



**TAG Meeting**  
**March 22, 2024**

**Webinar**  
**FINAL**



## **TAG Meeting Agenda**

- 1. Administrative Items – Rich Wodyka**
- 2. 2023 Public Policy Study Results – Sid DeSouza and Orvane Piper**
- 3. RZEP Project Status – Sammy Roberts**
- 4. 2024 Study Activities and 2024 Study Scope Update – Bill Quaintance**
- 5. CTPC Local Transmission Planning Process Changes – Sammy Roberts**
- 6. Regional Studies Update – Bob Pierce**
- 7. 2024 TAG Work Plan – Rich Wodyka**
- 8. TAG Open Forum – Rich Wodyka**



# **2023 Public Policy Study Results**

**Sid DeSouza - Duke Energy Progress**  
**Orvane Piper - Duke Energy Carolinas**



# Carolinas Transmission Planning Collaborative

## 2023 Public Policy Request Study Scope

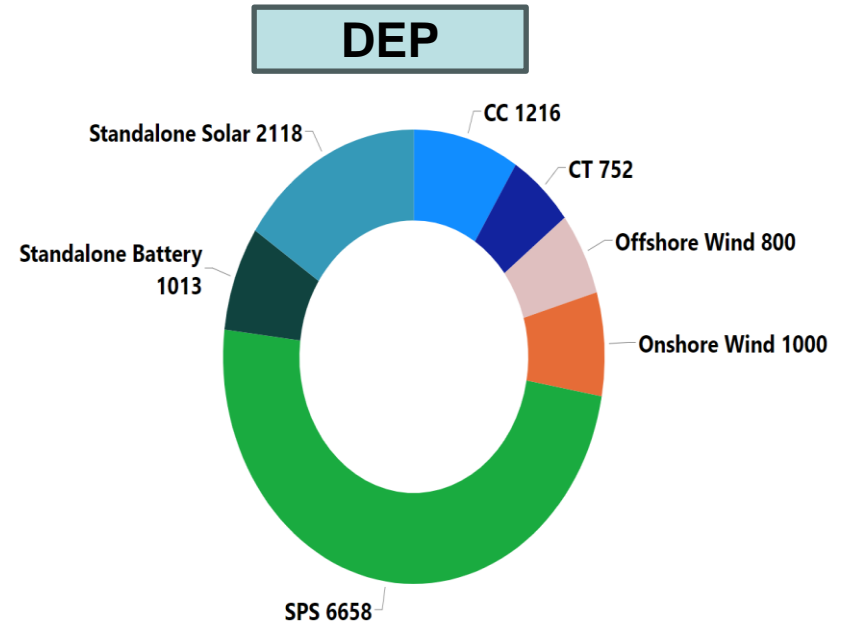
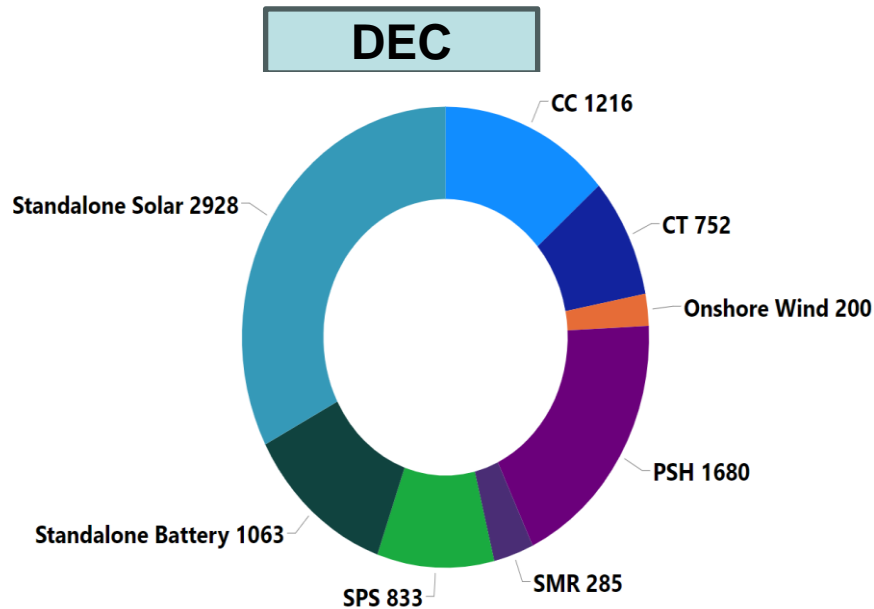
- **2033 Summer Peak, 2033/34 Winter Peak**
- **Incremental resource supply additions for 9.3 GW and 12.5 GW of additional solar and solar plus storage scenarios were specified in accordance with a modified 2022 P1 portfolio for each of the Duke Energy Balancing Authority Areas (numbers below are nameplate output). The solar resource MW levels below represent a 30%/70% DEC/DEP ratio.**
- **After discussion with study requesters, the 9.3 GW scenario was removed from the study in favor of moving forward into the 2024 study process.**
- **The 12.5 GW analysis was completed and is reflected by the portfolio in the table below.**

2033 S 2033/2034 W	Coal Retirements	Standalone Solar	SPS	Onshore Wind	Standalone Battery	CC	CT	Offshore Wind	SMR	PSH
DEC	-3050	2900	850	200	1063	1216	752	0	285	1680
DEP	-3175	2100	6650	1000	1013	1216	752	800	0	0



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## Breakdown of Additional Resources (Nameplate MW) – DEC vs DEP





# Site Selection – Standalone Battery, SPS, and Standalone Solar

To reach the targets in the study scope, sites in each jurisdiction were selected as follows using reverse chronological order (newest to oldest):

### ➤ **Standalone Batteries**

- 2022 DISIS (or earlier) standalone battery sites (active and withdrawn) that are not in the Base Reliability models.
- 2023 DISIS standalone storage sites (scaled down to reach final target)

### ➤ **SPS (Solar Plus Storage)**

- 40% (of solar nameplate MW) storage at 2022 DISIS (or earlier) solar sites that had been withdrawn as of 7/10/23

### ➤ **Standalone Solar**

- 2022 DISIS (or earlier) solar sites that: 1) are not in the Base Reliability models and 2) are not used for SPS



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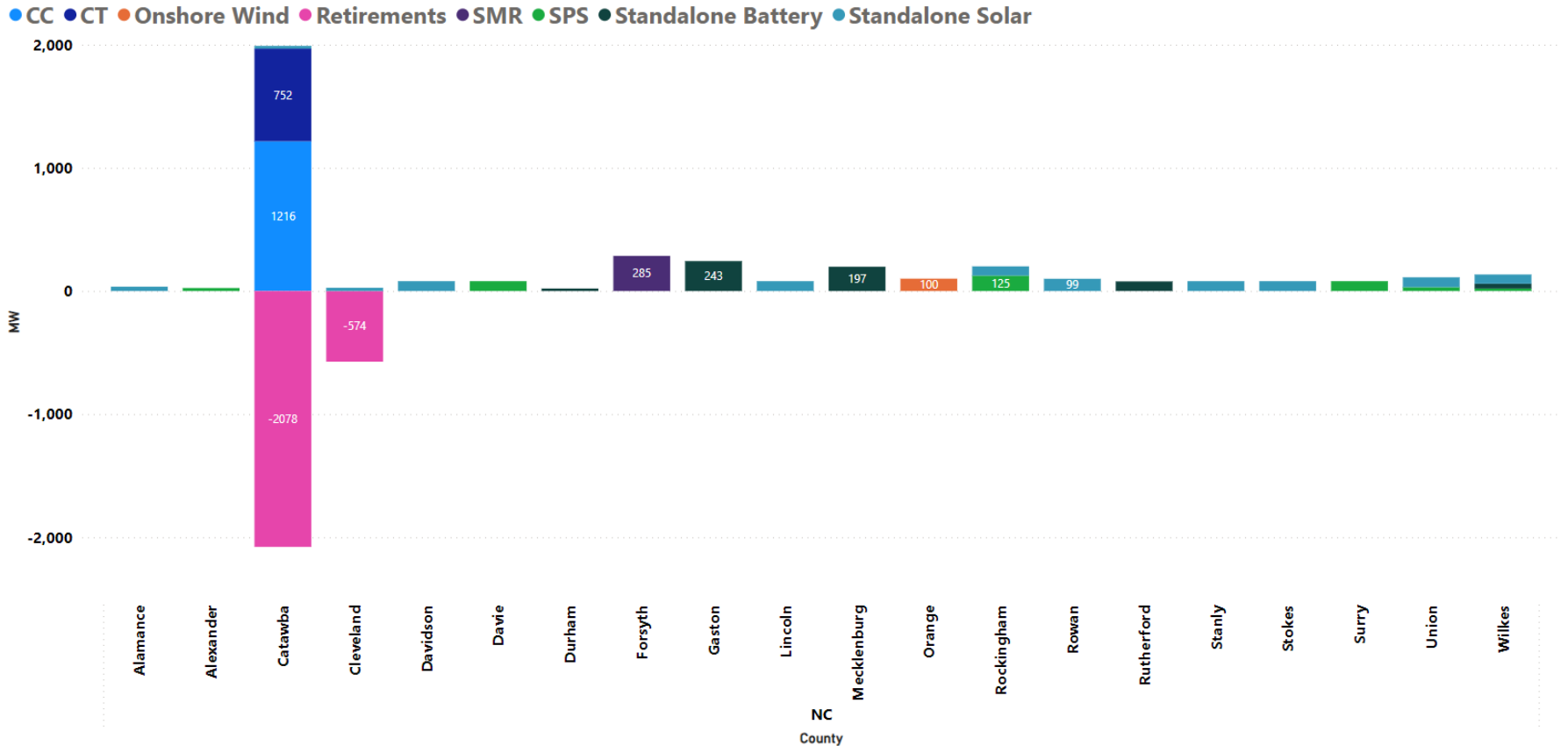
# Site Selection – CC/CT, Onshore Wind, Offshore Wind, PSH, SMR

