rather than continuing to decline. Projected emissions then begin declining again in the late 2030s towards achievement of carbon neutrality in 2050.[11]



[10] Note this does not include emissions from generation assets located outside of North Carolina that provide electricity to the state. Data from EIA https://www.eia.gov/electricity/state/northcarolina/

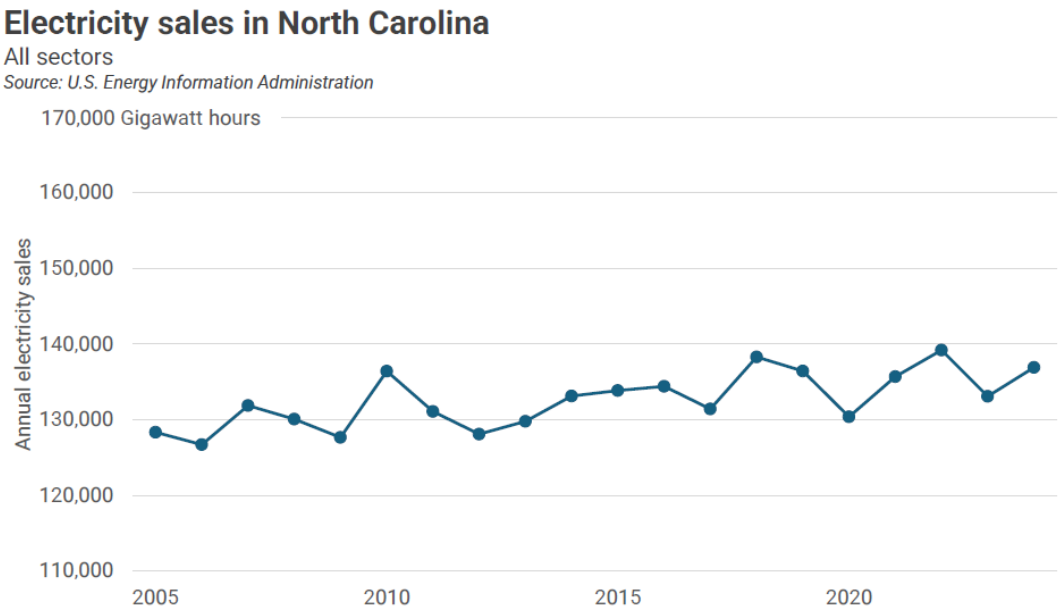
[11] https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=1dc54278-ef13-438f-a829-97a616d67574. Note this data includes the South Carolina portion of Duke Energy's service area.
chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ncleg.gov/Sessions/2021/Bills/House/PDF/H951v6.pdf



Load Growth

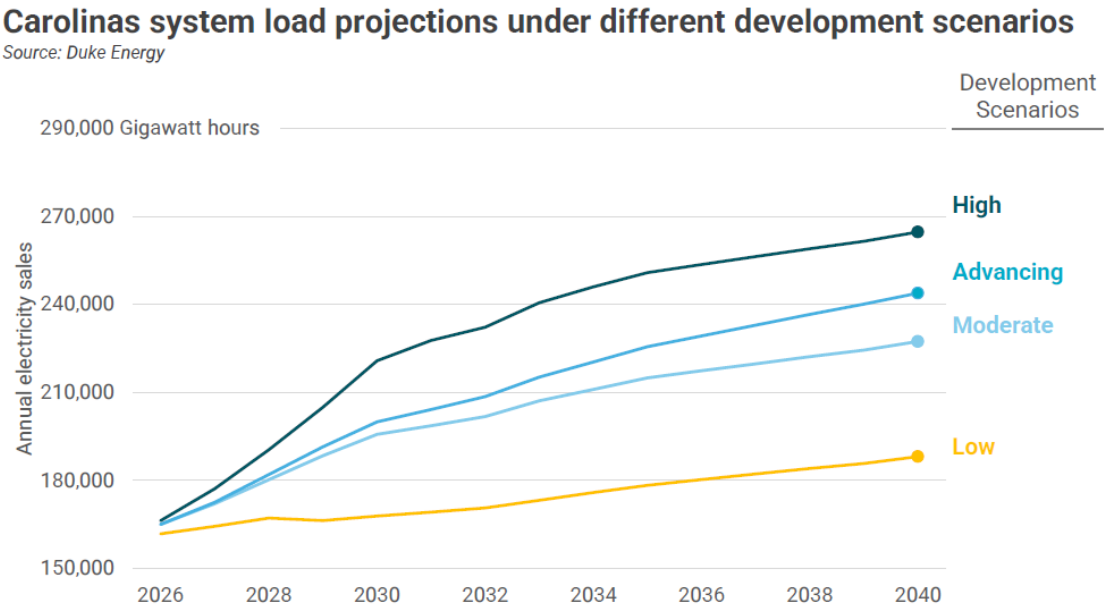
Since 2005, electricity consumption in North Carolina has been mostly level, increasing just 7% between 2005 and 2024 with around 133,000 gigawatt hours (GWh) purchased each year.[12]

[12] EIA. https://www.eia.gov/electricity/state/northcarolina/



According to Duke Energy's load forecast in its 2025 IRP, total net load across its two North Carolina systems is projected to increase between 16% to 60% over the next 15 years, representing a dramatic increase compared to the just 7% increase seen for all of the state over the last two decades.[13]

[13] https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=da8c7ac9-b1c1-4624-8fc9-2d4a8ba2febf

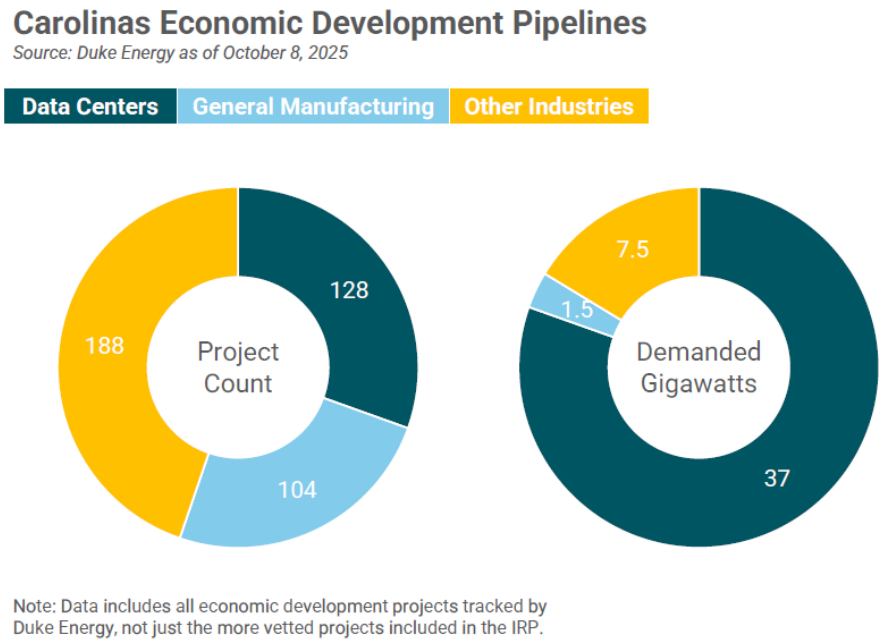


As part of this total projected load increase, Duke estimates energy demand from economic development projects will grow from 1,800 GWh in 2026 to between 29,000 and 33,000 GWh by 2030 for their Moderate and Advancing Development scenarios, respectively.[14]

Of the pipeline of economic development projects Duke Energy is tracking in its North Carolina and South Carolina territories, 30% are data centers, while the remaining 70% are a diverse suite of projects representing manufacturing, chemicals, life sciences, food and beverage, and aerospace industries. However, data centers account for 80% of the projected energy demand, indicating that data centers have uniquely high energy needs compared to traditional industries.[15]

[14] 2025 Carolina Resource Plan. Appendix D: Load Forecast. Page 11-12. URL: https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=da8c7ac9-b1c1-4624-8fc9-2d4a8ba2febf

[15] NCUC Technical Conference. Large Electric Load Additions. Presentation by Duke Energy Carolinas, LLC and Duke Energy Progress, LLC. https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=86ae7250-53a6-4b81-ad84-a70ed8b5c6f4 *Note that this reflects the full universe of projects considering sites in Duke Energy's service territory, not the smaller list of vetted projects included in the IRP load forecast.*



2. Task Force Activities & Discussion

In August 2025, Governor Stein issued Executive Order No. 23, creating the North Carolina Energy Policy Task Force.

