



Santee Cooper Resource Planning Stakeholder General Notice Meeting #4 June 11, 2026



Welcome and Agenda

Stewart Ramsay, Meeting Facilitator
VANRY Associates

Meeting Guidelines

Principles to guide today's session

- Participation welcome
- Respectful dialogue
- Transparency of all questions & answers
 - Questions and comments are public and will be shared via the IRP webpage
- Limited collection of personal information
 - Participant email address use is limited to IRP communications
 - Email list is not being shared or made public

**The value of this process is in your participation
... please ask questions!**

1. Why are we using this format?
2. Use the **Q&A** for comments or questions throughout the meeting – we have a team of people helping to answer your questions.
3. **“Raise Hand”** if you would like the chance to speak, we will call on people in the order that they raised their hands. We will wait to call on people until the presenter has concluded their presentation.

Note: We are not using the Chat function; it is disabled.

Desired Outcomes of this Meeting



- Stakeholders will know more about Santee Cooper's Integrated Resource Plan (IRP)
 - Factors driving load growth
 - Our plan to meet the growing electricity needs of our state
 - Resource development activities
 - Energy efficiency and demand response programs
- Stakeholders will have the chance to ask questions and provide feedback today and will learn how to submit feedback after the meeting

Meeting Agenda

- 1:00 pm **Welcome and Agenda**
 Stewart Ramsay, Meeting Facilitator, VANRY Associates
- 1:10 pm **Integrated Resource Plan (IRP) Update**
 Clay Settle, Director System Planning
- 1:30 pm **2026 Load Forecast**
 Carl Ciullo, Financial Analyst
- 2:10 pm **2025 Market Potential Study**
 Steven Roys, Manager Program Management
- 2:40 pm **BREAK**
- 2:50 pm **2026 Integration Study**
 Joel Dison, Technical Manager PowerGEM
- 3:35 pm **2026 Integrated Resource Plan**
 Clay Settle, Director System Planning
- 4:20 pm **Meeting Closeout**

Presenters



Stewart Ramsay
Meeting Facilitator
VANRY Associates



Clay Settle
Director System Planning
Santee Cooper



Carl Ciullo
Financial Analyst
Santee Cooper



Steven Roys
Manager Program Development
Santee Cooper



Joel Dison
Technical Manager
PowerGEM



Bob Davis
Executive Consultant
nFront Consulting

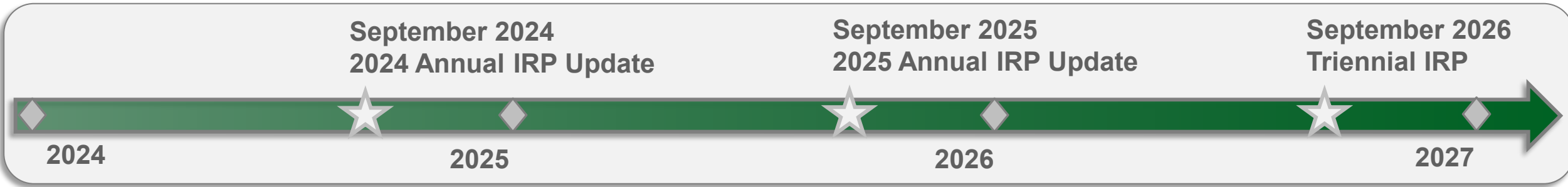


Integrated Resource Plan Overview

Clay Settle, Director System Planning

Santee Cooper

Current and Future Planning Initiatives santee cooper®



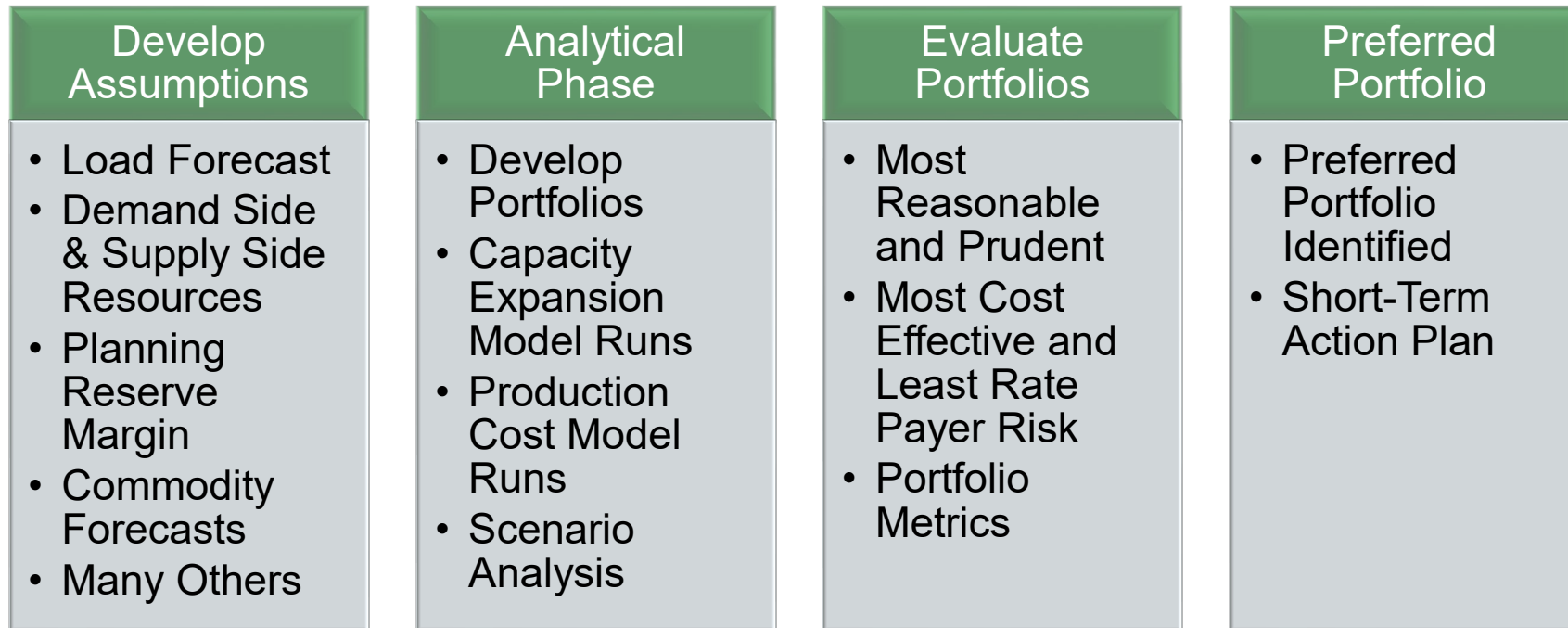
Fulling Santee Cooper's Planning Obligations

- Addressing requirements from the Public Service Commission Order for the 2023 IRP
- Executing the Short-Term Action Plan (STAP) and working with Central
- Continuing stakeholder engagement
- Monitoring regulatory developments
- Preparing to file the 2026 Triennial IRP and future Annual IRPs
- Continuing long term evaluations and studies for future IRPs

What is an IRP

“Integrated resource plans (IRPs) are electricity providers’ plans for meeting projected customer demand for at least a 15-year period in an economical and reliable way, while maintaining flexibility and considering environmental consequences.”

SC Energy Office



Who is involved?

- Public Service Commission
- Office of Regulatory Staff
- Customers
- All Interested Stakeholders

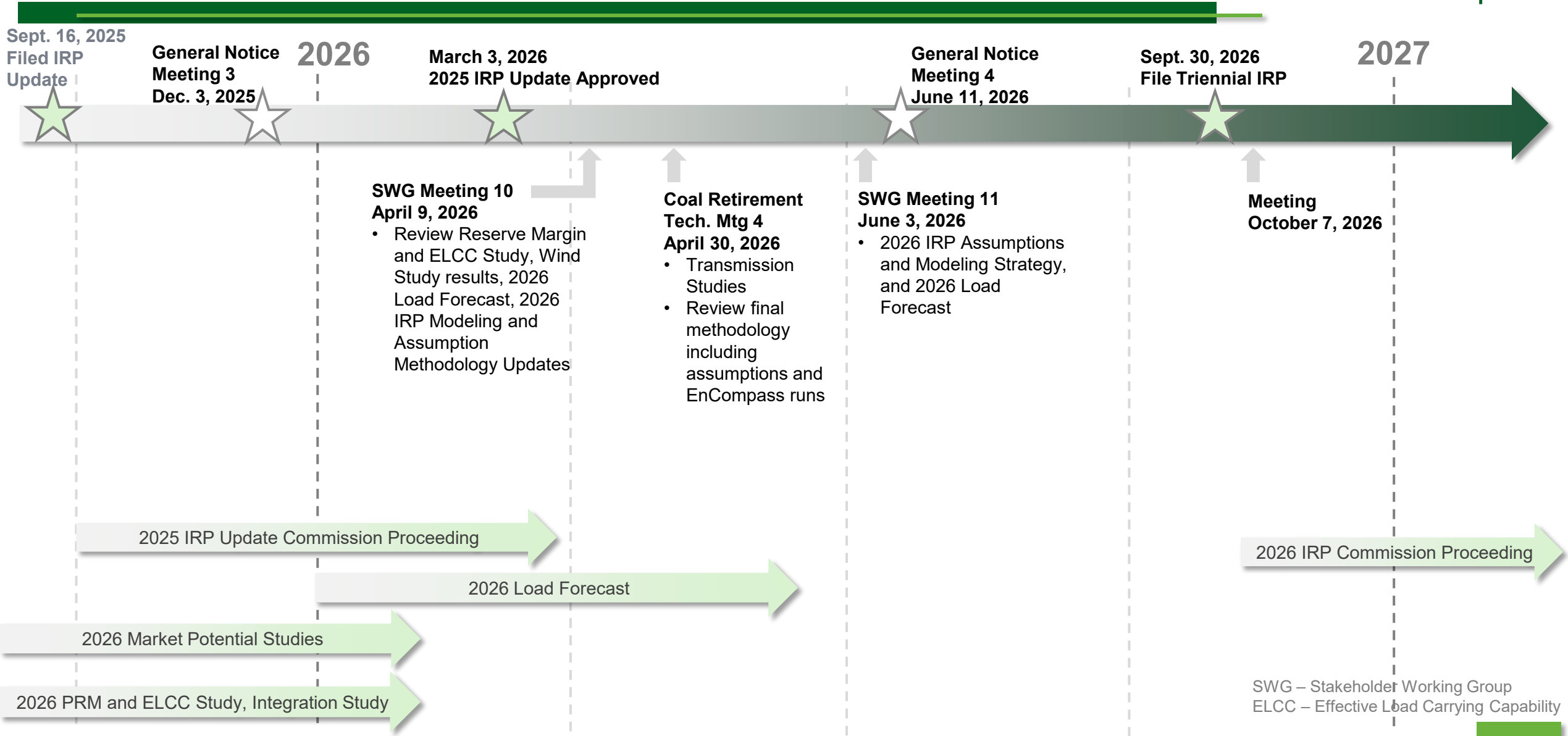
Triennial IRPs with Annual Updates and Stakeholder Engagement

Stakeholder Working Group



Category	Organization or Individual
Regulatory & Government	Office of Regulatory Staff South Carolina Department of Consumer Affairs South Carolina Department of Natural Resource South Carolina Dept. of Environmental Services
Central	Central Electric
Industrial Customers	Industrial Customer Association Century Aluminum Nucor Messer Google
Municipal Customer	South Carolina Association of Municipal Power Systems
Residential, Commercial, & Industrial Individual Representatives	4 Individual Representatives
Non-Governmental Organizations (NGOs)	Carolina Clean Energy Business Association Conservation Voters of South Carolina Coastal Conservation League South Carolina Energy Justice Coalition South Carolina Appleseed Legal Justice Center South Carolina Research Authority Southeastern Wind Coalition Southern Alliance for Clean Energy Southern Environmental Law Center Sierra Club Vote Solar

2026 IRP Stakeholder Schedule



2026 Triennial IRP PSC Schedule



Commission Procedural Schedule

Schedule Item	Date
Santee Cooper's IRP Update filed with the Commission	September 30, 2026
Santee Cooper to File Direct Testimony	November 20, 2026
Others' to File Direct Testimony	February 11, 2027
Santee Cooper to File Rebuttal Testimony	March 25, 2027
Others' to File Surrebuttal Testimony	April 22, 2027
Hearing	May 24, 2027
Proposed Order Due	TBD
Commission Issues Final Order	July 27, 2027

Santee Cooper IRP

www.santeecooper.com/irp



Santee Cooper IRP Stakeholder Process

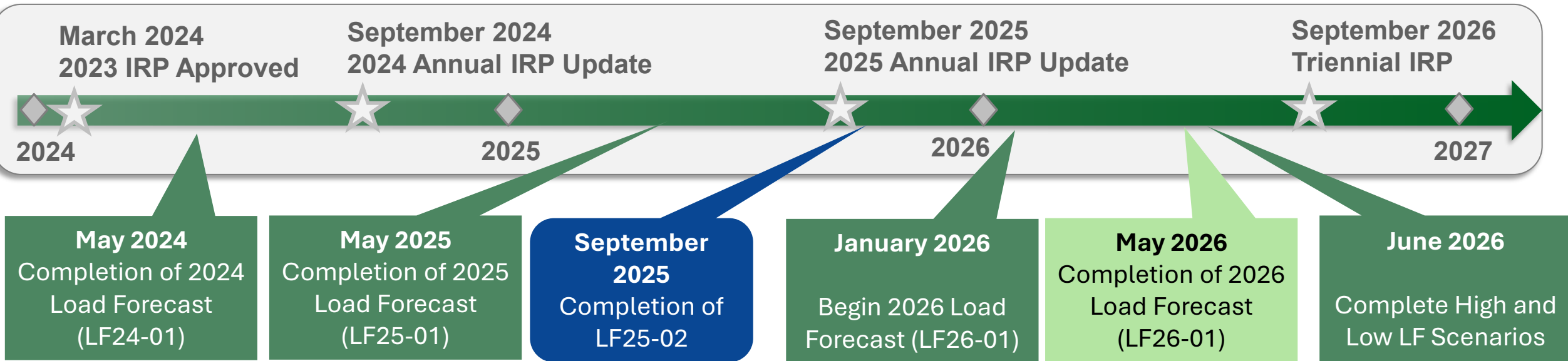
www.santeecooper.com/about/integrated-resource-plan/2026-irp-stakeholder-process



2026 Load Forecast

Carl Ciullo, Financial Analyst

Load Forecast | Timeline



- 2026 IRP Load Forecast (26-01) is complete.
- A High and Low load scenario will be completed in June.