- **CC/CT**
  - Marshall (DEC), Roxboro (DEP)
- **Offshore Wind**
  - New Bern (DEP)
- **Onshore Wind**
  - (2) DEC sites of 100 MW each identified based on wind resource and land viability
  - (10) DEP sites of 100 MW each identified based on wind resource and land viability
- **PSH (Pumped Storage Hydro)**
  - Bad Creek (DEC)
- **SMR (Small Modular Nuclear Reactors)**
  - Revised from Marshall to Belews Creek (DEC)



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## Generation Modifications to Base Reliability Models (DEC - NC)



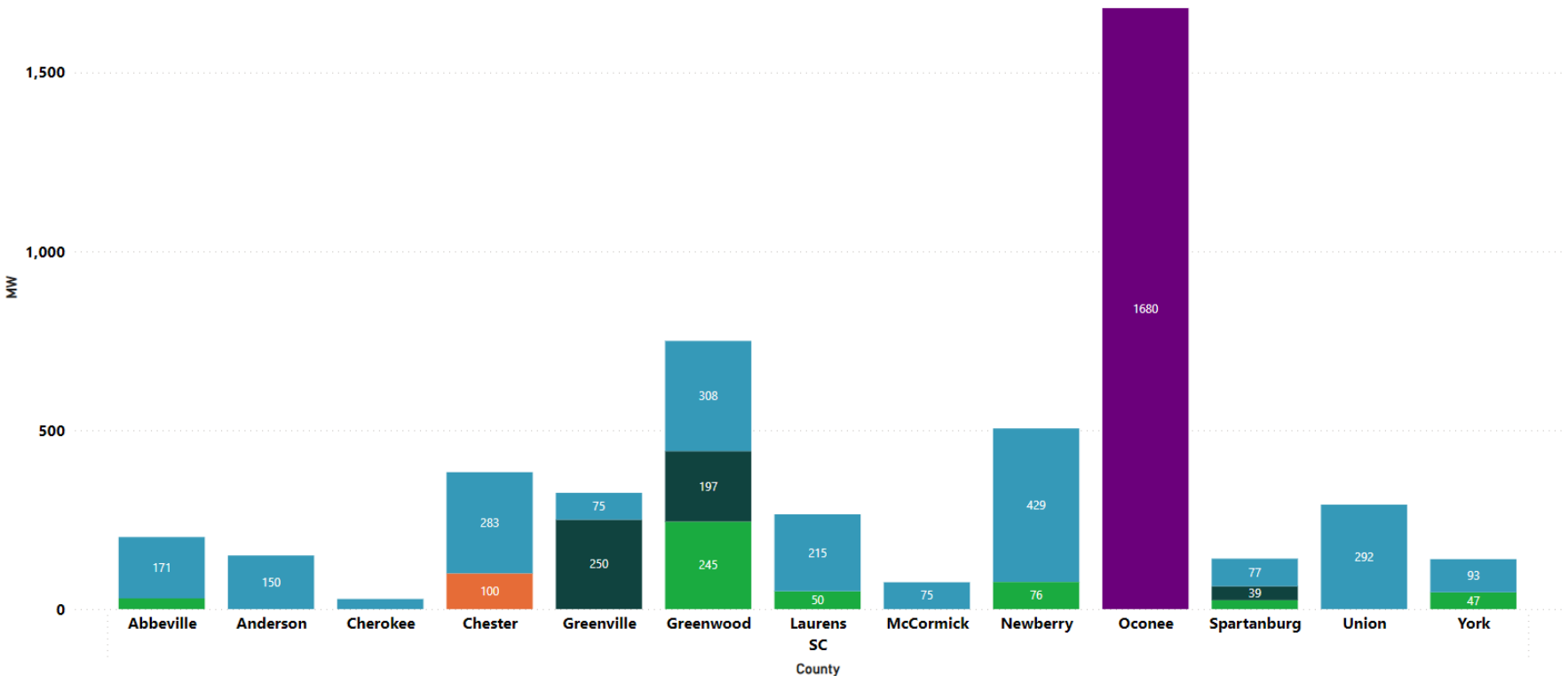




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## Generation Modifications to Base Reliability Models (DEC - SC)

● Onshore Wind ● PSH ● SPS ● Standalone Battery ● Standalone Solar

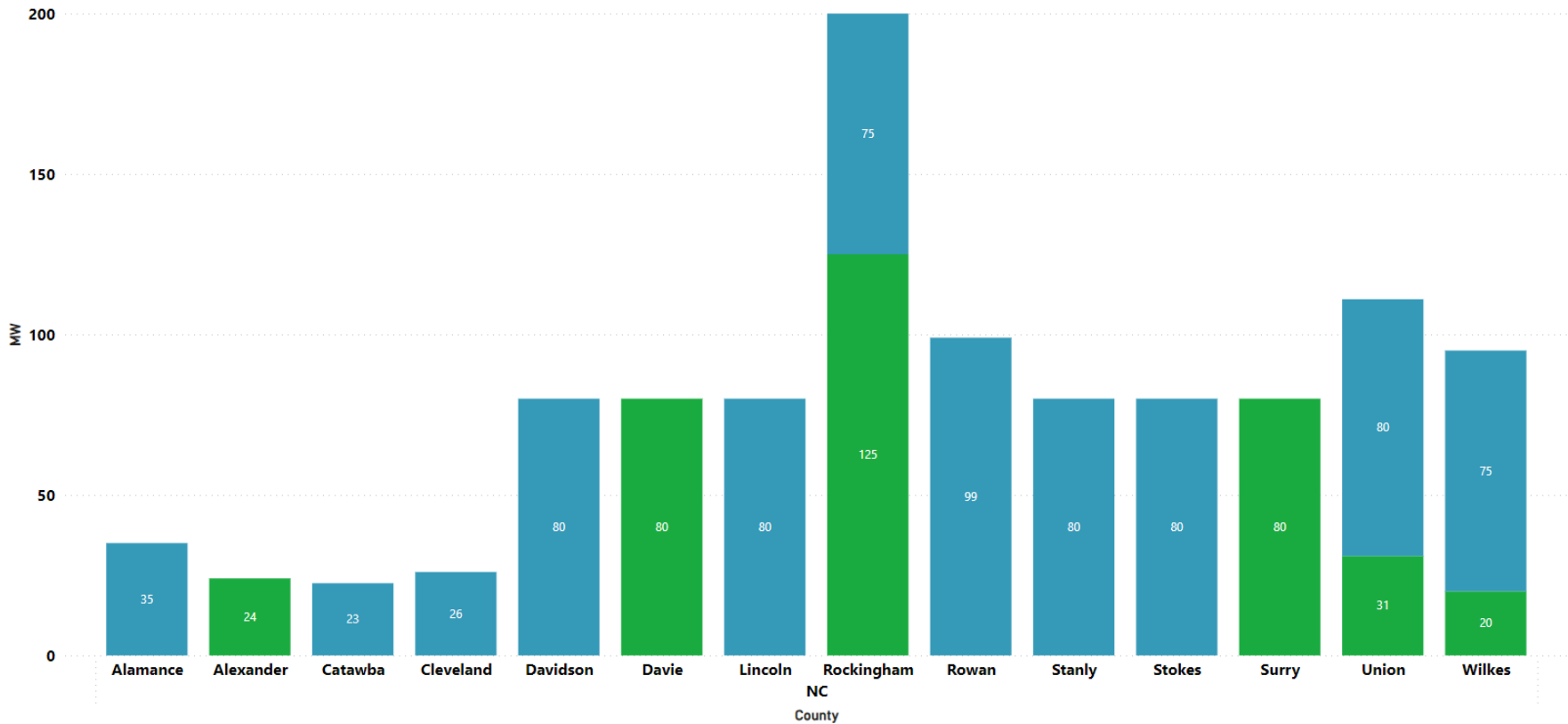




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## Generation Modifications to Base Reliability Models (DEC- NC) – Solar

