NC ENERGY POLICY TASK FORCE

Wednesday April 8, 2026 | 1:00 – 4:00 PM

NC Museum of Natural Sciences, Nature Research Center

121 West Jones Street, Raleigh, NC 27603 + WebEx

Co-Chairs: NC Representative Kyle Hall & DEQ Secretary Reid Wilson

EXECUTIVE SUMMARY

Task Force Co-Chairs Sec. Reid Wilson and Rep. Kyle Hall opened the meeting and reviewed the Conflict of Interest and Public Records policies. Staff then took roll call; 29 of the 30 Task Force members were present during the meeting.

Staff presented the draft workplan for the subcommittees to carry out the Task Force's February 2026 report recommendations. The Load Growth Subcommittee will kick off its next phase of work with three educational sessions on large load tariffs, bring your own capacity (BYOC), and load flexibility. The Technical Advisory Subcommittee will similarly hold four educational sessions on interconnection reform, grid-enhancing and advanced transmission technologies, load forecasting, and energy efficiency. Each subcommittee will then split into working groups focused on each of the topics assigned to it. The working groups will meet every other week, and then the full subcommittee will come together for every fourth meeting to report on progress.

Representatives from Microsoft presented on the company's data center activities and energy commitments in North Carolina and other states. Microsoft highlighted its "Community-First AI Infrastructure Plan," which commits the company to covering its full share of electricity costs, practicing sustainable water use, creating local jobs, paying local property taxes, and investing in local AI training and non-profits. Microsoft expressed support for well-designed large load tariffs, citing examples of its efforts with Black Hills Energy in Wyoming and its nuclear power purchase agreement with Constellation Energy at Three Mile Island.

Task Force Members asked the Microsoft representatives about opportunities in North Carolina to procure clean energy, as well as pursuing grid-connected vs. non-grid-connected projects. Members asked for additional detail around water use and contaminants, as well as back-up power assets. Task Force Members also inquired about Microsoft's local transparency policies, and the company representatives discussed their commitment to no longer enter into non-disclosure agreements with local communities.

Governor Stein joined the Task Force to provide some remarks focused on the state's sales and use tax exemption for data centers. The Governor emphasized the importance of the Task Force's work, given growing energy demands and affordability challenges. The Governor asked on the Task Force to discuss the state's sales and use tax exemptions for data centers and whether the exemptions should be repealed or modified. He cited Department of Commerce estimates that existing data centers may receive up to $50 million per year in exemptions, which could grow to $450 million per year if proposed data centers are built.

As directed by the Task Force's February 2026 report, a representative from the NC Department of Commerce presented estimates of the value of the sales and use tax exemptions received by data centers in the state. The analysis found that NC has roughly 800 MW of data center capacity, with approximately 6,300 MW in the broad pipeline. Data centers are not required to report the value of exemptions received, so estimates prepared by the Department of Commerce are based on publicly available data. The Department estimates that the value of exemptions if the full pipeline is built are about $160 million annually for electricity and $200 - $300 million annually for replacement equipment, with future construction-phase equipment exemptions potential reaching $1.5 - $2.3 billion. The Department estimated the present value of the exemptions at around $50 million per year.

Task Force Members discussed the scope of the analysis, noting that it was not a cost-benefit study. Members raised questions about grandfathering and the legality of taxing the same assets differently. Some Task Force Members expressed concern that the topic of sales and use tax exemptions is not within the scope of the Task Force, while Co-Chair Wilson identified language in the Governor's executive order establishing the Task Force that allows for it to consider broader issues that have a relevant tie. Another task force member noted that some modifications to the exemptions could relate to the main recommendations of the Task Force. Some Members expressed support for conducting a cost-benefit analysis, but noted challenges in obtaining necessary data.

Task Force Members then split into breakout groups to discuss three topics: Large Load Tariffs, Bring Your Own Capacity (BYOC), and Load Flexibility. The Large Load Tariff Breakout Group discussed mandatory vs. voluntary structures, cost-of-service analyses, curtailment provisions, and the distinction between tariffs and energy service agreements. The BYOC Breakout Group focused on additionality concerns, the role of market pricing in preventing cost shifts, and legal barriers to customers procuring their own generation. The BYOC Group expressed interest in learning more about examples from Georgia, Nevada, and Minnesota. The Load Flexibility Breakout Group discussed flexible interconnection and whether flexibility provisions should be included in tariffs or energy service agreements. The Load Flexibility Group also considered options to invest in and aggregate distributed energy resources or energy efficiency to provide flexibility. The online breakout group also discussed BYOC, expressing interest in learning from Virginia and other PJM states, as well as large energy users.

After a short break, Task Force Members continued breakout group discussions, focused on three new topics: Interconnection Reform, Grid-Enhancing and Advanced Transmission

Technologies (GETs/ATTs), and Load Forecasting. The Interconnection Breakout Group discussed the “connect and manage” model, the role of the Federal Energy Regulatory Commission, cost allocation challenges, as well as the need to hear from hyperscalers about their interconnection experiences. The GETs/ATTs Breakout Group noted the potential for these technologies to provide grid headroom in the near term, and identified challenges around transparency on hosting capacity and grid constraints. The group also identified several potential speakers to educate the subcommittee on this topic. The Load Forecasting Breakout Group discussed models in other states and whether best practices or transparent guardrails could be established for large load forecasting. The online breakout group also discussed load forecasting, focusing on the lack of a unified forecasting methodology and the importance of data quality and model transparency.

Task Force Members continued with a third round of breakout group discussions on Affordability and Energy Efficiency, Distributed Energy Resources (DERs), and an Open Topic. The Affordability and Energy Efficiency Breakout Group explored low-income energy efficiency program challenges, as well as fuel cost risk sharing, return on equity transparency, and alternative financing mechanisms. The DER Breakout Group discussed residential and commercial battery storage and microgrids, as well as the history and current status of net metering in the state. The Open Topic Breakout Group chose to focus on the data center sales and use tax exemption, suggesting that the Task Force focus on modifications that are tied to specific energy outcomes and learning more about the incentive’s history.

Following the breakout group discussions, Staff reviewed the schedule for upcoming Task Force and Subcommittee meetings, and Co-Chair Wilson adjourned the meeting.