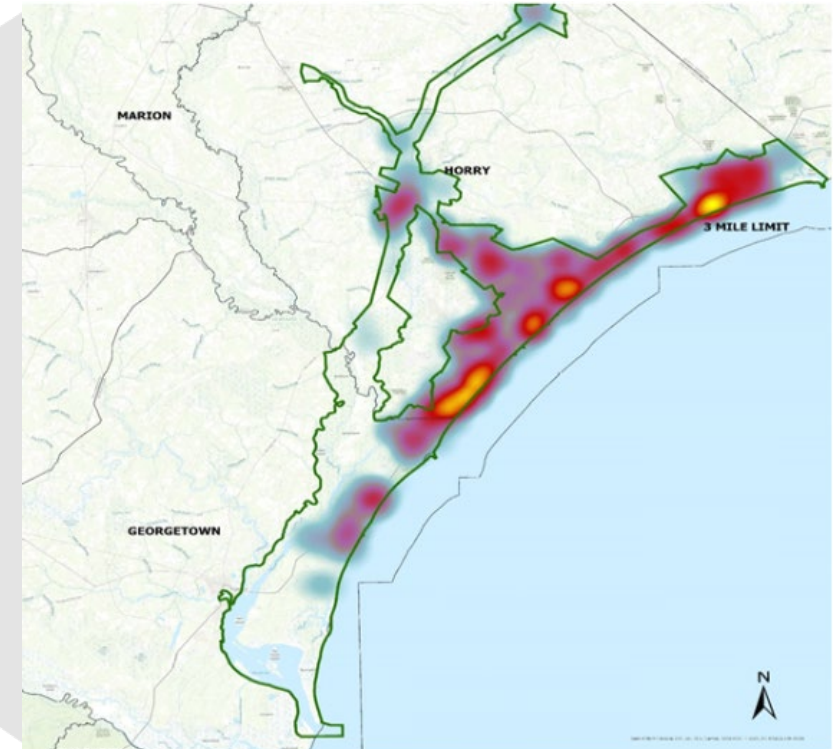
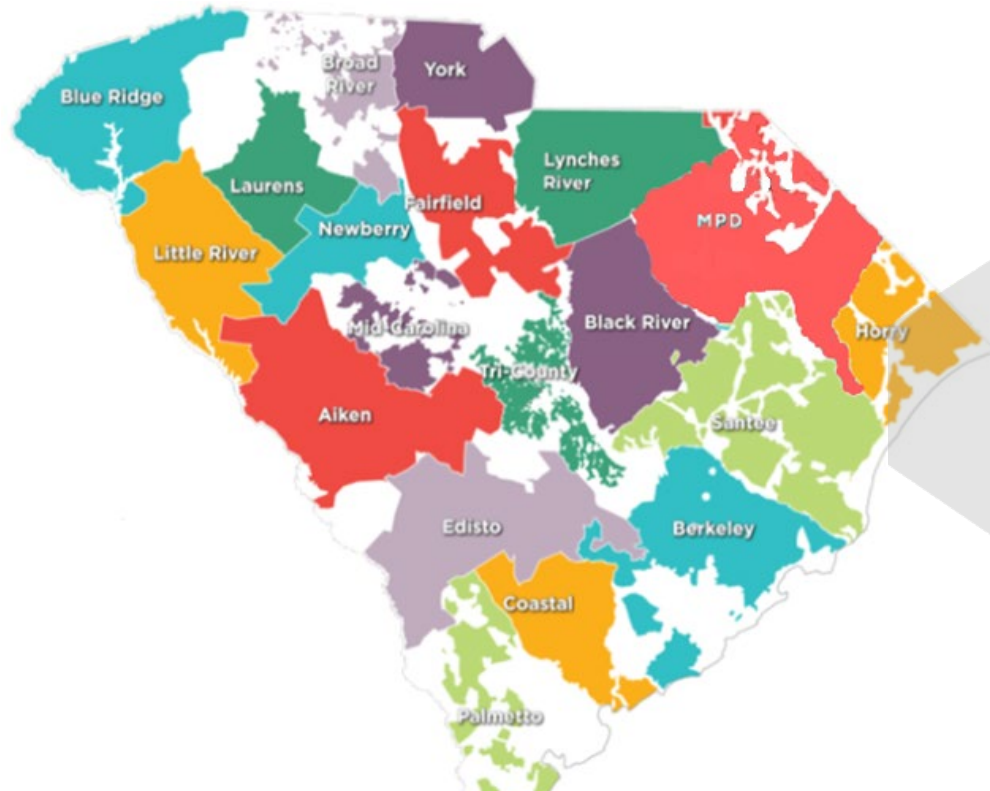
Class	Customer Segment Composition	Originator
Central Member Cooperatives	<ul style="list-style-type: none"> Wholesale customer serving 19 distribution cooperatives, comprising ~60% of system energy 	Central
Direct Serve Residential and Commercial	<ul style="list-style-type: none"> Approximately 220,000 directly served accounts, comprising 15% of system energy 	GDS and Santee Cooper
Direct Serve Industrial	<ul style="list-style-type: none"> 27 large industrial customers currently served directly by Santee Cooper, comprising 23% of the system energy 	Santee Cooper
Off-system and Municipal Sales	<ul style="list-style-type: none"> Wholesale sales to Bamberg, Georgetown, PMPA, Seneca, and Waynesville (NC) Sales to PMPA are on a partial requirements basis Municipal and off-system sales comprise 2% of system energy 	Santee Cooper, GDS, and Customer

Note: Percent based on 2026 IRP forecasted system energy.

Santee Cooper is a blended wholesale and retail power provider.

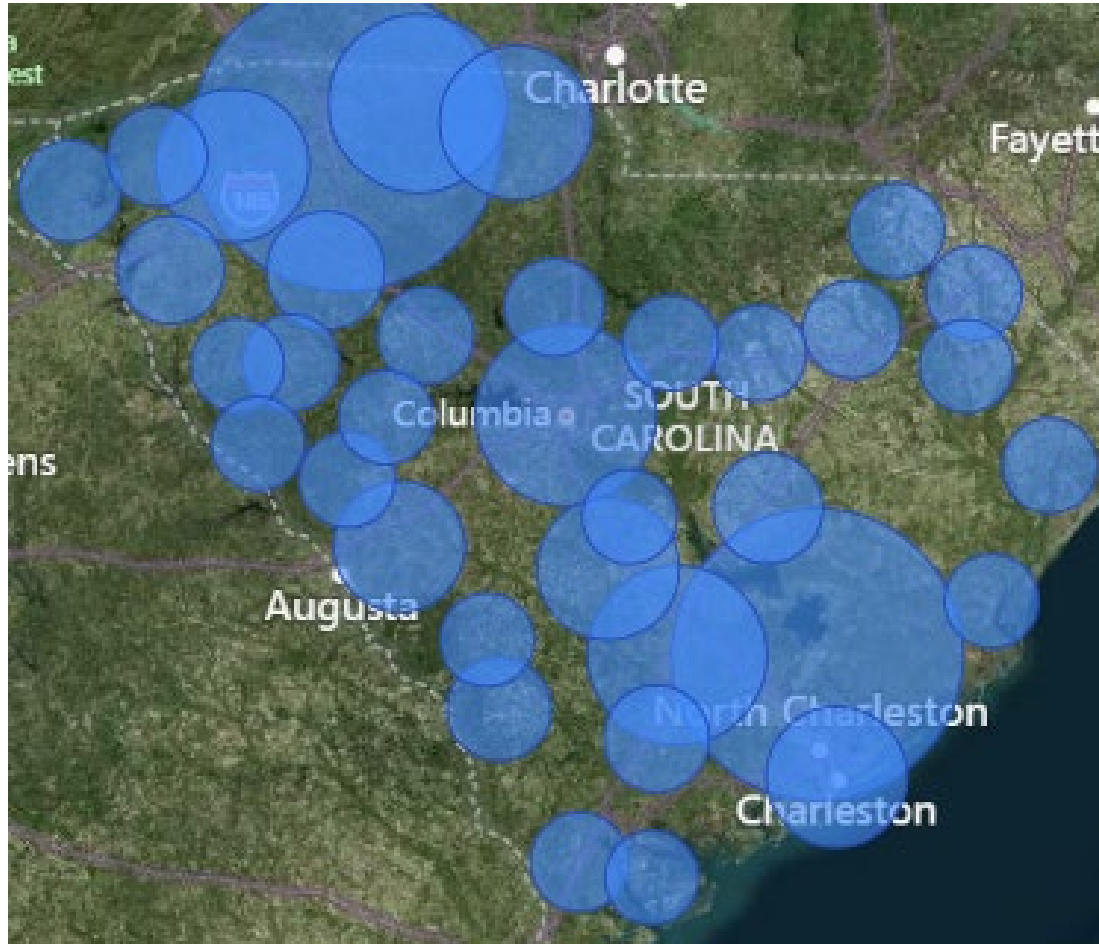
Wholesale: ~60% of load²

Retail Territory¹: ~40% of load

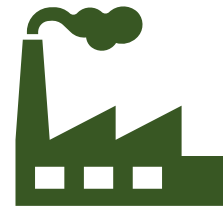


1. Includes Santee Cooper direct serve industrial customers
2. Blue Ridge, Broad River, Laurens, Little River, and York are outside of Santee Cooper's Balancing Authority.

Economic Development Announcements 2022-2025



South Carolina's population grew by 1.46% in 2025 and was the fastest growing state in the country.



8,100 new jobs and over \$9 Billion of investment in the state in 2025 is the third highest on record.

SAE MODEL SPECIFICATION

| EIA is key source for efficiencies and unit energy consumption (UEC)

| Commercial is similar, with indexes defined by building type

- | End-use profiles from EIA
- | Employment and average sq. footage used to help weight profiles



Electric System

Source: Santee Cooper

Inputs:

- # of customers
- kWh sales and revenues by class
- System peak demand

Economics

Source: Moody's Analytics

Inputs:

- # of Households (County and SC)
- Employment (County & SC)
- Household and Personal Income (County and SC)
- Retail Sales (County and SC)
- Gross Product (County and SC)
- Implicit Price Deflator (US)

Weather

Source: The Weather Company

Inputs:

- HDD/CDD
- Temperature
- Hours of Daylight

Electricity Price

Source: Santee Cooper

Inputs:

- Average price (¢/kWh)

End-Use

Source: Santee Cooper / EIA

Inputs:

- Appliance Saturations
- Appliance Efficiencies
- Unit energy consumptions (kWh)

House/Building Char

Source: EIA / ACS

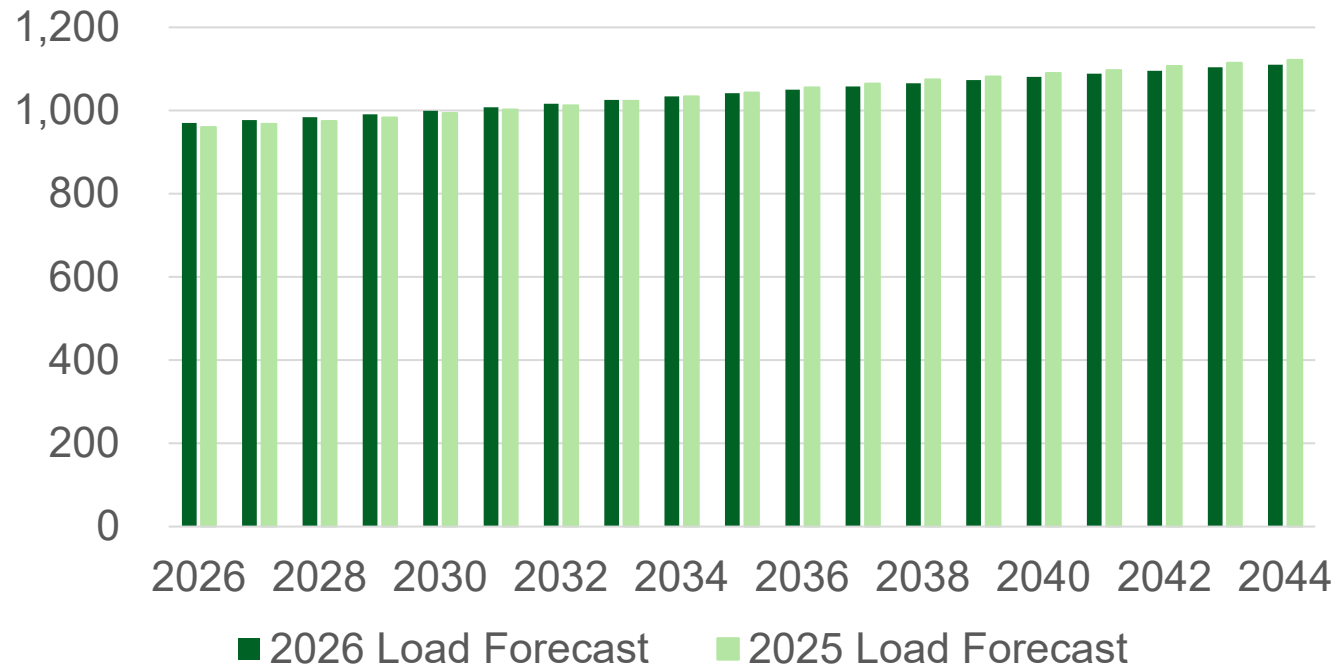
Inputs:

- Size of home
- End-use market share and efficiencies

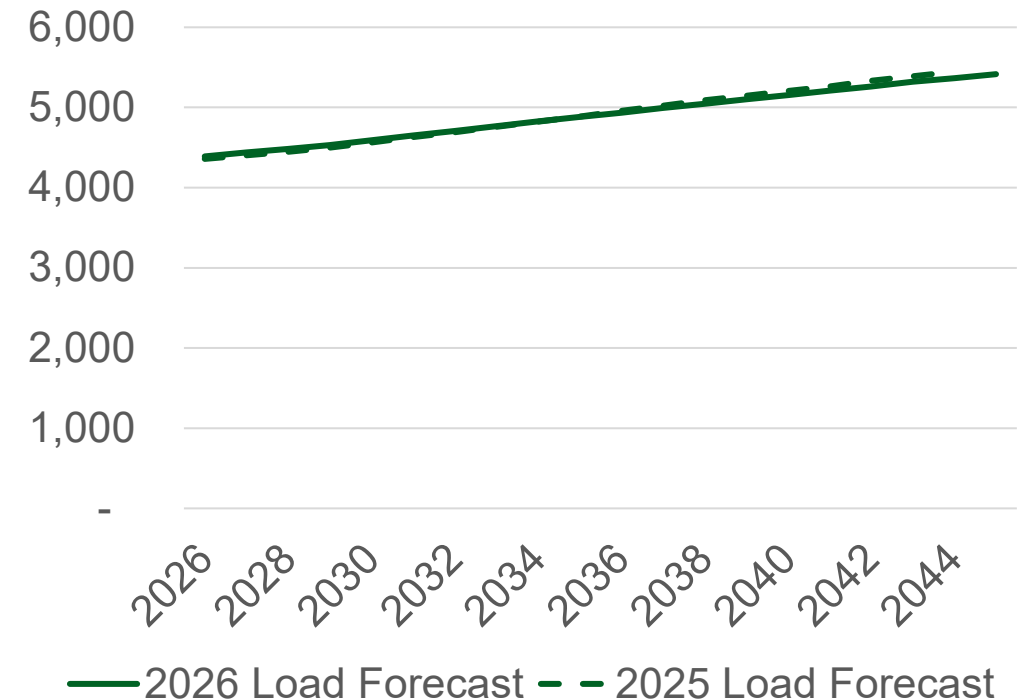
Residential and Commercial – 1.1% CAGR¹ for Energy and 0.7% CAGR¹ for Demand

- 1.6% average residential customer growth driven by in-migration in Myrtle Beach area
- -0.1% average residential use per customer slightly offsetting growth
- 0.3% average commercial customer growth
- Approximately 20 MW incremental demand from electric vehicles by 2035

Winter CP (MW)



Energy Sales (GWh)



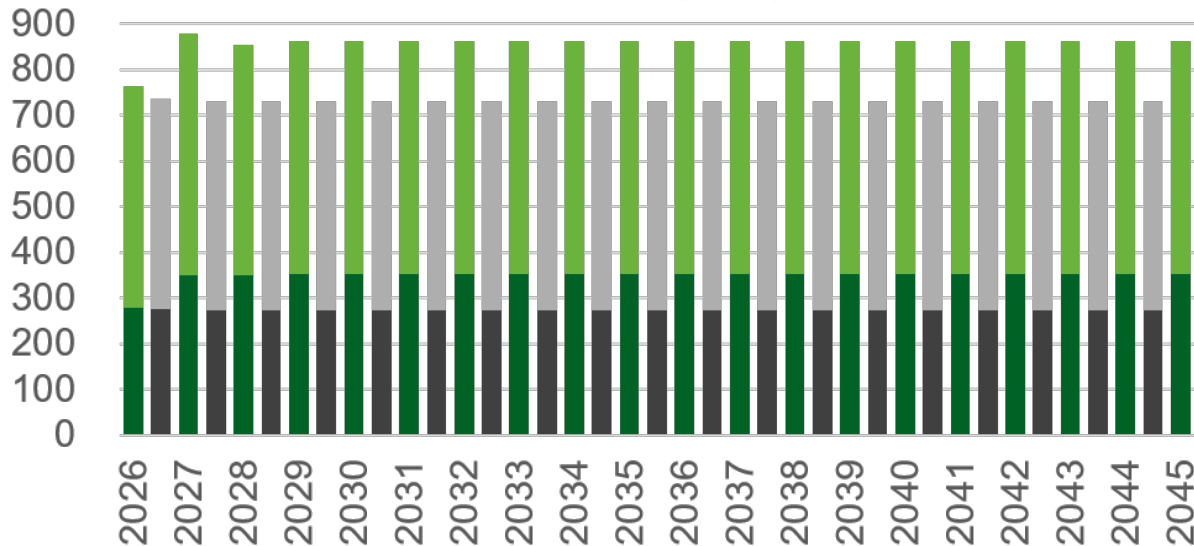
1 - Twenty year Compound Annual Growth Rate