● SPS ● Standalone Solar

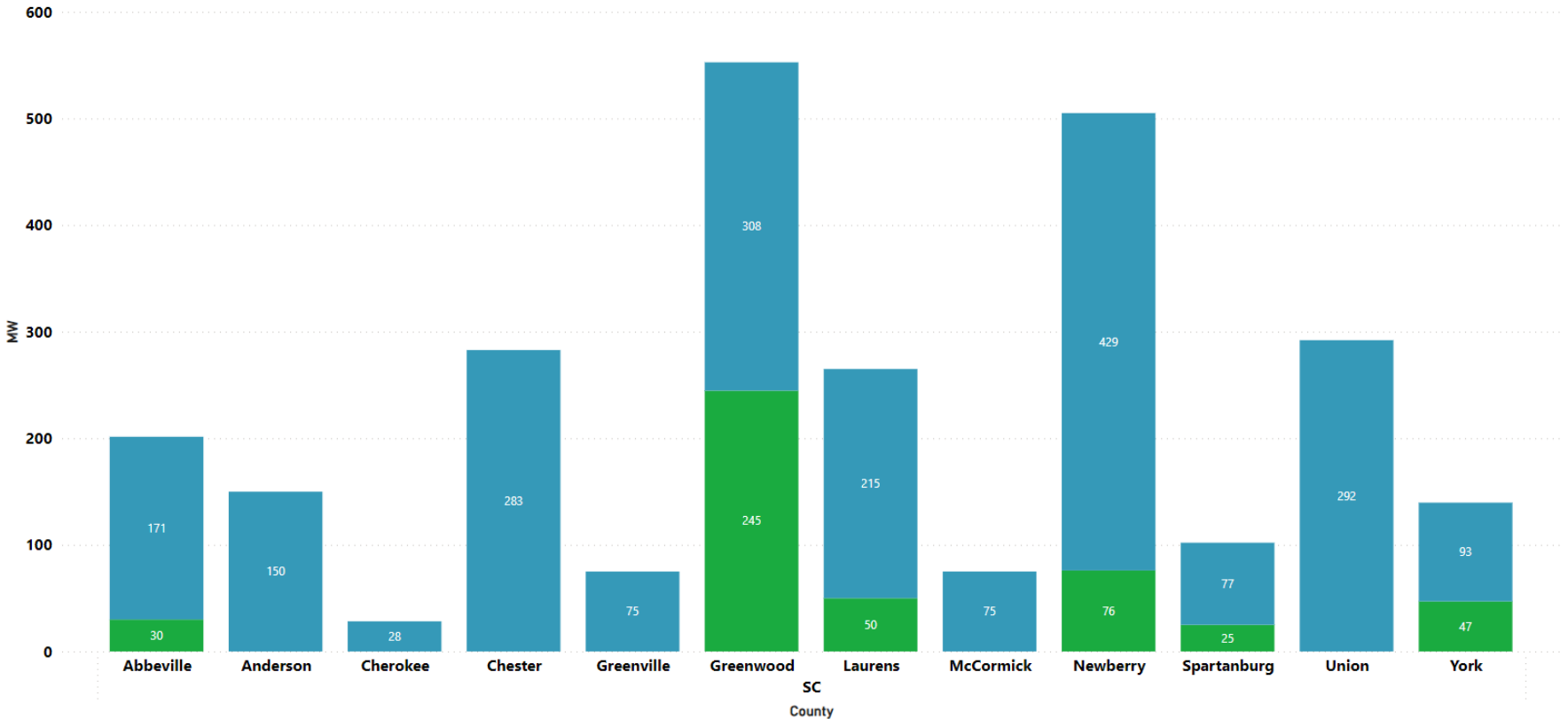




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## Generation Modifications to Base Reliability Models (DEC- SC) – Solar