FULL MEETING NOTES

Call to Order and Opening Remarks

- Representative Kyle Hall and Secretary Reid Wilson welcomed task force members and called the meeting to order.
- Sec. Wilson noted the need to make sure our energy supply is affordable, reliable and clean, and introduced a new staff member.
- Sec. Wilson read the Conflict of Interest Policy and reviewed the Public Records Policy.
    - No conflicts raised.

Roll Call

Present:

- Sec. Reid Wilson
- Rep. Kyle Hall
- Rep. Terry Brown
- Rep. Allen Chesser
- Rep. Pricey Harrison

- Sen. Michael Lazzara
- Sen. Julie Mayfield
- Matt Abele
- Chris Ayers
- Chris Carmody
- Chris Chung
- Peter Ledford - in place of Christina Cress
- Rob Corradi - in place of Ray Fakhoury
- Katharine Kollins
- Steve Levitas
- Mark McIntire
- Kathy Moyer
- Jennifer Mundt
- David Neal
- Tim Profeta
- Dave Rogers
- Will Scott
- Asher Spiller
- Don Stewart
- Winnie Wade
- Steve Wall
- Marshall Conrad - in place of Markus Wilhelm
- Maggie Sasser - in place of Rachel Wilson
- Michael Youth

Absent:

- Dana Magliola

Discussion of Draft Task Force Workplan

- Staff presented the draft workplan for Task Force subcommittees to carry out the recommendations in the Task Force's February 2026 report:
    - Load Growth Subcommittee
        - Three educational sessions on large load tariffs, bring your own capacity, and load flexibility- scheduled for April 16, 23, and 30.
        - Biweekly meetings, dividing the subcommittee into three working groups on each of these topics to develop options.
        - Every fourth meeting will bring the working groups together to report on progress.
    - Technical Advisory Subcommittee
        - Four educational sessions on energy efficiency, load forecasting, interconnection reform, and grid-enhancing/advanced transmission technologies - scheduled for April 13, 20, 27, and May 4.

        - Biweekly meetings, dividing the subcommittee into four working groups on each of these topics to develop options.
        - Every fourth meeting will bring the working groups together to report on progress.
- Task Force Member (TFM): A lot of overlap in the three groups, concern over how that will work
- Staff: Will be up to the working groups to decide how to progress after the educational sessions.

Presentation: Microsoft - Reese Rogers (Sr. Program Manager, Energy Markets) and Jonathan Noble (Sr. Director, Infrastructure Government Affairs)

- North Carolina activities:
    - Person County investment - purchased land in Person County for planned data center investments
    - Catawba County data center - three data center campuses currently under construction
    - Charlotte campus - one of the largest
- Data centers are the infrastructure that delivers the cloud
- Ensuring reliability for the grid and customers - committed to planning and operating a reliable grid
- Load flexibility - depends on the workload type, some compute tests, like AI tests, may offer some flexibility, critical functions like cloud functions cannot be interrupted
- Microsoft's position is that load flexibility should be voluntary, at least at first
- Can leverage AI for grid reliability, safety, etc.
- Partnership with MISO - Microsoft is supporting grid planning
- Microsoft's Community-First AI Infrastructure Plan
    - Microsoft will pay its own way to ensure data centers don't increase electricity prices for others
    - Will minimize water use and replenish more water than used
    - Will create jobs
    - Will add to the tax base that funds local hospitals, schools, parks, and libraries
    - Will strengthen communities by investing in local AI training and non-profits
- Microsoft intends to be carbon negative by 2030
- Does not oppose well designed large load tariffs, has engaged on the development of tariffs in other states
- Two notable efforts:
    - Black Hills Energy - collaborative tariff development to address reliability
        - Cheyenne, WY
        - Market purchase of wind energy and jointly designed tariff to use on-site energy as backup energy (for center and grid)
    - Constellation Energy - repowering nuclear
        - 20-year PPA to enable restart of Three Mile Island nuclear facility
        - Brings electricity to PJM

- TFM Question: What is the volume of water and potential contaminants getting back into ground and surface water?
    - Answer: Trying to replenish more water than we use. Can get back to you with more information from people more engaged on water use issues.
- TFM Question: Black Hills Energy back up assets are powered by what?
    - Answer: Natural gas powered
- TFM Question: What opportunities do you see to work with Duke Energy in the Carolinas for procurement of new clean energy beyond Duke's existing plans?
    - Answer: Can come from customer programs writ large. Looking for new avenues, BYOC. Optionality is important; more options to accomplish goals is better.
- TFM Question: Is Microsoft thinking about grid-connected projects vs. not grid-connected?
    - Answer: Decisions are dependent on the market situation and what is allowed in the specific market.
- TFM Question: Can you share learnings on the process of developing large load tariffs in other states?
    - Answer: Regulated proceedings, parallels in NC
- TFM Question: Said that you would no longer do NDAs with local communities and have a more transparent process - can you speak to this and why you did it?
    - Answer: Aware that the process at local level is very public and wanted to commit to it being kept that way - recognize that transparency is critical.
    - Another part of that commitment is foregoing local property tax incentives and paying full tax obligations at local level (including Catawba County).
    - Continues to be a critical issue at the state level.

Governor Josh Stein Remarks

- Recognize bipartisan legislative representation that is here
- Energy prices are an issue that impact all sides and appreciate everyone's willingness to try to come up with constructive solutions
- Work is urgent, growing state in terms of population and economically
- New energy demands from new residents, advanced manufacturers, and data centers
    - Single data center can consume as much energy as a mid-sized city
- AI will be a part of our future and want to keep innovation central to the state's economic development strategy, but cannot ignore impacts. They need to pay their way so that residential consumers don't bear the cost
- Projects in Minnesota, Pennsylvania, Texas, Nevada, Wyoming are doing this, and can be done in NC too
- Need to enable these types of solutions to keep electricity bills affordable
- Electricity bills going to mushroom if we do not act thoughtfully
- Trump administration aligned with main thrust of this task force - rolled out ratepayer protection plan last month

