



# Santee Cooper Resource Planning Update

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Carolinas Air Pollution Control Association Fall Meeting

# Santee Cooper Overview



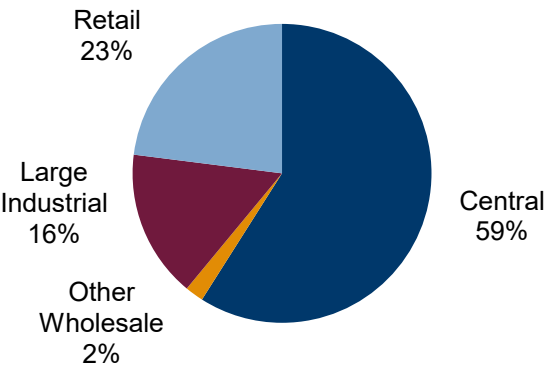
## Our Business

- An electric and water utility headquartered in Moncks Corner, South Carolina
- Owned by the State of South Carolina
- One of the nation's largest public power utilities:
  - \$12.3 billion of total assets and deferred outflows of resources (2024)
  - \$1.92 billion of operating revenues (2024)

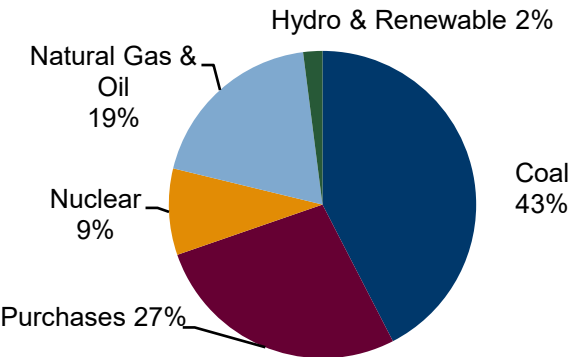
## Our Customers

- Retail and wholesale provider serving directly or indirectly over 2 million South Carolinians in all 46 counties
- Provided 27,150 GWh in 2024 to its customers
- Largest customer is Central Electric Power Cooperative; providing approximately 60% of the Authority's revenues

## Revenue by Customer Category (2024)



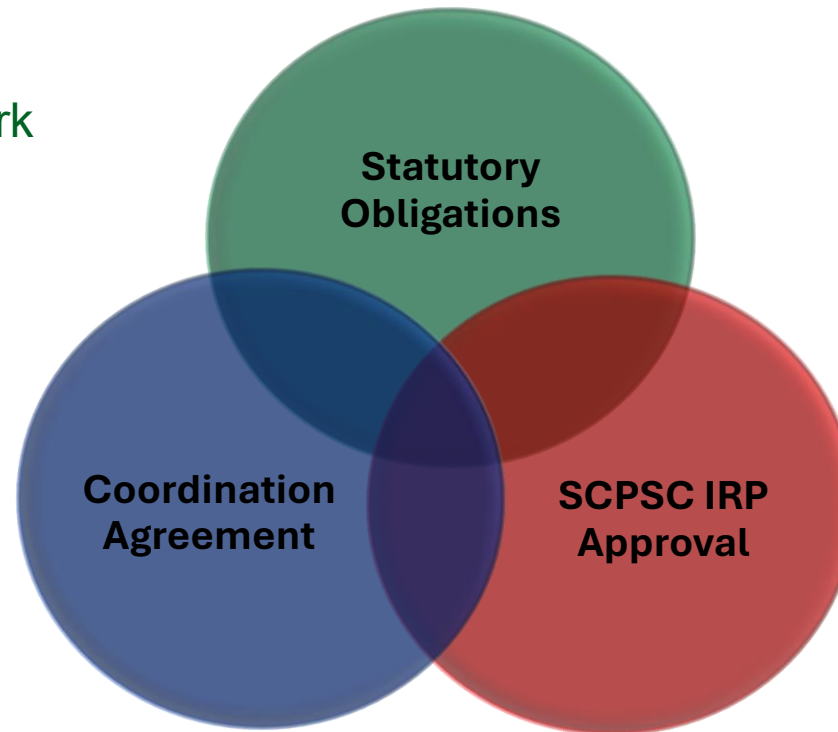
## 2024 Fuel Mix (MWh)



# Planning Obligations

## Coordination Agreement:

- Joint planning framework
- Load Forecast, Generation Expansion Plan (GEP), Resource Commitment Process