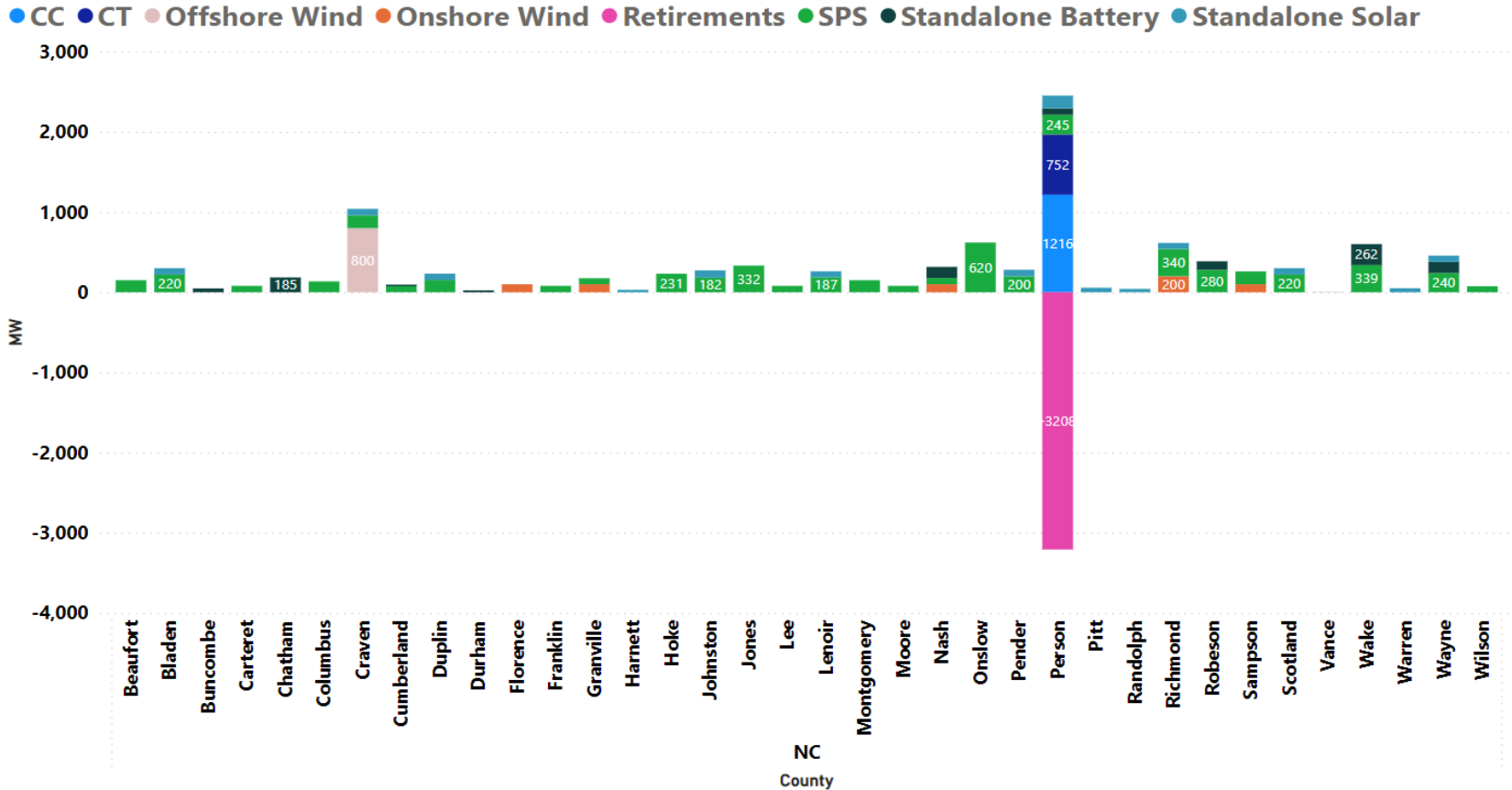
● SPS ● Standalone Solar





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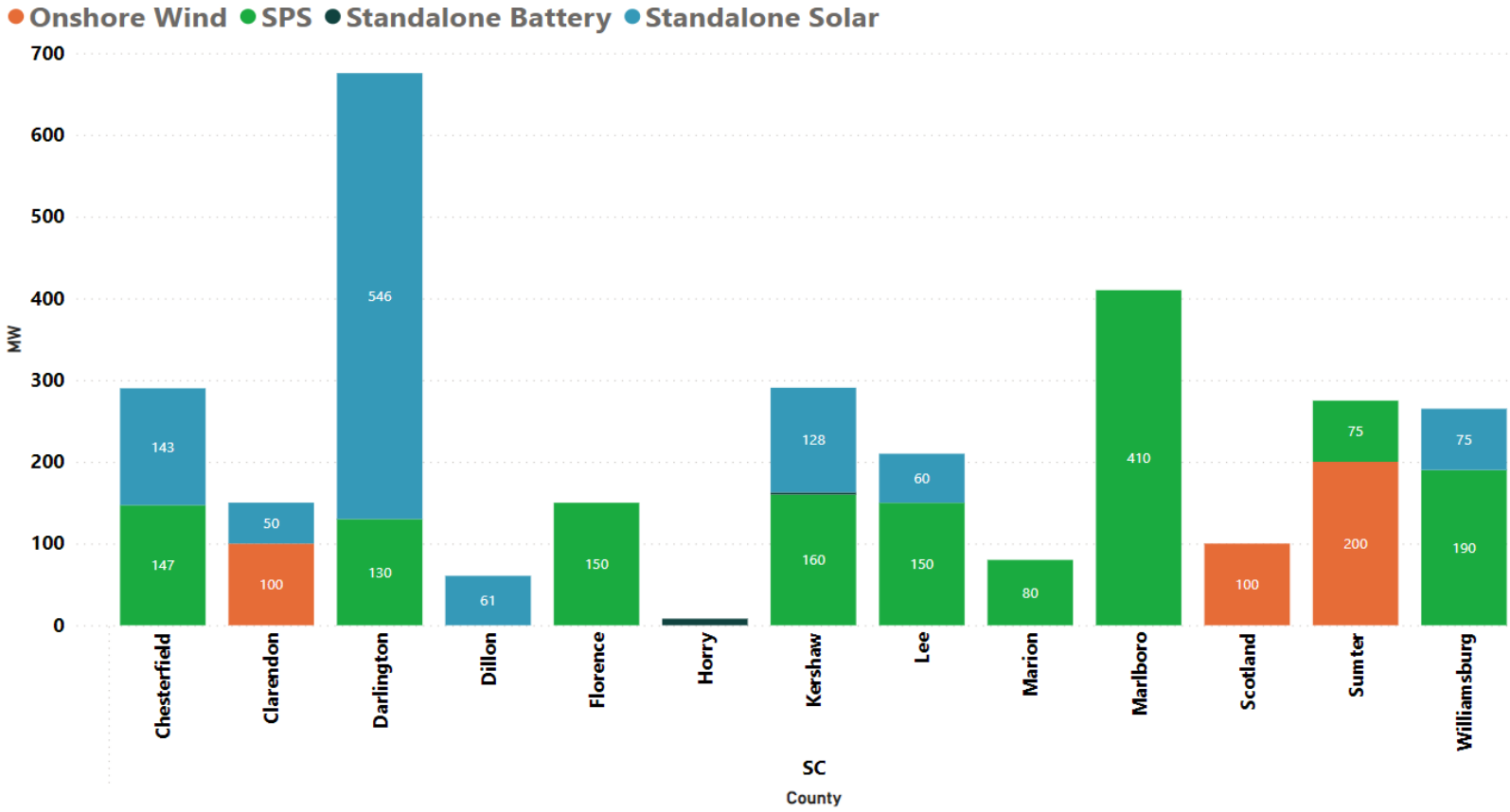
## Generation Modifications to Base Reliability Models (DEP - NC)





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## Generation Modifications to Base Reliability Models (DEP - SC)

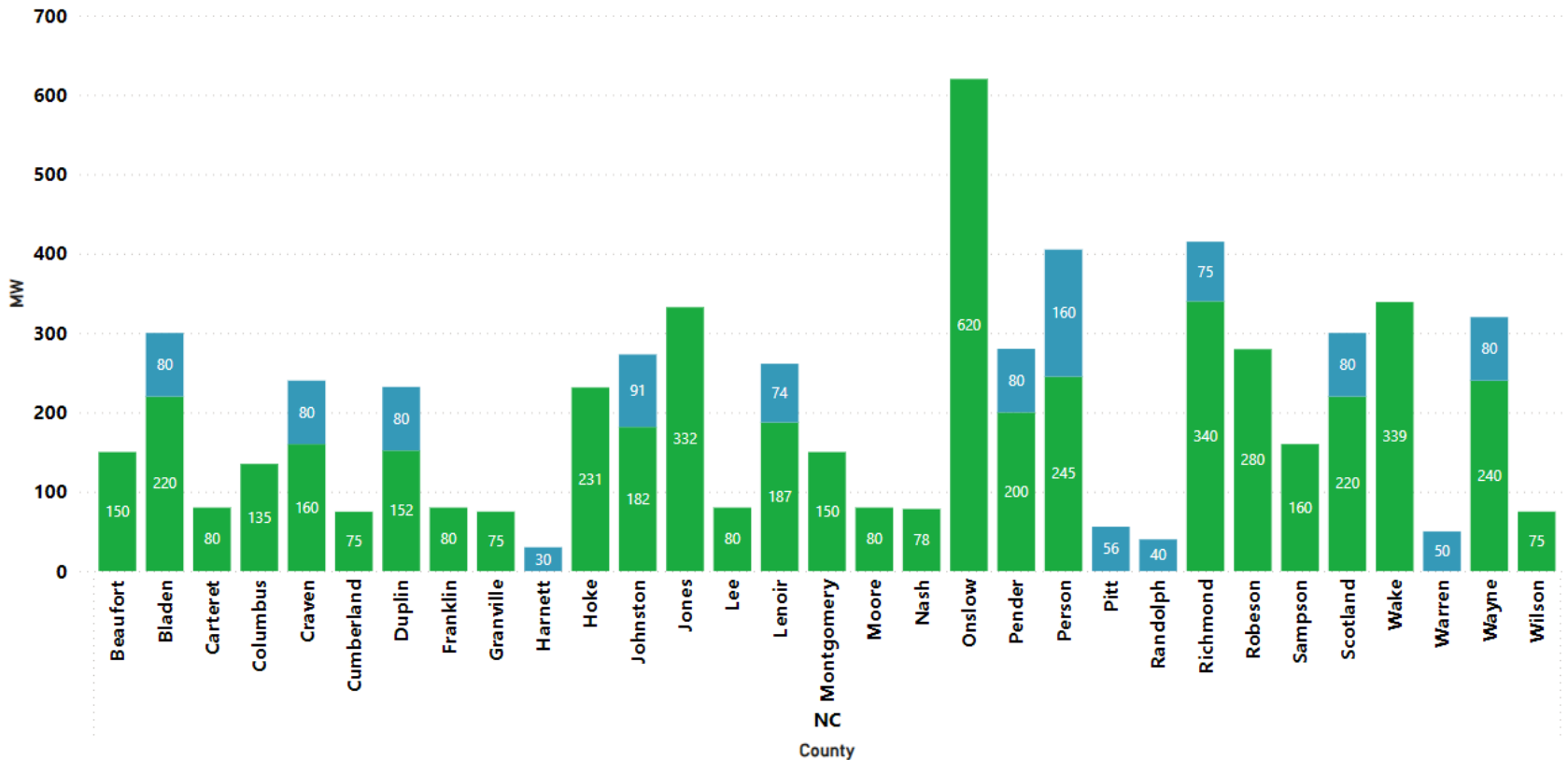




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## Generation Modifications to Base Reliability Models (DEP - NC) – Solar