    - Includes making sure data centers are building, bringing, or buying new power supply and paying through new separate rate structures that protect residential ratepayers
    - Goals mirror Task Force's February recommendations
- Ask you all to consider state's sales tax exceptions for data centers
- Charged Office of State Budget and Management and other agencies to assess the dollar value of these exemptions and have preliminary data
- Data centers not required to report value of exemptions received, but Department of Commerce used publicly available data to make estimates, as directed
    - Estimates that data centers in NC receive up to $50 million per year in sales tax exemptions for electricity and replacement equipment
    - Expense to state could grow nearly tenfold to nearly $450 million per year in sales tax exemptions if data centers proposed in NC come to fruition
    - Incentives on equipment put in place during construction would cost $2.3 billion in foregone revenue in potential exemptions
- When sales tax exemption originally written in 2006 and then expanded in 2015, entirely different world, data centers were a new industry
    - Incentives used to induce capital to invest, but no longer need economic incentives for investment to occur
- With the state's impending multi-million dollar shortfall, state revenue has become increasingly important
    - Should only forego revenue when there is a clear value residents
- Ask that you consider whether these exemptions should be repealed or modified
- Must be clear about the impact to ratepayers in terms of higher bills and to taxpayers in terms of lost revenue
- Will help us address broader questions the Task Force is dealing with:
    - How to meet electricity demands while keeping costs affordable?
    - How to use AI while ensuring data centers don't cause harm?
    - How to prioritize long-term resilience and build clean energy solutions?
- Noting higher costs and affordability issues, need to keep power bills affordable
- Tough challenges and looks forward to Task Force's continued work

Sales and Use Tax Discussion

- NC Department of Commerce Analyst Frank Muraca presented findings on the value of sales and use tax exemptions provided to data centers, pursuant to a directive in the Task Force's February 2026 report.

Background

- **Exemption applies to:** Electricity, electrical infrastructure and power equipment, HVAC systems, and computer hardware/software.
- **Eligibility:** Meets county-tier wage standards; invests $75 million in real property within five years; provides health insurance for full-time employees.
- **Certification:** Developer submits investment details to Commerce, which certifies statutory compliance. Certification must be shown if audited by Department of Revenue.

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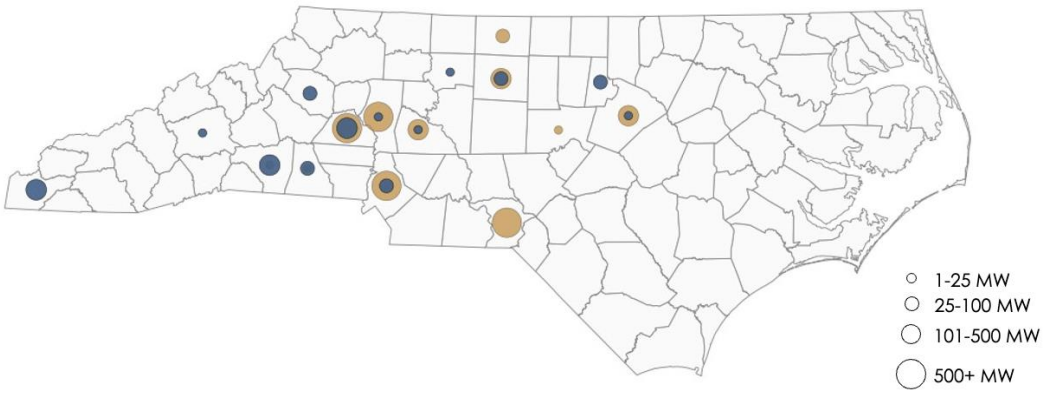
- Reviewing exemption and eligibility - these are written into the statute
    - To be certified - must meet county tier wage standards, must invest $75 million of real property with X years, must provide health insurance for full-time employees
- Developer completes a written certification that they meet the statute's requirements, but does not have to submit dollar amounts unless they are audited by the Department of Revenue

Data center projects in North Carolina

County-level data as of December 2025

Existing Data Centers: 800 MW

Future Data Centers: 6,300 MW



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Source: Baxtel accessed through National Lab of the Rockies

- Detailed facility-level data sets on energy use; public data set from National Lab of the Rockies
- 800 MW capacity among existing data centers in the state
    - 6,300 MW in the pipeline - very broad. Includes projects under construction and those that are proposals
    - Future value of exemption is highly variable based on if projects fall out of the pipeline or not; several announcements are not included, since the data set is an older snapshot

Data Center Sales Tax Exemption Assumptions

Tax Exemption	Existing Data Centers 800 MW *Annual*	Future Data Centers 6,300 MW *Cumulative During Construction*	Future Data Centers 6,300 MW *Annual After Construction*
Electricity	$25,000 Per MW	-	$25,000 Per MW
Equipment	$40,000 Per MW	$308,000 Per MW	$40,000 Per MW

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*Note: New data centers are likely to claim higher tax exemptions because they must purchase equipment for the entire facility during construction.

- Assumed to be under rate schedule High Load Factor (HLF)
- There are a wider range of challenges to get an estimate for the equipment
- $40,000 for existing data centers; will also replace equipment
- New projects under construction will receive a greater subsidy because they are buying equipment all at once
    - 308,000 per MW

Data Center Sales Tax Exemption Assumptions

Tax Exemption	Existing Data Centers 800 MW *Annual*	Future Data Centers 6,300 MW *Cumulative During Construction*	Future Data Centers 6,300 MW *Annual After Construction*
Electricity	$20 Million	-	$160 Million
Equipment	$25 - $37 Million	$1.5 - $2.3 Billion	$200 - $300 Million

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*Note: New data centers are likely to claim higher tax exemptions because they must purchase equipment for the entire facility during construction.

- Full cohort about $160 million for electricity; $200-300 million for replacing equipment
- Future cohort about $1.5-2.3 billion for equipment purchased during construction

Presentation Question & Answer:

- TFM Question: Are they getting any other incentives? JDIG or other programs?
    - Answer: This is just looking at the sales and use tax, as directed by the Task Force report recommendation. To my knowledge, recent projects have not gotten Job Development Investment Grant (JDIG) or OneNC incentives.
- TFM Question: Wondering how confident you are about the 6.3 GW? A Duke lobbyist recently testified in South Carolina that their projects had dropped from 100 to about 5; at the technical conference, recall NC co-ops testifying that they had 24 or 28 interested parties and 4 under contract. Curious if those are in this number.
    - Answer: This dataset is larger than what is in the IRP. Some with just site control, might not have an electric service agreement or a building permit. This was from December 2025, we've already seen some be added or cancelled - very fluid.
- TFM Question: Any sense of how much overlap there is between the IRP? Is this 6 additional?
    - Answer: Don't have that as part of this analysis.
- TFM Question: To clarify, this is not a cost-benefit analysis? Not taking into account any benefit?
    - Answer: This is correct, simply the dollar value estimated to be received by data centers.
- TFM Question: Did you do any modeling of impacts of lost projects? Lost investment in the state?