The Task Force is Chaired by Secretary of the North Carolina Department of Environmental Quality Reid Wilson and Representative Kyle Hall (NC-91). Members of the Task Force include: bipartisan members of the North Carolina General Assembly; representatives of state agencies including the Departments of Environmental Quality and Commerce; the Office of the Attorney General; the North Carolina Utilities Commission Public Staff; the Economic Development Partnership of North Carolina; North Carolina electric utilities, public power providers, and electric cooperatives; large load data center and industrial electricity customers; non-governmental and non-profit organizations; and North Carolina public and private colleges and universities. A full list of Task Force members is provided beginning on page 38.

Task Force Members were sworn in during their first meeting on September 30, 2025. To date the Task Force has convened in person three times in Raleigh, NC, and two times virtually. As directed by Executive Order No. 23, the Task Force will continue its work through December 2028 with annual reports submitted to the Governor, North Carolina General Assembly, North Carolina Utilities Commission, and North Carolina Rural Electrification Authority on or before February 15, unless otherwise provided.

This report serves as the Task Force's first annual report and provides interim findings and recommendations. To comply with the timeline for submitting this first report, the Task Force operated under an accelerated schedule for the past six months. Going forward, the Task Force will work to refine the recommendations provided here and advance these efforts, as well as expand its work to other topics as directed by the Governor or to address current and future challenges as they might emerge. The Governor's initial charge to the Task Force was to focus on issues related to large loads: individual facilities such as data centers or advanced manufacturing operations that consume large amounts of electricity.

The Task Force has thus far operated with two subcommittees, the Load Growth Subcommittee and the Technical Advisory Subcommittee. The Load Growth Subcommittee met six times and has focused on identifying technology and policy solutions to address the growing energy needs of large loads in ways that promote affordability, reliability, and continued emissions reductions. The Technical Advisory Subcommittee has met seven times and has thus far focused on advising a modeling exercise of NC's electricity system commissioned by the Governor's Office that can be used to inform the ongoing work of the Task Force and answer key questions asked by Task Force members, including related to large loads. Each subcommittee comprised all Task Force members or their designees who volunteered to be part of the subcommittee.

Over the course of its meetings, the Load Growth Subcommittee heard presentations from a variety of speakers—including utilities, economic development experts, and large load customers—on load forecasting, the key drivers of growth, and emerging policy and regulatory considerations. Members also engaged in robust discussion and analysis of potential responses to load growth and linked those approaches to distinct North Carolina policy goals. The subcommittee then launched a report writing working group, who crafted, reviewed, and deliberated on the text of this report.

During its meetings, the Technical Advisory Subcommittee worked collaboratively to develop and refine technical assumptions and build consensus on modeled scenarios for a North Carolina electricity system modeling study. The modeling effort was framed around three core questions discussed by the subcommittee — how to maintain resource adequacy under reliability and policy constraints; what key assumptions drive costs and uncertainties; and the implications of load growth assumptions. Members discussed and voted on priority scenarios and sensitivities to examine. The full detailed modeling study is expected to be released in mid-March 2026.

The Load Growth Subcommittee led the preparation and deliberation of this interim report, with the Technical Advisory Subcommittee contributing key findings. The Load Growth Subcommittee then passed the report to the full Task Force for review, deliberation, and approval. The Task Force operated under a consensus model, although this did not always mean unanimity. The Task Force members represent diverse organizational perspectives. A Task Force member's vote supporting issuance of this report and the recommendations made herein is not intended to be (and should not be) construed as reflecting their organization's blanket endorsement of each and every recommendation made herein. Each Task Force member's employing organization reserves the right to advocate for policy and regulation that serves its organizational mission. This includes in North Carolina Utilities Commission

proceedings, where, because of the continual cycle of the Carbon Plan and Integrated Resource Plan proceedings, there will never be a full year in which there is not a significant North Carolina Utilities Commission regulatory proceeding underway.

3. Implications and Policy Approaches

Implications

Load growth is associated with both potential risks and opportunities for the state of North Carolina. One such risk is cross-subsidization of large load customers by other ratepayer classes, such as residential ratepayers. Cross-subsidization could occur if significant generation or grid infrastructure investments are needed to serve new large load customers, and these costs are spread across the rate base. Additionally, ratepayers risk bearing these costs if a large load customer leaves the state after significant investments are made, if an investment is made prematurely, or if the investment made does not align with the large load customer's actual energy needs.

Another potential risk is experiencing a shortfall in energy supply, which could threaten grid reliability for all customers and limit the ability of new large customers to interconnect to the grid in a timely fashion. An additional risk associated with load growth is exposure to fuel price volatility, particularly if natural gas facilities are heavily relied on to serve new loads. Furthermore, there are environmental risks associated with load growth, including achieving the state's 2050 carbon neutrality mandate and the availability of water, which can be needed in large quantities for data center cooling systems.[16]

If the state can successfully mitigate these risks, there are potential opportunities associated with load growth. These opportunities include North Carolina maintaining its competitive economic edge and attracting new business investment driven by large energy users, reducing carbon emissions and air pollution from transportation with electrification, and others. Load growth can also potentially apply downward pressure on electricity rates if grid utilization (i.e., selling more kilowatt-hours using the same electricity infrastructure) is increased. However, capitalizing on these opportunities requires a thoughtful, forward-thinking approach to load growth and cost allocation by North Carolina policymakers and regulators.

Policy Approaches

The Task Force considered numerous policy and technology approaches to mitigate risks associated with load growth, including suggestions made by Task Force members, approaches presented during the North Carolina Utilities Commission's Large Load Additions Technical Conference, and approaches taken by other states.

[16] https://nicholasinstitute.duke.edu/publications/hyperscaler-data-center-buildout-sustainability-bane-boon-or-both

Cost Allocation and Reduction

Large Load Tariffs

A large load tariff is a specialized utility tariff (*i.e.*, the terms outlining a utility's rates, service rules, and other conditions for service as opposed to individual customer contracts) for a large load customer class. The definition of a "large load customer" may differ by jurisdiction, often according to minimum load requirements above which customers are grouped together, along with other criteria. Large load tariffs are primarily intended to ensure that the majority of costs directly associated with serving new large load customers are paid by these specific customers, rather than other customer classes. Large load tariffs can also provide increased transparency into the requirements included within large customers' energy services agreements with utilities and help discourage speculative loads. The lower the minimum load requirements or less strict the other conditions, the larger the group that may share the costs for new infrastructure intended to serve large loads.

Elements of large load tariff design may include minimum load requirements, monthly demand charges or minimum billing requirements, applicability to certain customer types, recovery for interconnection study costs, customer credit rating, capacity requirements, collateral requirements, contracted capacity and energy definition, resizing or reassignment of contracted capacity/energy, behind-the-meter resources for backup energy, load factor definitions, contract duration, ramp times, duration flexibility, exit fees, clean energy requirements, or optional clean energy programs, specific generation technologies, marginal pricing, and economic development payments.

A large load tariff could also adjust the cap on incremental costs of compliance with the state's Clean Energy and Energy Efficiency Portfolio Standard (changed from the Renewable Energy and Energy Efficiency Portfolio Standard by S.B. 678 of 2023) that are allowed to be recovered from large load customers. Existing law caps incremental costs for industrial customers at $1,000 per month. An alternative to a fixed cap is a variable cap based on load, as used in Illinois. Illinois investor-owned utilities have retail customer cost caps ranging from $0.00263 to $0.00502 per kWh.

As of November 2025, 33 utilities across 25 states had adopted large load tariffs, while another 26 utilities across 16 states had large load tariff proposals under consideration by regulators.[17] For example, Virginia's State Corporation Commission, the agency responsible for the regulation of public utilities in Virginia, recently approved the creation of a new tariff for the largest users of electricity, including data centers, designed to help insulate ratepayers from the cost associated with buildout of infrastructure to support data centers and other large loads. Under this new large load tariff, certain large-scale

[17] Database of Emerging Large Load Tariffs (DELTa). Updated November 5, 2025. https://sepapower.org/large-load-tariffs-database/

customers with a demand of over 25 MW will be required to pay a minimum of 60% of contracted generation demand and 85% of distribution and transmission demand.