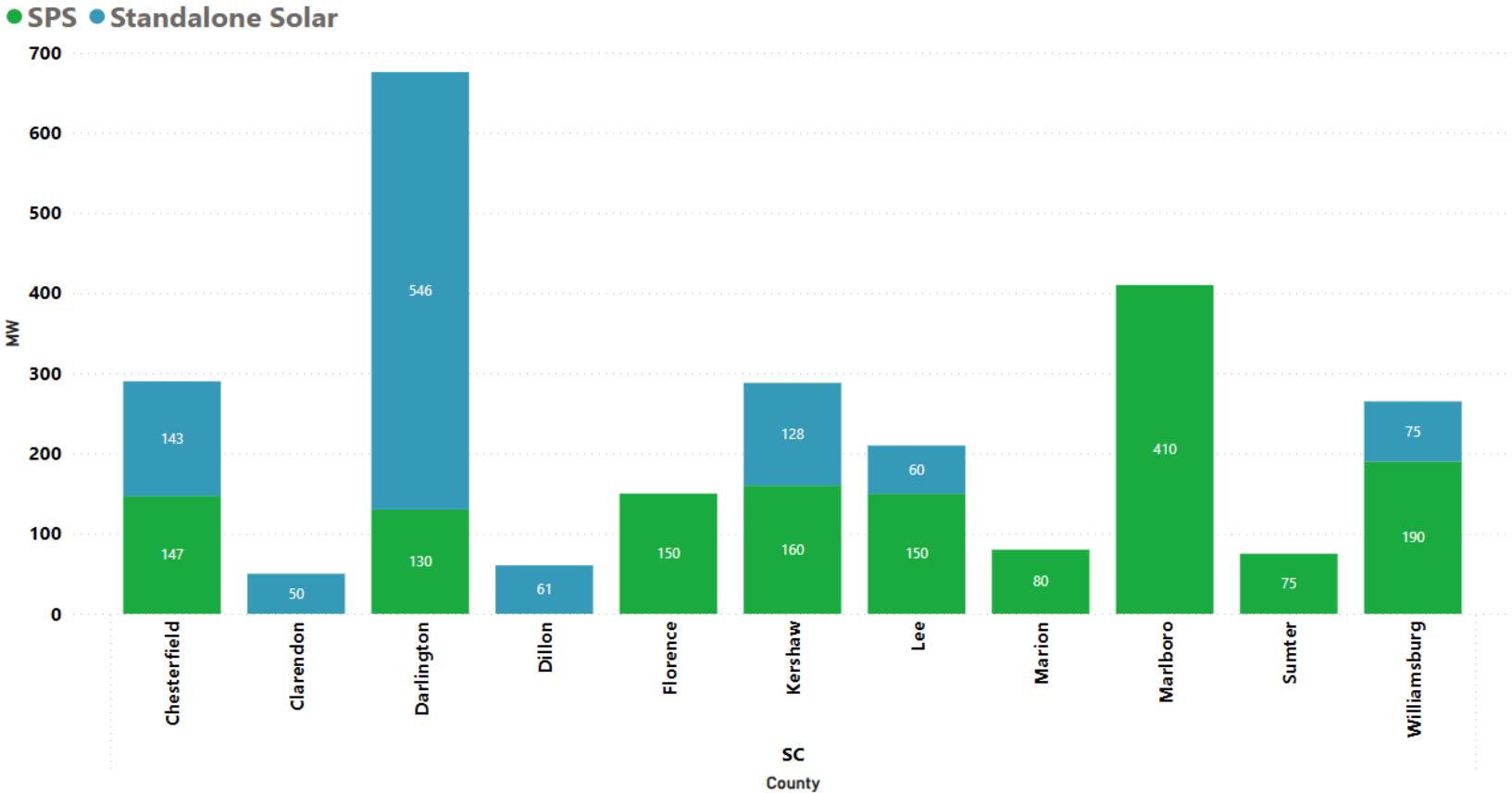
● SPS ● Standalone Solar





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## Generation Modifications to Base Reliability Models (DEP - SC) – Solar





## **Interchange Adjustments**

- Due to the magnitude of additional generation resources in CPLE, several interchange adjustments were required to the Base Reliability model for 2033 summer:
  - Increase 400 MW CPLE to CPLW transfer
  - Remove 875 MW CPLE import from DUK
  - Remove 175 MW CPLE import from PJM
  - Add 3975 MW CPLE export to DUK
- No interchange adjustments were required to the Base Reliability model for 2033/2034 winter.





# Carolinas Transmission Planning Collaborative

## Major Component Overloads

	44 kV (Circuit Miles)	100 kV (Circuit Miles)	115 kV (Circuit Miles)	230 kV (Circuit Miles)	Total (Circuit Miles)
DEC	20.8	454.7	35.7	161.1	672.3
DEP	N/A	N/A	254.3	188.6	442.9

	100/44 kV (# of Transformers)	115/100 kV (# of Transformers)	500/230 kV (# of Transformers)	Total (# of Transformers)
DEC	2	2	1	5
DEP	N/A	2	0	2



## **Duke Energy Carolinas – Major Component Overloads (500/230 kV, 230 kV)**

### **500/230 kV transformer**

- Newport Tie

### **230 kV lines**

- Fisher BL/WH (Central-Shady Grove Tap) [17.8 miles x2]
- Flint BL/WH (N Greenville-Tiger) [18.4 miles x2]
- Lilesville BL/WH (Oakboro-\*DEP) [5.3 miles x2]
- Moser BL/WH (Allen-Catawba) [10.9 miles x2]
- Parr BL (Newport-\*DESC) [56.3 miles]



# Duke Energy Carolinas – Major Component Overloads (115/100 kV, 100 kV)

## 115/100 kV transformers

- Bush River Tie
- Clark Hill Tie

## 115 kV lines

- Clark Hill (Clark Hill-\*SEPA) [35.7 miles]



# Carolinas Transmission Planning Collaborative

## Duke Energy Carolinas – Major Component Overloads (100 kV)

### 100 kV lines

- Avon WH (E Spartanburg-Pacolet) [16.6 miles]
- Bainbridge BL/WH (Bainbridge Retail-Oakvale) [4.5 miles x2]
- Beulah BL/WH (Lookout – Energy United Del 18) [5.4 miles x2]
- Bond BL/WH (Clark Hill-Greenwood) [1 mile x2]
- Broadway BL/WH (Belton-WS Lee) [6.4 miles x2]
- Champion BL/WH (Bush River-Customer Delivery) [6.3 miles x2]
- Champion BL/WH (Buzzard Roost-Creto) [6.4 miles x2]
- Coronaca (Creto-Customer Delivery) [1 mile]
- Cypress BL/WH (Cypress-Hodges) [12.1 miles x2]
- Duncan BL/WH (Tiger-Mud Creek Retail) [11.8 miles x2]
- Edgemoor BL&WH South [Great Falls-Customer Delivery] [12 miles x2]
- Greenwood BL/WH (Greenwood-Hodges) [12.4 miles x2]
- Harley BL/WH (Tiger-Campobello) [11.8 miles x2]
- Hodges BL/WH (Belton-Hodges) [20.5 miles x2]
- Jordan (Lockhart Del 6-Midway Tap) [0.9 miles]
- Lawsons Fork BL/WH East (E Spartanburg-Lawsons Fork) [1.4 miles x2]
- Lockhart BL/WH (Lockhart-Morris) [3.7 miles x2]
- Lookout BL/WH [Lookout-Lyle Creek] [7.4 miles x2]
- Mauldin BL/WH (Greenbriar-Laurens EC Del 28) [5.6 miles x2]
- Midway BL/WH (Bush River-Newberry Main) [3.1 miles x2]
- Oakvale BL/WH (Oakvale-Shady Grove) [4.1 miles x2]
- Pacway BL/WH (Midway-Pacolet) [18.9 miles x2]
- Perry BL/WH (Lee-Perry Tap) [8.5 miles x2]
- Rabon BL/WH (Lee-Laurens EC Del 32) [18.7 miles x2]
- Sevier BL/WH (Oakvale-August Tap) [1.5 miles x2]
- Tiger BL/WH (Walden Tap-W Spartanburg) [1.3 miles x2]
- Toxaway BL/WH (Lee-Toxaway) [13.5 miles x2]
- Wateree BL&WH (Great Falls-Wateree) [19.8 miles x2]



# Duke Energy Carolinas – Major Component Overloads (100/44 kV, 44 kV)

### 100/44 kV transformer

- Cypress Tie (x2)

### 44 kV lines

- Belfast (Buzzard Roost-Joanna) [15 miles]
- Copeland (Clinton-Joanna) [5.6 miles]
- Hooker (Clinton-Laurens EC Del 12) [0.2 miles]



## **Duke Energy Progress – Major Component Overloads (230 kV)**

### **230 kV lines**

- Aurora - Greenville (Chocowinity-Greenville) [8.82 miles]
- Clinton - Wallace (Cumberland-Turnbull, Turnbull-Garland, Garland-Baytree Solar) [25.67 miles]
- Laurinburg – Richmond (Richmond-ID\_569986 & ID\_569986-Q393) [9.14 miles]
- Lee – Selma (Section of line near Selma ) [0.04 miles]
- Lee Sub - Milburnie (Entire Line) [40.18 miles]
- Lilesville - DPC Oakboro Black (Lilesville-\*DEC) [24.7 miles]
- Lilesville - DPC Oakboro White (Lilesville-\*DEC) [24.7 miles]
- Robinson - Rockingham (Entire Line) [29.02 miles]
- Weatherspoon - Fayetteville (Entire Line) [13.71 miles]



## ***Carolinas Transmission Planning Collaborative***

# **Duke Energy Progress – Major Component Overloads (115/100 kV, 115 kV)**

### **115/100 kV transformers**

- Badin (2 Transformers)

### **115 kV lines**

- Asheboro East - Biscoe (Biscoe-Ether & Seagrove-Ulah) [8.82 miles]
- Blewett - Tillery (Tillery-ID\_569168) [4.91 miles]
- Camden - Camden Junction (Entire Line) [11.13 miles]
- Camden DuPont - DPC Wateree (Entire Line) [8.45 miles]
- Clayton Industrial - Selma (Entire Line) [9.38 miles]
- Fayetteville - Fayetteville Dupont SS (Four different sections) [4.0 miles]
- Franklinton - Spring Hope SS (Six different sections of line) [12.5 miles]



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## **Duke Energy Progress – Major Component Overloads (115 kV (continued))**

