

2024 Request for Adjustment to Rate Schedules and Tariffs

May 24, 2024

REQUEST

Santee Cooper's management ("Management Team") hereby submits its request ("Request") for an adjustment of its retail rate schedules and tariffs effective for bills rendered on or after April 1, 2025, for your review and approval. In support of this Request, the Management Team has retained NewGen Strategies and Solutions, LLC ("NewGen") to assist it with its statutory obligation to complete a comprehensive review of its rate structures and rates consistent with applicable statutes and Santee Cooper's bond covenants concerning revenue requirements pursuant to S.C. Code Ann. § 58-31-730(B)(2). NewGen's report titled 2024 Electric System Cost of Service and Rate Design Study ("Study") outlines its work with the Management Team to develop the proposed adjustments to Santee Cooper's retail rate schedules and tariffs and provides detailed analysis of the projections of customer sales and usage characteristics, revenue requirements, cost of service, and general rate design by customer class. NewGen's report also includes the Management Team's proposed rates for approval and has been submitted to the Board of Directors ("Board") simultaneously with this Request.

In support of this Request, the Management Team is providing additional reports (as described below) containing the written findings and analyses of members of the Management Team ("Management Reports"). The Study, the Management Reports, and this Request together support the rate adjustment request, which in addition to being submitted to the Board is also being provided to the South Carolina Office of Regulatory Staff and Santee Cooper's customers as contemplated by S.C. Code Ann. § 58-31-730(B)(4).

<u>Overview</u>

Santee Cooper has established a strong track record over the last 90 years as one of the State's leading resources for improving the quality of life for all South Carolinians. The more than 2 million people who are served directly or indirectly by its system today enjoy safe, reliable, affordable, and environmentally responsible electric service, and its successful economic development leadership and partnerships have played a significant role in attracting and retaining industry and jobs for the people of South Carolina. The employees of Santee Cooper have produced nationally-recognized results in the key operational areas of safety, reliability and customer service all while operating under retail rates that were approved in 2015 and have not been adjusted since 2017 – while inflation has risen by 25% between 2017 and 2023. It has done so through good stewardship and efficient and strategic management of its resources.

Santee Cooper's efforts to manage the need for retail rate increases despite continuing upward cost pressures include a strategic reduction in full time employees by almost 10% between the end of 2017 and the end of 2023 despite its number of customers growing by almost 18% over that same period. Additionally, over the last five years, Santee Cooper has refinanced over \$2 billion in debt to produce over \$765 million in gross savings for its customers.

It is worth noting Santee Cooper's average rates are below the country's average rates. Per the U.S. Energy Information Administration, as of 2022, Santee Cooper's average rates for its retail customer classes are *significantly* below the United States average for the same classes:

2022 Average Electric Rates (cents/kWh)

	Residential	Commercial	Industrial
Santee Cooper	11.33	9.37	6.43
U.S. Average	15.04	12.41	8.32

As Santee Cooper strategically plans for the future, its in-depth study and analysis shows that a rate adjustment is necessary and warranted. South Carolina's population—and thus Santee Cooper's customer base—is growing at rapid rates as the State continues to attract new residents and industries. This rapid growth is not restricted to Santee Cooper or South Carolina as states throughout the Southeast and associated electric utilities are also experiencing growth. That regional growth will require Santee Cooper not only to take steps to maintain the safety and reliability of its existing electric system, but also to invest in generation, transmission, distribution, and customer service-related improvements, upgrades, and assets to ensure that it can continue to provide safe, reliable, affordable, and sustainable service that meets customers' evolving needs. Santee Cooper's need to fund these activities—in conjunction with the need to comply with increasing environmental regulations, and inflation—are the key drivers for this Request.

Set forth below are details about Santee Cooper's requested rate adjustment and rationale and support for it. This Request aims to assure the Board that Santee Cooper remains committed to strategically and prudently investing in its system to ensure the continued resiliency, safety, and reliability in a cost-effective manner.¹

Background about Santee Cooper's Customer Base and Electric System

Santee Cooper's electric system serves a large and diverse group of customers, including residential, commercial, industrial, and wholesale customers, across South Carolina. As of the end of 2023, Santee Cooper directly served approximately 215,000 retail customers in Berkeley, Georgetown and Horry counties, including 27 large industrial retail customers. Santee Cooper also served several wholesale customers, including Central Electric Power Cooperative, Inc. ("Central"), Santee Cooper's largest customer and the power aggregator for the State's 19 member-owned electric cooperatives. Other wholesale customers include the Cities of Bamberg, South Carolina, Georgetown, and Seneca, South Carolina, as well as Piedmont Municipal Power Agency, and the Town of Waynesville, North Carolina. In 2023, 22% of Santee Cooper's revenue was from sales of electricity to retail residential and commercial customers, 17% of revenue was from retail industrial customers, and 61% of revenue was from wholesale customers. Santee Cooper serves its retail and wholesale customers through a vertically integrated generation, transmission and distribution system in South Carolina.

Requested Rate Adjustment

Santee Cooper's rates were last adjusted in April 2017. While Santee Cooper has maintained safe and reliable service to customers since that time, it cannot afford to maintain

¹ According to the United States Energy Information Administration, Santee Cooper currently ranks 7th out of 500 utilities for shortest average time without power per customer.

current rates indefinitely, especially given the necessary investment in the electric system and the effects of inflation. With its current rates, Santee Cooper anticipates an approximately \$39.7 million revenue deficit in 2025. As a result, on June 20, 2023, the Board approved a management recommendation to conduct a comprehensive rate study.

Based on the results of the study and consistent with Santee Cooper's pricing principles, the Management Team requests proposed rates and charges that would result in an increase in non-fuel revenues from its retail customer classes (residential, commercial, industrial, and retail lighting) of approximately \$39.7 million, which equates to a 4.9% average system increase (exclusive of any changes in fuel rates) when compared to the revenue generated by current rates. If approved, the rate adjustment would apply to bills rendered on and after April 1, 2025.

Key Drivers of the Requested Rate Adjustment

As previously noted, Santee Cooper is operating under rates implemented in 2017. There are several issues impacting Santee Cooper's need for a rate adjustment, but two primary drivers are (i) price inflation since Santee Cooper's last rate study and (ii) the need for strategic investment in Santee Cooper's electric system, including investments and workforce additions needed to comply with environmental regulations, and increased transmission operations and maintenance expenses stemming from regional system constraints. Allowing rates to remain unchanged would have detrimental effects on Santee Cooper, including its ability to meet bond covenants and desired financial metrics as well as its ability to continue to generate, transmit and distribute safe and reliable electricity in meeting the needs of our customers and aiding and promoting South Carolina's economic development efforts.

The existing rates, which went into effect in 2016 and 2017, are based on outdated information and assumptions from 2014 and 2015.² Following implementation of the current retail rates in April 2017, the general price level of the economy in the United States has risen by over 25%. Santee Cooper has been unable to adjust those rates since March 2020 because of the "Cook Settlement," which resolved litigation surrounding the construction of V.C. Summer Units 2 and 3.³ Among other things, the Cook Settlement required Santee Cooper to implement a rate freeze through the end of 2024.

Santee Cooper's residential and commercial class sales of electricity have significantly increased, growing 3.3% since 2017. The amount of annual peak firm load on the Santee Cooper system has increased 12.3% since 2017.

The highest expected growth rates on Santee Cooper's system between 2024 and 2043 are projected to occur between 2024 and 2028. This projected growth is largely driven by new large corporate customers and residential and commercial customer growth in the combined territories of Santee Cooper and Central. In 2022, the State announced 120 projects creating over 14,000 new jobs, with \$10.27 billion in new capital investment, the largest amount in state history. From January to December 2023, the State announced total capital investments of \$9.22 billion and over

 $^{^{2}}$ The current rates were implemented in two phases, with the first phase becoming effective in April 2016 and the second phase becoming effective in April 2017.

³ The litigation was *Cook v. South Carolina Public Service Authority*, Case No. 2019-CP-23-6675.

14,000 jobs, the second largest in state history. Energy sales to residential and commercial customers alone on Santee Cooper's system are also projected to increase 124,315 MWhs between 2024 and 2028.

As a result of this growth, the need for generation capacity to meet load and reserve requirements for Santee Cooper, like other utilities in the Southeastern United States, has increased. The economic and financial well-being of South Carolina and its citizens depends on continued economic development, industry retention, and opportunities for job attraction and retention. Santee Cooper and other electric utilities are critical economic development partners for the State making it imperative that Santee Cooper continue to invest in its electric system to ensure timely available, sufficient, reliable generation capacity needs are maintained.

These factors have increased annual operating costs and necessitated investments in transmission and generation assets. Santee Cooper's annual operating costs in its 2024 Budget, which is the basis for the rate increases, include, among other things, higher expenditures for Santee Cooper's jointly owned nuclear facility, operation of the newly acquired Cherokee gas plant, new operations related to effluent limitation guidelines, and alignment with broader business conditions. The annual costs also include expenses to pre-purchase transmission services from neighboring utilities, which are necessary for Santee Cooper to meet reserve requirements in a capacity constrained environment and to reduce fuel cost risk, particularly during system events.

Recognizing the concurrent load growth in both Santee Cooper and Central's service territories, Santee Cooper also requires investments to ensure the ability to serve those new and existing customers in a safe, reliable, and timely manner. The current 10-year financial plan is designed to strategically invest in capital projects relating to existing units, transmission upgrades, and distribution projects that will support Santee Cooper's ability to meet the growing needs for power supply, support, and delivery in South Carolina.

In short, Santee Cooper's existing rates, which are based on 2014 and 2015 information, is no longer sufficient. The proposed rate adjustment is vital as it will enable Santee Cooper to recoup the revenue necessary to enable it to adjust for existing inflation, fund needed capital projects and investments, satisfy a growing customer base with increasing needs and expectations, and continue to partner with the State to drive economic development.

Management Reports Supporting the Requested Rate Adjustment

In addition to the Study and the proposed rate schedules, enclosed are the following written reports that provide additional context and support for the proposed rate adjustments:

• Load Forecast Report: This report was prepared at the direction of Greg McCormack, the Senior Manager of Financial Forecast. It explains the load forecast Santee Cooper utilized in the current rate study and emphasizes how that load forecast projects compound annual growth rates from 2024 to 2028 of 1.8% for energy and 1.1% for winter demand, which exceeds the expected growth for the remainder of the forecast. This projected growth is driven by new large corporate customers and residential and commercial customer growth in the combined Santee Cooper and Central territories.

- Financial Planning & Requirements: This report was prepared at the direction of • Suzanne Ritter, the Treasurer and Director of Financial Planning, and Mike Smith, the Director of Billing and Pricing. This report provides information regarding Santee Cooper's financial planning and revenue requirements. It explains how projected revenue requirements are used to develop the requested rate adjustment. In doing so, it details the process Santee Cooper utilizes to determine its net revenue requirements, which are in turn used to update its retail rates and charges for electric services. It also denotes the anticipated costs associated with operations, maintenance, financing of improvements to existing facilities, financing for future projects, and providing reliable service to customers. The report further identifies the components of the annual revenue requirement, specifies key assumptions for determining those components, and describes how such costs have changed from the previous rate study. It details Santee Cooper's financial forecast and needs set forth Santee Cooper's 10-Year Capital Plan. It also outlines how the existing rates are no longer sufficient for a variety of reasons, including a projected revenue shortfall in 2025, increased inflation, rising operating costs, and the need to invest in the electric system. The report also details Santee Cooper's current credit ratings, the importance of these ratings, and how the requested rate adjustment impacts those ratings. Of note, the report explains how Santee Cooper's ability to maintain or improve its credit rating impacts the utility's ability to efficiently fund its capital plan and refinance existing debt with lower interest rate debt. It also highlights how the requested rate adjustment will increase the likelihood of stabilized or improved credit ratings by providing Santee Cooper with sound financial metrics and liquidity.
- **Cost of Service Study:** This report was prepared at the direction of Mike Smith, the Director of Billing and Pricing. It provides a description of and details regarding Santee Cooper's fully allocated cost-of-service study, which appropriately allocates responsibility for the costs Santee Cooper incurs to operate the electric system among its various customer classes. The report further highlights how Santee Cooper designed the proposed rates to be just and reasonable.
- Rate Design and Proposed Rates: This report was also prepared at the direction of Mr. Smith. It outlines the pricing principles Santee Cooper utilizes in evaluating and designing rates, explains the need and objective for new rates, and discusses and sponsors the new rate design, which, unlike the existing levels and design, will adequately recover costs allocated to each customer class.
- Generation, Transmission, and Distribution Report: This report was prepared at the direction of Carey Salisbury, Senior Director of Generation; Chris Wagner, Director of Transmission Planning and Research & Development; Mike Johnson, Director of Transmission Operations; Adam Taylor, Senior Manager of System Operations; and Neil James, Director of Distribution Engineering and Operation. It outlines why the proposed rate adjustment is needed from a generation, transmission, and distribution standpoint. It explains Santee Cooper's system and discusses the high costs associated with operating and maintaining Santee Cooper's current and future generation, transmission, and distribution facilities. It further details the external forces, including

inflation, system growth, and environmental regulation, that are applying increased pressure on those facilities and how the rate adjustment will help combat them.

- **Customer Service:** This report was prepared at the direction of Bryan Lewis, Director of Retail Customer Service, and Chad Hutson, Director of Wholesale and Industrial Services. It describes Santee Cooper's customer service focus and program, which have produced quality service and yielded above-average satisfaction to Santee Cooper's residential, commercial, industrial, and wholesale customers. The report also discusses steps Santee Cooper is taking and proposes to take to further improve its customers' experience and satisfaction and how the requested rate increase will enable Santee Cooper to take those steps and maintain its high level of customer service and satisfaction.
- Workforce and Compensation: This report was prepared at the direction of Edwina Roseboro-Barnes, Director of Human Resources. It outlines Santee Cooper's workforce size and compensation and explains how Santee Cooper's ability to recruit and retain a qualified, sufficient workforce is critical to the utility's continued ability to provide reliable and affordable service to its customers. The report explains how Santee Cooper has optimized its workforce. The report also highlights the need to add additional employees to ensure compliance with increasing environmental regulations, however neither overall workforce size nor compensation is a key driver in this rate case.

As explained above, pursuant to S.C. Code Ann. § 58-31-730(B)(4), Santee Cooper will make available this Request, the Study, the proposed rate schedules, and the above-referenced written reports for review by Santee Cooper customers and the South Carolina Office of Regulatory Staff.

Conclusion and Management Recommendation

Santee Cooper's mission includes providing affordable, reliable, safe and environmentally responsible service to its diverse and growing customer base. Comprehensive research and analysis reveal that Santee Cooper's existing rate levels are no longer sufficient for the utility to meet that mission long-term. Specifically, the Study supports the conclusion an increase in non-fuel revenues from Santee Cooper's retail customer classes (residential, commercial, industrial, and retail lighting) of approximately \$39.7 million (effective for bills rendered on and after April 1, 2025) is necessary to eliminate the projected revenue shortfall for 2025. The Study also confirms that the requested rate adjustment is just and reasonable.