Another example is in Indiana, where starting last year Indiana Michigan Power began using a separate tariff for large load customers over 70 MW. The tariff's minimum contract term is 12 years, with a 5-year optional ramp-up period and a minimum billing requirement of 80% of total contracted capacity. A notable feature of Indiana Michigan Power's tariff is its requirements around reductions of contracted capacity. Large load customers are required to provide at least 42 months of notice before reducing contracted capacity, and customers may not reduce contracted capacity by more than 20% after the first 5 years. If customers provide notice and reduce their contracted capacity or terminate their contract, they are subject to exit fees.

Across the country, lawmakers have enacted legislation directing their state's utilities or the state's utilities commission to develop large load tariffs. In Missouri, state legislators enacted S.B. 4 in 2025, requiring electric utilities serving more than 250,000 customers to develop tariffs that apply to customers with an anticipated peak demand of 100 MW or more, while utilities with fewer than 250,000 customers must develop equivalent tariffs with a 50 MW minimum. In Minnesota, state lawmakers enacted H.F. 16 in 2025, which requires the Minnesota Public Utilities Commission to develop a very large customer class or subclass for each utility and ensure tariffs proposed by utilities for these customers classes meet certain standards.

Some utilities, such as AEP Ohio, have instead adopted tariffs specifically applicable to data center customers, as opposed to large load customers more broadly. This approach may cause data center customers to pay higher rates and contribute more to fixed costs and utility infrastructure than other large load customers, even if they are the same size, as well as pay more than the broader ratepayer base. While it places a higher cost burden on data center customers, it creates a competitive advantage for other large loads (manufacturing and industry) and avoids shifting costs to homeowners and small businesses.

Of large load tariffs in effect as of November 2025, the median customer demand threshold was 19 MW (range of 0.3 MW to 150 MW), the median specified contract term was 5 years (range of 1 year to 20 years), and the median required billing demand specified was 80% of contract capacity (range of 75% to 100%). Also including proposed tariffs under consideration, the median demand threshold is 25 MW, and the median contract term is 10 years.[18] The majority of approved and proposed large load tariffs also specify some type of required financial assurance or contribution.

In North Carolina, Duke Energy Carolinas and Duke Energy Progress currently have tariffs that are applicable to large high load factor customers with a minimum contract

[18] https://sepapower.org/large-load-tariffs-database/

demand of 1 MW.[19,20] The tariffs feature a contract term of one year and a minimum billing demand of 75% of contract capacity. The tariffs both contain rates for service, which include a monthly fixed charge, a per-kilowatt demand charge, and per-kilowatt-hour energy charges. The demand charges included in these rate schedules are comparatively higher than the those in the utilities' other large general service tariffs, while energy charges are lower. The tariffs do not contain provisions related to financial assurance or contributions.

While the tariffs in the two Duke territories are very similar in structure, there are a few differences between them. Duke Energy Carolinas' high load factor tariff contains an early termination charge, while Duke Energy Progress' does not specify that such a charge applies. Duke Energy Carolinas' tariff also provides for a one-year load ramping period, while Duke Energy Progress' tariff does not.

Duke Energy Carolinas' and Duke Energy Progress' service regulations also include sections authorizing the utility to require appropriate performance and credit provisions for a customer intending to contract with the utility for a demand of at least 100 MW at one or more aggregated sites.[21,22]

Dominion Energy does not currently have a generally available large load tariff in place for its NC service territory, though it has received approval to implement a large load tariff in its Virginia territory beginning in 2027.

Payments for System Infrastructure

Payments for System Infrastructure, also called Contributions in Aid of Construction (CIAC), are mechanisms that allow or require developers or large load customers to financially contribute to utility-owned infrastructure required for their interconnection. This contribution is credited towards the project, but the utility maintains ownership of the infrastructure for future maintenance, retirement, or replacement. CIAC mechanisms can help expedite interconnection of large load customers while ensuring that interconnection costs attributed to these customers are directly paid for by them.

CIAC-related actions have been taken by both state legislatures and utilities commissions across the country. In Utah, state lawmakers enacted S.B. 132 in 2025, requiring large load contracts to ensure that all large load incremental costs (system upgrades, transmission service requests, and incremental generation) are allocated to and paid by the customer. In California, the Public Utilities Commission approved interim

[19] Duke Energy Carolinas Schedule HLF High Load Factor. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/nc-schedule-hlf.pdf?rev=7167cfd42cad44f9a71c3eae9593e88e

[20] Duke Energy Progress Large General Service (High Load Factor) Schedule LGS-HLF. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-536-schedule-lgs-hlf.pdf?rev=6d5316f5c2f446c8864d2e618f27445f

[21] Duke Energy Carolinas Service Regulations. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/ncserviceregs.pdf?rev=98241877c9d04f8d86f10ada776b3921

[22] Duke Energy Progress Service Regulations. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-800-service-regulations.pdf?rev=0f1e8a3470d14f57b4040ec21db65b70

implementation of Rule No. 30 for Pacific Gas & Electric, requiring new transmission-level customers seeking retail services to be responsible for the initial costs of all transmission facilities. In Indiana, Amazon and NIPSCO have partnered to create GenCo, a structure in which data center customers exclusively pay for new generation and infrastructure upgrades needed to bring new large loads online without passing on costs to the ratepayer base.

In North Carolina, Duke Energy Carolinas' service regulations address CIAC for transmission, distribution, and service facilities.[23] A CIAC is required when the investment required to complete the requested facilities does not produce sufficient revenue to support the investment. Duke Energy Carolinas' and Duke Energy Progress' line extension plans also address CIAC policies for distribution system infrastructure.[24,25] Customers are generally responsible for any additional costs of distribution infrastructure other than the standard design and/or for points of delivery other than the normal point of delivery. If a detailed engineering study is required, the customer is responsible for the study costs if, following the study, the customer chooses not to move forward with installation of facilities.

Data Center Tax Incentives

There are myriad options for tax incentives for data centers, including sales and use tax exemptions on materials, electricity, and equipment and property tax relief, like in Alabama, Iowa, Montana, Nevada, and Oklahoma.[26]

Some states make these tax incentives conditional. In Missouri, Delaware, Maryland, and Louisiana, data centers are required to create between 5 and 50 jobs, and in Georgia, Idaho, Illinois, Mississippi, and Missouri, any jobs created must pay at or above the local average wage. Some states, like Texas and Iowa, phase out any tax exemptions after a set period of time.

As of late 2025, Kansas, Louisiana, Wisconsin, Iowa, and Minnesota are all considering or recently passed additional legislation to modify tax incentives for data centers. Among the modifications include granting new sales tax exemptions, incorporating data centers into the definition of "industrial purposes," imposing time limits on tax incentives, or removing them. Other proposals include refining tax incentives to prioritize particularly high impact projects that provide significant job opportunities or bring new clean energy

[23] Duke Energy Carolinas Service Regulations. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/ncserviceregs.pdf?rev=98241877c9d04f8d86f10ada776b3921
[24] Duke Energy Carolinas Distribution Line Extension Plan. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/nclineextensionplan.pdf?rev=fed88c851ac14e31977064e78c7e8be4
[25] Duke Energy Progress Line Extension Plan E. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-802-line-extension-plan.pdf?rev=474a9ce688c14fb1b11ab7c4a9dad2b3
[26] https://www.ncsl.org/fiscal/policy-snapshot-data-center-incentives

generation online. Washington's Data Center Workgroup report recommends that agencies incentivize load flexibility, including via tax incentives.[27]

North Carolina currently provides sales tax exemptions for data center electricity use and equipment. In 2006, the General Assembly enacted exemptions for sales and use tax for manufacturers and later expanded those exemptions to data centers. In a Fiscal Note prepared for 2015 legislation that broadened the applicability of the exemptions, the General Assembly's Fiscal Research Division estimated an annual fiscal impact of $4 million. In the ensuing years, North Carolina has seen substantial manufacturing, industrial, and data center investments in amounts that could not have been forecasted 10 years ago due to advances in technology and shifting economic forces. State Government therefore currently does not have a reliable estimate of the dollar value attributed to the sales tax exemptions for data center electricity use and equipment.