### **115 kV lines (continued)**

- Jacksonville - Wommack (Entire Line) [33.26 miles]
- Laurinburg - Raeford (Richmond-ID\_569986 & ID\_569986-Q393) [9.14 miles]
- Lee – Wallace (Lee-Tri County EMC Friendship TAP & Wallace-Q514) [31.42 miles]
- Lee Plant – Selma (Entire Line) [17.66 miles]
- Lee Sub - Tri County EMC Grantham Feeder (Lee-ID\_569890) [1.64 miles]
- Method - Milburnie South (Garner-Garner Perstorp & Garner Perstorp-Milburnie) [9.91 miles]
- Robinson - Camden Junction(Three different sections) [15.28 miles]
- Robinson – Rockingham (Chesterfield-Sneed Solar & Hartsville Tap-ID\_564942) [10.93 miles]
- Tillery - Alcoa Badin 115kV Black & White (Entire Lines) [14.57 miles each]
- Weatherspoon - Fayetteville Dupont SS (Entire Line) [19.18 miles]
- Weatherspoon - Raeford (Entire Line) [27.3 miles]





## **DEC/DEP Map**

**Slide intentionally left blank to display map**



# Carolinas Transmission Planning Collaborative

## Key Observations

- Significant east-to-west flow through Dominion Energy South Carolina and Santee Cooper
- Numerous loading issues in the southwestern portion of DEC
- 6 overloaded ties: (2) CPLE-DUK, (2) CPLE-YAD, (1) DUK-DESC, (1) DUK-SETH
- RZEP 1.0 upgrades did not reappear, i.e. the upgrades were big enough for this portfolio
- All upgrades in the initial draft of proposed RZEP 2.0 validated
- Miscellaneous minor upgrades across system

TO	# of Major Component Overloads	Planning Level Estimated Total Cost (\$B)
DEC	42	1.552
DEP	29	1.078
Total	71	2.630



## **Potential Alternative Upgrades Not Studied**

- Construct Durham - Parkwood 500 kV Line
- Construct 230 kV network in southwestern portion of DEC system
- Construct Wake - New Bern 500 kV Line



# Questions ?





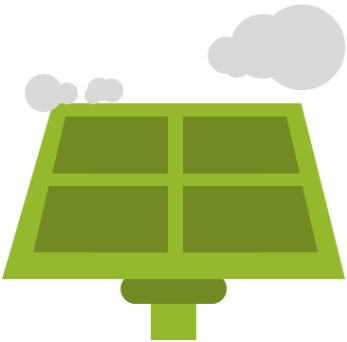
**Duke Energy Red-Zone  
Transmission Expansion Plan  
Projects (RZEP 2.0) Status**

**Sammy Roberts  
Duke Energy**



# *Carolinas Transmission Planning Collaborative*

## 2023 CTPC Public Policy Study Resources



2033 S 2033/2034W	Coal Retirements	Standalone Solar	SPS	Onshore Wind	Standalone Battery	CC	CT	Offshore Wind	SMR	PSH
DEC	-3050	2900	850	200	1063	1216	752	0	285	1680
DEP	-3175	2100	6650	1000	1013	1216	752	800	0	0



## **DEC/DEP Map**

**Slide intentionally left blank to display map**



***Questions ?***







**2024 Study Activities and  
Study Scope**

**Bill Quaintance  
Duke Energy Progress**



## **Studies Proposed for 2024**

- **Annual Reliability Study**
  - Assess DEC and DEP transmission systems' reliability, and develop a single Collaborative Transmission Plan
- **Local Economic Studies / Public Policy Studies**
  - One Local Economic Study Requests Received
  - 4 Public Policy Requests Received
    - Currently being evaluated to develop a scope for 2024
- **Resource Supply Options**
  - Power Transfers studied every other year. Last studied in 2022. Scheduled to study this year.



## **2024 Reliability Study Scope**

- **Base reliability case analysis – 2029 summer peak, 2029/30 winter peak, 2034 summer peak, 2034/35 winter peak**
  - “All Firm Transmission” cases will be developed which will consider all confirmed long term firm transmission reservations with roll-over rights applicable to the study years
  - DEC and DEP generation down cases will be created from the common Base Cases
  - Includes new economic development assumptions



# **Economic Study Request**

- **North Carolina Sustainable Energy Association (NCSEA), Southern Alliance for Clean Energy (SACE), Southern Environmental Law Center (SELC), Sierra Club**
  - **1500 MW Power Transfer from MISO to DEC**



# **Public Policy Study Requests - 1**

- **NC Public Staff Request**
  - **Connection of 4800 MW of Offshore wind**
  - **Split between two Points of Interconnection**
    - **2400 MW at New Bern/Havelock**
    - **2400 MW at Jacksonville/Castle Hayne/Folkstone**
  - **Add Combined Cycle Gas, Simple Cycle Gas, or Storage as needed**



## **Public Policy Study Requests - 2**

- **North Carolina Sustainable Energy Association (NCSEA), Southern Alliance for Clean Energy (SACE), Southern Environmental Law Center (SELC), Sierra Club**
  - **2400 MW Offshore Wind Study**
    - **Include network and interconnection costs**
    - **Include power flow, stability, and short circuit**
    - **Determine least cost POIs for Kitty Hawk and Carolina Long Bay OFSW sites**



# **Public Policy Study Requests - 3**

- **Carolinas Clean Energy Business Association (CCEBA)**
  - **Re-assess the 2023 PP results using an ERIS methodology for solar**
  - **Maintain NRIS analysis for storage**



# **Public Policy Study Requests - 4**

- **Carolinas Clean Energy Business Association (CCEBA)**
  - **Rerun the 2023 PP Study using the latest forecasts and models**
    - **Similar quantities and locations of solar additions as 2023**
    - **Compare Reliability Study and PP Study upgrade needs**





# *Carolinas Transmission Planning Collaborative*

## **Proposed 2024 Transfer Studies**

<b>ID</b>	<b>Resource From</b>	<b>Sink</b>	<b>Test Level (MW)</b>
<b>1</b>	<b>SOCO</b>	<b>DUK</b>	<b>1,000</b>
<b>2</b>	<b>DUK</b>	<b>SOCO</b>	<b>1,000</b>
<b>3</b>	<b>TVA</b>	<b>DUK</b>	<b>1,000</b>
<b>4</b>	<b>DUK</b>	<b>TVA</b>	<b>1,000</b>
<b>5</b>	<b>PJM</b>	<b>DUK / CPLE</b>	<b>1,000 / 1,000</b>
<b>6</b>	<b>DUK / CPLE</b>	<b>PJM</b>	<b>1,000 / 1,000</b>
<b>7</b>	<b>MISO</b>	<b>DUK</b>	<b>1,500</b>
<b>8</b>	<b>DUK</b>	<b>CPLE</b>	<b>1,000</b>

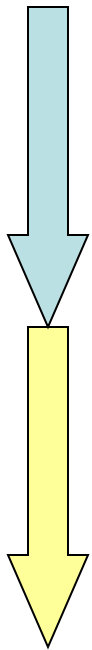


# **Propose Moving PP Requests into MVST Process**

- **Start with 2034 Summer, 2034/35 Winter Reliability Cases**
- **Follow P3 Fall Base Case from Supplemental Planning Analysis**
- **Keep 12,500 MW Solar assumptions from 2023 study**
- **Offshore Wind - 2400 MW**
  - **Sensitivity case for 4800 MW**



# Study Process Steps



- 1. Assumptions Selected**
- 2. Study Criteria Established**
- 3. Study Methodologies Selected**
- 4. Models and Cases Developed**
- 5. Technical Analysis Performed**
- 6. Problems Identified and Solutions Developed**
- 7. Collaborative Plan Projects Selected**
- 8. Study Report Prepared**



# Study Assumptions Selected

- **Study Years for reliability analyses, select from:**
  - Near-term: 2029 Summer, 2029/30 Winter
  - Long-term: 2034 Summer, 2034/35 Winter
- **LSEs provide:**
  - Input for load forecasts and resource supply assumptions
  - Dispatch order for their resources
- **Adjustments may be made based on additional coordination with neighboring transmission systems**



# Study Criteria Established

- **NERC Reliability Standards**
  - Current standards for base study screening
  - Current SERC Requirements
- **Individual company criteria**



## **Study Methodologies Selected**

- **Thermal Power Flow Analysis**
- **Each system (DEC and DEP) will be tested for impact of other system's contingencies**



## **Models and Cases**

- **Start with 2023 series MMWG cases**
- **Latest updates to detailed models for DEC and DEP systems will be included**
- **Planned transmission additions from updated 2023 Plan will be included in models**

## **Technical Analysis**

- **Conduct thermal screenings of the cases**



## **Identify Problems and Develop Solutions**

- **Identify limitations and develop potential solutions for further testing and evaluation**
- **Estimate project costs and schedule**





## **Collaborative Plan Projects Selected**

- **Compare all alternatives and select preferred solutions**

## **Study Report Prepared**

- **Prepare draft report and distribute to TAG for review and comment**



***Questions ?***





# **CTPC Local Transmission Planning Process Changes**

**Sammy Roberts**  
**Duke Energy**



# Carolinas Transmission Planning Collaborative

## CTPC Planning Study Process Changes

### Timeline for Local Transmission Planning Process Changes

March 13, 2024

April 1, 2024

May 20, 2024

June 2024

November 2024

March 2025

FERC-accepted revisions to Transmission Planning Process are effective

CarolinasTPC.org website Go-Live

Interactive calendar, meeting registration, and Interactive forms (e.g. MVST scenario form) available on website