Industrial – 0.3% CAGR¹ for Energy and 0.6% CAGR¹ for Demand

Significant expansion of a large, preexisting customer

- Small increase in non-firm load
- Forecast held constant after first 3 years

Winter CP (MW)



■ 2026 Load Forecast Firm ■ 2026 Load Forecast Non-Firm
■ 2025 Load Forecast Firm ■ 2025 Load Forecast Non-Firm

Energy Sales (GWh)

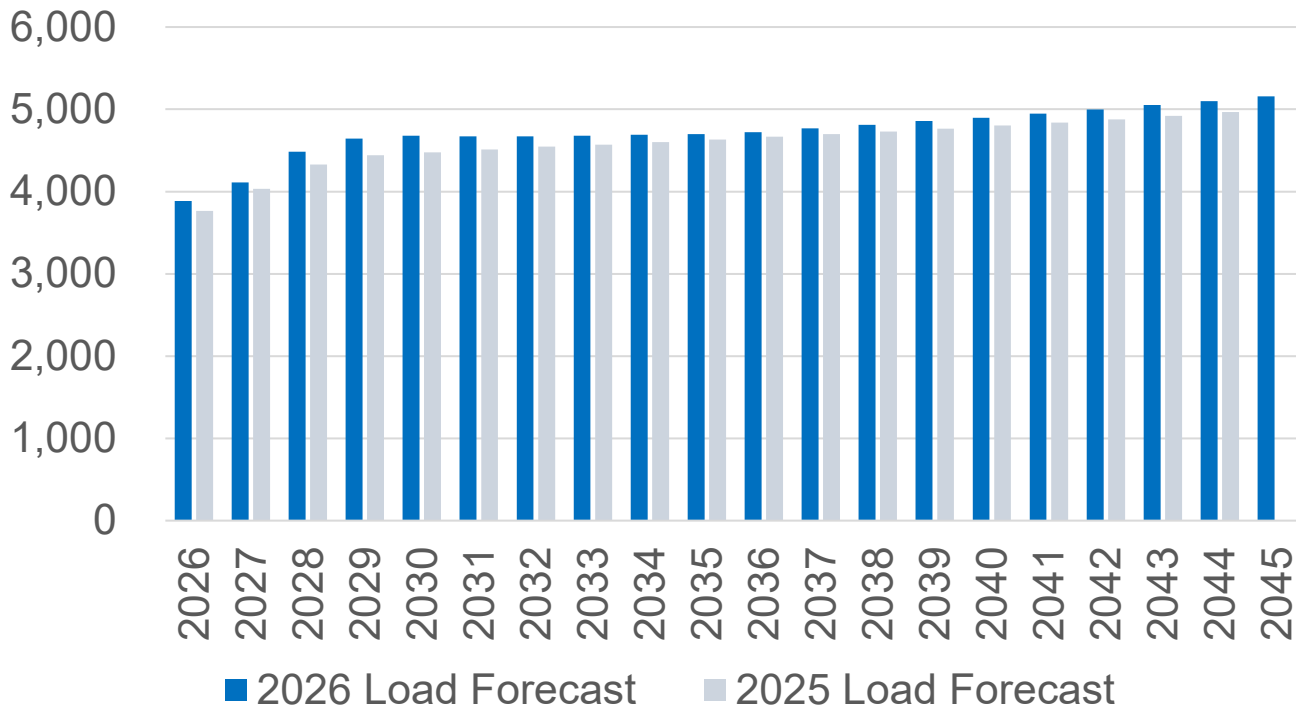


— 2026 Load Forecast - - - 2025 Load Forecast

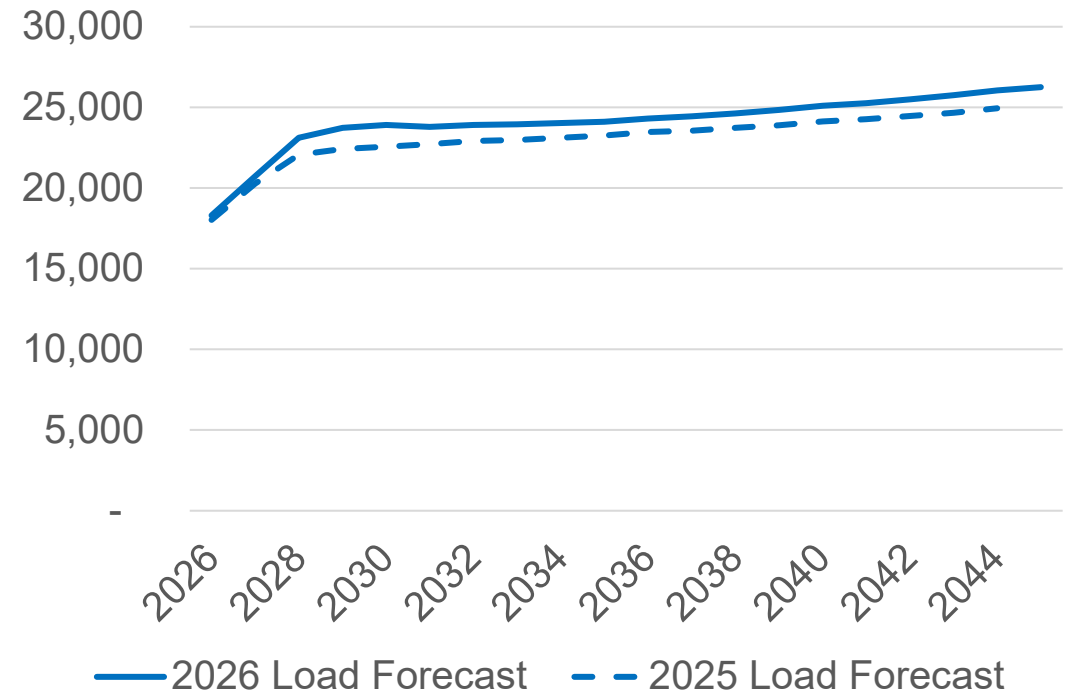
Central Electric Cooperative Members – 1.8% CAGR¹ for Energy and 1.5% CAGR¹ for Demand

- Substantial industrial and data center load
- Strong household growth across South Carolina

Winter CP (MW)



Energy Sales (GWh)



1 - Twenty year Compound Annual Growth Rate

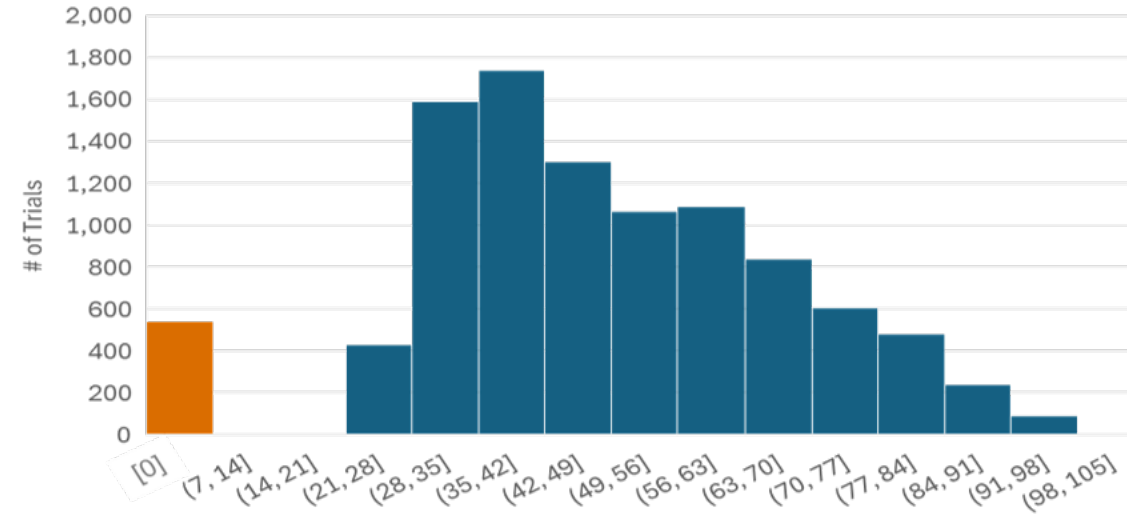
- **Likelihood of Connection**
 - Binary variable to determine if customer locates on system
 - Uniform distribution (randomized to match probability)

- **Magnitude Adjustment**
 - Adjustment to reflect lower usage than projected
 - Triangle distribution (trend to internal projection)

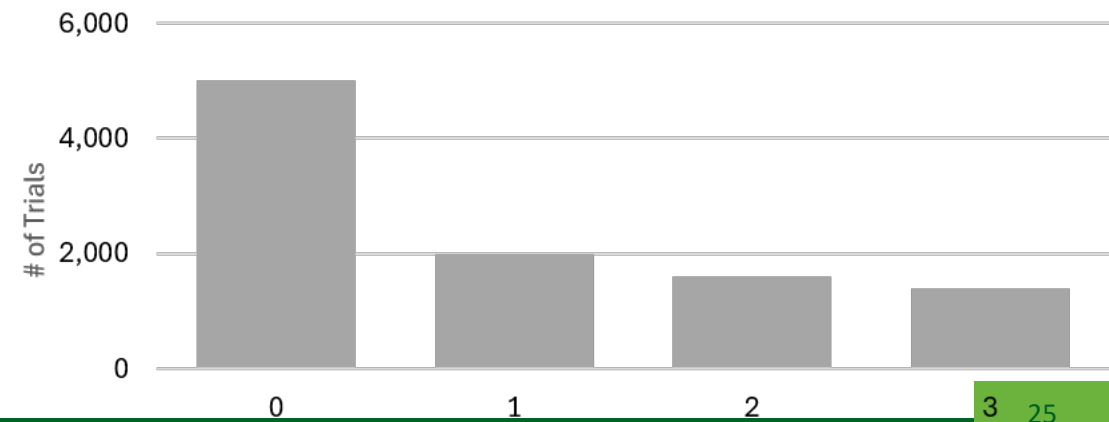
- **Siting Delay**
 - Potential delay in customer connection of 0-3 years
 - Left-skewed (no delay)

- **50,000 Trials**

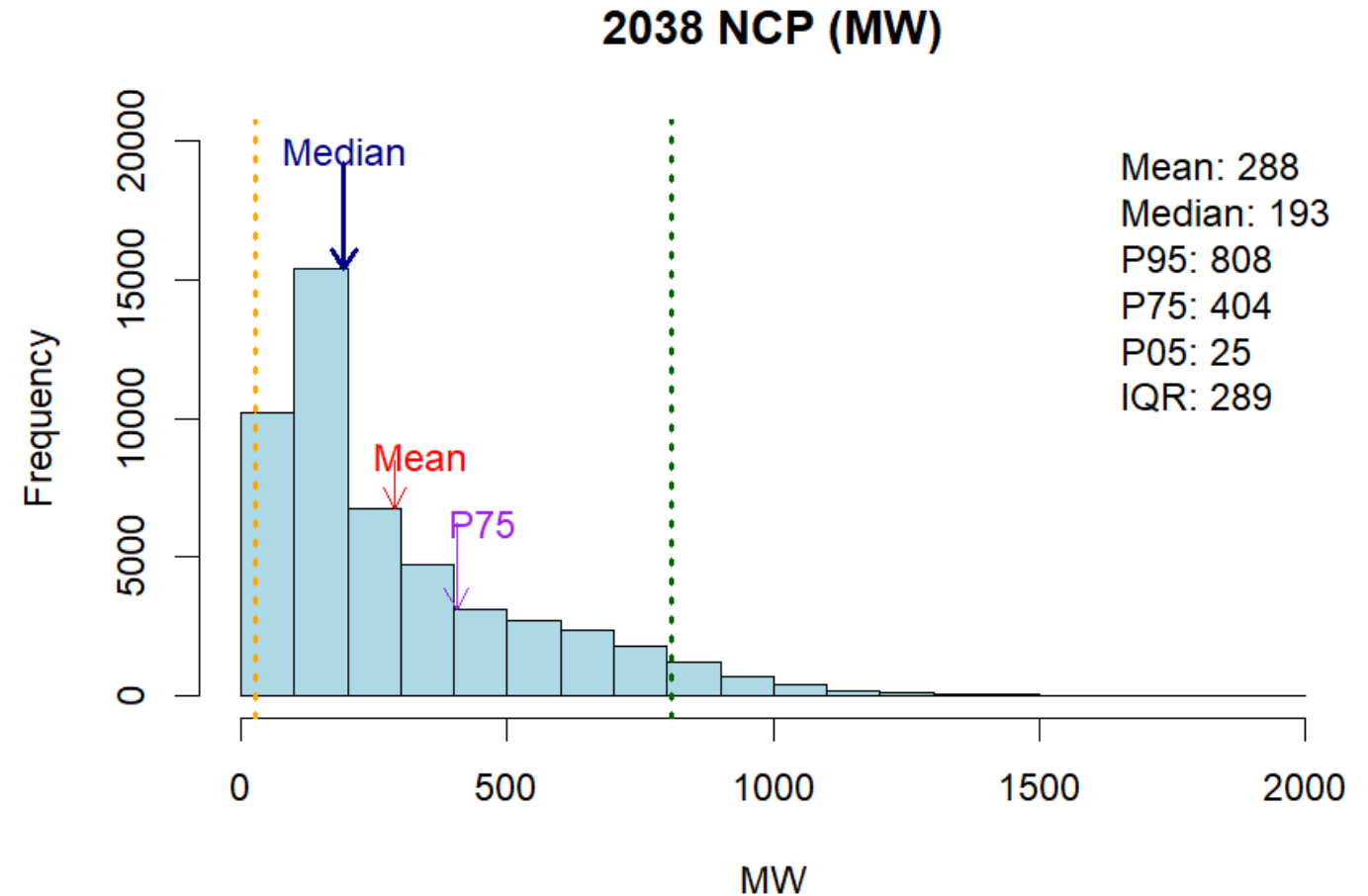
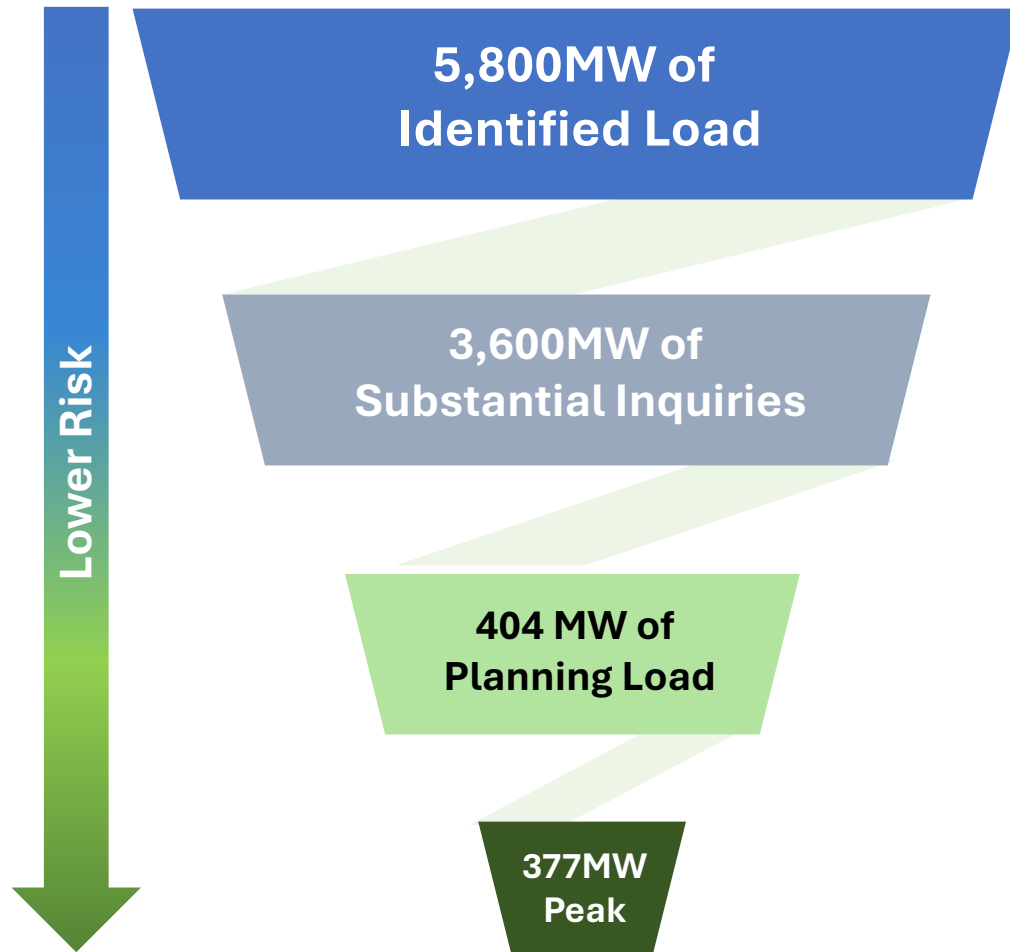
Example Customer (MW, 10,000 Trials)
 100MW projection, 95% connection, 30% magnitude