The requested rate increase will allow Santee Cooper to comply with its statutory obligations and bond covenants by ensuring it establishes and maintains charges adequate to, among other things, pay its debt service and the cost of operation and maintenance of its system and all other such costs as are necessary.

For these reasons, the Management Team believes the requested rate increase—in conjunction with Santee Cooper's continued commitment to budget discipline and prudently investing in infrastructure and workforce—will result in continued, long-term financial health and

stability of the utility. It thus respectfully recommends that the Board adopt a retail rate adjustment process consistent with the requirements of S.C. Code Ann. § 58-31-730 and, at the conclusion of that process, adopt the proposed rate adjustments and proposed rates set forth in the Study or as may be amended by the Management Team.

Management Reports

LOAD FORECAST REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to provide details on the load forecast utilized in the current rate study, which is Load Forecast 23-03, developed in October 2023. This forecast is the third load forecast developed in 2023 and incorporates new industrial customers and significant changes to certain existing industrial contractual arrangements that occurred in 2023 for both Santee Cooper and Central Electric Power Cooperative, Inc. ("Central"). The results of the Load Forecast provide future peak load projections, which are important to any rate adjustment, including this one, because Santee Cooper will have to plan for and budget to expand its system to reliably meet these projected peak demands. As discussed more fully below, Santee Cooper anticipates compound annual growth rates of 1.8% (energy) and 1.1% (winter peak) from 2024 to 2028. These load projections are a key component in developing the revenue and cost assumptions used in the rate adjustment.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Greg McCormack, the Senior Manager of Financial Forecast. Greg McCormack is responsible for coordinating the annual development of the 20-year load forecast for Santee Cooper as part of his role.

III. SUMMARY OF THE REPORT

Through collaboration with Central, customers, and various consultants and experts, Santee Cooper produces an annual load forecast that projects the monthly energy and coincidental peak demand for each of Santee Cooper's customer classes for twenty years. As stated above, the Load Forecast used in the current rate study was developed in 2023 and projects compound annual growth rates from 2024 to 2028 of 1.8% for energy and 1.1% for winter demand, which exceeds the expected growth for the remainder of the forecast. This projected growth is driven by new large corporate customers and residential and commercial customer growth in the combined Santee Cooper and Central territories.

IV. DISCUSSION

A. LOAD FORECAST METHODOLOGY

With assistance and input from consultants, GDS Associates ("GDS") and The Energy Authority ("TEA"), Central, and other customers, Santee Cooper prepares a weather-normal load forecast by determining each customer class's energy use and contribution to system peak demand for a period of 20 years. The individual customer class forecasts are then consolidated to determine a total system forecast at the generation level. Santee Cooper, Central, and expert consultants use Statistically Adjusted End-Use ("SAE") forecasting techniques with special adjustments for rooftop solar, electric vehicles, and demand side management to create a weather-normal forecast for residential, commercial, and municipal customers. The forecast of demand and energy requirements for Santee Cooper's direct-served industrial class is based on historical load and

contractual quantities. The industrial class forecast is based on an analysis of the previous fiveyear history of customer usage. Industrial customers are then consulted to determine any potential changes to their loads, and any knowledge gained from those consultations is used to adjust the load forecast accordingly.

B. COMPONENTS OF THE LOAD FORECAST

Santee Cooper's load forecast is created by combining several class-level forecasts, namely the direct-serve residential and commercial classes (collectively referred to as the distribution class), the direct-serve industrial class, sales to Central, and the municipal and off-system sales. **Table 1** below explains the component pieces of the 2023 Load Forecast and the relative size of the load compared to the total system requirements.

Table 1 – Components of 2023 Load Forecast				
Santee Cooper	Percent of 2025	Entity Responsible for		
Customer Type	Energy Sales	Load Forecast Development		
Direct-Serve –	15%	GDS		
Residential and Commercial	1370	605		
Direct-Serve Industrial	23%	Santee Cooper		
Wholesale – Central	60%	Central		
Wholesale –	2%	Various		
Municipal and Off-System	270	v arious		

C. COORDINATION WITH CENTRAL

As required under the Coordination Agreement, Santee Cooper and Central work together through a Joint Planning Committee ("JPC") to develop a combined load forecast. Contractually, Santee Cooper and Central are required to provide each other with the most current version of their load forecasts, review the results together, and cooperatively resolve any discrepancies prior to creating a combined load forecast. In practice, this means that Santee Cooper and Central work closely throughout the process and meet several times each year to compare assumptions, review each other's preliminary results, share information, and discuss final results prior to presenting the proposed load forecast to the JPC for approval. GDS and TEA also attend these meetings with Central, ask questions throughout the process, and review the results.

D. RESIDENTIAL AND COMMERCIAL FORECAST

Santee Cooper's system energy sales to residential and commercial customers are presented in <u>Table 2</u> below. These figures do not include reductions for future Energy Efficiency. Residential class energy sales are projected to grow at a compound annual growth rate of 1.0% per year from 2024 to 2043, with higher growth in the very early portion of the forecast and slower but still steady growth for the remainder of the forecast. Commercial class energy sales are projected to contract slightly at a compound annual growth rate of -0.2% per year over the same forecast period, as decreasing per-customer usage offsets a growing number of total customers. Total Santee Cooper energy sales to directly served customers, including sales for electric

vehicles--and offset by energy efficiency programs and rooftop solar--are projected to grow at a compound annual growth rate of 0.6% per year from 2024 to 2043, and the coincident peak demand for these customers is projected to grow at 0.6% per year.

Year	Residential	Commercial	Electric Vehicles	Rooftop Solar	Total
2024	2,054,563	1,940,474	7,554	(1,290)	4,001,301
2025	2,072,482	1,940,827	13,570	(1,896)	4,024,983
2026	2,090,193	1,941,962	21,140	(2,508)	4,050,788
2027	2,115,448	1,946,050	29,570	(3,146)	4,087,921
2028	2,139,133	1,950,732	39,545	(3,793)	4,125,616

Table 2: Residential and Commercial Forecast (MWh)

E. INDUSTRIAL SERVICE FORECAST

Santee Cooper's system energy sales to Industrial customers are presented in <u>Table 3</u> below. Total industrial sales are projected to grow at a rate of 3.9% from 2024 to 2026 due to several new customers joining the system, and then remain at 2026 levels for the remainder of the forecast.

Santee Cooper offers non-firm service rates to its industrial customers who are willing and able to adjust their power usage in a manner that provides benefits to Santee Cooper's system by reducing the levels of "firmness," or, said another way, allows Santee Cooper to reduce its obligation to provide power to these non-firm customers at certain times. The rates may also include pricing benefits for the system, such that the customer is charged incremental prices for their power at certain times. Santee Cooper develops a forecast for non-firm service using the same methods as firm power, using a five-year historical average and the current contract with individual customers as well as input from the customer on short- and medium-term operational changes.

The non-firm service rates Santee Cooper currently offers are Interruptible Power and Economy Power. These products have the same general characteristics as Firm Power, except that Santee Cooper retains the right to interrupt or curtail the customer's load for any reason or reasons, and for as long as necessary, to maintain reliability for the system or to avoid deterioration of service to firm customers. In addition, Santee Cooper reserves the right to curtail Interruptible customers for up to two-hundred and fifty hours per year for economic reasons, known as Economic Curtailments. Customers are typically afforded an opportunity to purchase Interruptible Power that has been curtailed during an Economic Curtailment at prevailing market rates.

For Economy Power, Santee Cooper makes power available on an hourly basis only when Santee Cooper determines that the system has resources available in excess of the power and energy requirements needed to serve the other customers. When such power is available, Santee Cooper notifies customers of the availability, and customers are required to schedule the amount of power that they wish to receive. This power is typically priced at the prevailing market rates. Santee Cooper is under no obligation to offer the power to customers if it is deemed unavailable, and Santee Cooper retains the right to curtail previously offered power as needed.

Year	Firm	Interruptible	Economy Power	Total
2024	2,365,826	3,470,831	503,559	6,340,217
2025	2,514,926	3,660,097	497,680	6,672,702
2026	2,561,754	3,779,244	497,131	6,838,128
2027	2,561,754	3,779,244	497,131	6,838,128
2028	2,561,754	3,779,244	497,131	6,838,128

Table 3: Industrial Forecast (MWh)

F. MUNICIPAL AND OFF-SYSTEM LOAD FORECAST

The municipalities or agencies typically create their own load forecast for Santee Cooper's use, and Santee Cooper may adjust the forecast to reflect certain contractual arrangements. In the event the customer does not provide their own forecast, Santee Cooper will create one for our use using an appropriate methodology. Each of these customers is assumed to terminate service from Santee Cooper at the expiration of their contract, as Santee Cooper does not have an obligation to serve them following this date.

G. RESULTS OF 2023 LOAD FORECAST

Santee Cooper forecasts its energy and system peak obligations to grow over the course of the next twenty years, led by strong demographic growth in both Santee Cooper's and Central's service territories, particularly in the near-term as several new industrial customers are added to the system. <u>Table 4</u> below helps explain the near-term system growth relative to the 20-year growth for both the direct-served classes and the total system.

Table 4 – Near-Term System Growth Relative to 20-Year Growth			
	2024 - 2028	2023 - 2043	
Energy Sales			
Direct-Served Customers	1.4%	0.6%	
Total System	1.8%	0.8%	
Winter Peak			
Direct-Served Customers	1.4%	0.6%	
Total System	1.1%	0.6%	

V. CONCLUSION

As explained above, Santee Cooper anticipates compound annual growth rates from 2024 to 2028 of 1.8% for energy and 1.1% for winter demand, which necessitates that Santee Cooper invest in the system to meet this projected growth. These load projections are a key component in developing the revenue and cost assumptions used in the rate adjustment.

FINANCIAL PLANNING AND REQUIREMENTS REPORT

I. PURPOSE OF THE REPORT

This report provides information regarding Santee Cooper's financial planning and revenue requirements. Santee Cooper seeks to provide its customers with reliable, low-cost power by making appropriate investments. To maximize its ability to accomplish all of these competing goals, Santee Cooper seeks to maintain a high credit rating, consistent with an A-rated utility. Santee Cooper's financial health, which is reflected by high credit ratings, is important in that it allows Santee Cooper to continue to partner with the State in future economic development activities and gives Santee Cooper the ability to obtain the most favorable financing. Such favorable financing drives its ability to provide its customers with reliable, low-cost power, which translates into customer savings in the long-term. This is particularly important given inflationary pressures.

Unlike the ratemaking methodology utilized by investor-owned utilities in South Carolina, Santee Cooper utilizes a forward-looking methodology in its ratemaking based on its projected revenue requirements. These projected revenue requirements include Fuel expenses, Non-Fuel Operations and Maintenance ("NFOM") expenses, Debt Service, Payments to the State of South Carolina ("PTS"), Sums in Lieu of Taxes ("SIL"), Capital Improvement Fund ("CIF") Requirements, and a Working Capital Charge. This report describes the process Santee Cooper used to determine these projected revenue requirements.

This report also describes the process by which Santee Cooper calculates its Net Revenue Requirements, which are used to evaluate the adequacy of its retail rates and charges for electric services. Santee Cooper arrives at its Net Revenue Requirements by beginning with its Gross Revenue Requirements and reducing those requirements by (1) revenue received from Central Electric Power Cooperative, Inc. ("Central"), (2) revenue received from other wholesale sales, and (3) revenue received from certain miscellaneous income, interest income, and subsidy receipts.

The general assumptions and considerations underlying the components used in developing Santee Cooper's Gross Revenue Requirements as well as the method by which it arrived at its Net Revenue Requirements are described in this report. Additional details on changes in costs will be provided in the remaining reports from Santee Cooper's management and staff.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Suzanne Ritter, the Treasurer and Director of Financial Planning and Mike Smith, the Director of Billing and Pricing. Ms. Ritter is responsible for coordinating the annual development of the 10-year Financial Plan, the 3-year NFOM Budget, and the 10-year Capital Budget. Ms. Ritter is also responsible for communicating with the credit rating agencies and developing Santee Cooper's financial plan. Mr. Smith is responsible for the development of retail rates that ensure Santee Cooper recovers its revenue requirements.

III. SUMMARY OF THE REPORT

Current retail base rates were implemented in April 2017 based on a study conducted in 2015. This report discusses Santee Cooper's financial plan and demonstrates why a rate adjustment is necessary for Santee Cooper to continue to provide service to its customers reliably and safely.

Santee Cooper's financial plan is based on the following: (i) three-years of budgeted NFOM projections with calculated escalations and adjustments thereafter, (ii) 10-year capital projections, and (iii) fuel cost projections.¹ These projections are primarily impacted by:

- Ongoing load growth in Santee Cooper's and Central's territories, which requires investments to ensure Santee Cooper's ability to serve these new customers in a timely and reliable manner; and
- The 2023 Integrated Resource Plan ("IRP") that was approved by the Public Service Commission of South Carolina (the "Commission") in February 2024.

In addition to responding to these items, the retail base rate adjustment is necessary to respond to inflationary and other cost pressures, as well as to collect Debt Service and CIF that support the capital program, Working Capital, SIL, and PTS.

The existing rates applicable to retail customers produce revenue that under-recover the projected revenue requirements for Test Year 2025. Santee Cooper engaged NewGen Strategies and Solutions, LLC to conduct the 2024 Electric System Cost of Service and Rate Design Study (the "Study"). The Study shows that the under-recovery from existing rates for retail customers in 2025 is approximately \$40 million or 4.9% of projected revenue requirements. A contributing factor to this under recovery is general inflationary trends in the United States economy, new environmental regulations and constraints on Santee Cooper and neighboring utilities' systems have increased annual operating costs and necessitated investments in generation, transmission, and distribution assets.

The Study is predicated on the projected costs of the electric system for the calendar year ending December 31, 2025, designated as the "Test Year." The projected costs are discussed more fully below.

Historically, Santee Cooper has achieved high credit ratings from all three major credit rating agencies. Recent challenges in the electric utility industry and challenges specific to Santee Cooper have impacted Santee Cooper's credit rating. Among other things, one of the factors the credit rating agencies focus on is a utility's willingness and ability to recover costs in order to maintain sound financial metrics. While Santee Cooper has been able to maintain reasonably high credit ratings from all three major credit rating agencies throughout its current rate freeze, its credit rating is at further risk of degradation without this requested rate adjustment. The electric utility industry is capital intensive, particularly now in South Carolina as economic development

¹Santee Cooper developed fuel cost projections in October 2023. While Santee Cooper's fuel cost projections are included in the revenue requirements, Santee Cooper is not presenting fuel costs for recovery in this proceeding.

continues to be robust and as the industry incorporates emerging technology to meet industry and customer demands. A utility's financial strength and high credit rating directly and favorably impact the utility's ability to fund its capital plan (which includes needed investments and improvements) and refinance existing debt with lower interest rate debt. Santee Cooper's ability to continue financing its debt at lower interest rates benefits customers as the utility's debt ultimately is recovered through customer rates. For the foregoing reasons, it is imperative that Santee Cooper, at a minimum, preserve its current credit ratings and, to the extent possible, reestablish its former higher credit ratings. The requested rate adjustment will increase the likelihood of stabilized or improved credit ratings by improving Santee Cooper's financial metrics and liquidity. A rate adjustment also directly addresses existing challenges credit rating agencies have identified as negatively impacting Santee Cooper's credit rating, such as limited financial flexibility and inability to pass through unbudgeted costs due to the rate freeze.