    - Answer: Because we don't have reporting, we stopped short of what would be the impact but for the subsidy.
- TFM Question - Do datacenters make contributions to state fisc via sales or use tax aside and apart from the sales and use tax exemption? What is the net of the fisc against the loss?
    - Answer: This analysis doesn't speak to what those tradeoffs are.

Sales and Use Tax Discussion:

- TFM: What is the definition for hyperscale versus regular? Is it based on size/consumption?
    - TFM: Not a standardized definition across the country, but generally where the end user is also the owner. If you are a wholesaler and you rent a data center, you are not thought of as a hyperscaler
- TFM: Regarding the memo on sales and use tax exemption options - under the repeal section, it says existing facilities could potentially be grandfathered in. Would this be constitutional to tax the same assets two different ways?
    - Staff: As not a lawyer, the preliminary view I heard is that they thought this was possible.
- TFM: If the question is should we consider changing these exemptions, I'd like to weigh in on the positive side that we should. General Assembly has over the last several years eliminated a number of exemptions and incentives in the energy world, primarily in the clean energy world. I do think we should put this on the table for consideration if the original purpose was to incentivize data centers to come here. We could repeal, modify, tie them to something else. Legislature should consider this.
- TFM: Fair question for the legislature to consider – have some broader questions about how a broad sales and use tax exemption fits into the purview of this group, instituted to have conversations around large load energy and how it affects ratepayers. Broad conversation around sales and use tax exemption feels like a potential overreach in terms of this group's stated purpose.
    - If we're gonna go down the path of thinking about large load customers and whether exemption attract them to state or not, we should think about what it looks like when a state makes assurances to an industry, attracts to the state, industry starts to hire North Carolinians long term and short term, what it would look like for the state's business reputation.
    - One of the things the memo doesn't cover is that most attempts to alter or get rid of exemption in other states have failed.
- TFM: Echo those comments. What is the strategic objective we are trying to achieve with this? Is it a means to an end? Energy efficiency? Using sales and use tax to achieve those outcomes? Should we focus on outcomes versus this as a tool? Does feel like this is out of scope. What is the strategic objective?
- TFM: Follow up on my previous question. If we have this conversation, we can't have it in a vacuum. What are the costs and what are the benefits we'd be providing? If we change the tax exemption, it could have trickle down impacts to other businesses.

- TFM: Question about next steps - maybe a cost benefit analysis would be interesting to see. Jobs, taxes, other investments, etc. and would also like to see it in context of other big sales tax exemption sector, which is manufacturing. It would be interesting to have more context on both sides of the ledger and how the exemption fits in
    - Some concerns about this being a tax issue more than an energy issue. Differentiate between the kinds of things we're looking at.
    - Some companies have lots of venture capital and are building in the middle of nowhere. This is different from a hyperscaler doing banking, healthcare, etc., other with other revenue streams. Maybe we think this is not as valuable. Lot of diversity in what these businesses are. Some of these businesses are speculative and will not continue to exist, but some will continue to exist, just as they do now as the seven largest market cap companies right now.
- TFM: Want to lean into how Commerce's evaluation didn't look at the other side of the equation. Before we go into a cost-benefit analysis, we need better information. We used national data resources; estimates as to what those costs are, for equipment and energy use. Need to drill down into what is happening on the ground before we can make these assessments.
- TFM: Agree with [TFM] and the Governor. Estimated cost of lost revenue was $4 million; ahead of that now.
    - Whether it belongs in this committee or not, it needs to be looked at in the legislature.
    - If we are going to do a cost-benefit analysis, they usually do not include externalities, and they should.
- Co-Chair: Regarding the question of whether this is part of the mission of this group, want to read from the executive order - "The mission of the Task Force is to advise the Governor, the General Assembly, and other state policymakers and to develop recommendations on how to manage increasing electricity demand while maintaining adequate, reliable, affordable, and clean electricity for NC. The Task Force may advise and develop recommendations on other topics that arise during the conduct of its work that address current and future energy goals or that promote economic development for NC and the state's clean energy economy."
    - Based on that, I don't think that rules out discussion of this question. Sales tax exemption may affect reliability, affordability, clean energy.
    - Probably a cost-benefit analysis might be the next thing we decide to tackle, but we shouldn't rule out this conversation.
- TFM: Since the Governor has brought it to us, we should take it seriously. We should evaluate if good policy or not. Some of the modification recommendations in the memo do correlate with the recommendations of this committee. Could be conditional on certain levers or relevant policy context for other things we're pursuing.

Breakout 1: Recommendation Brainstorming

- Task Force members were divided into three breakout groups, with one group discussing large load tariffs, one group discussing bring your own capacity, and one

group discussing load flexibility. Online participants comprised a fourth breakout group and were able to discuss any of these three topics.
- Discussions centered around potential policy options or levers Task Force members are interested in, as well as questions they have and potential experts they would be interested in hearing from.

Large Load Tariffs Breakout Group:

Staff: What policy options or levers are you interested in exploring in more detail?
- TFM: [Other TFM] heard from large load customers that tariffs should be mandatory, customers do want it to be mandatory.
    - Potential phase-in approach - provide some future business certainty
- TFM: Liked Virginia judge discussion from previous Task Force meeting, found it very informative. Converging on recognizing unique attributes of data center large loads. Mandatory tariffs focused on unique attributes that separate them from industrial customers. Load size, load factor, curtailability, other.
    - Virginia did a cost-of-service analysis, and found that large load customers would not be paying fair share.
- TFM: Cost-of-service analysis if things don't change.
- TFM: If a large load tariff is created then during the next rate case cost allocations are an issue again.
- TFM: Timeline between (IN and OH) assets and contacts
    - Fundamentally design contact with surplus revenue to provide benefit to the grid
    - Pays for full cost of the asset and not the cost of using the asset for a period of time - incremental cost ratemaking
- TFM: They want credit for environmental load they bring on to the grid
- TFM: Large load customers funding energy efficiency programs - not necessarily incorporated into the tariff, but there are examples of doing so voluntarily
- TFM: Does a large load tariff include curtailment provisions as mandatory - loads are not created equally and how to incorporate this into a tariff
- TFM: Energy service agreement (ESA) vs. tariff, biggest problem is that ESA is a temporary solution and no visibility, speed to market
- TFM: Linkage between large load tariffs and flexibility
- TFM: Optionality for bring your own generator or curtailment
- TFM: Bring your own capacity (BYOC) if you own it, you can begin now, not really allowed in NC
- TFM: Question about capacity, are we discussing solely self-consumption with no grid connection or one that can be called upon - clarify what BYOC means
    - Clarify between bring your own generation (BOYG) and BOYC
        - Expanded to capacity to include energy efficiency and demand response
- TFM: At end of the day must decrease utility planning
- TFM: Could be an element on a large load tariff
- TFMs discussed a lot of overlap between large load tariffs and other topics currently under discussion

- TFM: Some of the things in an ESA, fixed terms, companies are agreeing to pay a certain percentage (five standard terms)
- TFM: A large load tariff will be coming in front of the Commission
- Legislature pulling the lever or waiting for it to be brought in front of the Commission

Staff: Are there any experts you want to bring in to ensure the task force has the best available information?

- TFM: EPRI - DC flex initiative, mosaic initiative (5 tier/grades of curtailability, set nationwide standard)

Bring Your Own Capacity Breakout Group:

- TFM: Issue is the size of the program; NC program very limited in size. Additionality is a critical issue; due to interim carbon target removal, more additionality needed because less renewable energy procured by Duke Energy in the near term
    - Customer continues to pay regular retail; pay for resource, get a credit back
        - Debate about that credit
    - Issue - recommended including the demand-side efficiency
        - Growing recognition of VPPs
- TFM: What resources are they bringing?
    - TFM: In NC, mostly solar
- TFM: New gas for the utility
- TFM: Practically it's solar as well - 589 and 600 MW
- TFM: Then you sell Microsoft 350 MW
- TFM: If it's the same as a small city… where is it all going to go
- TFM: Proposed IRP is 880 MW…already contemplating most of that should be enough; not actually that many proposed new sites.
    - Some would like to use nuclear
    - Can't because they don't own the property
- TFM: Who is skeptical and why? The utility?
    - TFMs: Competition; don't want someone to bring their own capacity
    - TFM: This isn't beneficial to the customer? Or is it purely a competition issue?
    - TFM: Easy to make an allegation to cost shift; difficult to disprove a cost shift
        - When something is a grid or system resource, it is difficult to bifurcate a single customer from the rest
        - Easier is Microsoft is hardwired to Three Mile Island
- TFM: Microsoft, Google, Nucor approached Duke Energy about the clean transition tariff two years ago… that didn't pan out after negotiations, especially with the Public Staff
    - As a recent condition for the merger [of Duke Energy Carolinas and Duke Energy Progress], Google settled - gives them a chance to have the same conversation
    - Most of those entities have already shifted to South Carolina and Georgia
- TFM: Mentioned bill credit
    - Participants pay the utility and the cost of being on the system and getting a credit back

        - Pushing for a fixed bill credit in the past; problem with fixed bill credit is it is based on projected future cost - if that is wrong, it shifts to non-participating customers and vice versa
        - The solution is shifting to market pricing – that is the best way to ensure there isn't a cost shift. Shouldn't be a cost shift if credit is linked to shifting market
- TFM: But in a vertically integrated market, there isn't really a market to tie the real time price to
- TFM: Affordability concern – the more you do of this stuff, the more you eliminate potential for data centers to adversely affect customers - they are procuring their own energy
- TFM: Two big problems
    - 1. Misestimate demand if they don't come - but with this they have their own capacity
    - 2. Biggest risk to ratepayers other than building more stuff is gas goes through the roof, and the system is dependent on gas
        - More of this; less of system dependent on fluctuating gas

Staff: Does the utility just decide to do it? NC Utilities Commission? Legislature?

- TFM: None of those have worked so far
- TFM: All of these involve a tariff at the Commission; could be a part of some tariff; all current programs reflected in tariffs

Staff: Any examples?

- TFM: Georgia, Nevada
- TFM: What do you think of Minnesota? - an agreement with Google
    - Google fronts the cost
- TFM: Map and different states – goes beyond convos we're having. Energy efficiency grants, community solar
- TFM: Google has already done cost-benefit analysis- style energy efficiency
- TFM: The current iteration of the Commission probably won't initiate this tariff on their own - would probably need a legislative directive
- TFM: Customers will get some choice with sales tax
- TFM: Sales tax?
- TFM: Recommends looking at NC Utilities Commission large load technical conference
    - Dominion Energy laid out ways to protect customers; money to communities
    - Not great for carbon or choice, but other benefits
    - Would be a legislative fix
- TFM: If sales and use tax are put on the table, you will lose my thoughts
- TFM: Clean transition tariff broader than what we have?
- TFM: Have not taken the time to develop a legislative proposal. What is currently there is sufficient for what we are facing right now

Staff: Experts to hear from?

- TFM: Brattle is who we work with; Michael Hagerty
- TFM: People from CEBA itself
- TFM: Someone who could speak to the Minnesota example

Staff: What about the supplier side for energy? Potentially someone from Fervo?