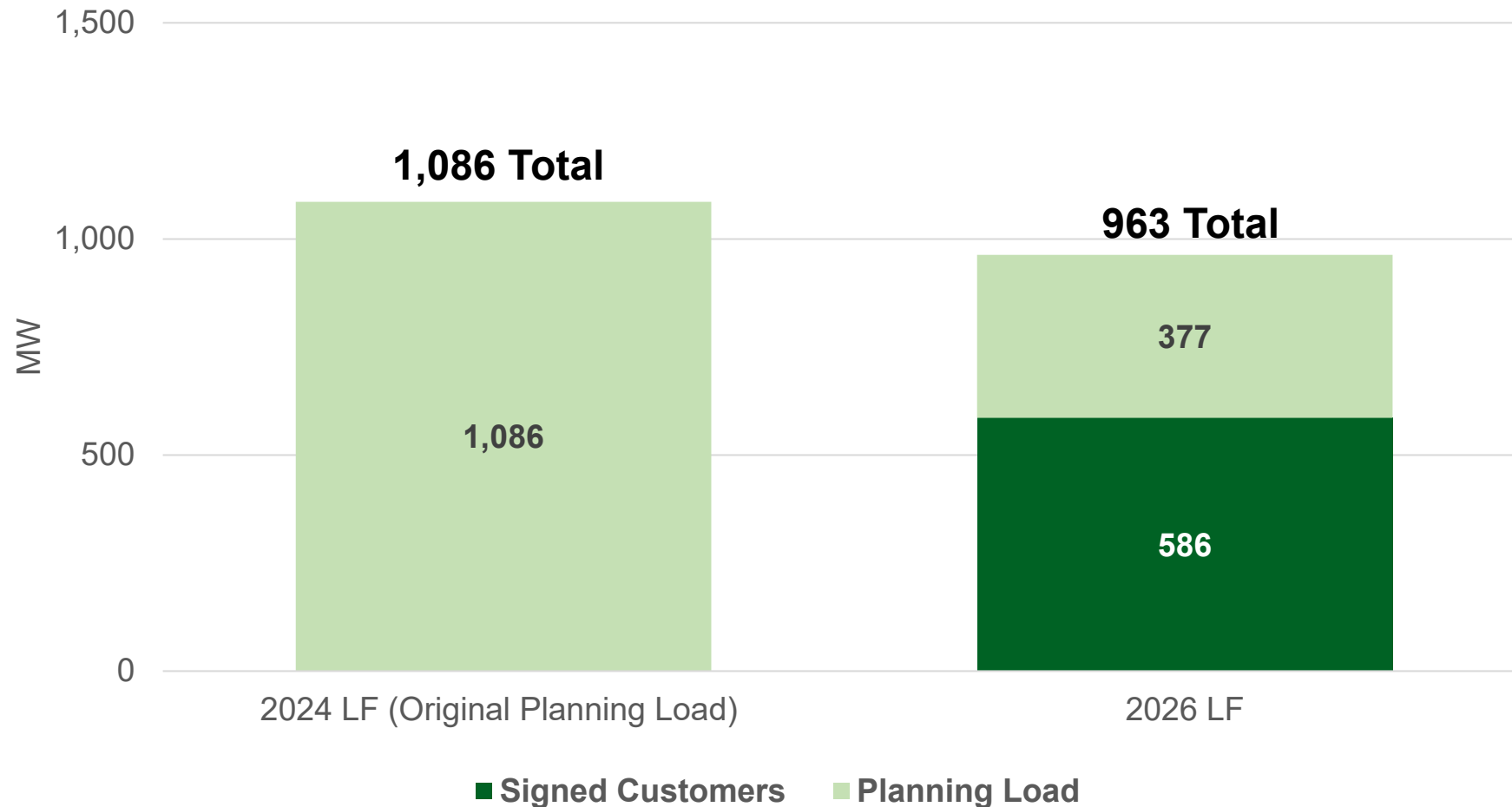
Example Siting Delay (Number of Years, 10,000 Trials)



A long tail indicates high upside risk. Therefore, we are planning for the 75th percent results. Even still, our load forecast includes only 7% of the potential economic development load.



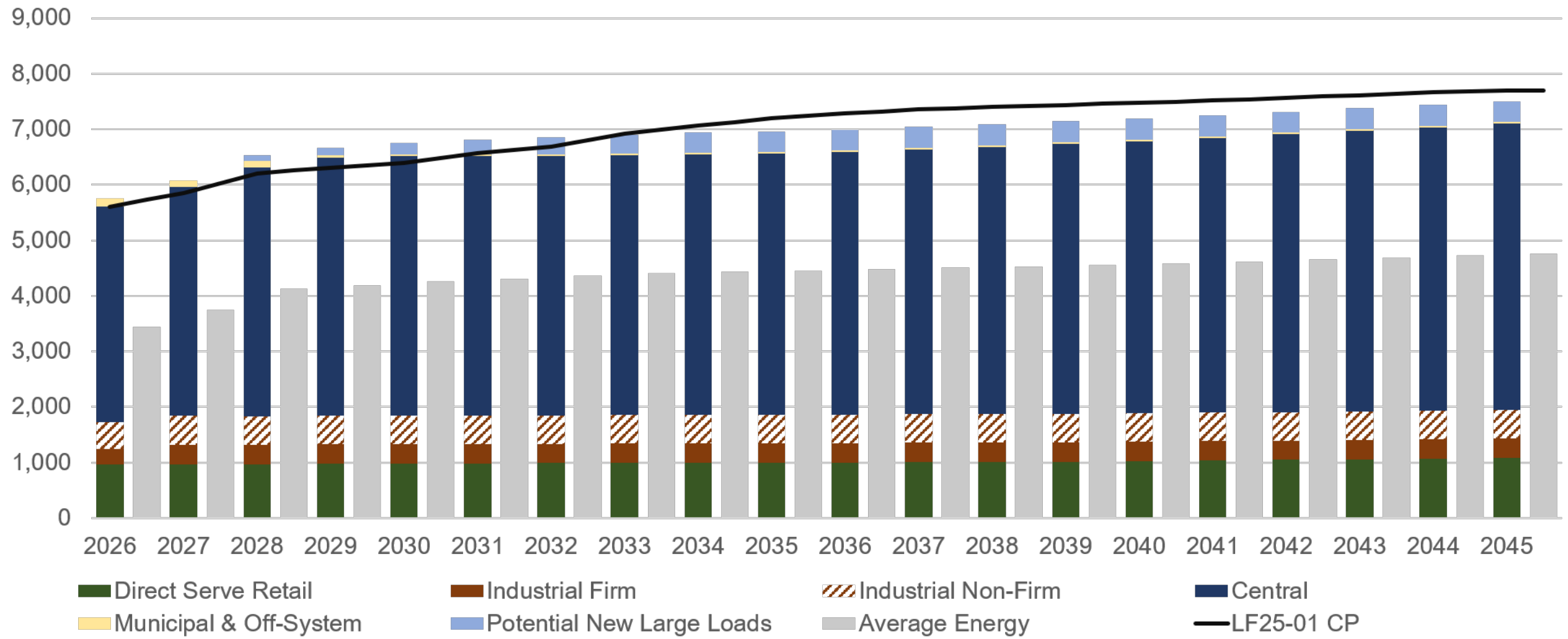
A significant amount of potential load has turned into real projects, validating Santee Cooper's approach to planning.



Load Forecast | 2026 IRP Load Forecast (LF26-01)¹



Winter CP (MW) & System Average MW¹

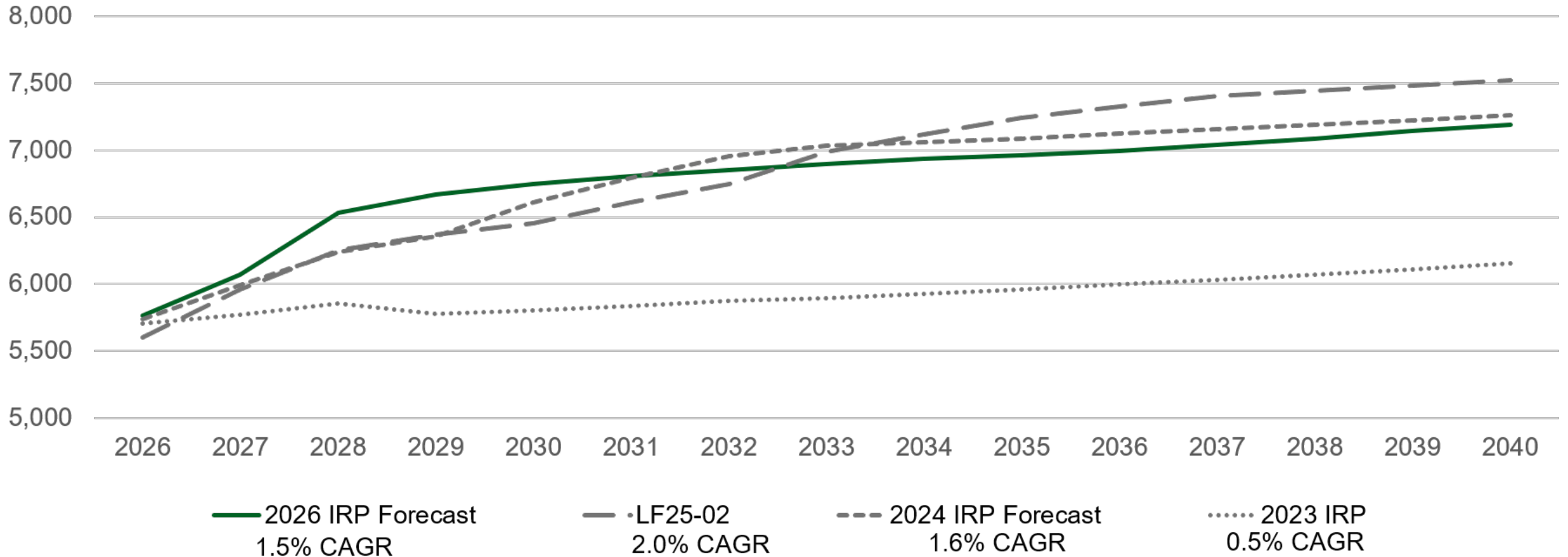


1. Includes transmission and distribution losses. Includes future DSM and EE.
 2. Calculated as Total Energy / 8760 hours

Load Forecast | Continued Manageable Growth



Our newest forecast indicates stronger growth in the near-term and more moderate long-term growth.



1. Compound Annual Growth Rate from 2026 to 2040.



2025 Market Potential Study

Steven Roys, Manager Program Development

EmpowerHome (Energy Efficiency - Residential)

- **Smart Energy New Homes**
- **Smart Energy Existing Homes**
- **Home Energy House Calls**
- **Marketplace** *(New!)*
- **Power Partners** *(New!)*

EmpowerBusiness (Energy Efficiency - Commercial)

- **Commercial Prescriptive**
- **Small Business Energy Saver**

Santee Cooper Rewards (Demand Response)

- **Smart Thermostat Demand Response Program** *(New!)*

Market Potential Study Process



- Completed 2 separate Market Potential Studies (MPS)
 - Energy Efficiency MPS
 - Demand Response MPS
- In coordination with SC Code 58-37-40-(B)(1)(e) Santee Cooper developed a low, medium, and high case scenario for each potential study.

DSM Market Potential Studies

Not Technically Feasible	Technical Potential			
Not Technically Feasible	Not Cost-Effective	Economic Potential		
Not Technically Feasible	Not Cost-Effective	Market Barriers	Achievable Potential	
Not Technically Feasible	Not Cost-Effective	Market Barriers	Budget & Planning Constraints	Program Potential

EPA – National Guide for Resource Planning

Stakeholder Process

- 3 technical working sessions
- Documents provided:
 - Study plan and measure list
 - Forecast disaggregation and measure parameters
 - Technical potential
 - Economic potential
 - Achievable potential

EE Achievable Potential Scenarios



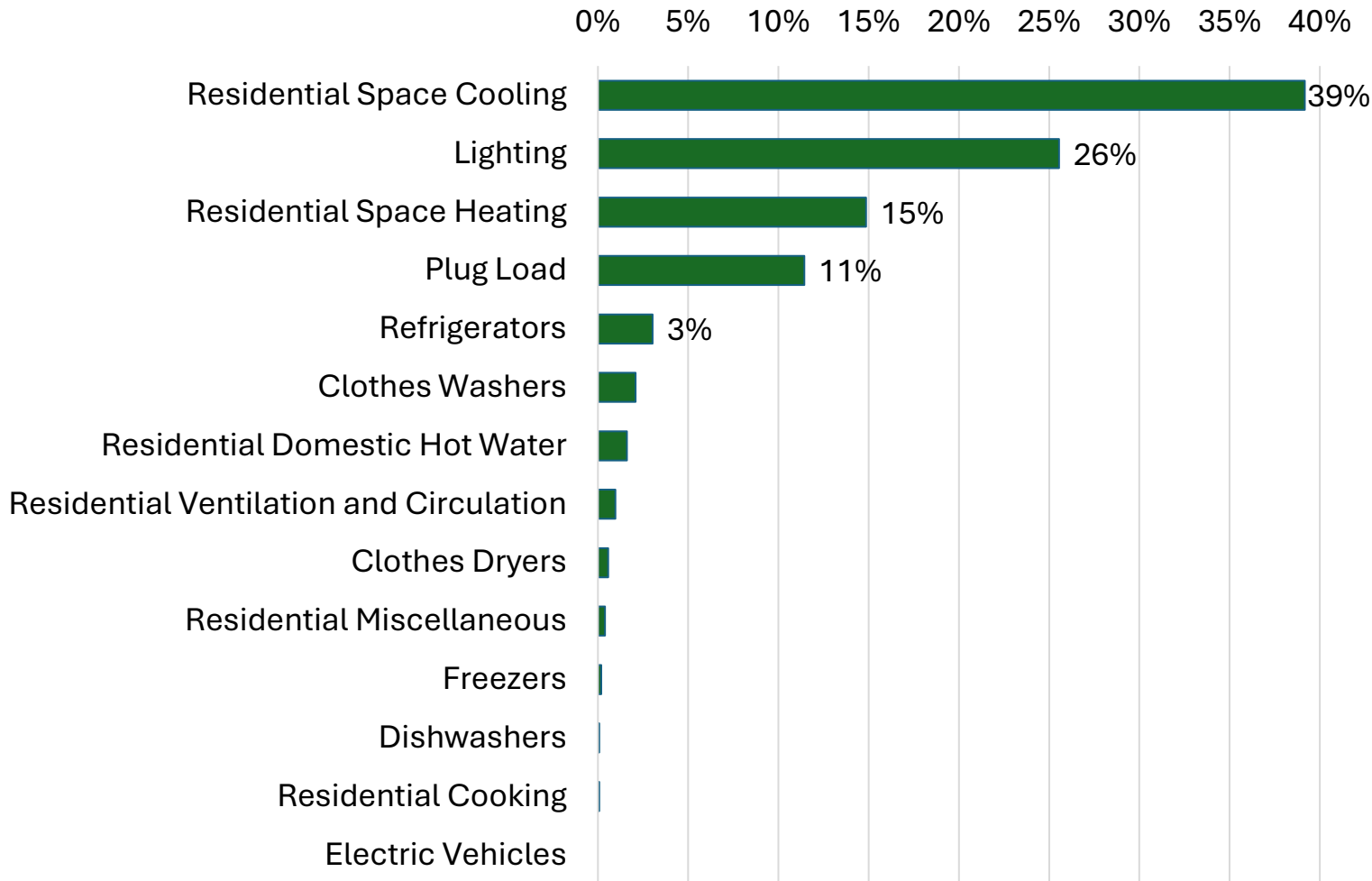
Summary of 20-Year Cumulative AP Results by Scenario (w. Roll-Off)

	Residential	Commercial	New Technology EVs	System
2026 Base Load (MWh)	2,171,150	1,962,867	32,174	4,166,191
Low Scenario AP (MWh), <i>% of first-year base load</i>	69,793 3%	135,595 7%	0.38 0%	205,389 5%
Med Scenario AP (MWh), <i>% of first-year base load</i>	90,237 4%	172,182 9%	36 0.1%	262,456 7%
High Scenario AP (MWh), <i>% of first-year base load</i>	177,701 8%	258,997 13%	36 0.1%	436,734 10%

- **Low/Base Scenario:** Incentives of 30% of the incremental costs, measures are screened at $UCT \geq 1.0$;
- **Medium Scenario:** Incentives are increased up to 50% of the incremental costs*, UCT threshold is reduced to 0.7 as **proxy for program-level screening**;
- **High Scenario:** Incentives are increased up to 75% of the incremental costs*, UCT threshold is reduced to 0.7, Avoided marginal energy costs are increased by 50%.