Discuss MVST Scenarios and Assumptions for Studying Scenarios

Review and Discuss MVST Identified Needs

Review Solutions to MVST Identified Needs and Discuss Input on Alternative Solutions





# ***Carolinas Transmission Planning Collaborative***

## **CTPC Planning Study Process Changes**

### **Implementation of CTPC Transmission Planning Process Changes:**

- Attributes from FERC NOPR on Regional Transmission Planning Processes
  - Transparency and Coordination
    - Share models and associated data
    - Stakeholder engagement meetings
  - Strategic transmission Planning
    - Long-term scenario planning that evaluates transmission needs based on changing resources and loads
    - Evaluate multi-value benefit streams for proposed projects to arrive at least cost recommendations that meet identified needs



# Carolinas Transmission Planning Collaborative

## CTPC Planning Study Process Changes

### TAG Stakeholder Meetings

- **Assumptions Meeting** – CTPC to review the criteria, assumptions, and methodology the PWG intends to use to identify needs and transmission solutions to include in the Local Transmission Plan (*OATT - Attachment N-1*)
- **Needs Meeting** – CTPC will review the identified system needs and the drivers of those needs, based on the application of its criteria, assumptions, and methodology in the Study Scope Document. (*OATT - Attachment N-1*)
  - ❖ Models and sufficient information will be made available, subject to CEII and confidentiality restrictions, to enable TAG participants to replicate the results of planning studies reviewed at the Needs Meeting (*Support Documents: CTPC Model and Data Requests; CTPC NDA template DEC; CTPC NDA template DEP*)
- **Solutions Meeting** - CTPC will review potential solutions and any alternatives considered as studied and identified by the PWG. (*OATT - Attachment N-1*)

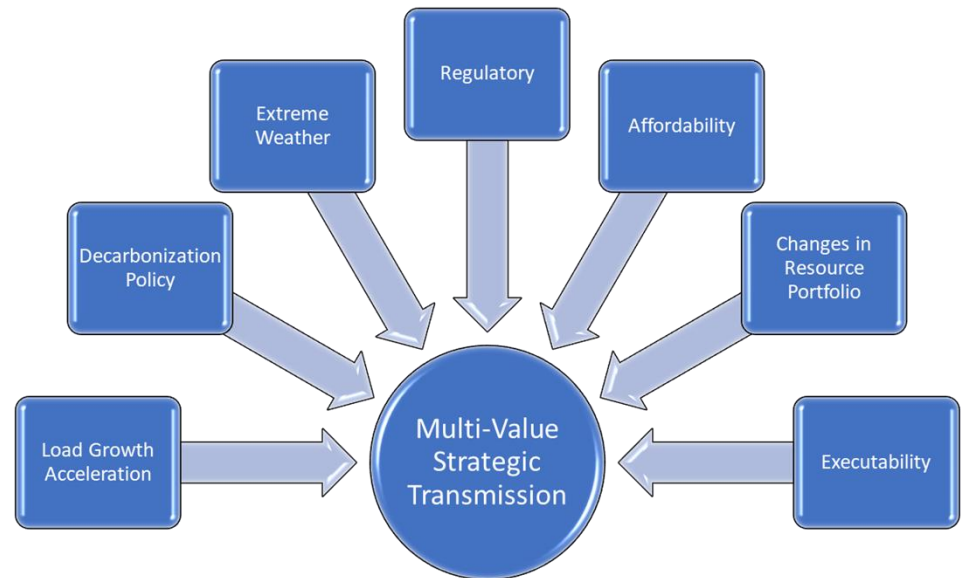


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## CTPC Planning Study Process Changes

### Multi-Value Strategic Transmission Studies

- **Adopts a forward-looking/proactive approach**
- **Scenario-based approach accounts for different possible futures**
- **Accounts for multiple benefits**
- **Avoids line-specific assessments and piecemeal planning**
- **Allows for meaningful stakeholder input**





# ***Carolinas Transmission Planning Collaborative***

## **CTPC Planning Study Process Changes**

### **Multi-Value Strategic Transmission Studies**

*(Support Document: Multi-Value Strategic Transmission Planning Process)*

Completed MVST Scenario forms must be emailed to the CTPC Administrator at least 30 days prior to the Assumptions Meeting

- GENERAL DESCRIPTION OF PROPOSED STRATEGIC PLANNING SCENARIO
- PROPOSED MODELS TO BE USED AND REASON FOR INCLUSION
- PROPOSED ASSUMPTIONS TO BE USED AND WHY
- PROPOSED DATA SOURCES TO BE USED  
(Include data sources to support assumptions proposed in #3. For example, include proposals such as a reference to an IRP portfolio, a load forecast, an external dataset, etc.)
- PROPOSED PLANNING HORIZON TO BE USED FOR SCENARIO AND WHY
- (Optional) SUGGESTED BENEFIT METRICS AND ASSOCIATED METHODOLOGY FOR CONSIDERATION IN EVALUATING POTENTIAL SOLUTIONS





***Questions ?***





# **Regional Studies Reports**

**Bob Pierce**

**Duke Energy Carolinas**



**SERC Long Term Working  
Group Update**



# **SERC Long Term Working Group**

- Have begun work on 2024 series of LTWG cases
- 2028 LTWG Summer Study to be made public with FERC 715 filings.
  - AC contingency analysis of P1, P2, and P7 events and reviewed the results for potential voltage and thermal constraints. No new DEP/DEC issues.
  - Cascading analysis was performed on any potential thermal overloads over 120%. Analysis did not show any wide area, subregional, or regional cascading events.



# ***Carolinas Transmission Planning Collaborative***

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**SERTP**



# ***Carolinas Transmission Planning Collaborative***

## **SERTP**

- **1st Quarter Meeting was held in Charlotte on March 19th.**
- **Determined Economic Planning Studies to be performed for 2024**
- **Training session topic – Load Forecasting and Model Development**



# ***Carolinas Transmission Planning Collaborative***

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**<http://www.southeasternrtp.com/>**



# ***Carolinas Transmission Planning Collaborative***

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**NERC**





# ***Carolinas Transmission Planning Collaborative***

## **NERC**

### **Interregional Transfer Capability Study**

#### **Transfer Capability Analysis**

- **ongoing**
- **about a month behind schedule**
- **models built and auxiliary files created**
- **total transfer capability analysis to be performed (thermal, voltage, stability)**

#### **Determine Prudent Transfer Capability Additions**

**Final Report to FERC in December**



# ***Carolinas Transmission Planning Collaborative***

**DOE**

## **National Transmission Planning Study**

**National Transmission Planning Study (NTP) to identify transmission that will provide broad-scale benefits to electric customers; inform regional and interregional transmission planning processes; and identify interregional and national strategies to accelerate decarbonization while maintaining system reliability.**

- **Resilience to extreme weather**
- **Pathways to new, dependable, cleaner and less expensive electricity**
- **Economic Growth**
- **Decarbonizing the grid and addressing climate change**



# ***Carolinas Transmission Planning Collaborative***

**DOE**

## **National Transmission Planning Study**

### **SCHEDULE**

- **April/May - possible meetings – dates TBD, may include TRC, Subcommittees, Regional meetings, ISO meetings**
- **Mid-Summer – PNNL to start work on dynamics cases**
- **Late-Summer – Final Report**
- **Late-Summer – Public Meeting when Report is complete**



# ***Carolinas Transmission Planning Collaborative***

**DOE**

## **National Interest Electric Transmission Corridor Designation Process**

**Transmission Needs Study (formerly NIETC) report was released 10/30/23**

### **Corridors will be determined based on:**

- **Findings from the National Transmission Needs Study, DOE's triennial state-of-the-grid report.**
- **Critical public input gained through early and meaningful collaboration with affected states, Tribes, local communities, industry, and stakeholders. Public meetings Spring 2024.**
- **Information and recommendations relevant to transmission capacity constraints or congestion that harms consumers currently or in the future, and ongoing roadblocks to transmission development in those areas, such as permitting, siting, or regulatory issues.**
- **Information on whether one or more transmission projects are under development in those areas.**