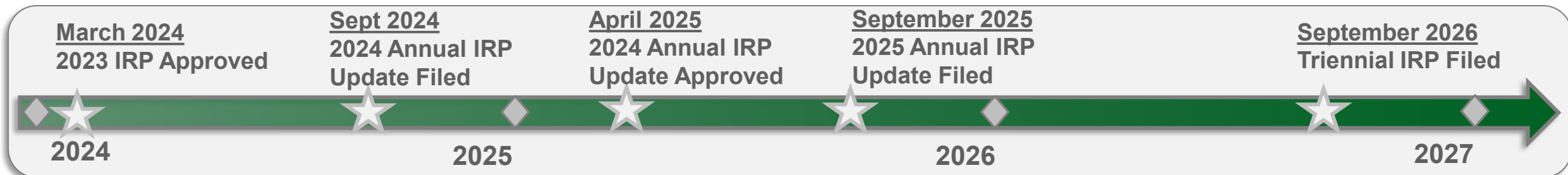


## Statutory Requirements:

File Integrated Resource Plan (IRP) every three years with annual updates, to PSC for approval

### IRP annual update requirements:

- Update base planning assumptions relative to its most recently accepted IRP
- Describe the impact of the updated base planning assumptions on the selected resource plan

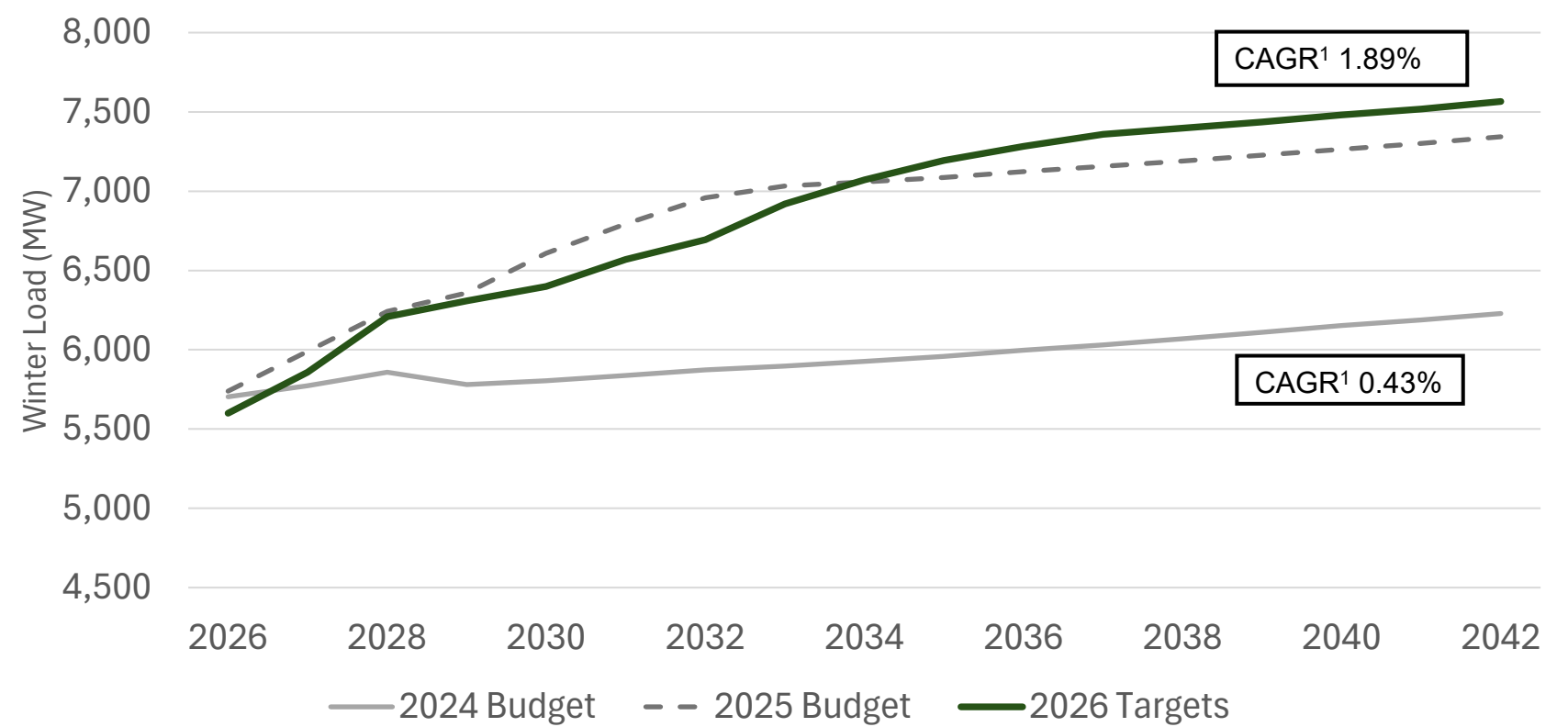


# Santee Cooper Load is Growing



The Southeast is experiencing significant