IV. DISCUSSION

A. BUDGETING PROCESS

Santee Cooper's Board of Directors has the authority to approve and adopt the annual 1year forward-looking NFOM and Capital Budgets for the Electric and Water Systems. During this annual budget process, the Board also receives projected information related to the "Planning Years." The Planning Years provided contain financial projections for the 2-subsequent calendar years, with corresponding NFOM and Capital planning budgets. Along with this annual budget process, the Board also approves and authorizes the projected PTS, as well as directs and authorizes Santee Cooper management to pursue the most cost-effective and efficient means for financing portions of the Capital Budget (described in more detail under Section B. "Financing Investments and Credit Quality").

The most recent annual budget (the "2024 Budget") was adopted in December 2023, and describes the Calendar Year 2024 ("CY2024") NFOM and Capital expenditures, which are described below in Section "1."

1. <u>2024 Budget - CY2024</u>

The combined CY2024 NFOM and Capital budgets for Santee Cooper's electric system is approximately \$1.2 billion and is designed to capture the expenditures necessary to provide reliable electric service to existing and new customers, support load growth, and integrate future resources. The 2024 Budget also includes a PTS of approximately \$19 million. The Board approved the 2024 Budget on December 4, 2023.

This expenditure budget addresses the following priorities:

- Ongoing load growth in Santee Cooper's and Central's territories.
- A capital spending initiative aimed at strategically investing in the system (e.g., capital projects for existing units, transmission upgrades, and distribution projects) to improve resiliency and provide highly reliable service to customers over time.

CY2024 NFOM

The Electric System NFOM Budget for CY2024 was proposed and approved by the Board to be \$547 million. The 2024 Budget NFOM included the following expenditures by function:

CY2024 NFOM		
Function/FERC	Approved Amount (\$Millions)	
Generation	\$314	
Administrative & General	\$126	
Transmission	\$66	
Distribution	\$20	
Customer Accounting	\$19	
Sales Expenses	\$3	
Total NFOM Budget	\$547	

CY2024 Capital

The Electric System Capital Budget for the CY2024 was proposed and approved by the Board to be \$650 million. The 2024 Capital Budget included the following expenditures:

CY2024 Capital		
Function/FERC	Approved Amount (\$Millions)	
Generation ²	\$344	
Transmission	\$188	
Distribution	\$59	
Customer & Corporate Services	\$59	
Total Capital Budget	\$650	

2. 2025 Planning Year

Current retail base rates are based on a study conducted in 2015 and implemented in April of 2017. Following implementation of the current retail rates, the general price level of the economy in the United States has risen by over 25%. In addition to this broad trend of inflation, new environmental regulations and constraints in our and neighboring utilities' systems have increased annual operating costs and necessitated investments in transmission and generation assets.

As stated above, in addition to providing the required annual budget—the 2024 Budget— Santee Cooper also provided projected financial information for the two subsequent years 2025 and 2026, to the Board solely for planning purposes. The Planning Year 2025 formulated during

² Includes major environmental projects such as FERC relicensing, Effluent Limitation Guidelines ("ELG"), Solid Waste Landfill ("SWLF"), & CCR Rule. Includes expenditures related to the resource plan (2023 IRP Preferred Portfolio (Supplemental)).

the 2024 Budget process is being utilized for the Study as the Test Year. As such, this report focuses on and describes important considerations for the 2025 Planning Year:

- The projected electric NFOM and Capital costs for 2025 currently produce a non-fuel revenue shortfall when compared to revenues under current rates. These projected costs are being used as the source for the Study.
- The Cook Settlement rate freeze period ends in December 2024 and certain revenue adjustments, including Central's adjust-to-actual cost of service, will return to a cost-based calculation methodology.
- Automatic fuel cost recovery rates and adjustors, which were "frozen" to the rates projected in Santee Cooper's 2019 Reform Plan from 2020 through 2024, will be reinstated in January 2025. The frozen rates are not reflective of current commodity markets. While Santee Cooper's customers will realize benefits from its fuel commodity hedging program and other fuel mitigation strategies, a portion of the costs will be subject to commodity market pricing when the rates are unfrozen. Projections based on the 2024 Budget indicate Santee Cooper's retail customers could experience a price increase of approximately 7% from fuel costs alone in 2025; however, fuel commodity prices have moderated and the price increase may be lower.
- Estimates of how the Cook Settlement rate freeze exceptions will be recovered from customers are unavailable at this time and collection-related revenues are <u>not</u> included in the 2025 projections. Additionally, expense recognition for 2025 and beyond, including interest on outstanding debt issued under bank credit facilities to fund these exceptions, has been excluded.

2025 NFOM

The Electric System NFOM Budget for the Planning Year 2025 was provided to the Board in December 2023, and was projected to be \$575 million. The Calendar Year 2025 ("CY2025") NFOM amounts included the following expenditures by function:

CY2025 NFOM		
Function/FERC	Planned Amount (\$Millions)	
Generation	\$325	
Administrative & General	\$132	
Transmission	\$74	
Distribution	\$21	
Customer Accounting	\$20	
Sales Expenses	\$3	
Total NFOM Budget	\$575	

2025 Capital

The Electric System Capital Budget for the Planning Year 2025 was also provided to the Board in December 2023 to be \$629 million. The CY2025 Capital Plan included the following expenditures:

CY2025 Capital		
Function/FERC	Planned Amount (\$Millions)	
Transmission	\$270	
Generation ³	\$251	
Distribution	\$68	
Customer & Corporate Services	\$40	
Total Capital Budget	\$629	

More details on the Capital Plan are provided in Section C. "Santee Cooper's Future Plans."

B. FINANCING INVESTMENTS AND CREDIT QUALITY

1. Financing Investments

Santee Cooper strategically funds capital investments using a blend of long-term debt issuances (Revenue Obligation Bonds), short-term debt instruments (Commercial Paper and Revolving Credit Agreements), and internal funds (typically Capital Improvement Funds.) The current funding plan is specified for the 2024 Budget in <u>Attachment A</u>. More details of the funding sources are as follows:

³ Includes major environmental projects such as FERC relicensing, Effluent Limitation Guidelines ("ELG"), Solid Waste Landfill ("SWLF"), & CCR Rule. Includes expenditures related to the resource plan (2023 IRP Preferred Portfolio (Supplemental)).

Debt Issuance: As part of the budget approval process, the Board directs and authorizes management to pursue the most cost-effective and efficient means for financing the Capital Plan. Management accomplishes this by balancing the total needs of the capital program against the ability to internally fund projects while considering the impact on relevant financial metrics (for example, liquidity, debt service coverage, debt-capitalization) and customer rate impacts. After the debt issuance amounts are determined, Santee Cooper then receives approval from the Board to present a debt funding plan to the Joint Bond Review Committee for approval and, with approval, proceeds to finance the capital projects using a blend of tax-exempt and taxable financing.

<u>Capital Improvement Funds</u>: Santee Cooper's Bond Covenants require a transfer of, and thus collection of, a minimum of 8% of Santee Cooper's 3-year average gross revenues into the CIF typically used to directly fund capital improvements on the system. Santee Cooper may adjust the amount collected from customers to meet broader organizational needs, such as liquidity or debt service metrics, and is currently collecting a 9% CIF Requirement. While Capital Improvement Funds can be used for any corporate purpose, they have predominately been used to (1) finance portions of the capital program, which avoids interest and issuance costs related to debt-financing expenditures, and (2) to defease debt outstanding, which reduces the debt service to be collected from rates and reduces cost impacts on rate payers.

2. <u>Explanation of Credit Quality and Credit Ratings and Methodology for</u> <u>Determining Them</u>

Credit quality (or creditworthiness) is a term used to describe a company's overall financial health and its willingness and ability to repay all financial obligations in full and on time. A credit rating is a letter grade, generally ranging from AAA (highest) to D (in default), that is used to show a company's creditworthiness.

Three major credit rating agencies, Standard & Poor's ("S&P"), Moody's Investors Service ("Moody's") and Fitch Ratings ("Fitch"), have assessed Santee Cooper's creditworthiness using a variety of qualitative and quantitative factors. Qualitative aspects may include Santee Cooper's cost recovery framework, the strength of its management team, its operating performance, and the economic vitality and customer profile of its service area. Quantitative measures may include rate competitiveness, debt service coverage, debt to capitalization ratios, and liquidity. Creditors and credit rating agencies view both qualitative and quantitative factors in the aggregate when assessing a company's credit quality.

3. Impact Santee Cooper's Credit Ratings Have on Customers

Credit ratings impact a company in a number of ways, including its access to the capital it needs and the interest rates at which it can access that capital. Accordingly, Santee Cooper's credit ratings impact its ability to access debt markets to the extent needed to fund its capital plan.

Santee Cooper's capital plan is robust, continuously assessed and, when needed to continue providing reliable and cost-effective service to its customers, calls for the implementation of

significant capital projects. This robust capital plan will support system growth, reliability, environmental compliance, and Santee Cooper's South Carolina Public Service Commissionapproved IRP. To fund a portion of its capital plan Santee Cooper requires on-going access to the bond markets. The interest rate at which Santee Cooper issues these bonds will be directly impacted by its credit ratings, and those interest costs are passed through to its customers in the form of rates that include payment of debt service.

In addition to the impact of interest rates associated with the issuance of new debt, Santee Cooper is also impacted by interest rates associated with the refinancing of existing debt. Santee Cooper has the ability to issue tax-exempt debt which typically has a 10-year call option. This option allows Santee Cooper to evaluate its debt and refinance the bonds if internal savings targets are met. Between 2019 and 2022, Santee Cooper refinanced \$2.1 billion in debt, resulting in \$797 million in gross savings and \$457 million in net present value ("NPV") savings. Santee Cooper has approximately \$2.6 billion in upcoming callable debt between now and the end of 2026. Santee Cooper will continue to evaluate these bonds and if market conditions are favorable will refinance to achieve additional savings. Santee Cooper's improved rating will result in improved interest rates for Santee Cooper to the ultimate benefit of its customers.

4. Credit Rating of Santee Cooper's Outstanding Securities

The three major credit rating agencies have all given Santee Cooper "A" category credit ratings, as reflected by the below:⁴

Credit Agency	Rating	Outlook
Moody's	A3	Stable
Fitch	A-	Negative
S&P	A-	Negative

Bonds rated in the "A" category are considered to be strong investment grade credits with a very high probability of full and timely payment of principal and interest.

5. Strengths and Weaknesses of Santee Cooper that Impact the Credit Rating

As reflected by Santee Cooper's "A" category credit ratings, the major credit rating agencies believe Santee Cooper is a strong viable credit. They base that belief on a number of Santee Cooper's strengths, such as the following:

- A willingness and ability to recover costs;
- Santee Cooper's Board's autonomous rate making authority;
- Santee Cooper's sufficient liquidity during the rate freeze which began in 2020;⁵
- Santee Cooper's transitioning to a cleaner, more efficient, flexible and diverse resource portfolio;

⁴ Notably, Santee Cooper's credit ratings have gone down slightly in recent years. The major credit rating agencies have cited the rate freeze as a negative factor impacting Santee Cooper's rating.

⁵ Santee Cooper's base rates have not changed in over seven years, since April 2017.

- Santee Cooper's competitive rates (however, rate setting ability is limited while under rate freeze); and
- Santee Cooper's deep and diverse service area, which directly or indirectly serves 2 million people in South Carolina.

However, the rating agencies have identified several challenges Santee Cooper faces in maintaining its credit ratings, such as:

- A limited financial flexibility during the rate freeze;
- Weakened coverage metrics resulting from the utility's inability to pass through unbudgeted costs due to the rate freeze;
- Cook Settlement rate exceptions which cannot be collected until after the rate freeze;⁶
- Santee Cooper's regulatory asset is a non-cash accounting treatment that defers recognition of the costs, but not the obligation to fund them;
- The utility is highly leveraged; and
- There is a carbon transition risk due to coal plant ownership.

6. <u>Current Ratings Outlook for U.S. Public Power</u>

In 2023 and 2024, the three major credit rating agencies each issued reports addressing the outlook for public power, which substantiate Santee Cooper's statements on its proposed rate adjustment and the timing of the adjustment. Below are excerpts from those reports:

Per Moody's December 4, 2023, report "2024 Outlook – Stable as utilities remain positioned to weather economic challenges:"

- "Our outlook for the US public power sector remains stable based on our expectations that public power utilities will remain able and willing to raise rates as needed and will rely on strong liquidity to manage through higher capital spending in a higher interest rate environment."
- "Public power investments in dispatchable natural gas-fired generation are growing to support intermittent renewable generating assets and to meet regional load growth. Incremental load growth is largely driven by greater economic activity across the country, including the proliferation of data centers, the increasing frequency of extreme weather events and expanding efforts to electrify the economy. Adding natural gas-fired generation resources is generally positive for power risk management and will help support grid reliability, an important credit consideration for public power issuers."
- "The public power sector awaits clarification on how the US Treasury and the IRS will implement the legislation's tax credits for renewable generating assets. We anticipate greater transparency on such guidance in the coming months which could lead to more public power utilities building their own renewable generation, rather than relying on power purchase agreements to decarbonize their generation portfolios."

⁶ These exceptions can be subject to an audit through the courts related to compliance with the settlement agreement.

Per Fitch Ratings' December 7, 2023, report "U.S. Public Power and Electric Cooperatives Outlook 2024:"

• "Capacity constraints and proposed environmental rules are increasing long-term concerns that could dampen performance over time."

Per S&P's January 23, 2024, report, "U.S. Public Power and Electric Cooperative Utilities 2024 Outlook: Mandates, Rising Costs, and Diminishing Affordability:"

• "Sector View: Negative - ...Exacerbating inflation-related affordability pressures are legislative and regulatory mandates that S&P Global Ratings expects will trigger substantial utility spending on clean generation resources and generation additions needed to support load growth from electrification directives. However, utilities could maintain credit quality if they're able to recover costs in a timely manner and at levels sufficient to preserve sound financial margins--commensurate with our existing ratings."

7. <u>Santee Cooper's Financial Metric Targets for Maintaining Its Strong Credit</u> <u>Ratings</u>

Santee Cooper's financial objectives include continuing to maintain its strong credit ratings. Santee Cooper continuously monitors its Debt to Capitalization Ratio, Debt Service Coverage, and Liquidity to support high credit ratings.

• Debt to Capitalization Ratio:

Santee Cooper's current debt to capitalization ratio is 77%. As a public power utility Santee Cooper does not have the ability to raise equity from the capital markets. As a result, its debt ratio typically increases during major building cycles and then declines over time. For example, over the past 35 years, Santee Cooper's debt ratio has ranged from 84% (1985) to a low of 69% (2005). Nonetheless, Santee Cooper does not expect this ratio to decrease near term as a result of its robust capital plan, which supports the utility's IRP, system growth, system reliability, and compliance with environmental standards.