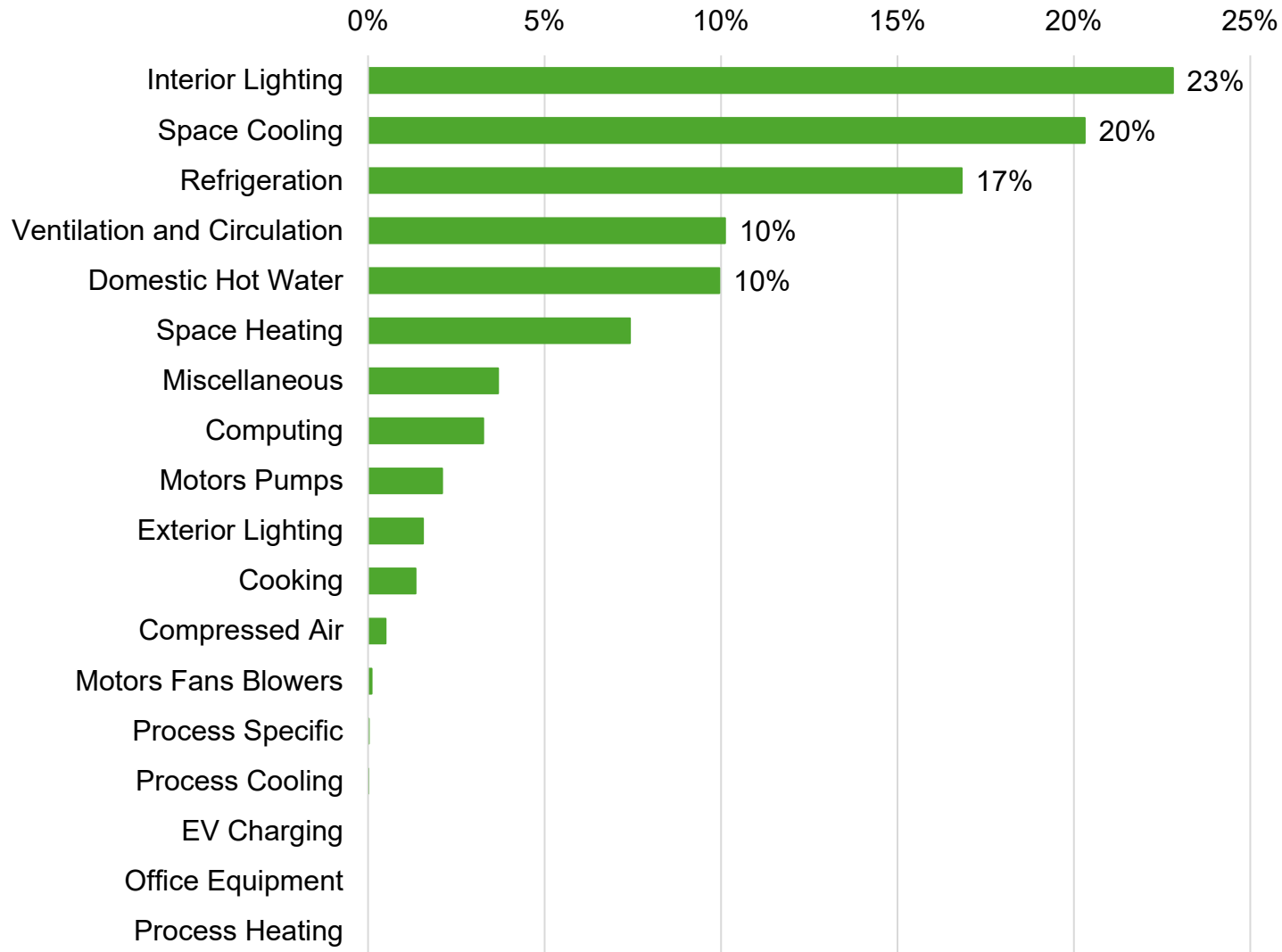
* Incentive rates for individual measures will be capped to maintain passing UCT result, if less than targeted rate.

Residential Potential by End Use



- The top five end uses contribute 94% of residential savings opportunities.
 - Residential Space Cooling
 - Lighting
 - Residential Space Heating
 - Plug Load
 - Refrigerators
- We expect fewer savings opportunities from the **water heating end use** due to new federal regulations. Updated DOE energy conservation standards for residential water heaters will take effect on **May 6, 2029**.

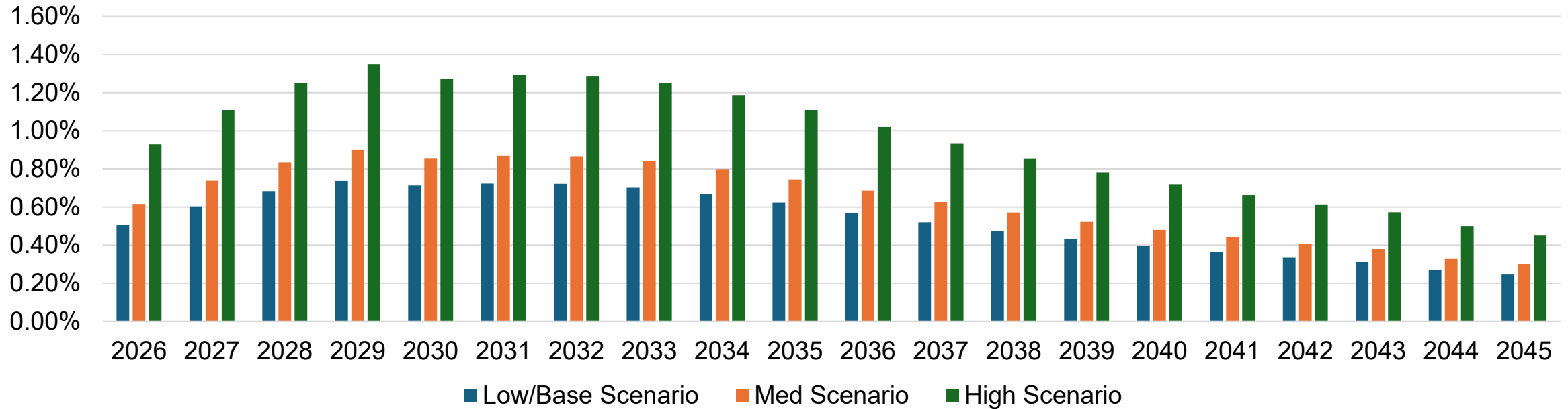
Commercial Potential by End Use



- The top five end uses contribute 80% of commercial savings opportunities.
 - Interior Lighting
 - Space Cooling
 - Refrigeration
 - Ventilation and Circulation
 - Domestic Hot Water
- The savings opportunities correlate with the end-use sales distribution from the load disaggregation.

Annual EE Savings by Scenario

System-Level Annual Savings As a Percentage of Baseline



DR Achievable Potential Scenarios

- AP incorporates expected market response to cost-effective measures
 - Technology adoption, program enrollment, marketing & customer acquisition
- Measures are analyzed based on scenario parameters

Low Scenario	Medium Scenario	High Scenario
<ul style="list-style-type: none">• “Business as usual”• Aligned with existing programs• Residential and SMB Thermostats	<ul style="list-style-type: none">• Include all economic loads/ measures• Target cost-effective customer segments• Assume medium incentives, marketing & outreach	<ul style="list-style-type: none">• Include all economic loads/measures• Target all customer segments that maintain program cost-effectiveness• Enhanced incentives, marketing & outreach

DR Achievable Potential by Sector

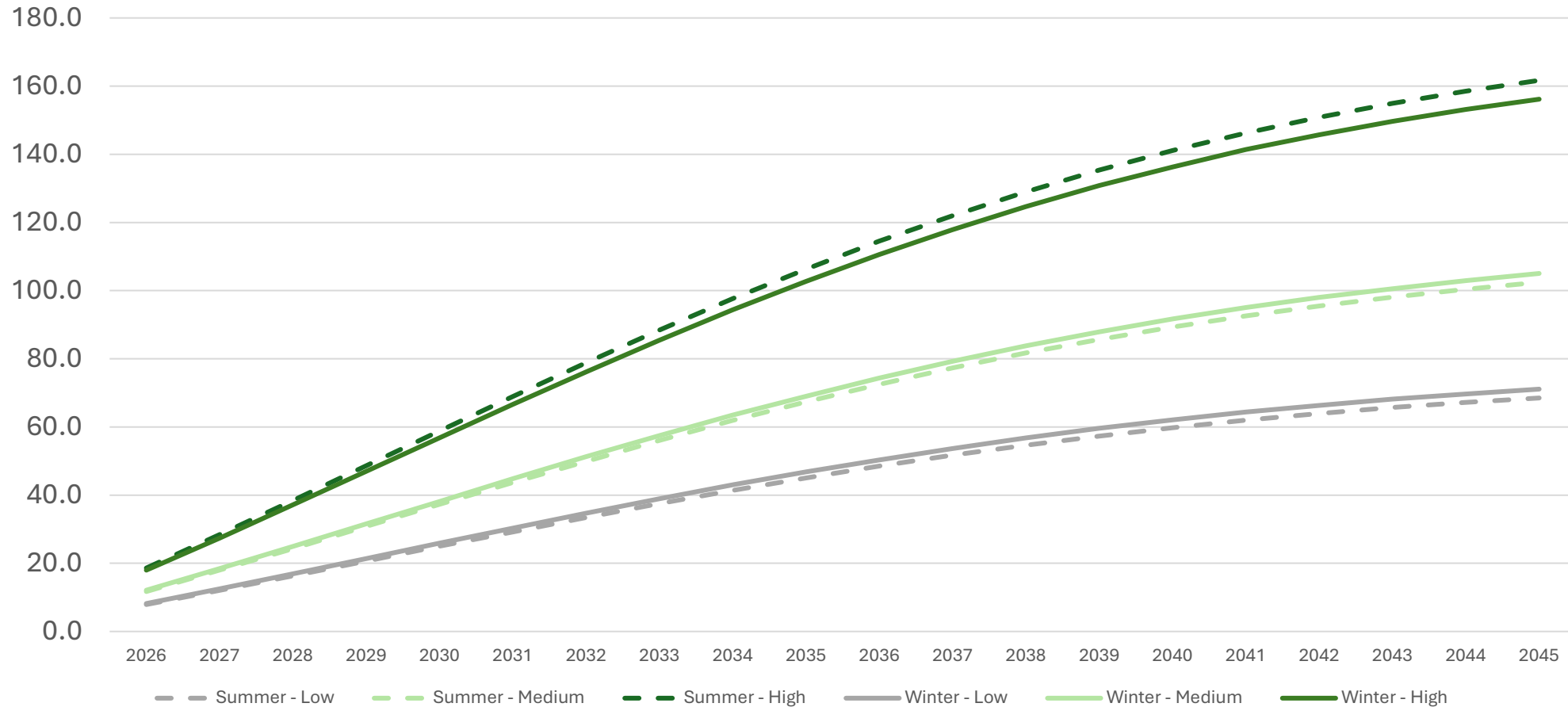
- Medium scenario: includes Smart Thermostats, Peak Time Rebates, Pool Pump (Switch), Water Heat (Grid-Enabled), and Behavioral DR

Sector	Season	Achievable Potential (MW)		
		Short-Term (2030)	Medium-Term (2035)	Long-Term (2045)
Residential	Summer	30.2	54.5	83.0
	Winter	34.1	61.7	93.9
Small Commercial	Summer	4.2	7.6	11.5
	Winter	2.4	4.4	6.7
Large Commercial	Summer	2.9	5.2	8.0
	Winter	1.6	2.9	4.4

DR Achievable Potential by Sector



DR AP Savings (MW)





BREAK





2026 Integration Study Results

Joel Dison, Project Lead PowerGEM

Solar Integration Study Fundamentals

- The solar integration study is intended to identify the incremental operating reserves necessary to integrate the intermittent nature of solar resources.
- Nature of the study
 - Similar to a reliability study but instead of identifying loss of load events, it identifies flexibility events where the system is unable to ramp to meet five minute load variances
 - Compares the flexibility events of a reference system to the flexibility events of a system with renewables to determine the amount of operating reserves necessary to return the system back to its reference state

Santee Cooper Integration Study

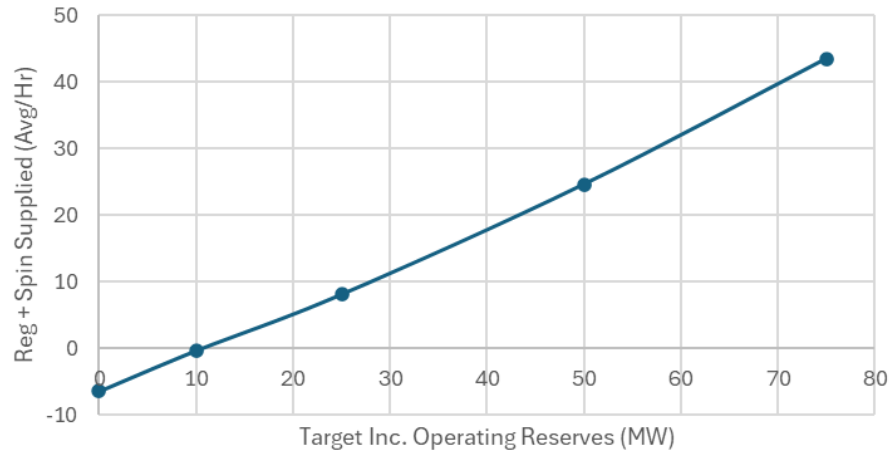
- Determine integration requirements based on three simultaneous metrics
 1. Traditional Flex Violations (Days/Year)
 2. Total Flex Violations (total events per year)
 3. CPS1 Stress Index (new metric that looks at both frequency of event and size of event similar to how CPS1 is calculated)
- Benchmark Study: 2030 study year: No Solar and No BESS
 - Metrics from benchmark would define the target
 - Anything below those targets would represent “existing headroom on the system”
 - Anything above those targets would require additional operating reserves
- Operating Reserves for this case study
 1. No-Solar/No BESS Benchmark to be calibrated to 2021 levels*
 2. Incremental “target” operating reserves to be added to all hours.
 3. Results to be reported as incremental “realized” operating reserves.