On-Site Energy

Load Flexibility

Load flexibility involves the ability to avoid drawing power from the grid during periods of peak system demand or grid emergencies. Utilities build infrastructure specifically to meet extreme peak demands; load flexibility can shift demand away from the peaks, allowing for more efficient use of grid resources around the clock. Researchers at Duke University recently published an analysis demonstrating significant potential benefits associated with modest flexibility commitments from large loads.[28] However, large load customers have different needs and have expressed varying levels of willingness to participate in such programs.

An additional source of load flexibility can come from the aggregation of behind-the-meter resources (e.g., demand response for home appliances, managed charging, and residential solar and storage), otherwise called a virtual power plant (VPP). VPPs can be treated like a virtual large load or large generation source and can be managed in real time to respond to grid needs much like a single resource. Accomplishing this requires customers to opt-in and the appropriate software and digital infrastructure to manage.

Approaches to encouraging load flexibility may involve voluntary programs providing financial incentives for large customers that agree to flexibility obligations – similar to traditional demand response programs offered by many utilities across the country. Incentive amount and curtailment requirements are key elements to consider in designing a program that successfully attracts large customer participation. While these types of tariffs are frequently proposed by utilities and approved by utility regulators, state legislatures may also advance these programs. For example, state lawmakers in Utah enacted S.B. 132 in 2025, requiring the Utah Public Service Commission to adopt a

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Data Center Workgroup: Preliminary Report. Washington State Department of Revenue. December 1, 2025. https://dor.wa.gov/sites/default/files/2025-12/2025DataCntrWrkgrpPrelimReport.pdf

[28] https://nicholasinstitute.duke.edu/publications/rethinking-load-growth

large load flexible tariff if the Commission determines that it is just and reasonable and in the public interest.

Another potential incentive is providing expedited interconnection to new large load customers that agree to flexibility requirements. In California, Pacific Gas & Electric offers FlexConnect, which allows customers to connect to the grid without waiting for capacity upgrades if they agree to be connected to a grid management system that imposes capacity limits on operation. Similarly, the Southwest Power Pool's Conditional High Impact Large Load Service lets large load customers interconnect in areas in need of transmission upgrades, but the grid operator retains curtailment rights to shed large customer load first during grid emergencies.

An alternative approach to these voluntary options is to adopt curtailment requirements for large load customers. For example, Texas' S.B. 6, enacted in 2025, allows ERCOT to either curtail new large load customers or require large load customers to deploy their backup generation during grid emergency events.

Early discussions on the potential of 'flexible flexibility' have begun in Virginia. This type of proposal would create mechanisms for inflexibly large load customers to purchase or otherwise procure flexibility from other loads connected to the system.

Recent federal action may further elevate the role of load flexibility in large load interconnection. In October 2025, the U.S. Department of Energy (DOE) directed the Federal Energy Regulatory Commission (FERC) to consider an Advanced Notice of Proposed Rulemaking (ANOPR) for reforms to the interconnection process for large electricity loads to the transmission system. The directive recommends expedited interconnection studies for large loads that agree to be flexible. While FERC has not previously asserted jurisdiction over load interconnection and the directive does not specify implementation details, this signals growing federal interest in integrating load flexibility into interconnection and planning frameworks.

In North Carolina, Duke Energy currently offers a demand response program for large customers called PowerShare.[29,30] This voluntary program provides capacity credits to participating customers providing at least 100 kW of curtailable demand. Duke Energy Progress also offers a demand response automation rider offering availability and event performance credits to non-residential customers providing a minimum contracted curtailable demand of 50 kW during summer peak periods.[31] Duke Energy is negotiating

[29] Duke Energy Carolinas Rider PS PowerShare Nonresidential Load Curtailment. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/ncriderps.pdf?rev=b791d925179148ddb120a30bbdb5428a

[30] Duke Energy Progress PowerShare Nonresidential Load Curtailment Rider PS. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-674-rider-ps.pdf?rev=01a4f89ad9db40a6a7715ab2d757b6da

[31] Duke Energy Progress Demand Response Automation Rider DRA. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-717-program-dra.pdf?rev=806e1f999ffb4bb7bc9c8f7ba70fb0db

Energy Service Agreements with large load customers that include curtailment provisions, among others.

Bring Your Own Capacity and Alternative Capacity Procurement Pathways

"Bring Your Own Capacity" (BYOC) and other alternative capacity procurement pathways can allow large load customers to directly select and procure energy resources to supply their operations. This approach can allow large load customers greater choice in the type of generation resources they use – something that is often important to companies with carbon-free energy or sustainability commitments. Resources procured in this fashion are often co-located with the large load customer, but this is not always the case.

In Georgia, Georgia Power and stakeholders have been working to develop a Customer-Identified Resource option that will allow large load customers to procure their own energy resources. A settlement agreement approved in Georgia Power's 2025 IRP proceeding included a provision approving the new option for customer-identified renewable resources that will begin a part of the 2025 Clean and Renewable Energy Subscription (CARES) RFP. As part of this option, multiple customers will be allowed to bring forward a single customer-identified resource for procurement.

The governors of Pennsylvania, Maryland, New Jersey, and Virginia (states in the PJM Interconnection), joined by the Data Center Coalition, created a plan to expedite the interconnection of new power generation. Interested and capable data center customers could provide financial support to enable the development of generating capacity to account for the new load being added at the same time. Notably, this plan also includes an extension of the policy that prevents price spikes in the PJM market for the next two auctions.

In January 2026, the White House and all 13 governors of states in the PJM Interconnection agreed to a Statement of Principles for the PJM market that includes encouragement of bring your own generation by allocating the cost of new capacity procured through an Reliably Backstop Auction to data centers that have not self-procured new capacity or agreed to be curtailable.[32] The PJM Board of Managers also promoted a voluntary BYOC pathway that would be paired with expedited interconnection.[33]

In Virginia, customers who procure clean energy via the accelerated renewable energy buyers mechanism authorized in the Virginia Clean Economy Act (VCEA) are exempt from state-based procurement or carbon-free electricity riders.

In North Carolina, the sale of electricity to the public for consumption (including third-party power purchase agreements) by entities other than public utilities, municipal

[32] https://www.energy.gov/documents/statement-principles-regarding-pjm

[33] https://www.pjm.com/-/media/DotCom/about-pjm/who-we-are/public-disclosures/2026/20260116-pjm-board-letter-re-results-of-the-cifp-process-large-load-additions.pdf

utilities, and electric cooperatives is currently prohibited by state law.[34] For rooftop solar, five other states expressly prohibit third-party power purchase agreements, while 29 states clearly allow these agreements (at least under certain conditions), and the legal status is unclear or unknown in 15 states.[35] Solar leasing is permitted in Duke Energy's service territory for systems serving the lessee's premises, up to an aggregate capacity limit of 1% of the previous 5-year average of the North Carolina retail contribution to the utility's coincident retail peak demand.[36] Municipal utilities are allowed to opt in to permit solar leasing in their service areas.[37] In Perquimans and Pasquotank Counties, outside of Duke Energy's service territory and within the PJM market footprint, the Amazon Wind U.S. East Onshore Wind Farm supplies power to Amazon Web Services data centers, in accordance with a long-term power purchase agreement signed between Amazon and the wind energy facility in 2015. In North Carolina there is also precedent for bring your own capacity programs in the context of the Green Source Advantage program, which is discussed in greater detail below.

On-Site Generation

Some large load customers have expressed interest in on-site generation, which may involve multiple state policies or utility programs. On-site generation may also assist loads in behaving flexibly. In the context of serving large loads, on-site generation is distinct from the narrower category of backup generation, which is designed to operate only when the facility is disconnected from its primary energy source. In general, backup generation is designed, permitted, and operated for short-term emergency use only, as opposed to other on-site generation which can serve as a primary energy source.