Although the capital plan is robust, Santee Cooper is managing this ratio by: (1) paying down debt in advance as funds are available, (2) using Capital Improvement Funds to avoid issuing debt when possible, and (3) taking advantage of debt refunding opportunities.

• <u>Debt Service Coverage ("DSC"):</u>

Santee Cooper targets to maintain a debt service coverage of approximately 1.40x. Debt service coverage is the ratio of funds available to pay debt service to the debt service requirements in any given year. This indicates that, after funding all operating expenses, remaining funds exceed debt service by 40%. These funds are then invested back in the system or used to execute Santee Cooper's accelerated debt reduction program.

• <u>Liquidity:</u>

Santee Cooper targets to maintain days cash on hand of at least 87 days and days liquidity of at least 200 days. These ratios measure the number of days Santee Cooper could continue to pay its average daily cash operating expenses using the relevant source or sources of liquidity. Days cash on hand measures the number of days a company can pay its operating expenses with available cash. Days liquidity measures the number of days a company can pay its operating expenses with available cash along with available bank lines of credit.

C. SANTEE COOPER'S FUTURE PLANS

Santee Cooper's Capital Plan is relevant for the determination of the Test Year's debt service requirements. Santee Cooper funds the cost of its capital plans by using internal funds (predominately from amounts in the CIF) or issuing debt. The capital costs are collected from customers by including in rates the CIF Requirements and principal payments on the debt issued to fund the capital plans. Santee Cooper must strategically invest in its system to meet anticipated load growth demands and to continue to provide reliable, low-cost power to its customers. The 10-Year Capital Plan reflects this strategy, which is provided as <u>Attachment B</u>.

The 10-Year Capital Plan reflects Santee Cooper's approved 2023 IRP which identified the most cost-effective and least ratepayer-risk resource portfolio—the Preferred Portfolio (Supplemental)—and requires Santee Cooper to invest to modernize its generation fleet to ensure continued reliability, while transitioning to a more sustainable generation portfolio, all in a cost-effective manner for ratepayers. This translates to an increase in renewable and gas generation resources, transition away from coal, and increased reserve margin requirements. Details regarding the Preferred Portfolio (Supplemental) are below:

- Add approximately 2,400 megawatts of solar capacity by 2035 in a phased approach, beginning by targeting approximately 300 megawatts per year from 2026 through 2030.⁷
- Develop a Natural Gas Combined Cycle ("NGCC") generating resource by 2031 to provide at least 1,000 megawatts of capacity.
- Add several hundred megawatts of Battery Energy Storage Systems and peaking resources beginning in early 2030s to meet capacity needs, with approximately 300 megawatts added by 2035.
- Continue to operate Winyah Generating Station until the NGCC has been implemented, assuming sufficient capacity resources being otherwise available to ensure reliability. At that point, Winyah will be retired.

⁷ Santee Cooper issued a 90-day notice and 45-day notice, per its approved Competitive Procurement of Renewable Energy program, stating its intent to issue a Request for Proposals for solar PPA resources in June 2024. Targeted additions of 300 megawatts per year from 2026 through 2028 are being solicited, but Santee Cooper will determine the final quantities to add to its system once bids are received and evaluated.

D. GROSS REVENUE REQUIREMENTS

Pursuant to S.C. Code Ann. § 58-31-30, *et seq.*, Santee Cooper's Enabling Act, Santee Cooper has, among other things, the power to sell electric power and to:

fix, alter, charge, and collect tolls and other charges for the use of their facilities of, or for the services rendered by, or for any commodities furnished by, the Public Service Authority at rates to be determined by it, these rates to be at least sufficient to provide for payment of all expenses of the Public Service Authority, the conservation, maintenance, and operation of its facilities and properties, the payment of principal and interest on its notes, bonds, and other evidences of indebtedness or obligation, and to fulfill the terms and provisions of any agreements made with the purchasers or holders of any such notes, bonds, or other evidences of indebtedness or obligation.

S.C. Code Ann. § 58-31-30(A)(13).

Furthermore, Santee Cooper's Rate Covenant in Section 8.2 of its Master Revenue Obligation Resolution ("Master Resolution") provides that to maintain the ability to service current and future debt obligations, Santee Cooper must "establish, maintain and collect rents, tolls, rates and other charges for power and energy and all other services...." As such, Santee Cooper is authorized to revise and alter rates and charges to sufficiently recover the annual Gross Revenue Requirements.

1. Assumptions for Gross Revenue Requirements

Key assumptions used in developing the projected Gross Revenue Requirements are as follows:

- **Demand and Energy Requirements** Demand and energy requirements are based on Load Forecast 23-03 ("LF23-03") and are discussed in the Load Forecast Report, which details the load forecast assumptions.
- **Integrated Resource Plan** The IRP is based on future system expectations and has been created to fulfill projected demand and energy requirements as stipulated by LF23-03. The 2024 Budget incorporates the 2023 IRP's Preferred Plan, which identifies the Preferred Portfolio (Supplemental) as the most cost-effective, least ratepayer-risk resource portfolio.
- **Capital** Specific capital costs are discussed herein.
- Financing Considerations Existing cost of capital and financings are discussed herein.
- Non-Fuel Operations & Maintenance Expenses NFOM expenses are based on the 2024 Budget, approved by the Board of Directors in December of 2023.
- Fuel & Purchased Power Costs Electric system fuel and energy costs are based on an economic dispatch of Santee Cooper's generating resources, including purchased power,

completed using information available through October 2023. The dispatch reflects Santee Cooper's existing and projected coal contracts, purchased power contracts, and scheduled maintenance. Fuel burned is estimated by using average heat rate curves. Santee Cooper's customer rates include a true-up mechanism through the fuel adjustment to ensure customers are charged actual fuel and purchased power fuel costs. Fuel and purchased power fuel costs are reflected in the Gross Revenue Requirements and are recovered on an actual basis through the fuel adjustment. Purchased power capacity and NFOM costs are not recovered through the fuel adjustment, and thus are not trued up to reflect actual costs; consequently, such capacity and NFOM costs are included in the base rates.

Other General Assumptions/Considerations

- All applicable Federal and State environmental laws will continue to be implemented, applied and enforced.
- There will be no material change in the taxation of fuel used to produce electricity.
- There will be no material change on the taxation of governmentally owned or municipally financed electric generation, transmission and distribution systems.
- There will be no material change in the level of Federal, State or local regulation of governmentally owned electric systems.
- There will be no material change in Santee Cooper's existing ability to import or export power over the statewide transmission grid.
- The existing form of governance and policies established by Santee Cooper will continue throughout the study period.
- Santee Cooper will continue to be the exclusive owner and operator of the Electric System, including its generation, transmission, distribution, and customer care facilities.

2. <u>Components of Gross Revenue Requirements</u>

As noted above, the Gross Revenue Requirements consist of annualized costs and other charges that are reasonably recovered through rates from some or all of Santee Cooper's customers for service during a calendar year.⁸ The annual Gross Revenue Requirements include the following components:

- Operations and Maintenance Expense ("O&M"), which can be subdivided into NFOM, as discussed above, and fuel and purchased power
- Debt Service
- PTS
- SIL
- CIF Requirements
- Working Capital Charge

⁸ The assumptions used to determine Gross Revenue Requirements utilize and rely on a multitude of recent, available, and pertinent information. The projected revenue requirement determination process is a culmination of research, analyses, and forecasts from the appropriate subject-matter experts and external consultants where applicable; and the process takes into consideration expectations of future fuel prices, regulatory requirements, current resource plans, and interest rate market assumptions, among others.

The projected amounts for these components of the Gross Revenue Requirements were formulated and finalized during Santee Cooper's annual budgeting process approved by the Board of Directors in December 2023. During this process, the Board was provided the 2025 NFOM and Capital Budgets for planning purposes only. Table 1 below, provides the projected Gross Revenue Requirements calculation.

(\$Millions)	20	24	20)25	20	26
Fuel/Purchase Power	826	43%	923	41%	994	42%
Non-Fuel O&M	547	28%	575	25%	585	24%
Debt Service	434	22%	512	23%	558	23%
CIFR, ⁹ Payment to State, Sums in	152	8%	244	11%	251	11%
Lieu & Working Capital						
Cook Exception Deferral ^{10,11}	(27)	-1%	0	0%	0	0%
Total Revenue Requirements	1,932	100%	2,253	100%	2,388	100%

Table 1 - Electric System Gross Revenue Requirements

a. **Operations & Maintenance Expenses**

O&M expenses are expenses incurred in the normal course of business and for purposes of administering, generating, providing, and supplying reliable electric power and services to customers. Santee Cooper budgets these expenses by function, as set forth in Table 2 below. For 2025, which is the Test Year, total O&M expenses are projected to be approximately \$1.5 billion.

⁹ Capital Improvement Fund requirement is based on planned transfer during the rate freeze period and 9% of revenues in 2025 and 2026.

¹⁰ Timing and methodology for Cook Exception collection have not yet been determined. For purposes of determining 2025 & 2026 in the 2024 Budget, revenues and expenses, including interest on outstanding debt issued under bank credit facilities, have been excluded.

¹¹ Includes estimated future impact of interest on commercial paper issued for Cook Settlement Exceptions during the rate freeze period. Amounts are for planning purposes only and are not intended to represent the amount Santee Cooper may identify as exceptions in future compliance reports.

CY2025 O&M Expenses			
Function	Planned Amount (\$Millions)		
Fuel (Burned)	\$679		
Purchased Power	\$244		
Other	\$325		
Total Production	<u>\$1,247</u>		
Transmission	\$74		
Distribution	\$21		
Customer Accounts	\$12		
Customer Service & Information	\$8		
Sales Promotion	\$3		
Administrative & General	\$132		
Total Other	<u>\$250</u>		
Total O&M	<u>\$1,498</u>		

Table 2 – O&M Expenses – Calendar Year 2025

b. <u>Debt Service</u>

The debt service component of the Gross Revenue Requirements, identified in Table 1 above, includes annual principal payments and interest expense on both existing debt as of December 31, 2023, issued under Santee Cooper's Master Resolution, as well as projected future Master Resolution debt issuances. Debt Service also includes interest and certain principal payments to be paid from revenues on projected debt issued under commercial paper and revolving credit agreements. Santee Cooper's future capital plans (described herein) are relevant for the determination of the new debt service requirements, through the corresponding capital financing/funding plan. As described herein, Santee Cooper strategically funds portions of its capital investments through the issuance of debt. The projections reflect planned Revenue Obligation bond issuances in December 2024 and December 2025. The bond transaction planned for 2025 includes proceeds that will be used to pay for capital expenditures projected to be paid in early 2026. All projected future Revenue Obligation bond issuances approval.

c. PTS, SIL, CIF Requirements and Working Capital

(\$Millions)	2024		2025		2026	
CIFR	128	84%	201	82%	213	85%
Payment to State	19	13%	22	9%	24	9%
Sums in Lieu	5	3%	6	2%	6	2%
Working Capital	0	0%	15	6%	8	3%
CIFR, Payment to State, Sums	152	100%	244	100%	251	100%
in Lieu & Working Capital						

<u>Table 3 – Breakdown of PTS, SIL, CIF Requirements and Working Capital from 2024-</u> 2026

<u>PTS and SIL</u>: As a public utility, Santee Cooper does not pay taxes to the state of South Carolina or local authorities, but instead makes payments in lieu of taxes, which must be recovered through rates. These payments are described as follows:

- PTS: Santee Cooper remits a payment to the State of South Carolina of 1% of all projected operating revenues collected from the sales of Electric and Water services.
- SIL: Includes kWh Sales Taxes, Generation Taxes, Land Rental Taxes, and any other Additional Sums in Lieu of Taxes remitted to governments and governmental agencies.
- Franchise Taxes: Franchise taxes are collected on behalf of local authorities on annual retail/distribution sales. Franchise taxes are not included as a revenue requirement.

<u>**CIF Requirements</u>**: Santee Cooper's Bond Covenants in the Master Revenue Obligation Resolution includes a Minimum CIF Requirement, which is defined as:</u>

[A]n amount which, together with the amounts deposited in the Capital Improvement Fund in the two immediately preceding Fiscal Years, will be at least equal to eight per cent (8%) of the Revenues required by this Resolution to be paid into the Revenue Fund in the three immediately preceding Fiscal Years."

Section 5.3 of the Master Resolution.

In order to have funds to make such described CIF transfers Santee Cooper's Gross Revenue Requirements include a CIF Requirements component. To maintain Santee Cooper's financial health and metrics, customer rates have historically reflected a capital improvement fund requirement greater than the 8% minimum to meet such financial objectives. Santee Cooper's current and proposed rates include a CIF Requirement of 9% of the annual revenue requirements for the Test Year.

Working Capital Charge: Due to a time lag between expenditures and revenue collection, Santee Cooper's Gross Revenue Requirements include an annual allowance for Working Capital to ensure that sufficient funds are available to pay expenditures for day-to-day operations and maintenance of the electric system. The annual Working Capital allowance is based on total Working Capital to cover 45 days (1/8 of 365 days) of O&M expenses less Purchased Power, nuclear fuel, and lease payments. The annual Gross Revenue Requirement reflects the year-over-year change in the total Working Capital need. Therefore, such charges included for the annual allowance for Working Capital are calculated as one-eighth (1/8) of the total annual difference in O&M (less purchased power, nuclear fuel, and lease payments) from the current year to the previous year. If such working capital calculation for the given Test Year yields a negative adjustment, the Working Capital requirement is excluded from the Gross Revenue Requirements.

d. Cook Exception Deferral

Santee Cooper has developed a deferred cost recovery rider (the "DCR Rider") for the express purpose of creating a method by which it may collect costs it has previously deferred. No deferred costs are included in the revenue requirements to be collected from Santee Cooper's customers. The DCR Rider is included in the proposed rate schedules Santee Cooper's Board will consider and which parties have an opportunity to review and comment on as a part of the retail rates process. No additional opportunity will be provided for parties to comment on the DCR Rider or its implementation.

E. NET REVENUE REQUIREMENTS

Santee Cooper arrives at its Net Revenue Requirements by beginning with its Gross Revenue Requirements as described above and reducing those Gross Revenue Requirements by (1) revenue received from Central, (2) revenue received from other wholesale sales, and (3) revenue received from miscellaneous income, interest income, and subsidy receipts, all of which are described in greater detail below. Revenue from certain wholesale sales are included in the calculation of the Demand Sales Adjustment and Fuel Adjustment clauses and the difference between the actual and projected revenues is subject to a true-up.

1. Wholesale Sales: Central

Santee Cooper's largest customer Central accounts for between 55%-65% of Santee Cooper's annual revenues. Santee Cooper serves Central through an on-system wholesale contract entered into in 1980, titled the Power Systems Coordination and Integration Agreement and last amended in 2013 (the "CA"). The CA remains in effect through December 31, 2058, and prescribes methodology applicable to Central's annual cost of service and cost allocation.