**NIETC Corridor Designations – late 2024**



## ***Carolinas Transmission Planning Collaborative***

# **Atlantic Offshore Wind Study**



# Carolinas Transmission Planning Collaborative

## Atlantic Offshore Wind Study

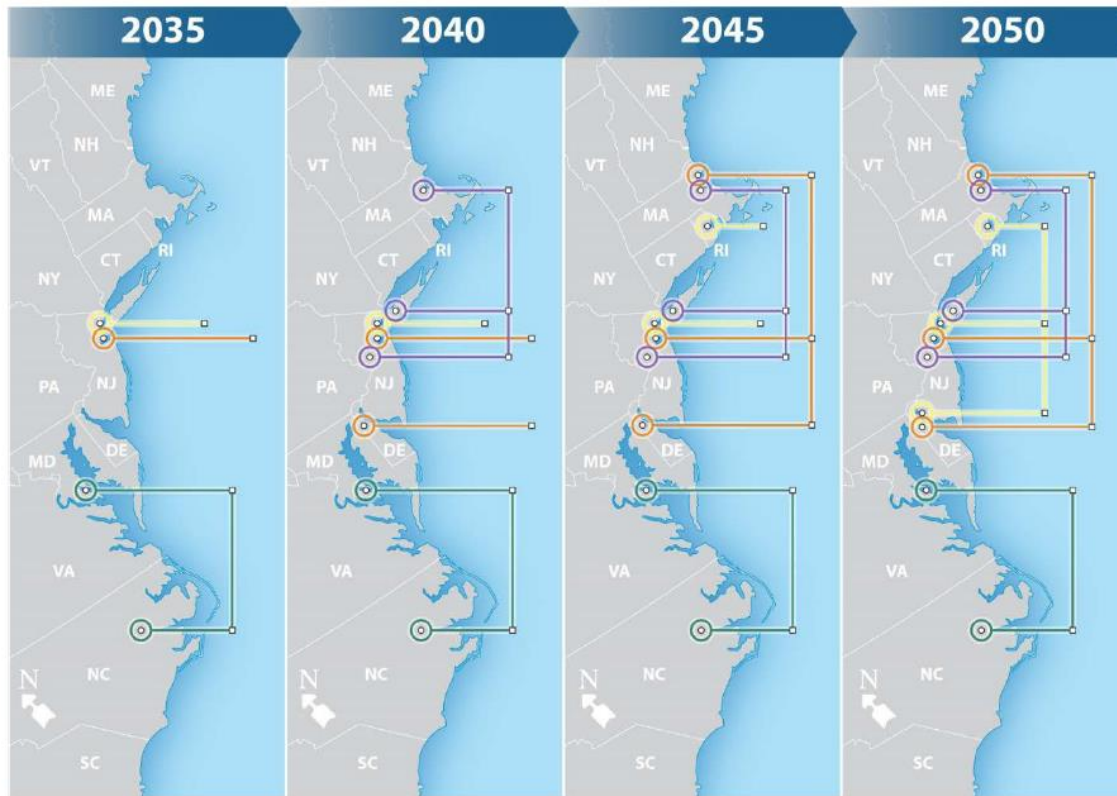


Figure ES-6. Potential build timeline of the interregional topology. *Illustration by Billy Roberts and Al Hicks, NREL*



# Carolinas Transmission Planning Collaborative

## Atlantic Offshore Wind Study

Atlantic Offshore Wind Transmission Study Final Report

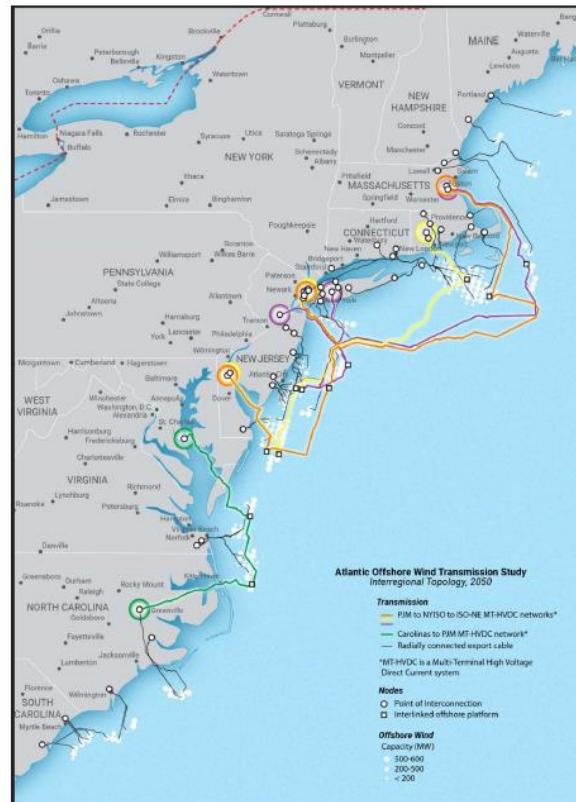


Figure ES-4. The 2050 interregional topology with modeled cable routes. Illustration by Billy Roberts, NREL



# **Atlantic Offshore Wind Study**

<https://www.nrel.gov/wind/atlantic-offshore-wind-transmission-study.html>





***Questions ?***





**TAG Work Plan**

**Rich Wodyka  
Administrator**



# Carolinas Transmission Planning Collaborative

## 2024 CTPC Overview Schedule

### Reliability Planning Process

- Evaluate current reliability problems and transmission upgrade plans
  - Perform analysis, identify problems, and develop solutions
  - Review Reliability Study Results

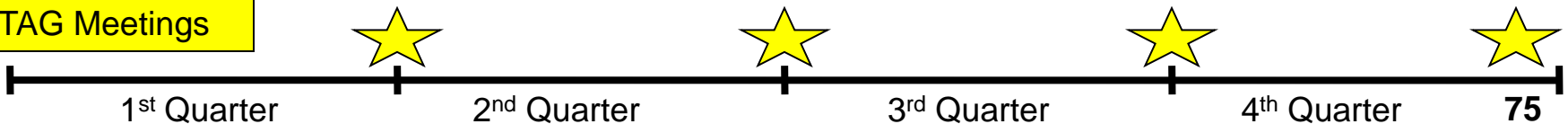
### Local Economic Planning Process

- Propose and select Local Economic Studies and Public Policy Study scenarios
  - Perform analysis, identify problems, and develop solutions
  - Review Local Economic Study and Public Policy Results

### Coordinated Plan Development

- Combine Reliability and Local Economic Study and Public Policy Results
  - OSC publishes DRAFT Plan
  - TAG review and comment

TAG Meetings





# *Carolinas Transmission Planning Collaborative*

## **January - February – March**

### **First Quarter TAG Meeting – March 22, 2024**

#### **➤ 2023 Study Update**

- ✓ Receive Final DRAFT of 2023 Collaborative Transmission Plan Report

#### **➤ TAG is invited to provide any additional comments or questions to the OSC on the 2023 Collaborative Transmission Plan.**

- ✓ Provide input by **February 9, 2024** to Rich Wodyka ([rich.wodyka@gmail.com](mailto:rich.wodyka@gmail.com))



## January - February – March

### ➤ 2024 Study – Finalize Study Scope of Work

- ✓ Receive request from OSC to provide input on proposed Local Economic Study scenarios and interfaces for study (Request sent on January 3<sup>rd</sup>)
  - TAG requested to provide input to the OSC on proposed Local Economic Study scenarios and interfaces for study
  - Provide input by **February 9, 2024** to Rich Wodyka ([rich.wodyka@gmail.com](mailto:rich.wodyka@gmail.com))
- ✓ Receive request from OSC to provide input in identifying any public policies that are driving the need for local transmission (Request sent on January 3<sup>rd</sup>)
  - TAG requested to provide input to the OSC in identifying any public policies that are driving the need for local transmission for study
  - Provide input by **February 9, 2024** to Rich Wodyka ([rich.wodyka@gmail.com](mailto:rich.wodyka@gmail.com))
- Receive final 2024 Study Scope of Work for review and comment
  - TAG review and provide comments to the OSC on the final 2024 Study Scope of Work



## **January - February – March**

### **➤ 2024 Study Update**

- ✓ Receive a progress report on the 2024 Study Activities**
- ✓ Receive a preliminary report on the 2024 Study Scope of Work and proposed Local Transmission study scenarios and proposed Public Policies studies that are driving the need for local transmission**



## **April - May – June**

### **Second Quarter TAG Meeting – TBD**

#### **➤ 2024 Study Update**

- Receive a progress report on Study Activities**
- Receive a final report on the 2024 Study Scope of Work including the final scope of work for any Local Transmission studies and/or Public Policies studies**
- Receive mid-year update status of the upgrades in the 2023 Collaborative Plan**



# ***Carolinas Transmission Planning Collaborative***

## **July - August – September**

### **Third Quarter TAG Meeting – TBD**

#### **➤ 2024 Study Update**

- Receive a progress report on the Study Activities and Preliminary Study Results**
- TAG is requested to provide feedback to the OSC on the technical analysis performed, the problems identified as well as proposing alternative solutions to the problems identified**





## **October - November - December**

### **Fourth Quarter TAG Meeting – TBD**

#### **➤ 2024 Study Update**

- **TAG will receive feedback from the OSC on any alternative solutions that were proposed by TAG members**
- **Receive and discuss Final DRAFT of the 2024 Collaborative Transmission Plan Report**

#### **➤ 2025 Study Scope**

- **Discuss potential Study Scope scenarios for 2025 studies**



***Questions ?***





**TAG**  
**Open Forum Discussion**

**Comments or Questions?**