One consideration for on-site generation is the resource type used, and whether it is a carbon-emitting resource or not. While utility-supplied electricity is typically subject to a state's carbon standards, on-site generation may not be (though it must comply with federal air permitting rules), and the size and carbon emissions of on-site systems that are permitted could have an impact on the state's overall environmental objectives. A potential policy option is to restrict the resource types or limit the emissions levels associated with on-site generation systems used to supply large load customers. In New Jersey, proposed legislation would require all energy supplied to AI data centers to be derived from new renewable or nuclear energy resources. Taking all of this into account, another policy lever could be enabling large loads to install capacity behind the meter,

[34] N.C. Gen Stat. § 62-3(23). https://www.ncleg.net/enactedlegislation/statutes/html/bysection/chapter_62/gs_62-3.html

[35] Database of State Incentives for Renewables and Efficiency. 3rd Party Solar PV Power Purchase Agreement (PPA). Updated November 2025. https://ncsolarcen-prod.s3.amazonaws.com/wp-content/uploads/2025/11/DSIRE_3rd-Party-PPA_Nov2025.pdf

[36] N.C. Gen Stat. § 62-126.5. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_62/GS_62-126.5.pdf

[37] N.C. Gen Stat. § 62-126.9. https://www.ncleg.gov/EnactedLegislation/Statutes/PDF/BySection/Chapter_62/GS_62-126.9.pdf

controlling or limiting exports, and creating a paradigm for flexibility, thereby enabling speed to power and helping large loads meet any corporate clean procurement commitments.

The prospects for on-site generation can also be impacted by net metering policies, which allow customers to offset electricity consumption with electricity produced by an on-site generation system and receive compensation for excess electricity produced and exported to the grid. Most states place a system capacity limit on net metering eligibility that is either a fixed number or tied to the customer's demand. In North Carolina, the system capacity limit for participation in utilities' net metering tariffs varies by utility, with Duke Energy's set to 5 MW or up to 100% of contracted demand, whichever is smaller.

One option to expand opportunities for on-site generation would be to increase system net metering capacity limits or tie the limit only to a customer's demand. However, depending on the compensation structure and rates provided to the customer for excess generation, this could potentially pose a risk of cross-subsidization by other ratepayers. Another potential option would be to allow customers to utilize larger systems if they are designed to be non-exporting.

Grid Capacity

Green Tariffs and Clean Transition Tariffs

Green tariffs and clean transition tariffs are rate structures that enable large customers to cover the direct costs of service while offering them procurement options through the utility to purchase power generated from clean energy technologies. Many large load customers have corporate clean energy or sustainability commitments and seek options to serve new load with clean energy resources. For many customers, the clean energy resources need to be in addition to what would have been procured by the utility in their business-as-usual planning. These tariffs are of particular interest in regions without direct access to alternative suppliers or wholesale electricity markets.

In Nevada, NV Energy has a clean transition tariff in effect, which enabled Fervo Energy, a geothermal plant developer, and NV Energy to provide Google data centers in the state with 115 MW of geothermal energy. Dominion Energy in Virginia has a voluntary and experimental rate class that allows existing customers to purchase up to 100% of net energy output or renewable energy certificates (RECs) from a new carbon-free generation facility or purchase power through a PPA from a third party.[38] Kansas recently adopted a large load tariff for facilities over 75 MW with options for customers to access clean energy.[39]

Across the country, legislatures have taken steps to expand green tariff or clean transition tariff availability. H.F. 16, enacted in Minnesota in 2025, requires utilities to offer clean energy and capacity tariffs to commercial and industrial customers.

[38] https://www.scc.virginia.gov/docketsearch#/caseDetails/145286
[39] https://www.kcc.ks.gov/news-11-6-25

Meanwhile in Missouri, state legislators enacted S.B. 4 in 2025, establishing an "accelerated renewable buyers" program for certain utilities.

In North Carolina, Duke Energy has offered multiple iterations of a green tariff for several years. Duke Energy Carolinas filed its original Green Source Rider application in November 2013. This rider was an experimental program to provide renewable energy options to large customers and provided renewable energy generation in addition to that used for compliance with the state's renewable energy portfolio standard.[40]

H.B. 589 of 2017 directed Duke Energy Carolinas and Duke Energy Progress to file applications for new programs whereby the utilities could purchase renewable energy and capacity on behalf of large non-residential customers (with a contract demand of at least 1 MW or 5 MW aggregated at multiple service locations). This resulted in the utilities' application for and North Carolina Utilities Commission's approval of the Green Source Advantage program, building upon the original Green Source Rider.

In 2023, Duke Energy Carolinas and Duke Energy Progress filed a joint petition for approval of a new iteration of the program – Green Source Advantage Choice.[41,42] The Utilities Commission issued a decision in July 2024 approving a modified Green Source Advantage Choice program. The program, as approved and currently offered, allows large non-residential customers (with a contract demand of at least 1 MW or 5 MW aggregated at multiple service locations) to purchase renewable energy procured on their behalf by the utility.[43,44] The program allows for a total capacity of 4,000 MW of renewable energy facilities, with a maximum of 2,200 MW of utility-owned facilities and a maximum of 1,800 MW of third-party owned facilities.

As part of the Green Source Advantage Choice program, the utility will retire RECs and document the retirement of the carbon emission reduction attributes on the participating customer's behalf. Renewable energy procured through this program is applied toward the utility's carbon plan procurement targets and does not constitute procurement in addition to this business-as-usual compliance plan. However, the program does include a Resource Acceleration Option that allows participating customers to support the accelerated development of renewable energy facilities additional to the procurement

[40] Duke Energy Carolinas files Green Source Rider with North Carolina Regulators. November 15, 2013. https://news.duke-energy.com/releases/duke-energy-carolinas-files-green-source-rider-with-north-carolina-regulators

[41] North Carolinas Utilities Commission Docket E-2 Sub 1314. Opened January 24, 2023. https://starw1.ncuc.gov/NCUC/PSC/DocketDetails.aspx?DocketId=f6761540-a5b5-4190-bf99-04490b678608

[42] North Carolina Utilities Commission Docket E-7 Sub 1289. Opened January 24, 2023. https://starw1.ncuc.gov/NCUC/PSC/DocketDetails.aspx?DocketId=2cb3cc55-e5f3-46f4-a9f2-dc5001aa482e

[43] Duke Energy Carolinas Rider GSAC Green Source Advantage Choice. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/electric-nc/ncridergsa-c.pdf?rev=0843c8188332484f8024456fbfc4da8a

[44] Duke Energy Progress Green Source Advantage Choice Rider GSAC. https://www.duke-energy.com/-/media/pdfs/for-your-home/rates/dep-nc/leaf-no-671-rider-gsac.pdf?rev=ba875d54e95d4429a16abc30be6921c7

schedule in the utility's carbon plan. This option is available for up to 300 MW on a rolling two-year basis and 1,000 MW total for the program.

In May 2024, Duke Energy announced that it had signed memorandums of understanding with Amazon, Google, Microsoft, and Nucor to develop new Accelerating Clean Energy tariffs that would allow large customers to directly support carbon-free energy investments.[45] This would include establishment of a Clean Transition Tariff to provide individualized carbon-free energy portfolios to large customers and enable these customers to accelerate the utility's decarbonization compared to its carbon plan. Despite this announcement, involved parties have indicated during task force meetings that discussions on this have not continued, and a tariff has not yet been proposed.

Interconnection Reform for Generation and Large Loads

Interconnection to the electric grid is an important step for supplying power to new large loads. Utilities have interconnection procedures for new generation resources that may be used to serve large loads, as well as procedures for interconnecting the large loads themselves (also called "energization"). A wide range of potential reforms to the interconnection process can allow for expedited interconnection. These may include applying existing generation interconnection reform approaches to large load customer-specific scenarios, such as clustering or queuing large load customers, or implementing innovative solutions such as requiring curtailment or bringing generation for accelerated interconnection.

Additionally, some states, including Indiana and Virginia, are considering the use of surplus interconnection, whereby new assets can utilize existing headroom in facilities that do not use their full interconnection capacity.[46] Other options may include larger upfront deposits, enhanced site control requirements, financial security instruments, formalized study processes, enforceable timelines, reporting requirements, and queuing or clustering large loads over a certain threshold.