Santee Cooper prepares an annual projected cost of service study each year for Central, which reflects budgeted costs, projected loads, and other information. The estimation of certain rates and charges to Central under the CA are derived from the annual projected cost of service study and are used for billing Central throughout that contract year. Following the end of that contract year, when actual costs, loads, and other data all become available, Santee Cooper prepares a final, actual cost of service study for the contract year. All rates and charges are

recalculated, and the difference between the originally billed charges and the actual charges are either charged or credited to Central as appropriate.

The cost allocation methodology required by the terms of the CA utilizes a revenue requirements calculation, which consist of those annual costs recorded in Santee Cooper's books and records along with certain allowances specified in the CA, that is similar to the revenue requirements calculation used for Santee Cooper's other customers. These revenue requirements are functionalized according to the CA (for example, to transmission, production fixed cost, distribution), and various rates and charges are determined using the appropriate system allocation, which is typically demand or energy. Central's total charges are then determined by multiplying their usage by the calculated rate.

Projected revenues from Central used in the retail rate study are based on information and other assumptions used in the 2024 Budget process. Central's actual revenues and usage are likely to be different than the projections used in the rate study process. These revenues and usage may be higher or lower than projected, which is consistent with the overall revenue projections for Santee Cooper's other customers. Other than through the treatment of certain retail adjustment clauses, Santee Cooper's rate study does not allow for an adjustment to retail rates based on variances in Central's revenue or usage characteristics.

2. <u>Wholesale Sales: Other</u>

Santee Cooper also receives revenue from various other wholesale contract sales. This includes contracts to municipalities within Santee Cooper's balancing authority, including the Cities of Georgetown and Bamberg, and to municipalities or joint action agencies that are not within Santee Cooper's balancing authority, such as the City of Seneca, the Town of Waynesville (North Carolina), and Piedmont Municipal Power Authority. While these customers are served through wholesale contracts, their charges may be directly or indirectly impacted by the rate adjustment through changes to the municipal rate or through the various revenue adjustments.

On an ongoing basis, Santee Cooper seeks to offer, when available, short-term power and energy sales to interested market participants. These sales may be offered directly or indirectly through Santee Cooper's energy trading affiliate, The Energy Authority. Revenues received from these sales are credited back to Santee Cooper's customers as a reduction to revenue requirements.

3. Miscellaneous Revenue

The revenue Santee Cooper receives is used to reduce the revenue to be collected from retail customers. Miscellaneous revenue includes gains on Santee Cooper's share of ownership in The Energy Authority, interest income on projected unrestricted cash balances, interest income on future bond proceeds, and subsidy proceeds received as a result of Santee Cooper's issuance of Build America Bonds.

V. CONCLUSION

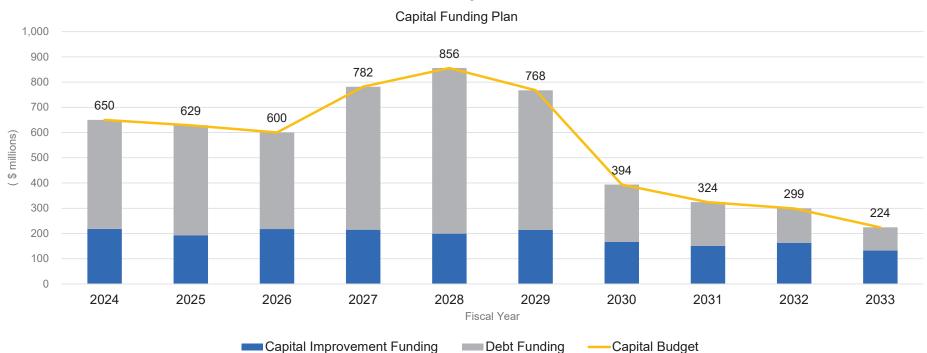
Santee Cooper has managed without a rate adjustment for the last 7 years. From April 2017 to December 2023, the general price level of the United States economy has risen by over 25%. In addition to this broad trend of inflation, new environmental regulations and constraints in Santee Cooper and neighboring utilities' systems have increased annual operating costs and necessitated the requested rate adjustment. Santee Cooper's current rates will not provide sufficient revenues for it to meet its Gross Revenue Requirements. Therefore, Santee Cooper is requesting to increase retail rates on average by 4.9% to address the projected under-recovery from existing rates.

Like other U.S. utilities, Santee Cooper must continue to invest capital in needed facilities, equipment, and improvements. Santee Cooper anticipates the improved financial metrics made possible with its proposed rate adjustment increases the likelihood of improved credit ratings thus allowing Santee Cooper to implement its capital plan and maintain its existing operations with favorable interest rate debt. Approving the proposed adjustment in rates will address the cost drivers discussed above and bolster Santee Cooper's credit ratings which will allow Santee Cooper to continue to provide low-cost, reliable power to its customers throughout South Carolina, execute on its plan for generation transition, and partner with the State in economic development initiatives. Failure to implement the proposed rate adjustment would likely lead to deteriorating financial metrics, higher interest costs and higher costs for customers over the long run.

Financial Planning and Requirements Report

Attachment A

Capital | Funding Plan



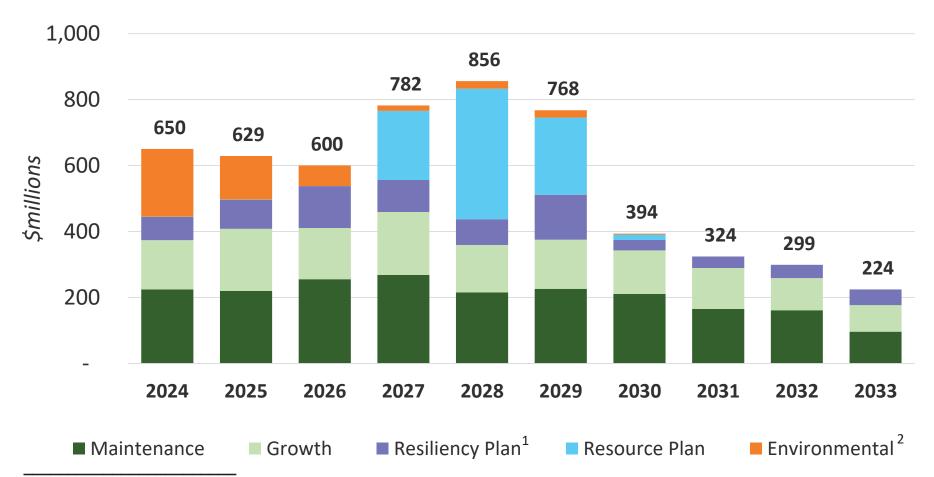
Electric System



Financial Planning and Requirements Report

santee cooper"

Electric System 10-Year Capital Plan



1. Includes generation, transmission, distribution, and corporate services projects identified as system improvements, specifically related to maintaining and ensuring resiliency of existing resources.

2. Includes environmental compliance projects (i.e. Solid Waste Landfill, Ash Pond Closure, FERC Compliance, etc). December-2023

COST-OF-SERVICE REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to provide a description of and details regarding Santee Cooper's fully allocated cost-of-service study, which reasonably and appropriately allocates responsibility for the costs Santee Cooper incurs to operate the electric system among its various customer classes. This employee report is provided in conjunction with the 2024 Electric System Cost of Service and Rate Design Study (the "Study") performed by NewGen Strategies and Solutions, LLC. Specifically, Section 4 of the Study addresses the cost-of-service analysis, which provides detailed information regarding the cost-of-service analysis.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Mike Smith, Director of Billing and Pricing.

III. SUMMARY OF THE REPORT

To assist in designing the new proposed rates, Santee Cooper conducted a cost-of-service study to determine the costs of serving its various customer classes. Customer classes impose different requirements on the electric system and thus are responsible for different costs to Santee Cooper. The cost-of-service study, which is based on reasonable and customary methodologies described below, allows Santee Cooper to appropriately match incurred costs to particular customer classes and therefore enables Santee Cooper to design fair and equitable rates that account for those customer class costs and help avoid cross-subsidization.

IV. DISCUSSION

A. GENERAL DESCRIPTION OF A COST-OF-SERVICE STUDY

A cost-of-service study is a useful guide in designing rates because it determines the costs of serving various classes of customers (e.g., residential, small general service, medium general service, large general service, and lighting). It does so by aligning and matching the costs Santee Cooper incurs to the customer classes responsible for "causing" those costs.

A key principle in setting utility rates is that the rates for individual customer classes should reasonably reflect the cost of serving those particular customers. Santee Cooper's customer classes place different requirements on the electric system. Those differing requirements include size of load, usage patterns, service voltages, metering types, costs of reading meters, complexity of billing, etc. The differing requirements impose different costs to Santee Cooper. A cost-of-service study analyzes those costs, assigning them to the appropriate customer classes that are responsible for "causing" Santee Cooper to incur them. Santee Cooper performed the cost-of-service study based on revenue requirements for the fiscal year ending December 31, 2025 ("Test Year"). Those revenue requirements were developed based on the 2024 Budget Financial Forecast values, with

certain adjustments and reclassifications to reflect the allocation and collection methodologies used in the cost-of-service study.

There are three principal activities that occur when assigning costs in a cost-of-study study:

- *Functionalization* Costs are grouped according to their "function," such as production (generation), transmission, distribution, and customer service.
- *Classification* Functionalized costs are then grouped based on the utility operation or service being provided and the related causation of the costs. Example classifications include demand, energy, and customer-related costs.
- *Allocation* After costs have been functionalized and classified, they are allocated (or assigned) to the proper customer class based on the manner in which the costs are incurred (e.g., based on cost causation principles).

As noted above, in a cost-of-service study, Santee Cooper grouped costs according to the "function" associated with them. Notably, although budgeting and accounting systems generally follow functional groups (such as production, transmission, etc.), certain costs, like those associated with administrative and general expenses and debt service, generally are not assigned by accounting and budgetary convention to a major function. Thus, a cost-of-service analysis usually requires the rearrangement of certain expenditures into functional groups (i) to be more representative of the expenditure causation, (ii) to combine costs that have been incurred for a similar purpose, and (iii) to facilitate the allocation of cost responsibility.

Santee Cooper groups costs by the functions of production, transmission, distribution, and customer service – functions that align to a large degree with FERC's Uniform System of Accounts ("USOA"). Those functions are described as follows:

- *Production* the generation of electricity or its purchase at wholesale;
- *Transmission* the operation of a high-voltage system-wide grid or network for the interconnection of generating facilities and major load centers;
- *Distribution* the local distribution of electricity, generally at lower than transmission voltages, within and around load centers, to ultimate customers; and
- *Customer Service* services that include a variety of customer service, billing, and administrative activities.

The typical functions of the retail revenue requirements for the Test Year are summarized in **Table 1** below.

Table 1

Functionalization of Test Year Retail Revenue Requirements (\$000)

	2025
<u>Production</u> – Those costs associated with generating and purchasing power, and delivering that power to the utility's bulk transmission system.	\$ 635,351
<u>Transmission</u> – Those costs incurred in connection with the delivery of power over the bulk transmission system to the primary and secondary distribution system.	\$ 103,102
<u>Distribution</u> – Those costs incurred in connection with the delivery of power through the primary and secondary distribution system to the utility's consumers.	\$ 73,166
<u>Customer and Sales Expense</u> – Those costs incurred for billing accounts and providing various services and information for its customers.	\$ 31,994
Total Functionalized Revenue Requirements	\$ 843,613

B. EXPLANATION OF HOW SANTEE COOPER CLASSIFIES COSTS

Functionalized costs are classified according to their cost causation characteristics – which are demand-related, energy-related, or customer-related. This classification provides the means to reasonably and equitably distribute test year revenue requirements to the various customer classes and reflects usual regulatory practice.

Demand-related costs (or "fixed" costs) are costs incurred to maintain an electric system capable of meeting the total combined demands of all customer classes. Additionally, they are generally fixed in the short-run and do not materially vary directly with the number of kilowatt-hours ("kWh") generated or sold. Demand costs will include that portion of operation and maintenance expenses, debt service, renewals, replacements and improvements, and other costs that are not designated as specifically customer or variable energy costs.

Energy-related costs (or "variable" costs) are costs that vary substantially or directly with the amount of energy sold or generated and purchased, including costs for fuel and a portion of operation and maintenance expenses related to production facilities.

Customer-related costs are costs that are directly related to the number, type, and size of customers, such as customer accounting and collecting, the costs of meters and services, and other distribution-related costs associated with maintaining the minimum distribution system to serve Santee Cooper's customers.

For purposes of the cost-of-service analysis conducted for the proposed rate adjustment, Santee Cooper classified the functionalized Test Year revenue requirements as explained below.

Production Expenses: Santee Cooper's single largest operation and maintenance expenditure is fuel expenses, which are, for the most part, classified as energy-related because they vary in direct proportion to energy usage. However, the portion of fuel expenses incurred in startup and to keep certain generating units running at less than full load for "spinning reserves"¹ are classified as demand-related because they do not vary directly in proportion to energy consumption. Historically and for purposes of the Study, Santee Cooper estimated the demand-related fuel expenses as 5% of total fuel costs. Other production expenses (*i.e.*, expenses other than fuel and purchased power) are classified based on an account-by-account analysis of the nature of the costs involved to better align cost classifications with actual operation and maintenance expenditures.

Transmission Expenses: These operation and maintenance expenses are classified as demand-related because (i) a given transmission system is sized to transmit the demand placed on that system, and (ii) the expenses incurred to operate and maintain the system do not vary with energy usage.

Distribution Expenses: Santee Cooper classifies its distribution expenses based on an account-by-account analysis of its historical expenses. Meter expenses, customer installation expenses, and certain maintenance expenses are typically classified as customer-related, while load dispatching, station expenses, and line expenses are typically classified as demand-related. Expenses identified as being directly related to providing services to a particular customer or customer class are directly assigned to that customer or customer class.

Customer Accounts, Service and Informational Expenses, and Sales Expense: Consistent with the FERC Uniform System of Accounts, these expenses are classified as customer-related because they represent costs incurred by Santee Cooper for billing accounts and providing various services and information for its customers.

Administrative and General Expenses: Primarily related to personnel matters, administrative and general expenses, with the exception of property insurance costs, are functionalized and classified on the basis of functionalized wages and salaries. Property insurance costs are functionalized and classified on the basis of insured property.

Payments in Lieu of Taxes: Except for a small portion of franchise taxes directly assigned to distribution customers, Santee Cooper's payments in lieu of taxes, *e.g.*, franchise taxes, payment to the State, energy sales tax and generation tax, and other sums in lieu of taxes, are classified as demand-related because they are regarded as fixed costs related to system facilities.

¹ Spinning reserves refer to capacity of generating units that are online and operating, but which are not fully loaded so that they may meet anticipated changes in demand and other contingencies.

Debt Service, Capital Improvements Fund ("CIF") Requirements, and Lease Payments: Because Santee Cooper's debt service payments are incurred as a result of infrastructure additions to the system, they are allocated in the same manner as Santee Cooper's facilities. Santee Cooper's plant in service is first functionalized and then classified to various cost categories. The resulting classification of plant is used to classify debt service payments to demand-, energy-, or customer-related components. Santee Cooper's CIF requirement is also allocated in the same manner as Santee Cooper's facilities because the CIF is predominantly used in lieu of debt to fund capital improvements.