and rapid load increases from new industry and population growth, driving investment to meet the needs of the State.

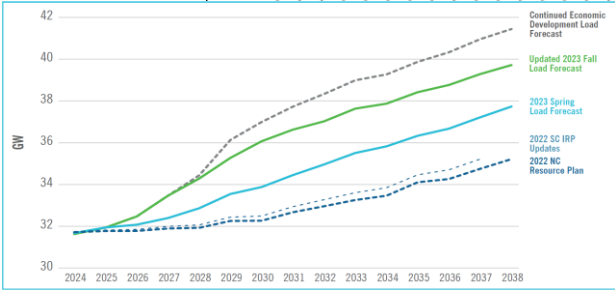
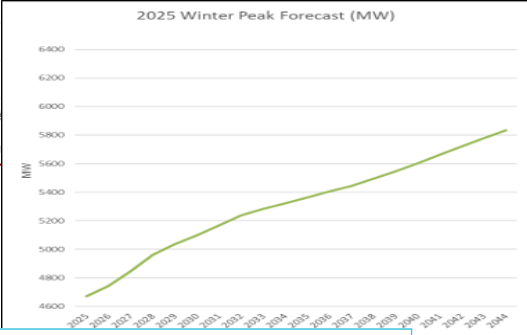
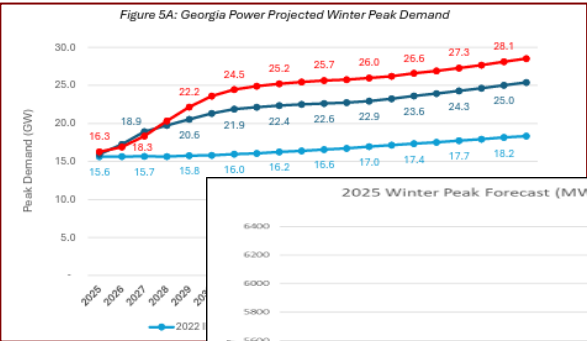
## Santee Cooper Load Forecast



1. Compound Annual Growth Rate from 2026 to 2042.

2. Neighboring Utility Sources: Georgia Power: 2025 IRP Update pg. 35, Dominion SC: 2025 Annual Update pg. 55, Duke Carolinas: IRP Load Growth Fact Sheet (1/2024).