The Southwest Power Pool has two interconnection processes worth considering: the Conditional High Impact Large Load Service (CHILLS) and High-Impact Large Load Generation Interconnection Assessment (HILLGA). CHILLS allows accelerated interconnection through enabling pathways of load curtailment while HILLGA assesses generation in conjunction with large loads.

In October 2020, the North Carolina Utilities Commission approved Duke Energy's generator interconnection queue reform proposal, which included implementation of a

[45] Responding to growing demand, Duke Energy, Amazon, Google, Microsoft and Nucor execute agreements to accelerate clean energy options. May 29, 2024. https://news.duke-energy.com/releases/responding-to-growing-demand-duke-energy-amazon-google-microsoft-and-nucor-execute-agreements-to-accelerate-clean-energy-options

[46] Indiana S.B. 240, https://iga.in.gov/legislative/2026/bills/senate/240/details
Virginia H.B. 1065, https://lis.virginia.gov/bill-details/20261/HB1065

cluster study process (replacing the previous first come, first served process).[47] In July 2023, the Federal Energy Regulatory Commission issued Order No. 2023, which also aimed to streamline interconnection processes and move toward a cluster study process.[48] Among other provisions, Order No. 2023 also implemented more stringent financial commitments and adopted rules that facilitate the addition of energy storage.

Grid-Enhancing Technologies and Other Advanced Transmission Technologies

Grid-enhancing technologies (GETs) and the broader category of advanced transmission technologies (ATTs) include hardware and software that increases the capacity and reliability of existing power lines while larger upgrades are completed. Deployment of GETs and ATTs can allow more generation resources to be interconnected to an existing transmission system. GETs/ATTs may also provide benefits in terms of speed and costs, where traditional transmission investments are more costly and take longer to complete.

States have taken steps to encourage transparent evaluation and deployment of GETs. In Indiana, lawmakers enacted S.B. 422 in 2025, requiring electric utilities to evaluate the potential use of or investment in advanced transmission technologies as part of the integrated resource planning process. Similarly, Utah legislators enacted H.B. 212 in 2025, requiring electric utilities to submit an analysis of the cost-effectiveness and timeline for deployment of advanced transmission technologies in proposals to expand the transmission system. North Carolina legislators introduced legislation in 2025 that would have required public utilities to produce a report evaluating a range of advanced reconductoring and/or GETs options.

On the regulatory side, in Georgia Power's 2025 IRP proceeding, the Georgia Public Service Commission approved a settlement agreement including a provision that Georgia Power will adopt a formal process to evaluate GETs as potential solutions for all major Georgia Power transmission projects and submit a report on planning assumptions, criteria, and outcomes associated with the utility's GETs evaluations.

In North Carolina, Duke Energy and some other utilities currently evaluate and utilize GETs. Duke Energy received $57 million in cost-share funding from the U.S. Department of Energy to support its use of advanced reconductoring to rebuild the Lee-Milburnie transmission line.[49] However, North Carolina does not currently have standardized requirements for evaluation of GETs.

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[47] North Carolina Utilities Commission Order Approving Queue Reform. Docket No. E-100 Sub 101. October 15, 2020. https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=cba78a14-8db3-4d01-960f-9deac1dc6bec

[48] Federal Energy Regulatory Commission Order No. 2023. July 28, 2023. https://www.ferc.gov/media/order-no-2023

[49] U.S. Department of Energy awards Duke Energy project $57 million in cost-share funding to enhance North Carolina's energy grid. August 6, 2024. https://news.duke-energy.com/releases/u-s-department-of-energy-awards-duke-energy-project-57-million-in-cost-share-funding-to-enhance-north-carolinas-energy-grid

ATTs also include High Performance Conductors (HPCs), which are conductors with significantly higher capacity and efficiency than conventional conductors.[50] For overhead lines, this includes conductors with reduced or no thermal sag compared to steel core conductors. HPCs include both carbon core conductors and superconductors.

HPCs can play a role in unlocking capacity on the grid to quickly interconnect new load and generation. Reconductoring existing corridors with HPCs can potentially double transfer capability without the need for new siting or rights-of-ways. Legislatures in several states have taken steps to encourage evaluation and deployment of HPCs. The Indiana and Utah laws from their respective 2025 legislative sessions, along with legislation introduced in North Carolina in 2025, similarly require utilities to evaluate HPCs in addition to GETs.

Residential and Small Business Energy Efficiency Improvements

Increasing the energy efficiency of buildings throughout the utility's service territory can reduce customer electricity demand, which in aggregate has the potential to create excess electricity supply that can be used to serve new large load customers. Energy efficiency is frequently the least expensive resource when compared to new generation alternatives, with customers across the country saving billions of dollars annually from utility efficiency investments.[51] A common approach to realizing energy efficiency benefits is to provide financial incentives or low-cost financing to residential and small business customers to make energy efficient equipment purchases or make building energy efficiency upgrades. Additional benefits to ratepayers in the form of lower electricity bills may also materialize while freeing up capacity to serve large loads faster.

Financial incentives for building energy efficiency can be funded in multiple ways. Some states appropriate funds for energy efficiency incentives. In other states, utilities may offer incentives and recover these costs through retail rates or specialized cost-recovery riders, as provided under North Carolina law for Duke Energy. An emerging concept is for large load customers themselves to directly fund consumer energy efficiency incentives. By establishing a mechanism to measure the capacity made available through such programs, the resulting capacity benefits could be quantified and credited toward serving new large load demand.

Several North Carolina utilities offer incentive programs to residential and small business customers for energy efficiency improvements. Duke Energy Carolinas and Duke Energy Progress offer energy assessments, as well as rebates for installation of certain energy efficient equipment at homes and businesses. Duke Energy also offers its Improve & Save tariffed on-bill financing program to help residential customers pay for energy efficiency improvements. Many of the state's electric cooperatives and municipal utilities also offer rebate programs for energy efficiency upgrades.

[50] https://acore.org/wp-content/uploads/2024/10/Unlocking-the-Grid-A-Playbook-on-High-Performance-Conductors-for-State-and-Regional-Regulators-and-Policymakers.pdf
[51] https://rmi.org/why-efficiency-matters-unlocking-benefits-beyond-climate-for-all/

Planning and Data Access

Large Load Resource Planning

Several states are exploring adjustments to their resource planning processes and load forecasting methodologies due to load growth and new large loads. Some of the motivations behind these adjustments are avoiding inclusion of speculative loads in load forecasts and facilitating expeditious resource procurement. One approach is to use a separate process for large load planning. In Indiana, lawmakers enacted H.B. 1007 in 2025, which allows utilities to file "expedited generation resource" plans to supply the needs of large load customers when load growth exceeds the smaller of 5% of average peak demand over the previous three years or 150 MW. These are separate from Indiana utilities' IRPs.

In North Carolina, Duke Energy and Dominion Energy file IRPs every two years using a 15-year base planning horizon. Large load additions are estimated by the utility as a part of the load forecasting that goes into the utility IRPs.

Independent Load Forecasting

In this era of load growth, load forecasting takes on increased importance. Accurate load forecasting is important to both ensure the grid has sufficient capacity to meet demand and to avoid unnecessary investments that could raise customer costs. Several states and utilities are evaluating their current load forecasting methodologies to ensure that they are using approaches that are likely to produce the most accurate results.

In Indiana, an independent entity produces state load forecasts using data provided by the state's electric utilities. The State Utility Forecasting Group at Purdue University was established in 1985 for this purpose. Third-party load forecasting can provide an independent check on utility-developed load forecasts and ensure that proposed investments are necessary.