Working Capital: Santee Cooper's working capital requirements are directly related to operating expenses and are classified to the demand-, energy-, and customer-related components based on the classification of total operation and maintenance expenses other than nuclear fuel and purchased power expenses.

Other Income and Revenues: Other income and operating revenues, *e.g.*, revenues from invested funds, non-class sales, wheeling, sales of property, and forfeited discounts, are classified as demand-, energy-, or customer-related based on an analysis of the particular source of such revenues.

C. EXPLANATION OF HOW SANTEE COOPER ALLOCATES COSTS

Santee Cooper allocates costs to customer classes according to cost allocation factors developed for each class and for each type of cost. The development of these cost allocation factors is based on a compilation of data from several different sources, including Santee Cooper's peak demand and energy forecasts, historical billing and other customer information, and data from Santee Cooper's Advanced Metering Infrastructure systems. The cost allocation factors also are based on the usage characteristics of Santee Cooper's firm requirements customer and do not take into account non-firm sales.

As described below, Santee Cooper's cost allocation factors relate to demand, energy, and customer-related classifications.

1. Demand Allocators

Santee Cooper has used demand allocators for (1) demand-related production costs; (2) transmission costs; (3) demand-related distribution costs; (4) demand-related debt service requirements; and (5) capital improvements. As explained below, the demand allocators are based on the peak demand methodology. Peak demand is the period of time in which customer demand for energy is the highest. The peak demand methodology allocates fixed demand-related costs to customer classes in proportion to each class's respective contribution to the peak demand for selected time periods. There are a number of different peak demand allocators that can be used to assign those fixed demand-related costs to customer classes, including coincident peak ("CP") and non-coincident peak ("NCP").

The CP allocator is developed based on the contribution of each customer class to the system territorial peak demand experienced during the test year. As explained below, the cost-of-service study uses the CP allocator to allocate retail production and transmission demand costs. The NCP allocator is based on a customer class's peak load regardless of when that peak occurs within a specified time period.

• Demand Allocation Factors for Production Costs

Santee Cooper developed demand allocation factors for production costs based on the four coincident peaks ("4CP") occurring in the four months of January, February, July, and August.² During those four seasonal months, a demand peak is set, and each customer class's fixed portion of production costs is allocated based on its respective responsibility for the total production demand-related costs placed on the system during those peaks.

This demand allocation is appropriate based on Santee Cooper's load characteristics for this cost-of-service study. Also, Santee Cooper's system has two distinct periods with very little difference in peak load among the summer and winter months. Though the difference in total demand is small, the contributions of each class varies a significant amount between the periods, making it reasonable to utilize both periods (with two months from each, or "4CP") to allocate production costs. While Santee Cooper's actual annual peak has typically occurred during the winter months for several years and the winter peak is the primary driver for capacity planning, it also plans for capacity resources to meet summer peaks due to the duration of those peaks, the reduced rated capacity for generation units, and the limited access to purchased power in the summer months as well. Thus, Santee Cooper's use of 4CP, which reflects these peak loads in summer and winter months, is also consistent with its most recent Integrated Resource Plan.

• Demand Allocation Factors for Transmission Costs

Santee Cooper developed demand allocation factors for transmission costs based on the average of the twelve monthly coincident peaks ("12CP"). A 12CP allocator analyzes a test period's twelve-monthly peaks and then allocates the fixed portion of transmission demand-related costs based on each customer class's coincident peak responsibility during those peaks. Using this method of demand allocation for transmission costs is congruent with industry standards, reflects the method regularly used by utilities in allocated costs to customers, and is FERC's preferred method for developing open access transmission tariffs ("OATT").

• Demand Allocation Factors for Distribution Costs

Santee Cooper developed demand allocation factors for distribution costs, such as line expenses, substation expenses, and load dispatching expenses. They are based on the twelve monthly average non-coincident peak demand ("12NCP") of each rate class.

Santee Cooper uses the 12NCP method for allocating distribution costs because it best measures the factors that contribute to investment in distribution facilities, which, from a design

² Historically, the 4CP has been calculated using December, January, July, and August, but in this cost-of-service study, Santee Cooper replaced December with February to better reflect the system peaks experienced recently.

and operational perspective, are installed primarily to meet localized area loads. They do not function as a single integrated system in meeting system peak demand. Instead, a distribution substation is designed to meet the maximum load from the distribution feeders emanating from that particular substation. Similarly, when designing primary and secondary distribution feeds, the distribution engineer ensures that sufficient conductor and transformer capacity is available to meet the customer loads at the primary and secondary distribution service levels. Thus, local area loads are the major factors in sizing distribution equipment. Consequently, customer class noncoincident demands and individual customer maximum demands are the load characteristics that are normally used to allocate the demand component of distribution facilities as they best measure the factors that determine the investment to that part of the system.

Notably, all demand allocation factors include, where appropriate, transmission and distribution losses.

A summary of the demand allocation factors for the Test Year is shown in **Table 2** below:

	2025 \$	Summary Dem	and Allocation	Factors		
	sion	Distribution				
Customer Class	4-C	Р	12-CP		12-NCP	
-	MW	%	MW	%	MW	%
Residential	575,997	47.48%	500,508	44.93%	478,521	60.15%
Commercial	332,756	27.43%	310,830	27.90%	305,148	38.36%
Lighting	7,819	0.64%	6,789	0.61%	11,904	1.50%
Total Distribution	916,571	75.55%	818,127	73.44%	795,574	100.00%
Industrial (Firm Only) ⁽¹⁾	296,558	24.45%	295,883	26.56%		
Total	1,213,129	100.00%	1,114,010	100.00%		

Table 2

(1) Santee Cooper does not plan or build generation capacity to serve Interruptible, Economy Power, or Stand-by loads.

2. Energy Allocators

Santee Cooper uses a net energy for load allocation to assign variable or energy-related costs to customer classes. Its development of energy allocation factors involves a ratio analysis of total energy consumption for the individual customer class compared to the total system energy requirements. Both are measured at the production (or generation) level and, as appropriate, include transmission and distribution losses.

A summary of the energy allocation factors for the Test Year is shown in **Table 3** below:

Table 3

Customer Class	2025	
Customer Class	GWh	%
Residential	2,071	31.77%
Commercial	1,873	28.73%
Lighting	61	0.94%
Total Distribution	4,006	61.43%
Industrial (Firm Only) ⁽¹⁾	2,515	38.57%
Total	6,521	100.00%

Summary of Energy Allocation Factors

(1) Santee Cooper does not plan or build generation capacity to serve Interruptible, Economy Power, or Stand-by loads.

3. <u>Customer Allocators</u>

Santee Cooper developed customer allocators based on an analysis of its customer-related costs. It has used factors to allocate customer-related revenue requirements based on the projected average number of customers or delivery points, and/or service attachments in each customer classification. Customer-related revenue requirements include meter reading, meter maintenance, customer installations, billing, collecting, and other customer related accounting, service, and information functions. In apportioning customer-related costs and revenues to the various customer classifications, the customer allocation factors utilized recognized weighted and unweighted customers and fixtures.

A summary of the energy allocation factors for the Test Year is shown in Table 4 below:

Table 4

Summary	of Cus	tomer	Allocation	Factors	(2025)
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		Customer Delivery		Weight	Weighted	
Customer Class	Rate	Points	%	Factor	Customer	%
Residential	RG	182,940	84.90%	1	182,940	80.89%
Small General Service	GA, TP	27,762	12.88%	1.3	36,091	15.96%
General Service	GB, GV	2,050	0.95%	2.09	4,279	1.89%
Commercial Lg Demand	GL	38	0.02%	2.09	80	0.04%
Commercial Time of Use	GT	25	0.01%	2.09	52	0.02%
Commercial Traffic Light	TL	305	0.14%	1	305	0.13%
Lighting	MS, OL	2,314	1.07%	0.5	1,157	0.51%
Total Distribution		215,435	99.99%		224,905	99.44%
Industrial (Firm Only)		31	0.01%	40.51	1,256	0.56%
Total Retail System		215,466	100.00%		226,160	100.00%

4. Other Allocators and Direct Assignments

Administrative and general expenses are allocated based on wage and salary expenses with the exception of property insurance, which is allocated based on net plant in service.

Debt service payments are related to the existing plant and additions of utility plants on Santee Cooper's system. Therefore, debt service is allocated using the appropriate plant allocation factor.

Santee Cooper assigns Demand Side Management and Energy Efficiency costs directly to Residential and Commercial classes, and those costs are allocated to the customer classes on the basis of the projected demand and energy savings of each of the classes.

Sales Expenses which can be directly assigned to a customer class have been allocated in this manner. The remaining sales expenses were allocated among the customer classes proportionally to each class's energy usage. The Sales Expenses allocation factors are shown in **Table 5** below.

Table	5

Summary of Sale Expense Allocation Factors				
Customer Class	2025			
	%			
Residential	32.85%			
Commercial	32.78%			
Lighting	0.00%			
Total Distribution	65.62%			
Industrial (Firm Only)	34.38%			
Total	100.00%			

D. RESULTS OF COST-OF-SERVICE STUDY

The results of the cost-of-service study are shown in **Table 6** below.

Customer Class	20	25 (\$000)
Residential	\$	266,508
Commercial		188,875
Lighting		16,541
Total Distribution	\$	471,924
Industrial (Firm & Non-Firm)		371,689
Total		\$843,613

Table 6

(1) Numbers may not add due to rounding.

(2) Includes policy adjustments related to cost allocation amongst classes

A comparison of the allocated costs by rate class compared to the revenues by class under existing rates is provided in **Table 7** below.

Table 7

Customer Class		(\$000)		0/
	Adjusted Cost of Service ⁽²⁾	Revenue at Existing Rates	Difference	%
Residential	\$266,508	\$245,108	\$21,400	8.7%
Commercial	\$188,875	\$181,521	\$7,354	4.1%
Lighting	\$16,541	\$15,756	\$785	5.0%
Total Distribution	\$471,924	\$442,385	\$29,539	6.7%
Industrial (Firm & Non-Firm)	\$371,689	\$361,524	\$10,164	2.8%
Total	\$843,613	\$803,910	\$39,703	4.9%

(1) Numbers may not add due to rounding.

(2) Includes policy adjustments related to cost allocation amongst classes

V. **CONCLUSION**

Santee Cooper's cost-of-service study employs reasonable and customary methodologies to allocate its demand-related, energy-related, and customer-related costs, and it appropriately distributes costs of providing services amongst its various customer classes. It thus serves as a proper basis for determining cost-based rates and its inclusion in the design of the proposed rates is fair and equitable.

RATE DESIGN AND PROPOSED RATES REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to outline the pricing principles Santee Cooper utilizes in evaluating and designing rates, explain the need and objective for new rates, and discuss and sponsor the new rate design, which will adequately recover costs allocated to each customer class. This report is provided in conjunction with the 2024 Electric System Cost of Service and Rate Design Study (the "Study") performed by NewGen Strategies and Solutions, LLC. Specifically, Section 5 of the Study addresses the rate design and proposed rates.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Mike Smith, Director of Billing and Pricing.

III. SUMMARY OF THE REPORT

In evaluating rate design, Santee Cooper uses pricing principles that are consistent with S.C. Code Ann. § 58-31-710 and the Board's directive. It aims to develop and use a rate design that satisfies those pricing principles and sufficiently recovers revenue from retail customers to meet Santee Cooper's revenue requirements and desired financial metrics. Additionally, Santee Cooper seeks to update its current rate structure to provide better price signals to residential and commercial customers. The proposed changes to rate structure will promote efficiency by, among other things, providing price signals that incentivize customers to reduce their demand during periods of high system demand. Additionally, time-of-use rates for residential and commercial customers will include peak periods instead of seasonality. These peak periods will better align with system marginal costs. As a result, Santee Cooper proposes rate design changes, outlined below, to sufficiently and reasonably address its projected revenue shortfall while also providing actionable price signals to customers and aligning costs in a manner that is consistent with its pricing principles.

IV. DISCUSSION

A. OVERVIEW OF THE RATE DESIGN PROCESS

Rate design is the process whereby the rates and charges for each customer class are established in such a manner that the total revenue requirement of the system will be recovered in an equitable manner consistent with the results of the allocated Cost-of-Service Study ("COSS") (the details of and methodology for which are described in a separate report), utility policy objectives, and any applicable orders and/or requirements of local, state, and federal regulatory authorities.

To the extent possible, rate design considers and reflects overall revenue stability; consistency with historical rate forms; conservation considerations; competitiveness with

neighboring utility systems; and the policies of those charged with the utility's management and operation.

B. INFORMATION UTILIZED TO INFORM AND EVALUATE RATE DESIGN

Santee Cooper performed a COSS, discussed in a separate report, which examined the costs to serve each customer class. Santee Cooper then designed its rate structure to meet its revenue requirements in a manner consistent with its COSS and pricing principles. Santee Cooper utilizes pricing principles, consistent with the requirements of S.C. Code Ann. § 58-31-710, to inform and evaluate its rate design.¹ As part of the 2019 Reform Plan and consistent with the requirements of § 58-31-710, Santee Cooper's Board adopted the below pricing principles ("Pricing Principles"):

- *Mission*: Limit price increases to less than inflation;
- *Equity*: Allocate costs to specific customer classes in a reasonable, equitable, and defensible manner;
- *Efficiency:* Design prices so that conservation savings are shared with the customers;
- *Adequacy:* Provide sufficient revenue to preserve the financial integrity of Santee Cooper;
- *Notice:* Ensure customer notice and engagement in rate proceedings;
- *Protection:* Allow reasonable relief mechanisms for financially distressed customers; and
- *Transparency:* Require openness in annual review of compliance with Pricing Principles.

Consistent with the Board's directive, Santee Cooper used these Pricing Principles to inform its evaluation of its new rate design. In addition to the Pricing Principles, the Study addresses other policy considerations used by public utilities when designing rates, such as avoiding undue price fluctuations and supporting economic development, job attraction, and customer retention.

¹ These pricing principles are similar to Santee Cooper's historical general rate design criteria, which it used to establish the rates currently in effect. Those "General Rate Design Criteria" included the lowest reasonable price consistent with the projected revenue requirement, the encouragement of economic development, job attraction, and job retention; simple and understandable rate design; equitable treatment of customer classes and individual customers within classes; an avoidance of undue price fluctuations; the efficient use of electric service; and compliance with applicable orders and requirements of local, state, and federal regulatory authorities.

C. EXISTING RATE STRUCTURE DOES NOT SATISFY THE RATE DESIGN OBJECTIVES

Santee Cooper's existing rates do not satisfy the Rate Design Objectives as it does not adequately recover allocated costs. Santee Cooper's last rate adjustment occurred in 2015, and now, it faces an approximate \$40 million revenue deficit that is projected to occur in 2025.