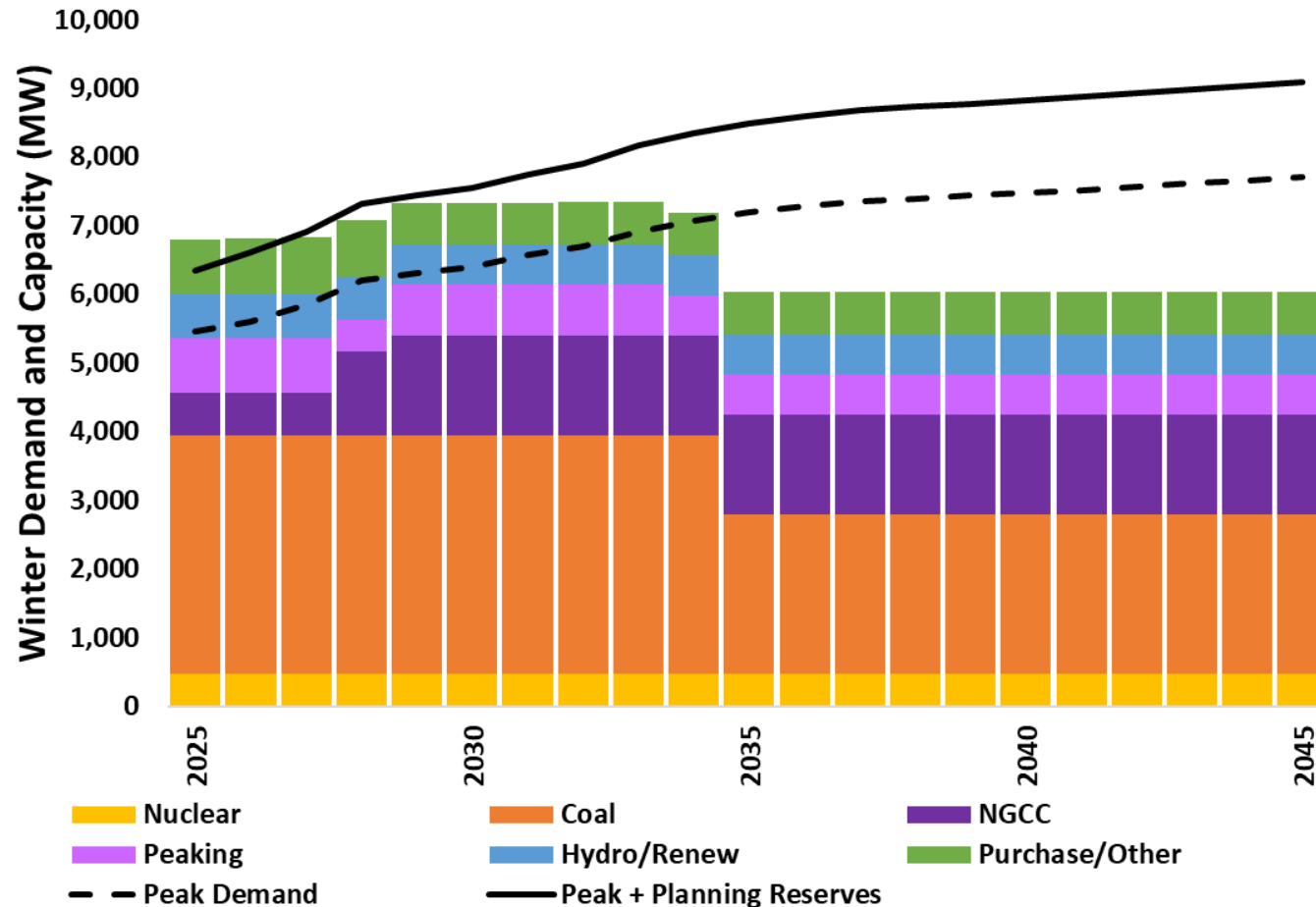
## Neighboring Utility Forecasts<sup>2</sup> (Georgia Power, Dominion SC, Duke Car.)





# Capacity Need

Combined System Supply and Peak Demand Balance Winter



- Capacity need starting in 2027 and grows to approximately 2,000 MW after assumed retirement of Winyah Generating Station
- Winyah will be retired when sufficient resources are available to reliably serve growing load