Summary of Unmitigated Tranche Performance

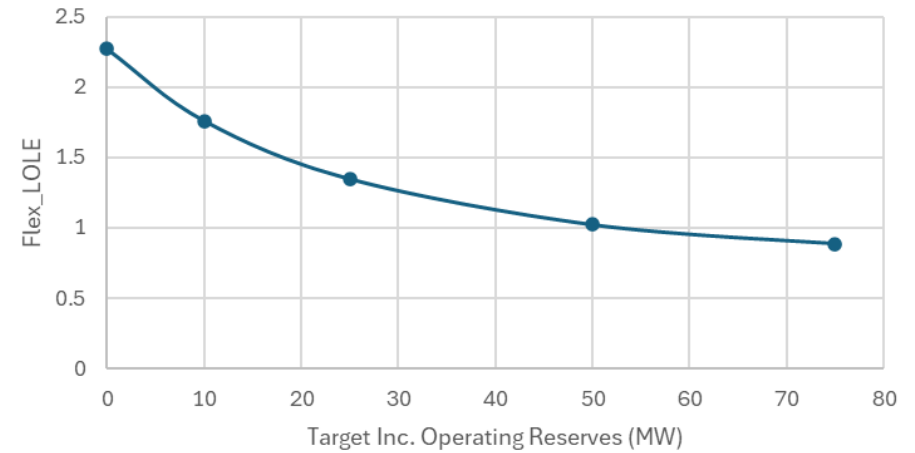
	Metric (Unmitigated)			
	Traditional Study Year No Solar Flex Events	2030 No Solar Total Flex Events	2030 No Solar CPS1 Stress Index	Spin Supplied
No Solar	1.42	4.31	54.00	517.30
250 Solar	1.49	4.16	51.60	514.97
500 Solar	1.73	4.29	65.50	511.91
750 Solar	2.27	4.68	62.57	510.91
1000 Solar	3.92	6.75	96.60	510.93
1500 Solar	12.01	15.79	211.40	510.98
2000 Solar	27.49	36.08	667.00	510.16

750MW Mitigation

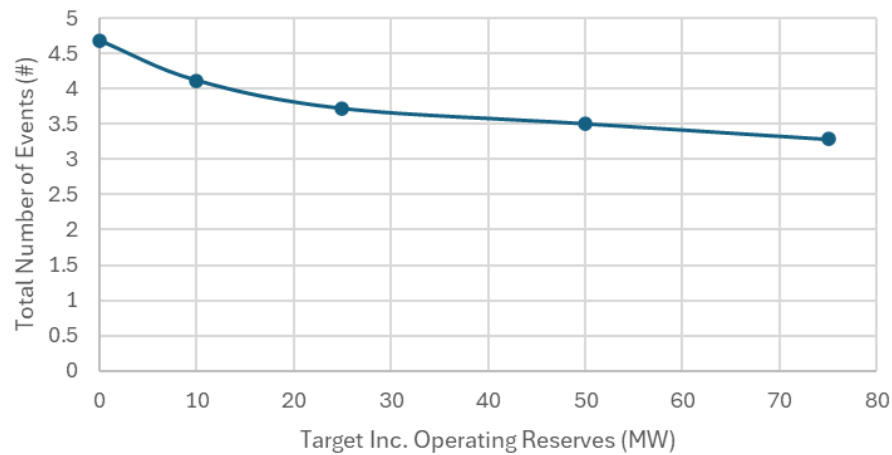
750 Solar - Realized Inc. Reserves



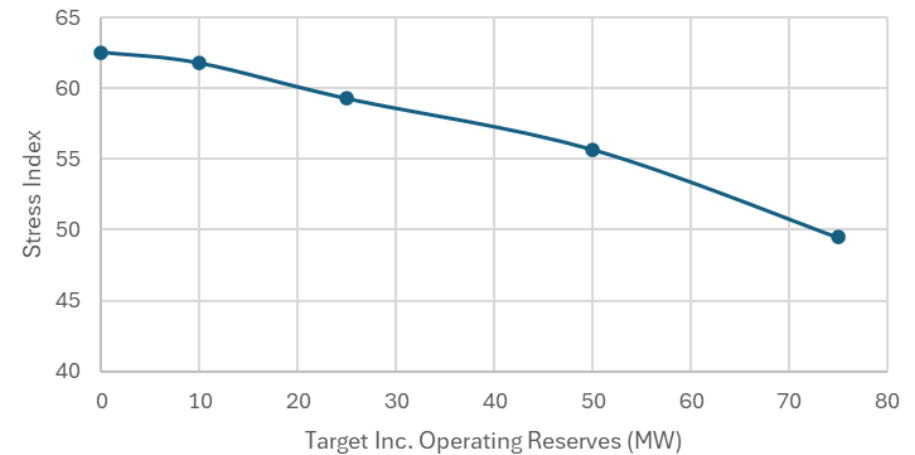
750 Solar - Flex Events (Days/year)



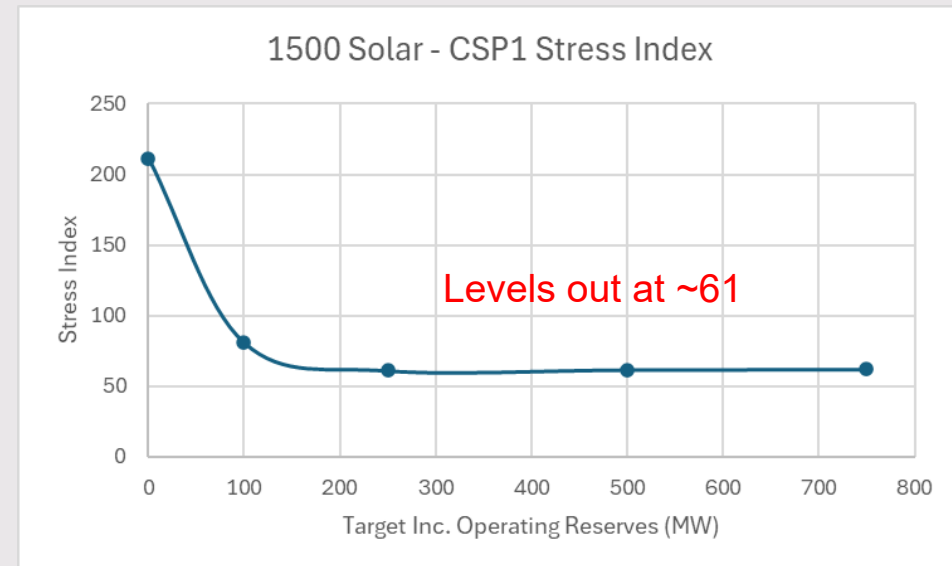
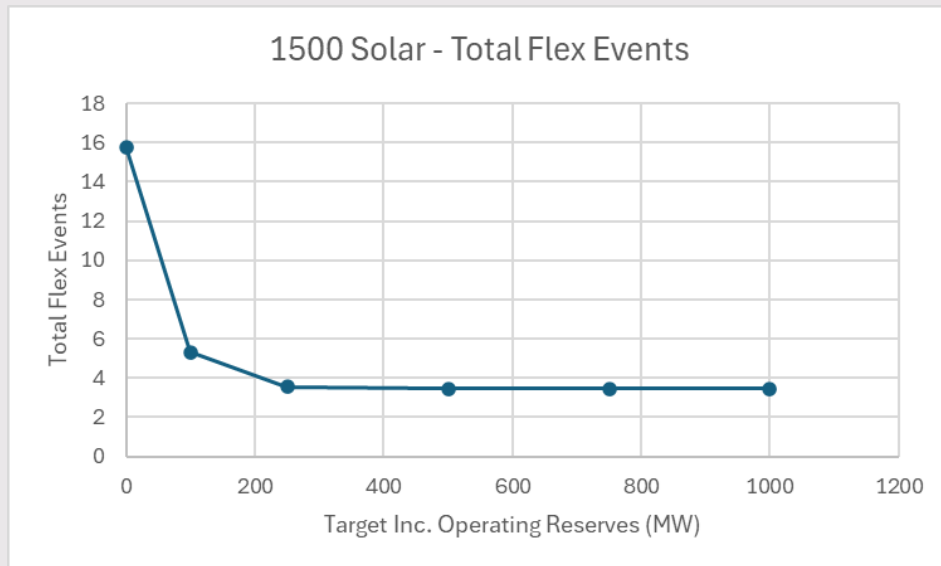
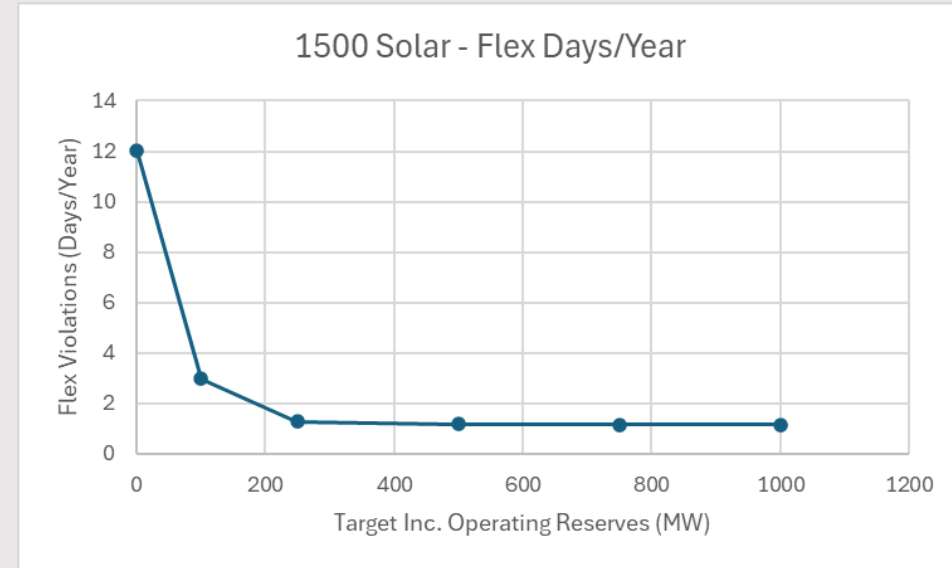
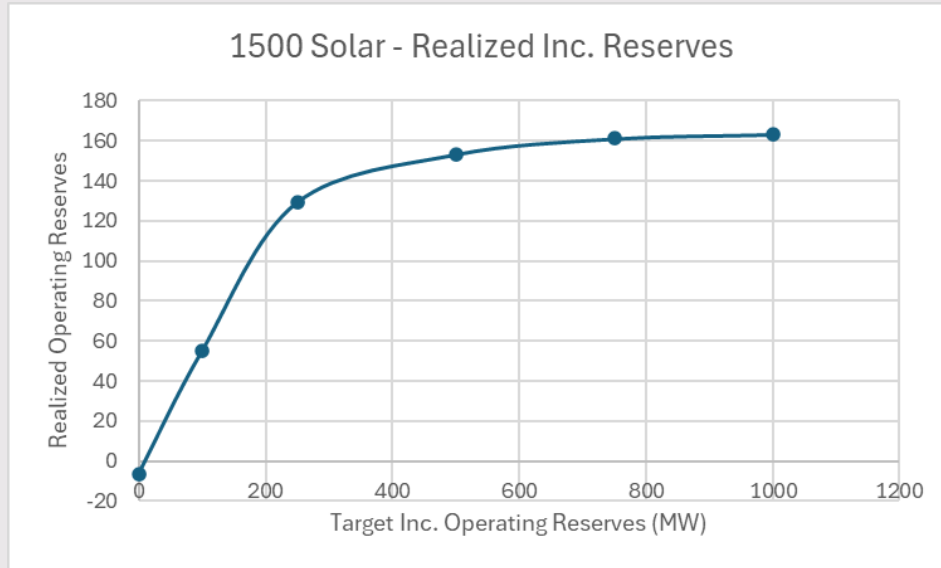
750 Solar - Total Flex Events



750 Solar - CPS1 Stress Index



1500MW Mitigation



Summary of Results – Targeted Incremental Reserves

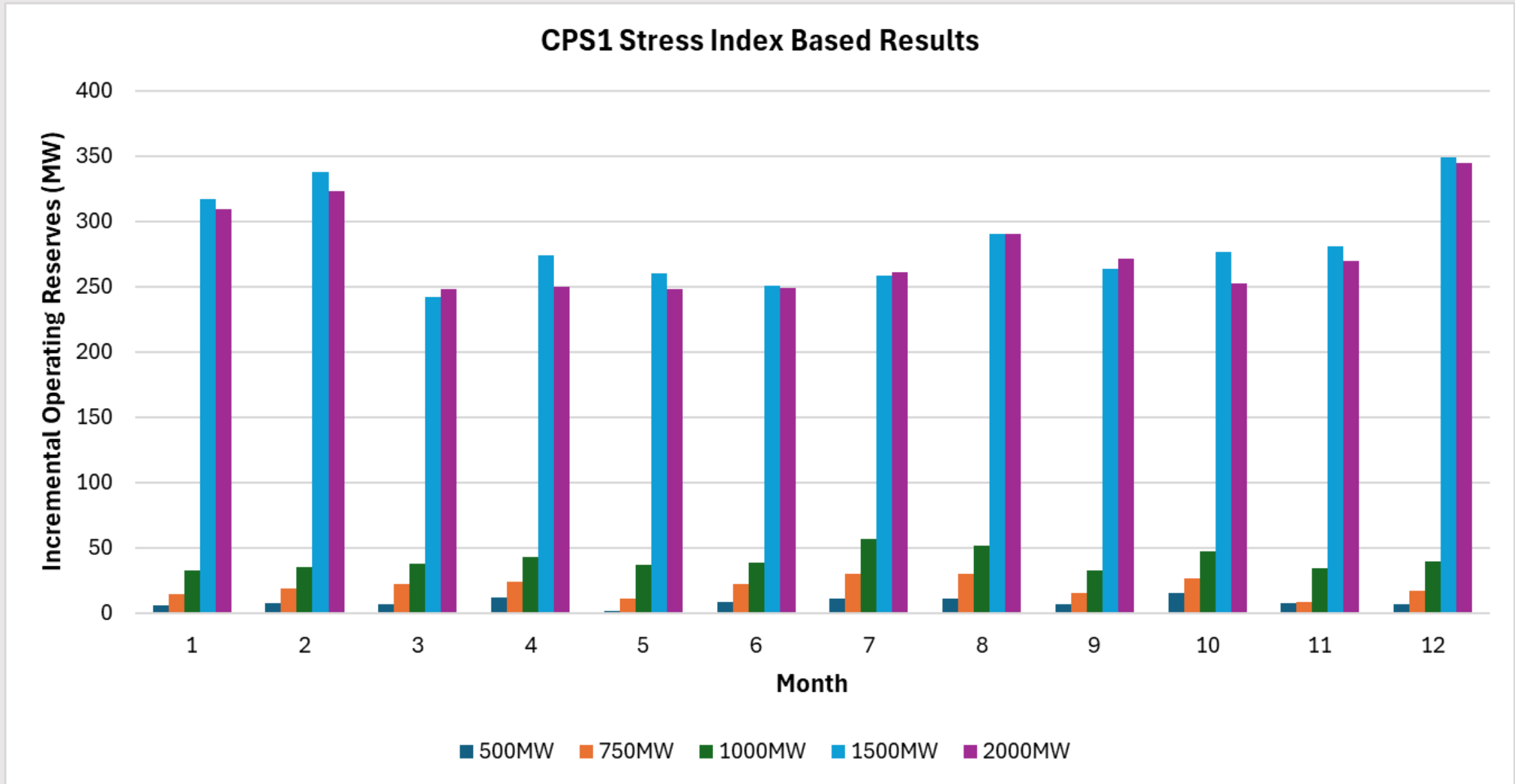
	Targeted Incremental Operating Reserves		
	Traditional Flex Events	Total Flex Events	CPS1 Stress Index
Target	1	4	54
250 Solar	2	0	0
500 Solar	8	0	13
750 Solar	22	8	53
1000 Solar	69	55	105
1500 Solar	216	184	250 BESS+348
2000 Solar	227 BESS	191 BESS	250 BESS+425

Summary of Results – Realized Incremental Reserves

	Average Realized Incremental Operating Reserves*		
	Traditional Study Year No Solar Flex Events	2030 No Solar Total Flex Events	2030 No Solar CPS1 Stress Index
250 Solar	0	0	0
500 Solar	0	0	16
750 Solar	6	5	33
1000 Solar	37	27	63
1500 Solar	113	101	330
2000 Solar	143	124	353