Additionally, Santee Cooper's existing rate structure does not promote efficiency, a core Pricing Principle, as it does not provide adequate price signals to residential and commercial customers. The current RG-17 and GA-17 rates are two-part "bundled" rates, that provide no change in pricing regardless of how much demand or energy the customer uses or when they use it. To promote efficiency on the Santee Cooper system, adequate price signals must be developed to drive customers from periods of high demand.

As a result, Santee Cooper believes that the existing rate structure must be modified per the proposed rate adjustment and design.

D. PROPOSED RATE DESIGN AND RATES

To address the significant revenue shortfall with existing rates, Santee Cooper has designed new rates consistent with the Pricing Principles to appropriately and sufficiently collect revenue by rate class. The proposed rate changes are discussed in more detail in Section 5 of the Study and are summarized as follows:

• *Changes to the RG, REV, EVO and GA rates:* The proposal will shift the Residential General Service ("RG") and Commercial General Service ("GA") rates from two-part rates (consisting of customer and energy charges) to three-part rates (consisting of customer, energy, and demand charges).

The RG rate will be changed to include a demand charge and a non-seasonal energy rate to incentivize customers to shift usage away from high system demand periods. This will result in less additional capacity added to the system and will ultimately reduce costs for all customers. Demand charges have been added to the REV and EVO rates as well, and for the same reasons.

The GA rate will be changed to include a demand charge to provide an incentive for customers to reduce overall demand, again reducing costs for all customers.

• *Changes to the L and L-I rates:* Additional on-peak hours will be added to the industrial L and L-I rates to provide an energy price signal to industrial customers during the winter (a price signal already exists during the summer). This will provide an incentive for customers to shift usage away from periods of high marginal energy costs.

- *Discontinuation of L-17-SB rate:* The Large Light and Power Standby Service ("L-17-SB") rate will be discontinued as the rate has not been utilized since its inception.
- *Peak Periods:* Energy for residential time of use and commercial rates will now have peak periods instead of seasonality to simplify terminology and make start times, end times and period durations consistent. This will align periods between the two classes and provide on and off-peak periods that better align with system marginal costs.
- *Minimal Increase in Customer Charges:* The proposed new rate designs will include changes to the customer charge for almost all rates. The increase in these charges is primarily due to the impacts of inflation on distribution fixed costs. Despite growing costs in the industry, most increases are projected to be less than a dollar a month. For example, the Residential Customer Charge will increase from \$19.50 to \$20.00 a month.

With regard to the new, proposed rates, Santee Cooper allocated the revenue increase using the same methods described in the Cost-of-Service report with certain adjustments to the allocation of the increase between rates and classes as a matter of policy.

1. Consideration of the Revenue Impacts of Rate Migration

Santee Cooper's proposed rate design is expected to limit the opportunity for rate migration within the residential and commercial rate classes and is expected to have little to no impact on industrial customer revenue. Therefore, the risk to meeting revenue requirements is low as a result of migration and further mitigation is not required at this time.

Residential customers who are on the current RG rate will all be transitioned to the new RG rate. Customers currently on the RT (time of use) or electric vehicle (RG-REV, EVO) rates will be kept on those rates. If a customer would like to transition off of RG, they will effectively have one option - RT. It is expected that migration to RT will be minimal as most RG customers will be able to change their behavior and reduce their bill on RG much the same as they would under the time of use rate.

Commercial customers currently on the GA, GB and GL rates will be assigned to the same rates but under different requirements. All commercial customers on one of those rates with peak demand less than 50 kilowatts ("kW") will be assigned to the GA, at 50 kW to 300 kW will be assigned to GB, and >300 kW to GL. The only options that will be available for migration will be GT (commercial time of use with on and off-peak demand and energy charges) and GV (seasonal rate, similar to GB but with no demand ratchet and a higher demand charge), and it is anticipated that the majority of our customers will not migrate to these rates due to their relative complexity and cost.

The Industrial class does present an opportunity for rate migration for non-firm customers, as the rate increase for Economy Power and Economy Power Optional customers will be >10%

while the increase for Interruptible customers will be 1.0%. Since a very small amount of total Economy Power demand (209 MW) exists vs. Interruptible demand (477 MW), any migration from Economy Power to Interruptible is expected to have little to no impact on revenue.

2. <u>Consideration of Equity</u>

As discussed above, Santee Cooper utilized the Pricing Principles in the design of the proposed rates. Those Principles expressly include a consideration of equity (specifically, the allocation of costs to specific customer classes in an equitable manner).

As discussed in a separate report, revenue requirements were generally allocated to the customer classes and rates developed on a consistent basis, using allocation methodology consistent with industry standards and Santee Cooper policies. This allocation methodology considered equity, as the majority of the customer classes were allocated most costs based on how they use the system (see report on cost allocation).

However, when applying the Pricing Principles it is important to view them all holistically rather than the exclusion of one principle for the benefit of another. While ensuring "equity" through the allocation of costs, Santee Cooper also embraced the Principle of "mission" as it tried to limit the increase of a single class when other classes had more modest increases. James Bonbright would consider this to be "gradualism," a key principle for public utility pricing in his seminal text, "Principles of Public Utility Rates." For these reasons, as a matter of policy, Santee Cooper provided limited adjustments to the commercial, residential and industrial classes to minimize the impacts to specific rates/classes and ensure a more equitable increase for all.

3. <u>Consideration of Emerging and Applicable Energy Trends</u>

Several emerging energy trends are impacting Santee Cooper. These trends and a description of how the proposed rate design addresses them are below.

- *Trend toward rapid growth outpacing the ability to build new generation.* Santee Cooper, as are many other utilities in the region, is experiencing a shortage of generating capacity beyond that needed to meet its current load. The lack of "excess" capacity enhances the value of demand reduction in customer classes and the use of interruptible rates. Santee Cooper has shifted both the RG and the GA rates from two-part energy only rates to three-part rates, thereby providing a mechanism for customers to lower their demand, save money, and preclude or limit the amount of additional generating capacity that must be constructed or contracted.
- *Trend toward renewable energy.* There is a strong interest in renewable energy from Santee Cooper's industrial customers. To address this and in order to allow customers to receive compensation for any solar energy that is produced above their own needs, the Distributed Generation Rider ("DG") rate has been expanded to include industrial customers.

4. Summary of Impacts of Proposed New Rates

As noted above, the projected revenues produced under current rates in 2025 would *underrecover* retail allocated costs by approximately \$40 million. It is anticipated that the new, proposed rates would sufficiently recover anticipated retail allocated costs. The proposed rate modification by customer class is provided as follows:

Table 1

		Table 1					
Retail Cost of Service and Existing Firm Rate Revenue Projections ⁽¹⁾							
	Calendar Year 2025 (\$000)						
			Differ	ence			
Customer Class	Cost of Service	Existing Rate	Amount	Percentage			
	(Adjusted) ⁽²⁾	Revenue					
Residential	\$266,508	\$245,108	\$21,400	8.7%			
Commercial	\$188,875	\$181,521	\$7,354	4.1%			
Lighting	\$16,541	\$15,756	\$785	5.0%			
Total Distribution	\$471,924	\$442,385	\$29,539	6.7%			
Industrial (Firm & Non-Firm)	\$371,689	\$361,524	\$10,164	2.8%			
Total	\$843,613	\$803,910	\$39,703	4.9%			

(1) Numbers may not add due to rounding.

(2) Includes policy adjustments related to cost allocation amongst classes

Under the proposed changes, the average 2025 residential bill increase would be 8.7%.

5. <u>Changes to General Terms and Conditions</u>

In addition to the changes to rates and charges, Santee Cooper is proposing several changes to its general terms and conditions for Residential, Commercial, Lighting and Industrial customers. These changes are described below:

Retail (Residential, Commercial and Lighting) Terms and Conditions

- 1. Paragraph III (d.) Eliminated the word "commercial" in the next to last sentence.
- 2. Paragraph III (h.) Eliminate the words "in writing" from the last sentence.
- 3. Paragraph IV (a.) Changed "\$1.00" to "5.00."
- 4. Paragraph IV (d.) Eliminated "letter of guarantee" from first sentence of second paragraph.
- 5. Paragraph IX (f.) Changed first sentence to say "TAMPERING: If the customer or any representative of the customer tampers with Santee Cooper's facilities, including

unauthorized removal of the meter, the customer will be required to bear all costs incurred by Santee Cooper for investigations, inspections, and the installation of necessary protective devices."

- 6. Paragraph X (c.) Changed paragraph to say "SPECIAL MEASUREMENT: Santee Cooper, at its expense, may install specialized equipment on the customer's property for the purpose of measuring energy usage or for tests of customer's electrical operations."
- 7. Paragraph X (d.) Changed the word "prevent" to "detect."
- 8. Paragraph XI (b.) Changed entire item to say "SPECIAL BILLING CONDITIONS: Santee Cooper will obtain meter usage data at regular intervals.

In circumstances where usage data is not available, Santee Cooper may render a bill based on estimated usage.

All bills are to be paid in accordance with the standard payment terms, but estimated bills are subject to adjustment on the basis of actual usage."

9. Under "SERVICE LOCATIONS," phone numbers were updated where necessary and fax numbers were deleted.

Industrial Terms and Conditions

- 1. Added Section 2(C) "The Authority reserves the right to require the Customer to provide a security deposit or letter of guarantee equivalent to one year's projected monthly invoices, unless the Customer demonstrates sufficient credit worthiness to the satisfaction of the Authority."
- 2. Section 4(B) Eliminated "mailed or otherwise" from references to rendering bill in first, second and third sentences.
- 3. Section 4(B) Eliminated "the larger of one hundred dollars (\$100.00), or" from late fee calculation.
- 4. Added Section 5(C) "The Authority shall be under no obligation to purchase any energy produced by the Customer as a result of generation behind the Authority's meter, except to the degree required by law or by separate mutual agreement by the Authority."
- 5. Section 6(A) Added "The Authority shall have the right to suspend service to the Customer until such time as the objectionable flow or disturbances have been mitigated by the Customer."
- 6. Section 8(K) Added "or establish an appropriate facilities charge per section "Monthly Facilities" to keep the excess facilities in service at the Customer's request."

V. CONCLUSION

Santee Cooper's existing rates are no longer sufficient to recover enough revenue from retail customers to satisfy Santee Cooper's revenue requirements, financial metrics targets, or Pricing Principles. Thus, Santee Cooper seeks approval to modify and implement changes to its rate design. It has developed the proposed new rate design in a manner consistent with Santee Cooper's Pricing Principles and will help address emerging energy trends. As discussed in other Reports, the new rate design will also enable Santee Cooper to, among other things, maintain or improve its credit rating, continue to fund its Capital Plan and obtain favorable interest rates for debt-related financing, and remain financially healthy while continuing to provide reliable, safe, environmentally responsible, and affordable service to its customers.

GENERATION, TRANSMISSION, AND DISTRIBUTION REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to provide an overview of the Santee Cooper system (generation, transmission and distribution), discuss associated operation and maintenance ("O&M") costs, and explain the capital-intensive costs of operating such a system, which is required to serve, directly or indirectly, approximately two million South Carolinians in all 46 counties of the State.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Carey Salisbury, Senior Director of Generation; Chris Wagner, Director of Transmission Planning and Research & Development; Mike Johnson, Director of Transmission Operations; Adam Taylor, Senior Manager of System Operations; and Neil James, Director of Distribution Engineering and Operations.

III. SUMMARY OF THE REPORT

Santee Cooper provides electric service to over 2 million South Carolinians through its vertically integrated generation, transmission and distribution systems and its operation of transmission facilities owned by Central Electric Power Cooperative, Inc. ("Central"). Santee Cooper serves its customers through a reliable generation portfolio, which includes a variety of resources geographically dispersed throughout South Carolina totaling approximately 5,158 MW of capacity in the summer and approximately 5,383 MW in the winter, and through various power purchase arrangements. Santee Cooper also operates an integrated transmission system consisting of lines Santee Cooper owns and lines that Central owns and Santee Cooper maintains and a distribution system that serves approximately 215,000 residential, commercial, and small industrial customers.

Santee Cooper manages its generation, transmission, and distribution systems to meet the electric needs of its customers in a manner that results in competitively priced electricity service to customers and maintains system safety and reliability in compliance with applicable regulations. Santee Cooper carries out a well-established maintenance program to ensure that generation is highly reliable and operates efficiently when called upon. Santee Cooper continued to undertake good utility practices and maintenance programs during the rate freeze and was able to maintain reliability of its system. However, external forces, including inflation, regional system growth, and increased environmental regulation, are applying increased pressure on the costs associated with doing so.

Continued economic development and future customer growth will require Santee Cooper to expand its system, including transmission, distribution, and generation assets, to meet its customers growing needs while still maintaining high standards of safety, reliability, and environmental requirements. The proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes the costs associated with operating and maintaining Santee Cooper's generation, transmission, and distribution facilities as well as Santee Cooper's current and future system investments. The proposed rates ensure that Santee Cooper continues to maintain its high levels of safe, reliable, competitively-priced electric service, while respecting the natural environment.

IV. DISCUSSION

A. SYSTEM DESCRIPTION

Santee Cooper is South Carolina's state-owned, not-for-profit electric utility and owns and operates over 40 miles of dams and dikes, several large generating facilities, a high voltage transmission network, and over 3,000 miles of distribution lines and associated facilities. Santee Cooper is statutorily authorized to, among other things, produce, transmit, and distribute electricity at wholesale and retail, and uses its robust system to serve over 2 million people across South Carolina. Of those over 2 million people Santee Cooper directly serves approximately 215,000 retail customers in Berkeley, Georgetown, and Horry counties, including 27 large industrial retail customers. Santee Cooper indirectly serves approximately 1.8 million people in South Carolina through its wholesale customers Central, its largest customer, the electric systems of South Carolina municipalities Bamberg, Georgetown, and Seneca, and joint action agency Piedmont Municipal Power Agency (South Carolina). Santee Cooper additionally serves the Town of Waynesville, North Carolina.

1. Generation and Power Purchase Arrangements

Santee Cooper serves its customers through a reliable generation portfolio that includes a variety of resources geographically dispersed throughout South Carolina, including: two natural gas combined-cycle units; simple-cycle combustion turbines; six hydro units located on Lakes Moultrie and Marion; five landfill gas-to-energy biomass facilities; three solar PV sites; two coal-fired generating stations; and, through a partnership with Dominion Energy South Carolina, Inc. ("DESC"), a one-third ownership interest in the V.C. Summer Nuclear Station. The capacity of these generating units total approximately 5,158 MW, based on peak output ratings under summer conditions, and approximately 5,383 MW during the winter, as shown in Table 1 below.