Indiana has 5 investor-owned electric utilities, as well as 72 municipal utilities and 2 primary generation cooperatives (serving 36 electric membership cooperatives).[52] In North Carolina, there are three investor-owned utilities, although Duke Energy Carolinas and Duke Energy Progress conduct their planning jointly. There are 76 municipal utilities and 32 electric membership cooperatives.[53]

[52] Infrastructure – Electric Utilities. Indiana Office of Energy Development. https://www.in.gov/oed/resources-and-information-center/about-indiana-resources/infrastructure/

[53] Electricity. North Carolina Utilities Commission. https://www.ncuc.gov/industries/electric/electric.html#:~:text=Customers%20of%20the%20State's%2032,North%20Carolina%20Electric%20Membership%20Corporation

In Duke Energy's current load forecasting process, the utility modifies its base load forecast by applying an economic development adjustment.[54] In developing this adjustment, the utility categorizes future large economic development projects as either Advanced Development Projects, Mid-Stage, or Early-Stage based on where the large customer is in the process of siting its facility and entering into agreements with the utility. In its resource plan, Duke Energy provides four different load forecast scenarios for its economic development adjustment:

- Low Case: Includes only customers that have signed an electric service agreement (ESA).
- Moderate Development: Includes customers that have signed an ESA, plus 75% of customers that have signed a letter agreement (LA), and 70% of customers that have progressed to advanced stage discussions in advance of signing an LA or ESA.
- Advancing Development: Same assumptions as Moderate Development, plus adds 2 GW by 2040 to allow for continued economic development signings and is informed by the Mid-Stage project pipeline (assumes approximately 40% of the pipeline, with linear growth).
- High Case: Includes all customers that have signed an ESA, LA, or have progressed to advanced stage discussions in advance of signing an LA or ESA, plus 50% of the Mid-Stage project pipeline.

Dominion Energy takes a different approach to large load forecasting, with its data center practice modeling data center load specifically and its corporate practice modeling other loads using econometrics. In its most recent forecasting, Dominion modeled its largest 7 projects distinctly and created a combined model for its remaining potential projects to eliminate double counting. Rather than using contracts as a key input for forecasting, it uses contracts to validate its forecasting. Additionally, Dominion Energy uses load ramps in its forecasting, rather than assuming new large loads use the full contracted demand from the start date of the contract.

Studying Data Center or Large Load Impacts

As data center development accelerates, some states have recently considered legislation directing state agencies to conduct studies of the energy, environmental, economic, or other potential impacts of data centers in their jurisdictions.

For example, the Maryland General Assembly enacted S.B. 116 in December 2025, directing the state Department of the Environment, Maryland Energy Administration, and the University of Maryland School of Business to study the likely environmental, energy, and economic impacts of data center development in the state. In New Jersey, lawmakers enacted A.B. 5466 in July 2025, directing the New Jersey Board of Public Utilities to study the effects of data center electricity usage on electricity rates in the

[54] Duke Energy 2025 Carolinas Resource Plan – Appendix D: Load Forecast. https://www.duke-energy.com/-/media/pdfs/our-company/carolinas-resource-plan/2025/appendix-d-load-forecast-web.pdf?rev=2688801dbcbd4f0e946502bc99dd0337

state. North Dakota legislators also enacted a bill – H.B. 1579 – in 2025 that directs Legislative Management to study the impact of large energy consumers on the state's electrical grid, regulatory structure, and economic development.

As of 2025, NCUC requires Duke Energy to submit a semiannual report on large load additions in the state and their grid impacts.

Energy and Water Use Reporting Requirements

A number of states have required or considered requiring data centers or large load customers to submit public reports on their energy and water use to provide increased transparency into the resource impacts of these facilities. Approximately forty bills across the country have been recently introduced requiring data centers to make disclosures about energy use and environmental impacts either to state agencies or the public.

New Jersey S.B. 4293 passed the state Senate and Assembly, but Governor Murphy conditionally vetoed the bill in October 2025 with recommended changes (primarily adjusting dates and adding new requirements). However, the Governor expressed overall support for the bill and the reporting requirements. Via H.F. 16, enacted in June 2025, Minnesota is requiring data centers to provide information on estimated water use as part of the permitting process. Iowa's H.F. 976, enacted in June 2025, requires data centers receiving sales tax incentives to file annual reports including backup power generation fuel and electricity purchased.

4. Key Findings

1. Significant load growth is coming to North Carolina, with the associated opportunities and risks.
2. The latest estimates project total net load for the Duke Energy Progress and Duke Energy Carolinas system increasing between 16% to 60% over the next 15 years, compared to the just 7% increase statewide over the last two decades.
3. A large fraction of expected load growth is due to data centers and other large loads.
4. Data centers in North Carolina have attracted significant public attention, but there is not reliable public data for the total number and size of existing and proposed data centers in North Carolina.
5. Plausible load forecasts for North Carolina contain a historically wide range of values, in part due to uncertainties from large loads.
6. North Carolina has a statutory target applicable to Duke Energy that requires electricity generation to be carbon neutral, as defined by statute, by 2050.[55] Load growth may pose an additional challenge to achieving this target, though with appropriate policy levers may be an opportunity to build more carbon free power.
7. Meeting projected energy demand growth from large loads and other sources will require new generation, more transmission, and other energy supply actions, which could increase rates on all customers unless the primary users of new infrastructure bear the cost burden.
8. Many prominent large load customers have corporate clean energy or sustainability commitments and seek options to serve new load with clean energy resources when making investments; fulfilling these commitments would have a significant impact of the mix of energy sources required to meet new load.
9. Effective use of new resources and infrastructure, along with optimal use of existing resources and infrastructure, especially through load flexibility, can put downward pressure on rates by distributing fixed costs, using assets more efficiently, managing aggregated and distributed resources, and lessening the need for new infrastructure.
10. Across the country, most states are taking some kind of action to study, respond to, or prepare for increases in electricity demand.

[55] https://www.ncleg.gov/BillLookup/2021/H951

5. Recommendations

For its first report, the North Carolina Energy Policy Task Force delivers the following as recommendations for consideration or implementation by relevant entities, for further refinement and expansion over the coming year by the Task Force itself, or both.

Recommendation 1: Develop Options for Large Load Tariffs

What: Develop options for large load tariffs for investor-owned electric utilities that mitigate any potential cross-subsidizations if they exist and protect ratepayers from imprudent investments. Duke Energy Carolinas and Duke Energy Progress currently have optional tariffs applicable to large high load factor customers with a minimum contract demand of 1 MW; options could therefore include modification of these tariffs or development of a new tariff for new loads, with differentiation possible based on load size and other characteristics. Dominion Energy does not currently have a generally available large load tariff in place for its NC service territory, though it has received approval to implement a large load tariff in its Virginia territory beginning in 2027.

Who: NC Energy Policy Task Force

Timeline: 12 months

Considerations: Increases transparency, provides predictability for businesses, supports avoidance of cross-subsidization, reduces speculative loads and risk of stranded utility assets, and can enable easier procurement of clean resources. Large load tariffs can be complex and may include many different specific provisions that require thoughtful design. Large load tariffs may or may not address certain other issues included in the Task Force's recommendations, potentially creating some overlap and requiring coordination. If done improperly, may discourage new large load customers from siting facilities in the state.

Examples: As of November 2025, 33 utilities across 25 states had large load tariffs in effect, while another 26 utilities across 16 states had large load tariff proposals under consideration by regulators.[56]

[56] Database of Emerging Large Load Tariffs. https://sepapower.org/large-load-tariffs-database/

Recommendation 2: Develop Options for "Bring Your Own Capacity" and Alternative Capacity Procurement Methods

What: Develop options to enable "Bring Your Own Capacity" and alternative capacity procurement pathways, including potential clean energy specific pathways. Potential options could include legislation enabling large customers to procure their own capacity through new generation, storage, or distributed energy resources; a clean transition tariff; provisions included within a large load tariff allowing for choice in generation resources, or sleeved power purchase agreements

Who: NC Energy Policy Task Force

Timeline: 12 months

Considerations: Enables large load customers to meet corporate sustainability commitments and reduce carbon emissions, increases NC's competitiveness as a site for new large customers, ensures increased costs and risk associated with new generation are borne by the large load customer, supports development of new technologies. Sales of electricity by third-party providers are not currently allowed in North Carolina. "Bring your own capacity" proposals able to be considered by utilities or the Utilities Commission must therefore involve either (i) utility ownership of generation selected by the customer; (ii) a three-way contractual relationship between the customer, the utility, and a third party supplier (sometimes referred to as "sleeved" power purchase agreements); or (iii) direct ownership of the generation by the customer.