*This represents an 8760 average of the realized operating reserves

Solar Only Hours Results





2026 Integrated Resource Plan

Clay Settle, Director System Planning

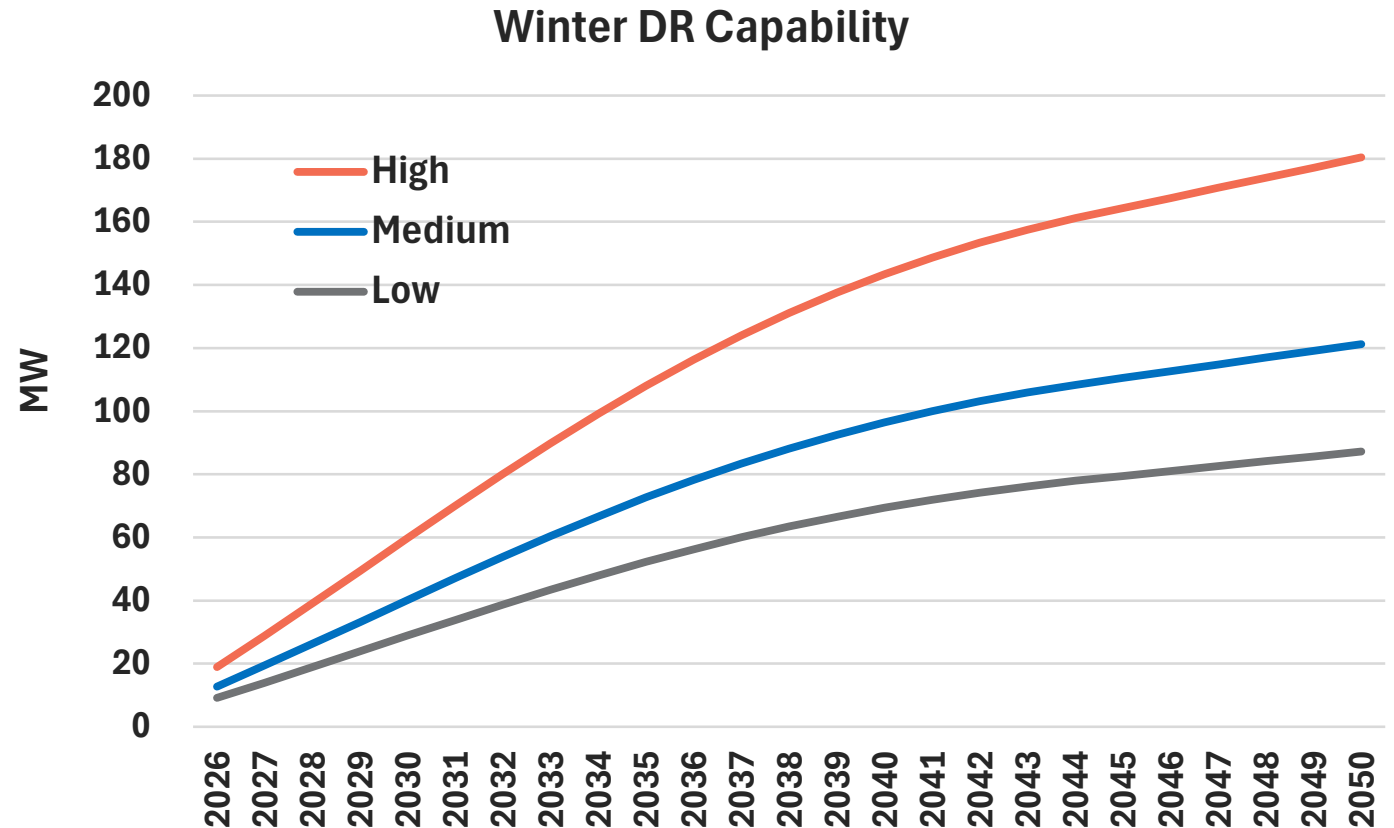
Bob Davis, Executive Consultant nFront

Economic and Financial

Assumption	Annual Rate	Source
Santee Cooper Weighted Cost of Debt	5.1%	Santee Cooper's financial advisor
Weighted Cost of Short-term Commercial Paper	3.5%	Santee Cooper's financial advisor
Santee Cooper Discount Rate	5.1%	Same as weighted cost of debt
General Inflation Rate	2.5%	Santee Cooper corporate escalation

Demand Side Management

- Projections of Energy Efficiency (EE) and Demand Response (DR) are taken from the 2026 EE and DR Market Potential Studies (MPS)
 - EE is modeled as an adjustment to the load forecast
 - DR is modeled as a resource
- Conservation voltage reduction is assumed to be implicit in the load forecast



Note: These values reflect Santee Cooper retail programs only.

Planning and Operating Reserves



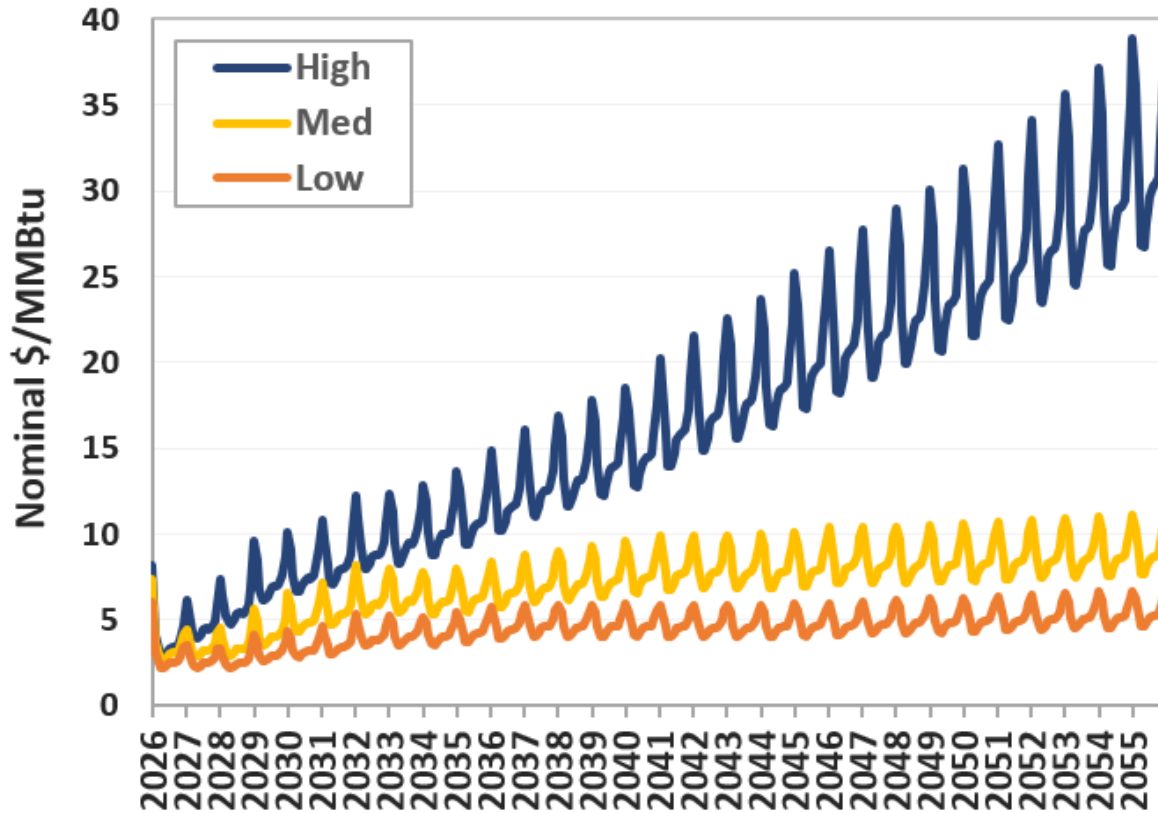
- Utilizing the Planning Reserve margins from the 2026 Reserve Margin Study of 20% Winter and 18% Summer
- Santee Cooper is part of the Carolinas Reserve Sharing Group (“CRSG”) along with Duke Energy and Dominion Energy South Carolina
 - Contingency reserves are recalculated annually or when there is a material change to the Most Severe Single Contingency (“MSSC”)
 - Each participating member is required to carry its load ratio share of the total contingency reserve requirement for the combined systems based on the previous year’s peak load

Operating Reserves			
Time Frame	CRSG Requirement	Spin Reserves	Non-Spin Reserves
2027	255	127.5	127.5
2028	275	137.5	137.5
2029 & Beyond	295	147.5	147.5

Delivered Natural Gas Price Forecast



NG Price Forecast - Henry Hub



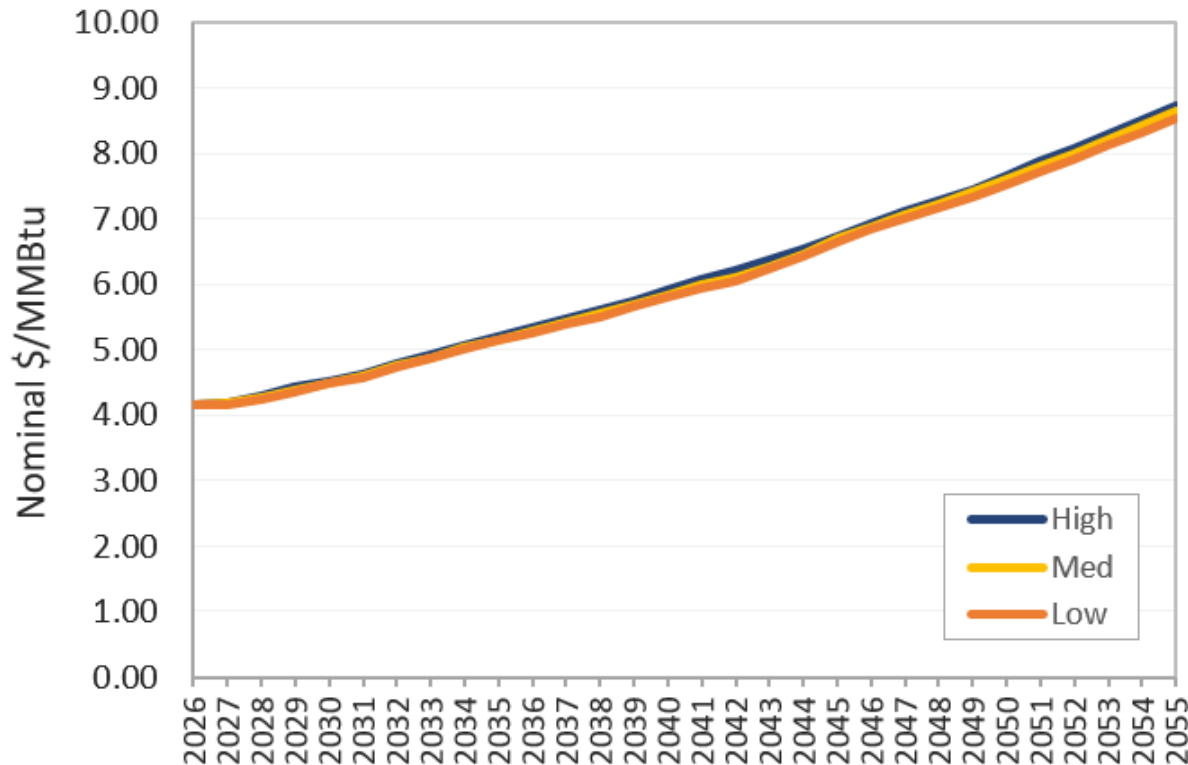
Similar process as used for prior IRPs

- Fundamental long-term price forecast from EIA AEO
- NG prices for 2026-2028 based on CME/NYMEX forward prices for Henry Hub
- Forecast NG hub basis for Transco Z4 and Z5 from S&P Global Platts
- Monthly NG price patterns developed from CME/NYMEX forward prices and S&P hub price forecasts
- Low and High prices derived from AEO High/Low Oil and Gas Supply cases
- Delivered NG prices include commodity prices plus variable pipeline tariff charges
- Delivered NG prices for the Medium Case average approximately the same over the study period as used for the 2025 IRP Update

Delivered Coal Price Forecast



**Coal Price Forecast
Delivered to Cross 3&4**



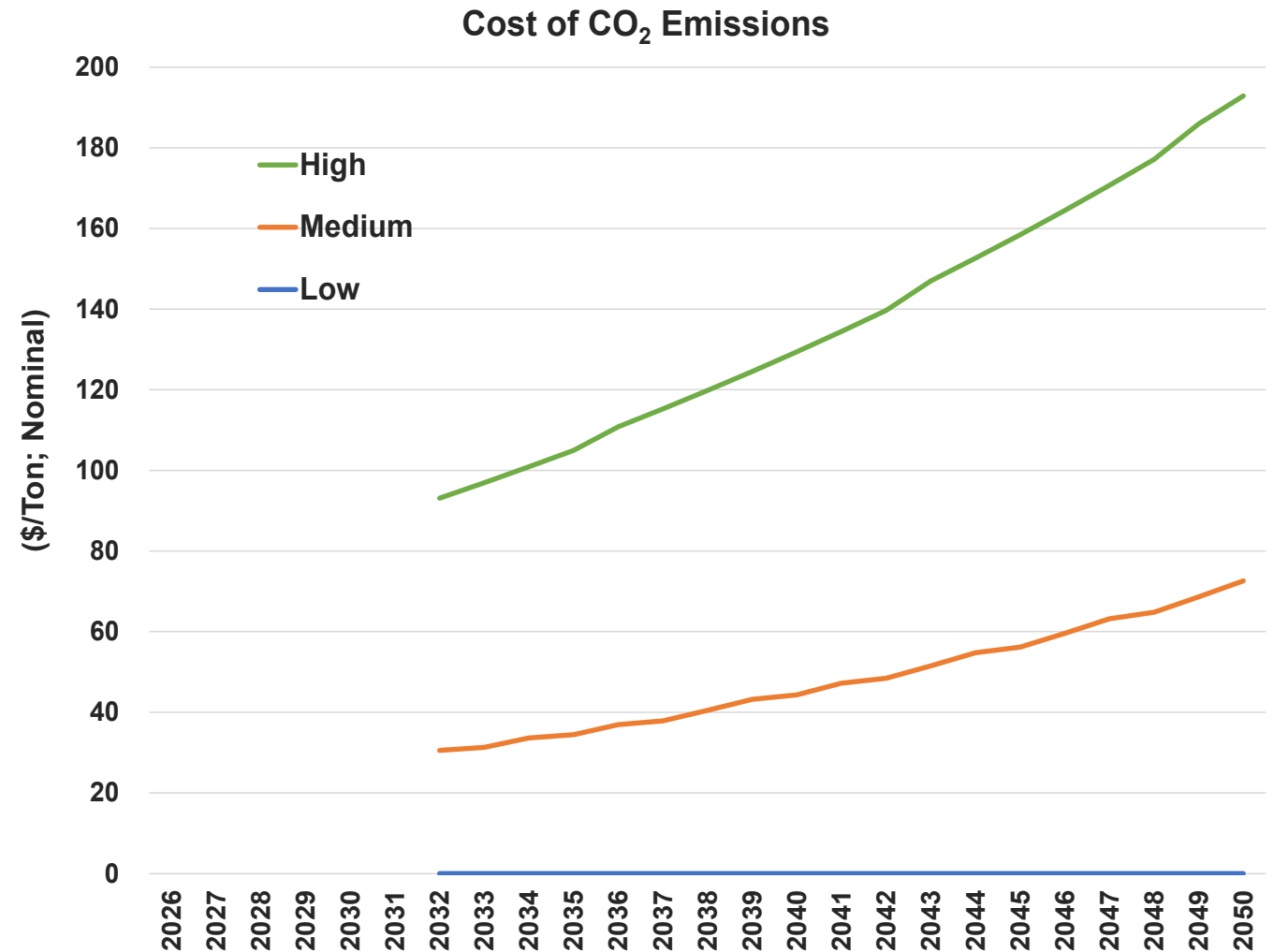
Similar process as used for prior IRPs

- Fundamental long-term coal basin price forecast from EIA/AEO
- Basin price blending for low/high sulfur coal consistent with Santee Cooper Budget assumptions
- Freight costs consistent with terms of Santee Cooper CSX contracts
- Includes cost for fuel handling and railcar maintenance consistent with Santee Cooper Budget
- Delivered coal prices for the Medium Case are approximately 12% lower on average than used for the 2025 IRP Update

CO₂ Pricing

- Assumptions for price of CO₂ emissions are largely unchanged from 2023 IRP
 - Low CO₂ Cost Case assumes no cost of CO₂ emissions and is used in the Reference Case
 - Medium and High CO₂ price assumptions are based on estimates of the social cost of CO₂ published in February 2021 by the Interagency Working Group on Social Cost of Greenhouse Gases
 - The assumed timing of regulation of CO₂ emissions has been pushed out to 2032 (from 2028 in the 2023 IRP)*