- TFM: Casey from Duke University
- TFM: Purely voluntary or mandatory programs?
    - Making a pledge for own costs; they are effectively saying they do it
    - Improvements to existing processes
- TFM: Our concern is imposing them on existing customers
    - From a practical perspective, the issue becomes - data center specific tariff vs. industrial + tariff
        - Do you distinguish based on type? Or MW amount? If it is MW amount, then the key becomes, what is that threshold? A mine with 100 MW looks different from a data center
        - Don't think client has issues with modifications moving forward, but concerns about present
- TFM: Carbon-free resources versus not
    - Not going to serve all for new gas
    - TFM: Actually dictating that they backup with gas
    - TFM: Virginia may be one with on-site service

Load Flexibility Breakout Group:

- Questions about load flexibility from TFMs, or experts they would like to hear from:
    - Hearing from hyperscalers about feasibility
    - Utilities in Virginia, Illinois, Arizona, Indiana
    - Connection to interconnection (speed to power) - this is a way to get participation from large load customers - offer two-year interconnection instead of eight-year.
    - Will still need flexibility provisions in either energy service agreements or a large load tariff - large load tariff provides transparency
    - Can the utility rely on this curtailment?
        - Include in contract
        - Financial penalties won't really work
    - Emerald AI, Verrus
    - Survey of flexible energy service agreements (note to look at the Tennessee Valley Authority)
    - Connection to affordability for other customers
    - Recommendation to the NC Utilities Commission that there should be a new program
- Potential Phase II load flexibility concepts to pursue:
    - Connecting to community benefits
        - Ex. solar panels on schools that can then be drawn upon, other DERs and VPPs
        - Example from Atlanta
    - Explore using sales tax revenue to go into a fund for DERs

Online Breakout Group (opted to discuss Bring Your Own Capacity):

- Hearing that this is something that the large companies want
- More designed to make it a more welcoming environment in terms of building what they want to build
- Other states exploring bring your own capacity?
- Something we can learn
- Need to do more research
- Want to hear from states doing this already
- Reviewing content from past presenters? Heard from Illinois and Virginia
- Page 20 of Task Force Annual Report
- Georgia Power 2025 IRP
- Governors of Pennsylvania, Maryland – PJM states
- Plan for expediting interconnection is another topic to look at
- How is PJM managing the Influx of projects
- Interconnection queue - what is the reason
- Dominion Energy
- Virginia
- Have the most hyperscalers in Virginia
- Accelerated Renewable Energy Buyers Mechanisms
- Is the state bringing in the capacity? Or do companies provide capacity?
- Hearing from one or more of the big users
- What do they want to see? What do they want to do?
- They know what's standing in their way
- Really important to hear from Duke Energy about their red lines
    - Don't want third party sales
    - If that's not on the table, what are the other questions, concerns, hold ups?
- Companies want to do it
- The public want to see companies doing it
- How to address the barriers?

Breakout 2: Recommendation Brainstorming

- Task Force Members (TFMs) were divided into three breakout groups, with one group discussing interconnection reform, one group discussing grid-enhancing and advanced transmission technologies, and one group discussing load forecasting. Online participants comprised a fourth breakout group and were able to discuss any of these three topics.
- Discussions centered around potential policy options or levers Task Force members are interested in, as well as questions they have and potential experts they would be interested in hearing from.

Interconnection Reform Breakout Group:

Staff: What policy options or levers are you interested in exploring in more detail?

- TFM: There was discussion on connect and manage approach, puts a lot more financial risk on developers, and significant impact of grid operation side
- TFM: Connect and manage - energy only interconnection - positive, in Texas there is much more visibility and transparency, which we do not have here.
    - Considering energy only, is solar a lighter lift given it has little to no winter capacity?
- TFM: Needs to plan for organic growth as well
    - FERC decision pending on interconnection
- TFM: Interconnection standards revisions at NC Utilities Commission rulemaking would be the place to do it
    - Usually deals with distribution, not transmission
- TFM: CTPC - Carolinas Transmission Planning Collaborative - under FERC jurisdiction
- TFM: FERC involvement also on the generation side

Staff: Are there any experts you want to bring in to ensure the task force has the best available information?

- TFM: Sammie Roberts from Duke Energy - transmission constraints and transmission
- TFM: Want to hear from AWS/hyperscale customers about interconnection experience
    - Constraint due to build-out - not a lot that can be done to facilitate speed
- TFM: ERCOT (faster)
- TFM: Georgia - added a lot of data centers
- TFM: Energy Resource Interconnection Service (ERIS), provisional interconnection (interconnect provisionally before all grid upgrades have been completed, some curtailment risks in meantime) - intermediate solution?, connect and manage
- TFM: Multi value strategic transmission and transmission planning process would lead to transmission investments which could lead to easier interconnection, does it consider large load customers
- TFM: Clarifying interconnection means interconnection on both sides
- TFM: Is part of this discussion about who pays?
- TFM: Who pays for actual interconnection and who pays for impacted systems?
- TFM: Generally T&D side is generally covered by the large load customer, but how to allocate costs of new generation
- TFM: Direct costs, indirect costs, impacted system costs - federal implications
    - TFM: FERC has a crediting policy - somebody builds a large solar farm in Virginia, putting a lot of generation on the grid, which triggers upgrades to the grid. Because of this project, Duke Energy will need to upgrade as well, but no way to to collect costs except from regular ratepayers.

Grid Enhancing Technologies (GETs) and Advanced Transmission Technologies (ATTs) Breakout Group:

Staff: What policy options or levers are you interested in exploring in more detail?

- TFM: GETs work in certain areas and not as well in other areas
    - You can move the headroom up in some areas, but some are totally at capacity

    - Large load buyers could benefit from knowing where the GETs/ATTs might be; enhanced use being possible versus not viable.

Staff: Would this involve having visibility of hosting capacity? Or more on the distributed side? Is there a way to make this more transparent?

- TFM: I think there is potential for it to be. I'm unsure if anyone besides Duke Energy has knowledge of that and am thinking it is related to their Integrated Systems and Operations Planning (ISOP).
- TFM: As it currently stands, that information is not terribly transparent, but could be a competitive advantage in the state.
- TFM: You can go down to the feeder level on Dominion's website for new loads and new generation, but this isn't possible for Duke.
- TFM: If you are trying to attract a business to a state, they could look at a resource like this.
- TFM: What did the Commission require of Duke Energy in the last CPIRP?
- TFM: It essentially directed Duke to make an effort, and it seems like that data is still unavailable.
- TFM: Pew Charitable Trusts has been pushing bills for ATTs and GETs in several states. I'm guessing that Duke Energy is probably using ATTs and GETs, but it is not clear to customers.
- TFM: I spoke to a Commissioner, and it seems like their understanding was that GETs are more of a bridge solution than long term one. I'm unsure if that is the correct understanding, though.
- TFM: I think it is a way to get some cheap headroom now in certain areas. A potential danger is that some people may say we don't need to build new transmission due to implementing ATTs and GETs.
- TFM: What is the resistance to these measures from the utilities?
- TFM: They didn't want to be required to do it.
- TFM: It is difficult to overstate how much those grid operators do not want to do something differently. Which I understand after being used to doing things a certain way.