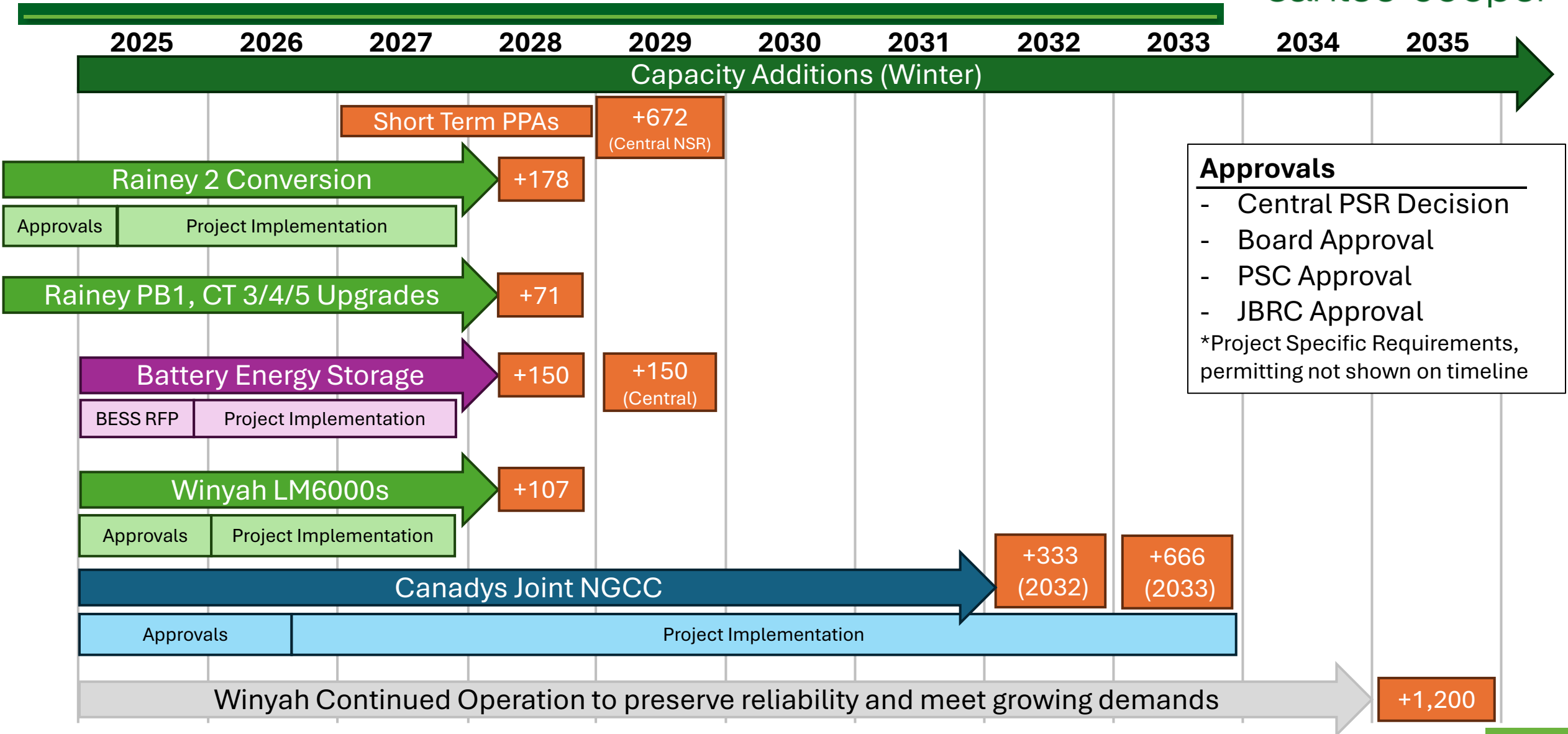
# Resource Additions

**Santee Cooper filed its 2025 IRP annual update on September 16<sup>th</sup>.**

- Key resource additions to meet projected load growth:

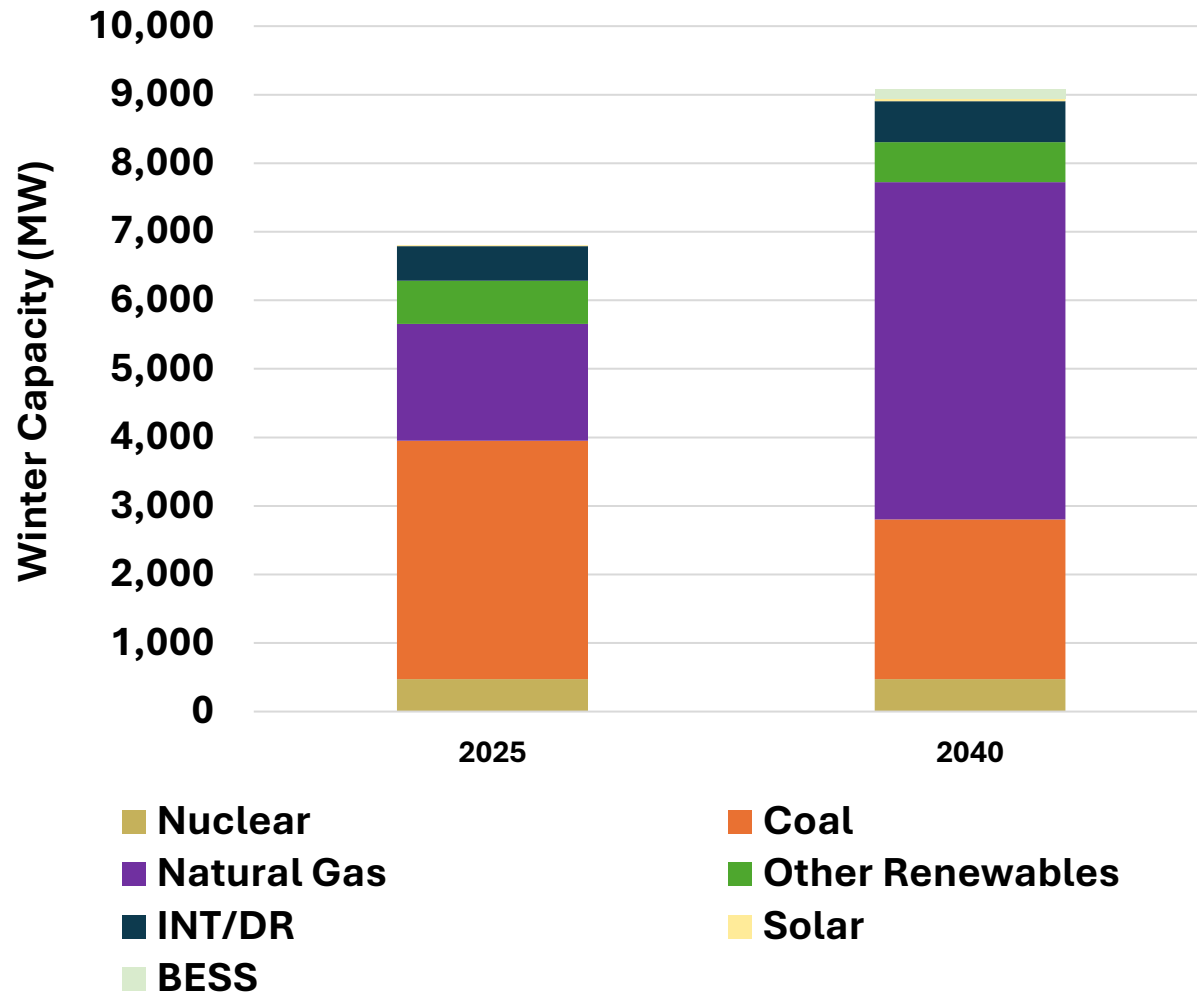
Resource	Winter	COD (winter of)	Comments
Joint Build Natural Gas Combined Cycle (NGCC)	998 MW	2032-2033	50% share of a proposed resource being developed jointly with DESC at Canadys
Combustion Turbines (LM6000s)	107 MW	2028	Two units at Winyah
Battery Energy Storage System (BESS)	~ 300 MW	2027-2029	150 MW at Jefferies; 150 MW Central's Blue Bell projects
Additional NGCC/CT Resources	Greater than 1,200 MW	2035 or later	Evaluate NGCC, LMs, CTs and PPAs
Solar	Future solar solicitations as economic to the system in coordination with Central		

# Resource Additions Timeline



# Capacity Resource Additions

Total Firm Capacity by Resource Type



Addition of dispatchable resources to meet growing system demands

- Reduced coal reliance
- Addition of flexible peaking through CTs and BESS
- New efficient NGCC

Santee Cooper is a winter peaking utility. We need firm, dispatchable power to supply the system on cold, cloudy, winter mornings.