* Also reflects the change in assumed rate of inflation



Existing Owned Resources



Generating Station	Unit #	Service Date	Fuel Type	Technology	Winter Rating (MW)
Cross	1	1995	Coal	ST	585
	2	1983	Coal	ST	570
	3	2007	Coal	ST	580
	4	2008	Coal	ST	595
Rainey	1	2002	NG	CC	520
	2A, 2B, 3-5	2002 - 2004	NG	CT	630
Winyah	1	1975	Coal	ST	280
	2	1977	Coal	ST	290
	3	1980	Coal	ST	290
	4	1981	Coal	ST	290
Cherokee	1	1998	NG	CC	98
Summer Nuclear Unit 1	1	1983	Uranium	NUC	322
Jefferies	1-4, 6	1942	Water	Hydro	140
Spillway	-	1950	Water	Hydro	2
Landfill Gas	Multiple Sites	2001 - 2011	LFG	CT, IC	17
Myrtle Beach	1,2,3,5	1962 - 1976	Oil/NG	CT	65
Hilton Head	1-3	1973 - 1979	Oil	CT	100
Solar	Multiple Sites	2006-2019	-	Solar	5

Existing Power Purchase Agreements



PPA Type	Generating Facility	Term End Year	Energy Source	Nameplate Capacity (MW)
Long Term Contracts	Domtar	2028	Biomass	38
	EDF Renewables	2043	Biomass	36
	Southeastern Power Administration (SEPA)	Indefinite	Hydro	305
	St. Stephen Hydro	2035	Hydro	84
Solar Purchases	Solar Qualifying Facilities	Various	Solar	280
	Solar PPAs	Various	Solar	245
	Central NSR Solar	Various	Solar	224
BESS PPA	Jefferies BESS	2028-2047	-	300
	Central BESS	Various	-	150
Central NSRs	Central NSRs	Start 2029	Multiple	672
Capacity Purchases	Purchase 1	2024-2028	System Purchase	200
	Purchase 2	2024-2028	Natural Gas	50
	Purchase 3	2025-2028	Nuclear	150
	Purchase 4	2027-2028	System Purchase	100
	Purchase 5	2027-2028	Natural Gas	49
	Purchase 6	2027-2028	System Purchase	200
	Purchase 7	2029-2033	System Purchase	200

Committed Resources & Retirements



Committed Resources

Generating Facility	Service Date (Winter Season)	Fuel Type	Technology	Winter Rating (MW)
Rainey Upgrade PB1	2028	NG	CC	56 ¹
Rainey 2A/B Conversion to PB2	2028	NG	CC	178 ¹
Rainey Upgrades 3-5	2028	NG	CT	21 ¹
Canadys	2033	NG	CC	1,098 ²
Winyah LMs	2028	NG	CT	108

¹ Represents incremental MW relative to existing capacity

² Represents Santee Cooper share of the joint Canadys project with Dominion Energy South Carolina

Resource Retirement Assumptions

Generating Station	Unit #	Service Date	Fuel Type	Technology	Winter Rating (MW)	IRP Retirement Date
Winyah	1	1975	Coal	ST	280	January 1, 2035
	2	1977	Coal	ST	290	
	3	1980	Coal	ST	290	
	4	1981	Coal	ST	290	
Myrtle Beach	1,2,3,5	1962 - 1976	Oil/NG	CT	65	January 1, 2034
Hilton Head	1-3	1973 - 1979	Oil	CT	100	

S&L Thermal Resource Summary



Type	Resource	Capacity (MW, Avg. Amb.)	Capital Overnight Costs (\$/kW)	VOM (\$/MWh)	FOM (\$/kW-yr)
1x1 NGCC H-Class	(1) 1x1 7HA.03	652	2,560	3.12	20.79
	(2) 1x1 7HA.03	1,303	2,335	3.01	18.97
H-Class CT	1x0 7HA.03	442	1,790	1.59	9.90
F-Class CT	1x0 7F.05	236	2,250	1.75	13.99
Aeroderivative	(2) LM6000	110	3,130	7.54	31.15
RICE	6x18V50DF	106	3,027	6.28	31.57
Nuclear	1x300 SMR	300	11,930	3.55	191.38
	AP1000	1,080	10,073	3.14	131.27

Capital and O&M costs in 2026 \$.

Capital costs exclude costs for land; interconnections for transmission and natural gas; financing issuance costs; and interest during construction. These costs items will be reflected in the costs for the IRP analysis.

Comparison to 2025 Resource Assumptions



Technology	2026 IRP		2025 IRP Update		2026 IRP % Incr in Cost
	Net Capacity Rating (MW)	Capital Cost (\$/kW)	Net Capacity Rating (MW)	Capital Cost (\$/kW)	
Combined Cycle, 1x1 H-class	652	2,560	652	1,602	60%
Combined Cycle, (2) 1x1 H-class	1,303	2,335	1,303	1,469	59%
Combined Cycle, (3) 1x1 H-class			1,955	1,354	
Combustion Turbine, H-class	442	1,790	442	1,155	55%
Combustion Turbine, F-class	236	2,250	236	1,349	67%
Aeroderivative CT, (2) LM6000	108	3,130	108	2,279	37%
RICE, 6x18V50DF	106	3,027	106	2,299	32%
Nuclear Reactor, SMR	300	11,930	300	10,727	11%
Nuclear Reactor, AP1000	1,080	10,073			

Average ambient capacity ratings.

All costs in 2026 \$. Per-unit costs at average ambient rating.

Capital costs exclude costs for land; transmission and natural gas interconnection; and financing and interest during construction.

Renewable and Storage Resources



Capital and Fixed O&M Cost – 2026 Install Year, 2026\$*

Technology	2026 IRP		2025 IRP Update		Percent Change from 2025 to 2026	
	Capital Cost (\$/kW)	Fixed O&M Cost (\$/kW-yr)	Capital Cost (\$/kW)	Fixed O&M Cost (\$/kW-yr)	Capital Cost	Fixed O&M
Solar Photovoltaic (PV)	2,022	22.43	1,628	23.69	24%	-5%
Battery Energy Storage System (BESS), 4-Hr	2,180	54.36	1,703	42.57	28%	28%
BESS, 8-Hour Duration	3,584	89.08	2,916	72.90	23%	22%
Long Duration Energy Storage (LDES, 100 hr)	5,912	187.51				
Onshore Wind	2,392	53.17	2,135	44.39	12%	20%
Offshore Wind	7,819	137.90	7,048	93.21	11%	48%

* Installs beyond 2026 can be expected to exhibit somewhat lower costs in 2026\$; capital costs exclude financing costs and the effect of potential tax credits

- Capital Cost Based on S&L Estimates, Adjusted for Interconnection Costs
- Fixed O&M
 - 2026 IRP reflects S&L estimates with adders for property taxes, insurance, and land lease
 - 2025 IRP Update values taken from ATB Conservative Case

Renewable and BESS Resources



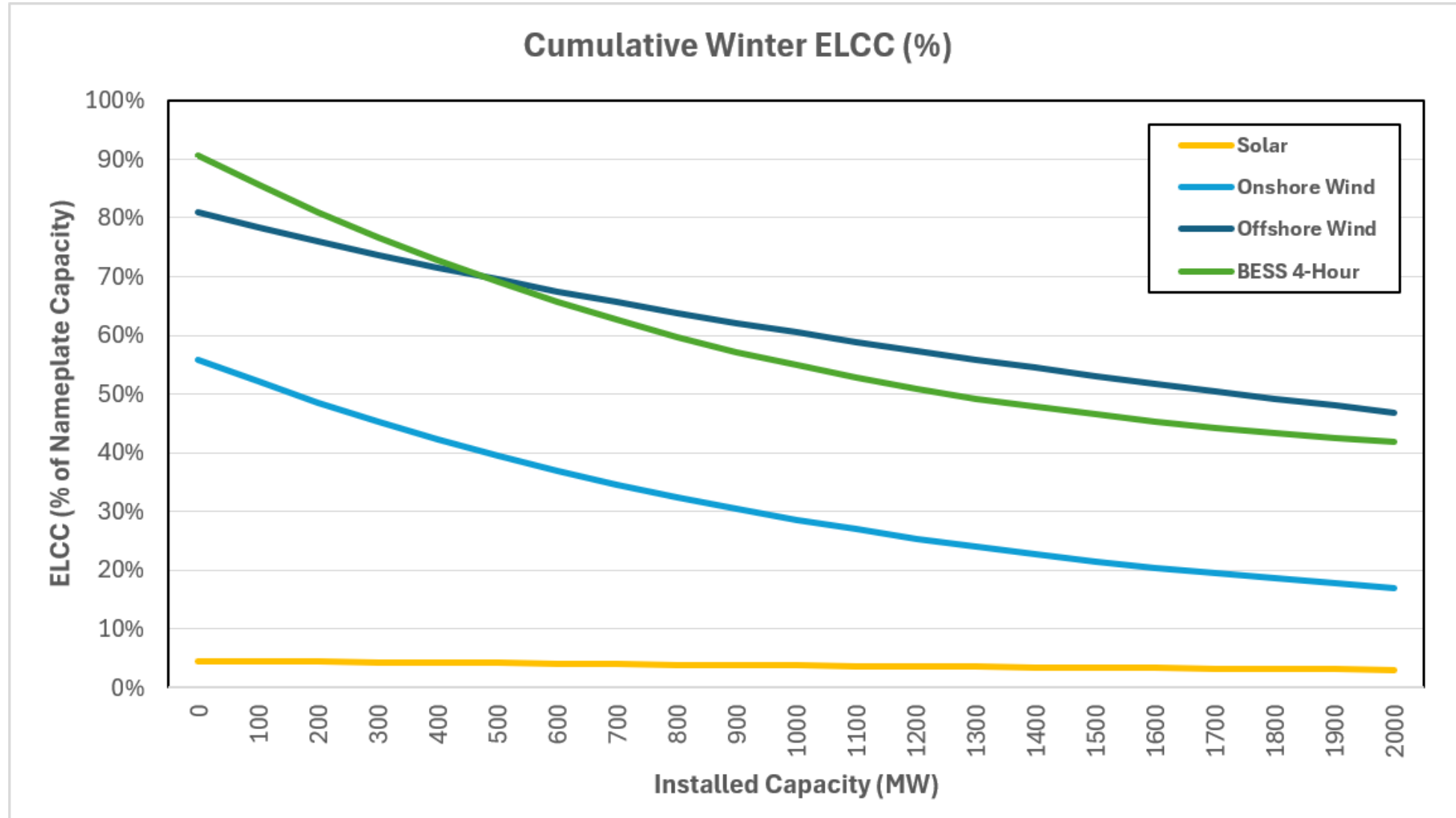
- Renewable and BESS Resource Options Modeled as PPAs
 - Similar to 2023 IRP and IRP Updates
- PPA Pricing Estimated Based on an Independent Levelized Cost Analysis
 - Base year capital and FOM costs adapted from S&L assumptions
 - Future capital and FOM cost trajectory taken from 2024 ATB Conservative Case
 - Solar and wind production parameters adapted from 2024 ATB Moderate Case
 - Developer finance assumptions adapted from ATB (updated for interest rate trend)
 - Assumed service life – solar/wind: 30 years; BESS: 20 years
- Tax Credit Assumptions
 - Solar/wind – No tax credits available to offset cost
 - BESS (including LDES) – Investment tax credit (ITC) at 40% (reflecting Energy Communities bonus) through 2035, phases out over 2036-38

Resource Availability Assumptions



Resource Option	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041+
Utility-Scale Solar PV						█	█	█	█	█	█	█	█	█	█	█
Battery Energy Storage System						█	█	█	█	█	█	█	█	█	█	█
Aeroderivative Turbine						█	█	█	█	█	█	█	█	█	█	█
Reciprocating Internal Combustion Engine						█	█	█	█	█	█	█	█	█	█	█
Onshore Wind									█	█	█	█	█	█	█	█
Combined Cycle										█	█	█	█	█	█	█
Combustion Turbine										█	█	█	█	█	█	█
Long Duration Energy Storage												█	█	█	█	█
Offshore Wind															█	█
Small Modular Reactor															█	█
Large Nuclear															█	█

Effective Load Carrying Capability (ELCC)



Portfolios and Sensitivities

- **Base Portfolios**
 - Economically Optimized
 - Coal Retirement
 - Renewable and Storage (Same as No New Fossil from 2023 IRP)
 - No thermal or nuclear resource options
 - Net-Zero CO₂ by 2050
 - Statutory – Winyah Retired by 2028 and Net Zero (No sensitivities)
- **Assumptions Base Portfolios**
 - Utilize medium Load, DSM, and Fuel and low CO₂
 - Cross retirement determined by coal retirement analysis
- **Sensitivities**
 - Load
 - Fuel
 - CO₂

Portfolios Assumptions

- Greenhouse Gas regulations
- Transmission costs
 - Applied to portfolios with Cross retirements
- Natural gas FT pricing
- Intending to use the same renewable limits as the 2025 IRP Update and previous IRPs
- Incremental operating reserves for solar resources modeled utilizing Solar Integration Study results
 - Only applied during hours of solar operation
 - Applied during capacity expansion and production cost

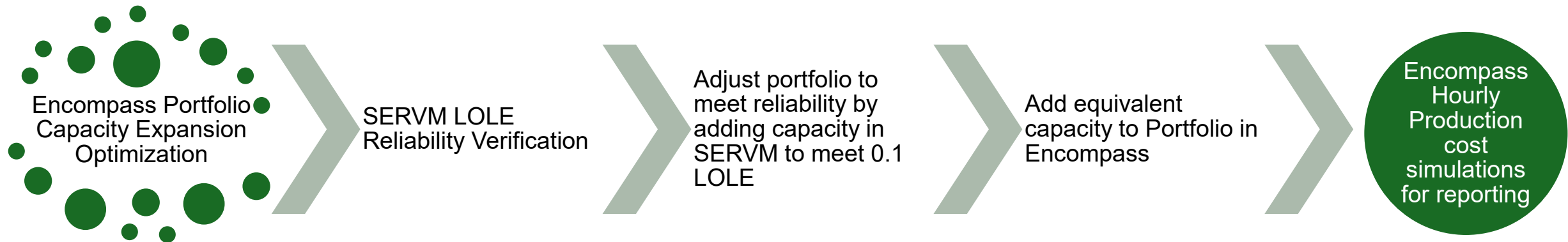
DSM, Potential Side Cases, and Metrics



- DSM evaluation
 - Low, medium, and high cases evaluated
- Side Case
 - Higher capital cost for thermal resources
- Metrics
 - Net Present Value (NPV) Power Costs
 - Mini-max Regret
 - Reliability Verification (NEW)
 - Fixed Cost Obligations
 - Fuel Cost Resiliency
 - CO₂ Emissions
 - Generation Diversity
 - Clean Energy
 - Load Uncertainty
 - Average Cost / Rate Impact

Portfolio Reliability Verification

- For the 2026 IRP, Santee Cooper plans to run a range of portfolios through a reliability verification process utilizing SERVM
- Santee Cooper is considering more detailed reliability metric reporting such as Loss of Load Hours (LOLH), Loss of Load Probability (LOLP), and Expected Unserved Energy (EUE)





Meeting Closeout

Stewart Ramsay, Meeting Facilitator
VANRY Associates

Any questions we haven't answered today?

- Comments can be provided:
 - IRP Stakeholder Forum - provide comments, feedback, and post documents at www.santeecooper.com/IRP
 - SanteeCooperIRP@vanry.com - for thoughts and input on meeting structure and engagement
- Meeting summaries and other materials will be posted and made available at www.santeecooper.com/IRP

Thank you!

Do you have more you'd like to share
about the session?

Please complete our survey
that will appear in your browser as you leave the meeting

Other Topics of Interest to Stakeholders



- 2026 Rate Study
 - <https://www.santeecooper.com/rates/rate-study/>
- Residential customer services and information
 - <https://www.santeecooper.com/residential/>
- Programs and incentives offered by Santee Cooper
 - <https://www.santeecooper.com/programs-incentives/>
- Santee Cooper community involvement and programs
 - <https://www.santeecooper.com/community/>
- Information on Nuclear project
 - <https://www.scnuclear.com/>
- Information on Canadys Station
 - <https://www.santeecooper.com/community/generation-projects/canadys-station/>

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