Staff: What are the potential benefits of GETs/ATTs? What policy options or levers might be viable here?

- TFM: I think a cultural approach would be more viable than policy? Because otherwise it would likely get bogged down in the legislature.
- TFM: Duke may be willing to share this information on a non-disclosure agreement basis, since it could make it more conducive to bring more ratepaying companies here. A bespoke information sharing system might be most appropriate.
- TFM: These technologies definitely relate to the Texas Connect and Manage interconnection model. They want to be able to get new customers interconnected as quickly as possible, so they employ a transitional mode and some curtailment.
- TFM: I think Duke is experimenting with two similar to Energy Resource Interconnection Service (ERIS) projects.
- TFM: A lot of utilities are going with a super cheap sensor, less than a penny, per mile. This means that they know when there is a storm and they don't have to send out a crew

to find where there is an issue. They know by every single segment, because of sensors, what is working and what is not.
- TFM: Wasn't there $57 million for reconductoring available from the State Energy Office?
- TFM: There's some complications with that funding
- TFM: Another relevant black box is the analysis of transmission constraints. Nobody understands that but the utility. I would think it is vastly cheaper to automate and move power.
- TFM: An understanding of constraints analysis is needed for distribution as well.
- TFM: The Clean Energy Buyers Association has started hiring transmission experts away from utilities, since the easiest way to get that information seems to be just hiring their former analysts.

Staff: Legislation is on one end, or maybe there is a more voluntary approach for working with large customers, or are there other policy options on the table?

- TFM: There were a couple of bills in the legislature, as well as some involvement in the area from a startup company. However, there were roadblocks with utilities for this bill.

Staff: Who would be a good speaker to invite on this issue?

- TFMs recommended the Watt coalition, GridStrategies, Aderis for the distribution side, Pew charitable trusts on GETs, Department of Energy Grid Deployment Office alumnus, Smartwires, GETs-focused companies from Joules Accelerator, and a speaker with Texas-based transmission expertise to share their lessons learned.

Staff: Are there any particularly interesting states or RTOs to look to?

- TFM: MISO is the most interesting RTO that comes to mind, but I'm unsure of their work on GETs and ATTs.

*** Breakout group members decided to discuss interconnection reform with their remaining time

- TFM: In terms of speed to market, interconnection reform is where you can make a difference
    - It is difficult for utility to build and keep that staff
    - Solar can be built in 18 months, so if you can get connected faster, you can make this happen fast
    - Interconnection reform is the red tape holy grail
- TFM: Also a major bottleneck for load connection
- TFM: What is the status of Federal officials assuming control over interconnection?
- TFM: Noted that action had not yet been taken to their knowledge
- TFM: thinking again about interconnection reform and connecting for straight power. Referencing ERIS model.
    - The utility determines it's safe, they allow the generator to interconnect, then they get to study, and can talk about adding capacity. The utility can curtail and control as needed.
    - The Carolinas Transmission Planning Collaborative has been working on this through multi-value strategic transmission planning. It is an economic look for the next 8 years and the different economic values that can fit into that.

Load Forecasting Breakout Group:

- More detail on the Indiana model and other third party forecasts
- S.B. 6 in Texas sets criteria to determine if new customers are new “real” loads
- PJM is changing their methodology
    - Potential guest speaker
- Deliverable:
    - Best practices for (large) load forecast
    - Could have recommendations on how to do forecasts
    - Minimum investment thresholds
    - Connect to large load tariffs
- Energy Systems Integration Group (ESIG) - research on load forecasting, webinar
- First emphasis is on transparent guardrails for methodology, second is on a third party one

Online Breakout Group (opted to discuss load forecasting):

- Each utility has its own load forecast
- Only as good as the data you put into it, and only as good as employees who interpret
- Load forecasting roles are often entry leven
- Must rely on
    - Good data (telemetry, historical data)
    - Good computer program
    - Good staff
- Need technology in place
- Load forecasting - in context of IRP - data and assumptions are different
    - Duke has their model
    - Public staff has their model
    - Advocate groups/consultants have their model(s)
- Is there a way to get agreement on assumptions, data, and models for load forecasting?
- Started talking about and acknowledging how important it is to have good data and the impact of assumptions in load forecasting

Staff: What policy options or levers are you interested in exploring in more detail?

- Whether the Utilities Commission could bring uniformity to analysis

Staff: What states, utilities, or customers are implementing interesting programs that you want to learn more about?

- Is there anyone who does this already? Are there states that already have a unified model for load growth forecast? And how did they get to alignment?
- Some states may do this - what can we learn from them? Are the methods or models transferable to NC?

Staff: Are there any experts you want to bring in to ensure the task force has the best available information?

- Hear from Duke Energy’s modeling, load forecasting folks

- Hear from consultants for advocate groups
- Modelers from the Public Staff
- Continued feedback from the Technical Advisory Subcommittee
- Curious to hear from each of them - whether a common model is feasible - what the barriers are
- Is a unified model a good idea? If we agree there is value in that , how do we get there?
    - Helpful to have set of guidelines
    - What is true and what is not is dependent on assumptions!

Breakout 3: Recommendation Brainstorming

- Task Force members were divided into three breakout groups, with one group discussing affordability and energy efficiency, one group discussing distributed energy resources, and one group discussing a topic (or topics) of their choice. Online participants comprised a fourth breakout group and were able to discuss any of these three topics.
- Discussions centered around potential policy options or levers Task Force members are interested in, as well as questions they have and potential experts they would be interested in hearing from.

Affordability and Energy Efficiency Breakout Group:

Staff: What policy options or levers are you interested in exploring in more detail?