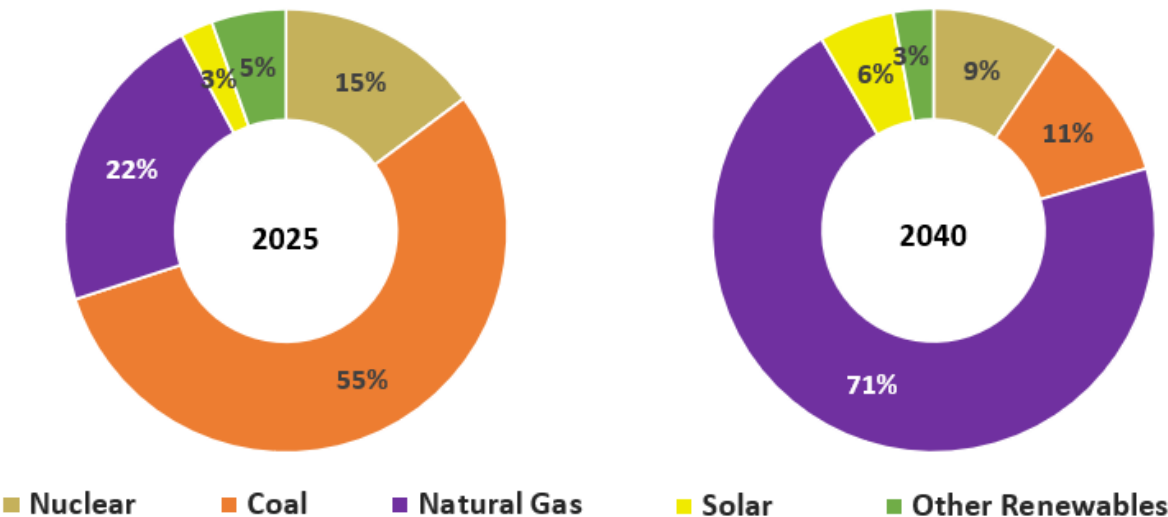


# Resource Portfolio Impact

## A CHANGING ENERGY MIX WITH MANAGED RISK

Current technology and fuel price economics favor transitioning from coal to gas generation. However, if gas prices spike, Santee Cooper retains the ability to fuel-switch back to coal, protecting customers.

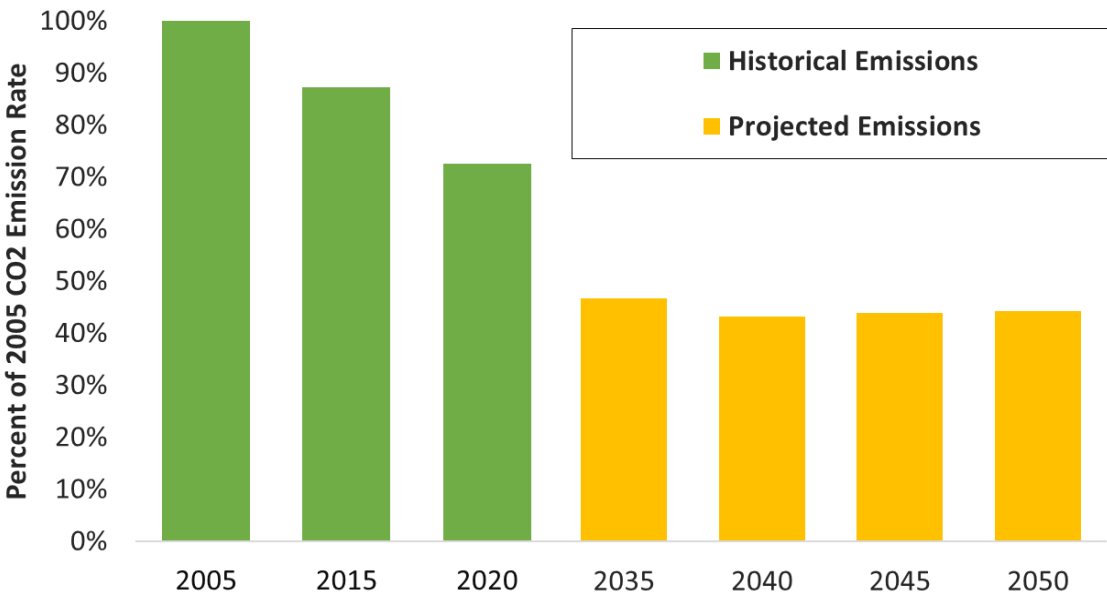
Generation by Resource Type (GWh, Energy)



## IMPROVED EMISSIONS PERFORMANCE

Transitioning to gas generation improves the emissions rate (tons of CO<sub>2</sub>/MWh) of the portfolio, dropping to half of what it was in 2005.

Projected CO<sub>2</sub> Emissions Rate as Percentage of 2005 Rate



# Stakeholder Engagement

## 2025 IRP Stakeholder Engagement

- Public Stakeholder Process
- 3<sup>rd</sup> Party Facilitator
- Information accessible on Santee Cooper's website

### Three Types of Meetings:

- Stakeholder Working Group
- Technical Sessions
- General Notice

- To support the 2025 IRP Update, Santee Cooper facilitated:
  - 5 Stakeholder Working Group meetings from September 2024 through June 2025 with the next meeting planned for October
  - 1 General Notice meeting held in April, with 192 registrants and 101 attendees
  - 3 Technical meetings covering the topics of Coal Retirement and Market Potential Studies for Demand Side Management programs
- Stakeholders are engaged and have provided valuable feedback