Examples: NV Energy Clean Transition Tariff, Dominion Energy (Virginia) Carbon-Free or Renewable Generation Supply Service tariff, Georgia Power Bring Your Own Clean Energy (currently under development), PJM Bring Your Own Generation

Recommendation 3: Develop Options to Encourage Load Flexibility

What: Develop options to encourage load flexibility for or sponsored by large load customers. Potential options could include voluntary demand response or tariffs, expedited interconnection in exchange for load flexibility commitments, increased capacity allocation in exchange for being flexible, programs to allow large loads to aggregate distributed resources to provide flexible capacity, programs to sponsor new demand flexibility for other grid customers, and/or mandatory requirements.

Who: NC Energy Policy Task Force

Timeline: 12 months

Considerations: Greater utilization of preexisting grid capacity, reduces costs, enables faster interconnection of large loads. Many large load customers prefer voluntary programs over mandatory programs because flexibility could mean curtailment or switching large loads to backup generation. This means the impacts of flexibility could vary depending on the definition and how backup is treated. Many large customers are working with utilities to design voluntary flexibility programs.

Examples: Pacific Gas & Electric FlexConnect program, Southwest Power Pool Conditional High Impact Large Load Service (CHILLS), Texas SB 6, New Jersey Assembly Bill 5462.

Recommendation 4: Explore Reforms to Large Load and Generation Interconnection Processes

What: Explore reforms to utility processes for interconnection of generation and large loads. Possible reforms could include utilizing a connect-and-manage approach for new generators, allowing a combined study process for new or paired load and generation at a single site or electrically proximate site, and offering expedited interconnection for customers willing to provide load flexibility or paired load.

Who: NC Energy Policy Task Force, Technical Advisory Subcommittee

Timeline: 12 months

Considerations: Enables faster interconnection of generation and large loads, reforms can be designed to improve grid management.

Examples: ERCOT Connect-and-Manage process, Southwest Power Pool Conditional High Impact Large Load Service (CHILLS) and High-Impact Large Load Generation Interconnection Assessment (HILLGA)

***Recommendation* 5: Assess the Dollar and Strategic Value of Existing Sales and Use Tax Exemptions for Data Centers**

What: Assess the current dollar value and strategic value of the sales and use tax exemptions for data centers and explore potential ways to link these incentives to desired energy policy outcomes. The last fiscal impact estimate of these exemptions was prepared over 10 years ago, prior to North Carolina's manufacturing renaissance and data center growth, and therefore does not reflect the present-day value of the attributes to industry, corporate decision-makers, and the state.

Who: Office of State Budget and Management in consultation with the NC Department of Revenue, the NCGA Fiscal Research Division, and other relevant entities.

Timeline: 6 months

Considerations: Robust and data-driven assessment of the value of these state tax exemptions for business recruitment and retention; Inform how to best align tax policy with economic development strategies and goals of the Energy Policy Task Force. Data availability, how to consider existing data centers.

Examples: Across the country, states are mixed on whether they offer sales and use tax exemptions for data centers. States vary in their tax policies for how long the exemptions may be claimed, which purchases they apply to (equipment, electricity, etc.), and alignment with desired policy outcomes (energy efficiency, load flexibility, deployment of clean energy). Some states, like Tennessee and Washington, report annual revenue impacts, while other states do not.

Recommendation 6: Explore Evaluation Process for Advanced Transmission Technologies and Grid-Enhancing Technologies

What: Explore further development of standardized processes to evaluate deployment of advanced transmission technologies (ATTs) and grid-enhancing technologies (GETs)

Who: NC Energy Policy Task Force, Technical Advisory Subcommittee

Timeline: 12 months

Considerations: Increases transparency, increases available electric capacity, allows for more efficient use of existing resources and infrastructure. Implementing changes to investor-owned utilities' current processes used to internally evaluate ATTs/GETs, additional time and effort needed to conduct robust cost-benefit analyses.

Examples: Several states, including Indiana and Utah, have recently enacted legislation requiring electric utilities to evaluate ATTs/GETs as part of their resource planning process and make this analysis publicly available. Washington's Data Center Workgroup Preliminary Report includes a recommendation for agencies to prioritize upgrades to existing transmission lines with GETs.

Recommendation 7: Explore Residential and Small Business Incentives for Energy Efficiency Improvements

What: Explore further development of residential and small business incentives, programs, and financial tools for energy efficiency improvements for buildings and other sectors.

Who: NC Energy Policy Task Force, Technical Advisory Subcommittee

Timeline: 12 months

Considerations: Increases available electric capacity, provides savings to consumers, potentially reduces costs and enables faster large load interconnection. Requires funding, program administration time and cost, and customer participation. Identifying funding, achieving scale to have a meaningful impact, overseeing contractor work and assuring consumer protection

Examples: 15 states plus DC have appliance and equipment efficiency standards; 29 states have an Energy Efficiency Resource Standard; and there are 635 utility rebate programs for energy efficiency across the country. There are also aggregating programs such as virtual power plants], and large load customer funded incentives have been proposed, NC's Electric Cooperatives provide a number of energy efficiency programs. For example, several cooperatives have partnered with Advanced Energy to provide efficiency upgrades to low-income residents.

Recommendation 8: Explore Development of a Third-Party Load Forecasting Process

What: Explore the feasibility, desirability, benefits, and costs for a third-party to develop regular load forecasts for the state.

Who: NC Energy Policy Task Force, Technical Advisory Subcommittee

Timeline: 6 months

Considerations: Increases transparency and trust in load forecasts and potential to help protect NC ratepayers from incurring cost due to incorrect forecasting. Additional considerations are data access and funding. Third party load forecasting may have more value in areas with multiple major utilities.

Examples: Indiana's State Utility Forecasting Group at Purdue University conducts load forecasting (including electricity demand, prices, and capacity needs) for the state.

Recommendation 9: Explore Energy and Water Usage Reporting for Data Centers

What: Explore options and methodologies for regular reporting on the energy and water usage of data centers.

Who: NC Department of Environmental Quality, NC General Assembly

Timeline: 6 -12 months

Considerations: Increases transparency and understanding of resource impacts, can enable better planning, can reduce concerns about data center siting. Data access, potential to discourage data center development.

Examples: New Jersey lawmakers passed legislation (S.B. 4293) in 2025 requiring data centers to submit quarterly energy and water usage reports; the New Jersey Governor expressed support for these provisions in an October 2025 conditional veto and provided recommended changes to the bill text that would adjust dates and add new requirements for a study of the issue.. Illinois legislators also introduced a bill in 2025 that would create energy and water reporting requirements for data centers.

Conclusion and Future Task Force Directions

The preliminary recommendations contained in this report represent the first steps the North Carolina Energy Policy Task Force has taken to identify policies to manage increasing electricity demand while maintaining affordability, reliability, and carbon emissions reductions. These recommendations focus on issues related to large loads, but all have relevance for the broader North Carolina electricity system.

Over the course of the next year, the Task Force will dive deeper into the selected subset of recommendations outlined in this report, with a goal of delivering more refined and detailed recommendations in the next report due on or before February 15, 2027. Other ongoing state and federal activities, such as the North Carolina Utilities Commission's Large Load Additions Docket or FERC's potential rulemaking on large loads, may also impact the Task Force's work and further inform and guide how the Task Force fulfills its mission. The final technical modeling report which the Technical Advisory Subcommittee advised is expected to be released by mid-March 2026 and may also inform further Task Force activities.

In addition to refining and expanding upon a subset of recommendations in this report, the Task Force plans over the next year to expand its work into new topics:

- General affordability and ratepayer protections
- Grid resilience, especially with regard to microgrids and distributed energy resources

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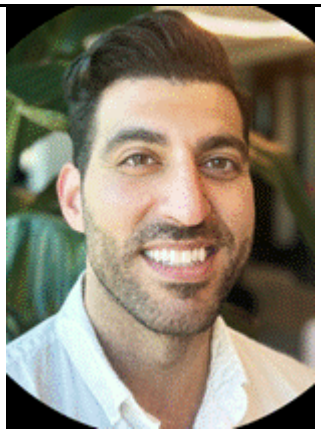	Ray Fakhoury	Energy Policy Manager	Amazon Web Services
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