- TFM: Potentially a legislative issue if the Utilities Commission won't deal with it
    - TFM: NC Utilities Commission did not allow low-income energy efficiency program to be approved
- TFM: DukeEnergy can do customer energy efficiency
- TFM: Connecting low-income to energy burden or other measure
- TFM: Duke Energy is partnering with the State Energy Office for the EnergySaver NC program
    - TFM: Duke Energy is trying to impress upon the State Energy Office to spend Duke's money first in order to stretch funds further
- TFM: No appetite for a CAP-like program right now
    - Quantify benefits for grid - unable to conduct a study to show the benefits to the system
    - No proof that these programs benefit anyone but the customers
- TFM: Not just about having the voluntary energy efficiency programs
    - Very difficult to convince people to participate
    - Duke Energy directly subsidizing products in stores, like previously did at Costco makes it very easy
- TFM: Training more installers/contractors in the network to advocate for programs
- TFM: Issues with customers not being paid back for energy efficiency investments because they are not staying in houses long enough
- TFM: If incentive was less tied to unit, but instead Duke Energy educated installers

- TFM: Tie incentives to pre- and post- energy usage
- TFM: Issues with heat strips turning on - there are ways to mitigate but people don't know about it
- TFM: Read a report about fuel cost risk sharing - as we put more natural gas on the grid, how do you share risk with utility so that risk is part of the calculus of whether or not things are built?
    - Topic for the task force to look into
- TFM: Another topic is return on equity - is there a role for making it more transparent and a better understanding of how cost recovery impacts rates and bills?
    - How formulaic to make it to generalize it
    - More transparent for customers - provide a simplified explanation
    - Break out on bills like riders?
- TFM: Are there alternative financing options that can help reduce costs?
    - Securitization
    - Cost overruns
    - Third party equity - Duke Energy in Florida and Indiana
- TFM: Biggest challenge for affordability is defining affordability, as well as how to quantify it
- TFM: Many reports are saying that electricity bills are not increasing beyond the rate of inflation
    - But it is not what customers are feeling
- TFM: Florida has very formulaic process used to inform general rate cases - unsure if better or worse
    - Great data point to look at is the national average, but cannot make rates based on it

Distributed Energy Resources Breakout Group:

Staff: Laying the groundwork for the distributed energy resource (DER) focus in our recommendations. Coming off of Hurricane Helene, there is interest in and funding for distributed energy resources as a resilience tool. We are looking into resources for resilience and barriers.

- TFM: I think there is interest in tariffs that bring on DERs on behalf of large load customers
- TFM: With rooftop solar – rates were not expensive enough to make it cost-effective; state-level tax credit expired. HB 589 created a ratepayer-funded incentive for folks that adopted rooftop solar and also directed the NC Utilities Commission to re-examine net metering.
    - Settlement between some clean energy advocates and Duke Energy included an incentive for demand response/energy efficiency.
    - The Utilities Commission adopted net metering reforms, rejected incentive; then incentive reworked to be for battery storage and presented as residential Powerpair program.

    - Duke Energy has now proposed a Powerpair/battery demand response program for commercial customers; the Commission has not ruled on it yet.
    - There has not been a recent policy incentive for rooftop solar, but there is a rationale for behind-the-meter storage paired with solar. All of this touches on site-specific resilience
- TFM: There has been action on community-based resilience. There was a Pisgah microgrid for communications tower. There is the Hot Springs Microgrid, which was initially not cost-effective, but Public Staff agreed to the project as a pilot project. It provided capacity during hurricane Helene. Not sure where microgrids proposed stand now
- TFM: Making cost decrease for DERs? Local resilience?
- TFM: There was recently filed testimony advocating for customer bring your own demand-side management and energy efficiency. There is a tremendous amount of potential
    - Demand being served by behind-the-meter measures
    - Some could be on the industrial side, but the focus could be more residential. There are smart meters at low-income residences; the system is getting capacity benefits. This could be a voluntary customer program.
- TFM: Massachusetts and New York have pilots, which allow battery energy to come onto the grid
- TFM: Duke Energy makes an assumption about what percent of load can be met with these measures. There should be more potentially. There is more technical potential, but such measures are pretty cumbersome to offer to a ratepayer; takes a lot of marketing.
- TFM: The Carbon Plan has a 1% energy efficiency goal. They're not modeled as selectable, they're just a load modifier. There is testimony filed about modeling them as selectable.
    - During a past modeling sensitivity, they were selected in the Duke Energy Carolinas territory. They were not selected in Duke Energy Progress because of utility-scale batteries being the option in that territory.
    - Model will never pick DERs if it's not allowed to pick DERs.

Staff: Are there particular topics we should explore as far as working on microgrids?

- TFM: Is there a way to integrate DERs, microgrids, resilience hubs into emergency planning? Ensure that there is a budget for it?
- TFM: State contracts for procurement.
- TFM: Always like to see more state appropriations focused on relief.
- TFM: There are technical challenges - capacity cannot exceed customer's highest demand at any point. If they have a diesel generator, if we are now adding solar, it will exceed their max demand for that month, running into some of those issues
- TFM: Believe this goes back to net metering
- TFM: Think it goes back to 2005/2003 net metering; cannot have more generation than load
    - Difficult to estimate this for residential net metering especially. There was modeling based on the square footage of a home and electric heat vs gas heat

- TFM: There are market participants in other states, but why are they not participating in North Carolina?
    - TFM: Leasing in other states; leasing in South Carolina. Why not doing business in North Carolina?
    - TFM: Wondering why FERC Order 2222 not implemented in North Carolina
    - TFM: Pew releasing distributed energy resource policy roadmap nationwide; outlines environment for behind-the-meter solar generation to thrive
    - TFM: Net metering

Staff: Regarding net metering, are we going back to where we were or moving beyond?

- TFM: Never had a residential value of solar study, kicking a hornet's nest
- TFM: Net metering settlements in the past
- TFM: Impending electrical code changes

Open Topic Breakout Group:

- Sales & Use Tax Exemptions
    - Explore modifications that meet energy goals
        - Keep it in our "lane"
    - Might be the policy lever for the other recommendations
    - Ask Fiscal Staff to come talk about history and background of the sales and use tax exemption
        - Legal question about the limits of how we can modify it
    - Establishing a fund
        - Still have legal limits?
    - Examples from other states

Online Breakout Group (opted to discuss distributed energy resources):

- Similar to bring your own capacity
- Not just data centers, other customers, bringing capacity and distributed energy resources (like back-up systems)
- Looking for more clarifications – what are we focused on?
- Excited for continued work and choosing the Task Force direction(s)

Next Steps and Adjournment

- Staff reviewed the schedule for upcoming Task Force and Subcommittee meetings.
- Sec. Wilson adjourned the meeting.