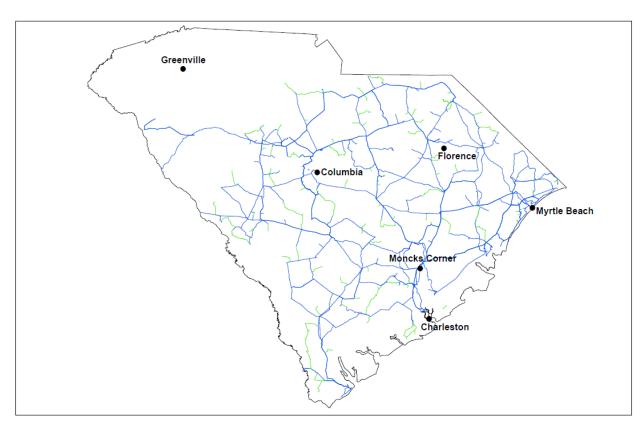
	SANTI	EE COOPER			
	ELECT	RIC SYSTEM			
	GENERATING FA	CILITY INFORMATION			
		IN-SERVICE	PEAK CAPABI		ENERG
	FACILITY	DATE	WINTER	<u>SUMMER</u>	SOURCE
4	EXISTING: JEFFERIES HYDROELECTRIC GENERATING	G 1942	1 4 0	140	
		1942	140	140	HYDRO
Ζ.	WILSON DAM GENERATING STATION	1950	2 142	2	HYDRO
			142	142	
3	MYRTLE BEACH COMBUSTION TURBINES				
0.	NOS. 1 AND 2	1962	20	16	OIL
	NOS. 3	1972	20	19	OIL
	NO. 5	1972	20	21	OIL
4	HILTON HEAD COMBUSTION TURBINES	1370	20	<u> </u>	01
	NO. 1	1973	20	16	OIL
	NO. 2	1974	20	16	OIL
	NO. 3	1979	60	52	OIL
	NO. 3	1979	165	140	01
5.	WINYAH GENERATING STATION (2)				
	NO. 1	1975	280	275	COAL
	NO. 2	1977	290	285	COAL
	NO. 3	1980	290	285	COAL
	NO. 4	1981	290	285	COAL
6.	CROSS GENERATING STATION				
	NO. 1	1995	585	580	COAL
	NO. 2	1983	570	565	COAL
	NO. 3	2007	580	585	COAL
	NO. 4	2008	595	605	COAL
			3,480	3,465	
7.	SUMMER NUCLEAR STATION (3)	1983	322	322	NUCLEAF
8.	LANDFILL GAS	2001 - 2011	26	26	METHANE GAS
9.	J.S. RAINEY GENERATING STATION				
	COMBINED CYCLE NO. 1	2002	520	460	GAS
	COMBUSTION TURBINE NO. 2A	2002	180	146	GAS
	COMBUSTION TURBINE NO. 2B	2002	180	146	GAS
	COMBUSTION TURBINE NO. 3, 4, & 5	2004	270	225	GAS
10	. CHEROKEE	1998	98	86	GAS
			1,248	1,063	3/10
	TOTAL EXISTING CAPABILITY		<u>5,383</u>	<u>5,158</u>	
				<u>-1.22</u>	
	Notes:				

<u>Table 1 – Santee Cooper Electric System Facility Information</u>

Santee Cooper has also entered various power purchase arrangements through which it currently purchases approximately 662 MW of firm capacity and associated energy in the summer and 712 MW in the winter. Solar units that Santee Cooper either owns or for which it has entered contracts to purchase the output are not included in the capacity totals. The effective load carrying capability of those units varies greatly from winter to summer, and it is also dependent on the amount of total solar on the system. The anticipated territorial peak demand with losses for 2025 is approximately 5,631 MW.¹

2. Transmission

Santee Cooper operates an integrated transmission system, illustrated in Figure 1 below, which consists of lines Santee Cooper owns and lines that Central owns and Santee Cooper maintains. The transmission system includes approximately 5,255 miles of overhead and underground lines which are primarily rated between 69 kV and 230 kV. Additionally, the system includes 93 transmission substations and switching stations serving delivery point substations that Santee Cooper and Central own. Santee Cooper plans the transmission system to operate during normal and contingency conditions in compliance with mandatory North American Electric Reliability Corporation ("NERC") electric system reliability standards ("Reliability Standards").





¹ Projected winter peak in 2025 which includes existing off-system sales customers.

Santee Cooper's transmission system is interconnected with neighboring electric utilities in the region. It is directly interconnected with DESC at twelve locations; with Duke Energy Progress, LLC ("DEP") at eight locations; with Duke Energy Carolinas, LLC. ("DEC") at two locations; and with Southern Company Services, Inc. ("Southern Company") at one location. Santee Cooper is also interconnected with DESC, DEC, Southern Company, and the Southeastern Power Administration ("SEPA") through a five-way interconnection at the SEPA J. Strom Thurmond Hydroelectric Project, and with Southern Company and SEPA through a three-way interconnection at the SEPA R. B. Russell Hydroelectric Project.

Through these interconnections, the Santee Cooper transmission system is integrated into the regional transmission system serving the Southeastern region of the United States and the Eastern Interconnection (one of the three major electrical grids in the continental U.S. power transmission grid). Santee Cooper has separate interchange agreements with each of the companies with which it is interconnected to provide for mutual exchanges of power.

3. Distribution

The Santee Cooper distribution system serves over 210,000 residential, commercial, lighting, and small industrial customers in two service areas: (1) the Berkeley District, which serves retail customers in St. Stephen, Bonneau Beach, Moncks Corner, and Pinopolis, some unincorporated and rural areas in Berkeley County, and a small parcel in Charleston County; and (2) the Horry-Georgetown Division, which serves retail customers in Conway, Myrtle Beach, North Myrtle Beach, Loris, Briarcliffe, Surfside Beach, Atlantic Beach, Pawleys Island, unincorporated areas along the Grand Strand, and portions of rural Georgetown and Horry Counties.

To deliver power safely and reliably to its directly served retail customers, the Santee Cooper distribution system is comprised of 3,159 miles of 12 kV and 34 kV primary lines. The primary distribution system is 44% overhead and 56% underground. The distribution system is served from 59 substations (of which 55 are 12 kV and 4 are 34 kV), including 87 power transformers (of which 79 are 12 kV and 9 are 34 KV), 297 breakers and 283 loaded feeders. The distribution system also includes: 3,486 miles of secondary distribution lines; 109,027 poles; 43,950 distribution transformers; 4,013 switches; 10,727 fuse protective devices; 49,400 underground enclosures; 849 regulators; 402 distribution line capacitors; and 212,872 mesh network devices, including 212,102 AMI meters.

B. SYSTEM MANAGEMENT AND OPERATIONS AND MAINTENANCE ACTIVITIES

Santee Cooper is committed to providing service throughout South Carolina as it currently does and managing its generation, transmission, and distribution systems to meet this need in a manner that results in competitively priced electricity service to customers and maintains system safety and reliability. Therefore, the proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes \$575 million in fixed and variable non-fuel operating and maintenance ("NFOM") costs. These costs and the need for them are further explained below.

1. Energy Control Center

From its 24/7 Energy Control Center,² Santee Cooper oversees and manages in real-time the monitoring, control, and dispatch functions associated with its generation assets and transmission system. System operators are responsible for economically dispatching Santee Cooper's generation fleet, subject to reliability and safety considerations. The system operators communicate with plant operators to coordinate plant outages and to increase or decrease the generator's output to match the load at any given time. System operators are also responsible for monitoring the transmission system for possible overloads, maintaining the security of the Santee Cooper electric system, communicating with transmission crews to ensure any maintenance work is safely performed, and coordinating transmission facility outages so that service to customers is not affected.

Control centers must comply with rigorous NERC regulations that relate to physical security, cyber security, and system balancing and emergency response. Santee Cooper System Operators undergo extensive training to ensure that they have a working understanding of Santee Cooper's NERC policies and procedures and are prepared to make high-pressure decisions in real time.

2. <u>Generation</u>

To ensure that its generation assets achieve high reliability when called upon and operate efficiently with low maintenance costs, Santee Cooper has a well-established maintenance program that incorporates good utility practices and programs.

For instance, Santee Cooper maintains its generation units with computerized maintenance management systems and the use of preventive, predictive, and proactive maintenance practices. In its maintenance program, Santee Cooper utilizes technologies such as vibration analysis, oil analysis, thermography, laser alignment, and non-destructive testing. Santee Cooper also continues to implement equipment maintenance programs for the units, including major unit components, such as control systems, steam generators, and turbine generators.

Notably, Santee Cooper continued these good utility practices and maintenance programs during the rate freeze and was able to maintain reliability of its units. However, external forces are applying increased pressure on generation reliability and maintenance cost. The first of these pressures is general inflationary increases for the cost of services and materials to operate and maintain the generating stations. Generation will need to expand maintenance funding in the next five years to continue the good utility practices and maintenance programs consistent with the expected performance of the system.

The second pressure is from increasing projections in regional system growth and prospective economic development load that may require more energy and better reliability from existing resources until additional capacity can be acquired. Over the next 5-10 years, Generation

² In accordance with NERC rules and industry best practices, Santee Cooper also maintains a backup control room.

will undertake many capital improvements targeted at reducing the frequency of unplanned outages and the number of forced reductions in station power levels.

Lastly, pressure continues to be applied from existing, revised, and new environmental regulations, such as: the revised mercury and air toxics standards for coal- and oil-fired electric generating units ("MATS Rule"); the revised effluent limitation guidelines and standards for water pollutants discharged from coal-fired power plants ("ELG Rule"); the coal combustion residual regulations ("CCR Rule"); and the revised standards for existing coal-fired electric generating units and for new, modified, and reconstructed natural gas-fired electric generating units to achieve up to a 90% reduction in greenhouse gas emissions ("GHG Rule"). Existing compliance equipment not only has to be maintained to achieve compliance performance but to also obtain excellent reliability. Additional compliance equipment will need to be added through capital investments, and NFOM costs will need to be included to operate and maintain this new equipment. Generation NFOM costs included in the proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes approximately \$325 million.

3. Transmission

Santee Cooper manages its transmission system primarily with in-house resources. Those include: the Energy Control Center and groups of transmission line workers; substation maintenance technicians; substation relay protection and control engineers and technicians; and a variety of other personnel who oversee and support construction, maintenance, vegetation management and other engineering, outage response, system metering, and compliance needs. Consistent with industry practices, these in-house groups also utilize contract partners for assistance with activities like line and substation work and vegetation management.

Santee Cooper operates and maintains its transmission system to provide safe, reliable, and economical power to its customers. It also does so in a manner compliant with NERC's evolving reliability and critical infrastructure protection standards associated with system security and reliability and in accordance with good utility practice. To continue providing safe and reliable operation to customers, Santee Cooper conducts rigorous testing and inspecting and employs preventative, predictive, and corrective maintenance activities on the system. Among other things, Santee Cooper performs the following activities:

- Transmission line and vegetation inspections annually, once by ground and once by air.
- Quarterly inspections of substations and other assets.
- Replacement of individual components, e.g., insulators, cross arms, etc.
- Operation of an encroachment program focused on defending transmission right-of-way easements in the name of public safety, etc.
- General upkeep of facilities such as outlying crew quarters, potable water systems, etc.
- Any general repairs to facility fences, roads, or any kind of damage that may have occurred to a private property during maintenance activities, etc.

• All vegetation management, whether cycled ground floor mechanical re-clearing, cycled ground floor select herbicide application, cycled tree trimming, or hazard tree removal.

Transmission NFOM costs included in the proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes \$74 million.

4. Distribution

Santee Cooper's service territory is broken into five operating areas, each with its own crew quarter: North Myrtle Beach, Conway, Myrtle Beach, Garden City and Moncks Corner. Santee Cooper has 17 crews (comprised of 94 line technicians and supervisors) across the five service areas, including a dedicated directional drilling crew. It also has a centralized Distribution Technical Operations group to handle substation maintenance and substation relay operating, maintenance and upgrade activities. Line crews and technical operations are on-call for storm response and after-hours emergencies. Santee Cooper performs N-1 contingency switching studies for summer and winter peaks to be able to pick up all customers in the event of any substation transformer or feeder outage.

Santee Cooper manages its distribution system using a Supervisory Control and Data Acquisition ("SCADA") system and an Outage Management System ("OMS"). These systems are monitored 24/7 by Santee Cooper's Distribution Control Center, which provides centralized control and information. Santee Cooper uses the SCADA system to monitor outage information; monitor and control substation device status; issue hot-line work permits for switching; minimize system losses; and reduce system loading as needed. The distribution line assets are mapped and tracked in the Company's geographic information system ("GIS").

To maintain a reliable distribution system, Santee Cooper performs or outsources the following operations and maintenance activities: vegetation management (five-year cycle); padmount transformer and equipment inspections (3-yr cycle); pole inspections (10-year cycle); Momentary Average Interruption Frequency Index ("MAIFI") patrols; corrosion patrols; inspections of worst-performing feeders by area; replacement of danger poles; and forward-looking infrared inspections on substations and switchgear.

Distribution Technical Operations conducts preventative maintenance tasks for substation assets. Those maintenance tasks include: Automatic Circuit Interrupter trip checks; breaker timing tests; relay testing; transformer oil analysis; and maintenance of breakers, regulators, and batteries.

Additionally, Santee Cooper conducts various engineering studies, such as: contingency studies; ten-year plan analysis; fuse/relay coordination studies; and short-range system improvement plans, which may involve capacitor bank placement, load balancing, contingency switching, reconductoring, and overcurrent protection strategies.

Distribution NFOM costs included in the proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes \$21 million.

5. Tree and Vegetation Management

Tree and vegetation management are vital tools to ensure the continued safety, reliability and resiliency of Santee Cooper's transmission and distribution systems. Effective tree and vegetation management reduces the frequency and duration of customer outages and allows crews to restore service after storm damage in a faster, easier, and safer manner. On the other hand, poor tree and vegetation management can lead to dangerous situations for crews in the field and slower outage response times.

With respect to tree management, Santee Cooper is required by a NERC Reliability Standard to maintain the full boundary widths of the rights of way from "ground to sky" and must ensure that trees, limbs, and wooded encroachment maintain appropriate clearances from transmission facilities covered by the NERC reliability standards. Santee Cooper employs both aerial and ground operations, including right-of-way patrolling, side-trimming and removal of "hazard trees," *i.e.*, dead, dying, diseased, leaning or damaged trees, and "danger trees," which include any tree that has the potential to cause damage to the power line that would result in a power interruption.

Because rainfall and long growing seasons support robust vegetation growth in its service territory, Santee Cooper must also employ effective vegetation control methods, including mechanical re-clearing and herbicide application, to target undesirable vegetation that has the potential to cause power interruptions. It leaves in place compatible low growing vegetation that promotes biological diversity.

Santee Cooper performs transmission vegetation management in accordance with its Transmission Vegetation Management Program ("TVMP"), which includes, among other things, maintaining the ground floor of the transmission rights of way and maintaining the trees that are adjacent to and align the transmission right of way. The vegetation management approach is generally cycled and planned to ensure public safety, transmission and electric grid safety and reliability, and compliance with NERC regulations. Santee Cooper's commitment to vegetation management and its execution of the TVMP has allowed Santee Cooper to remain in good standing related to successful outcomes (i.e., no adverse findings) in the reoccurring audits associated with NERC standard FAC-003 for vegetation management on the transmission system.

For its distribution system, Santee Cooper utilizes an Integrated Vegetation Management ("IVM") program. It implements the IVM Program on a multiyear cycle to mitigate, control, and eliminate plants and trees that are incompatible with the safe and efficient operation of the system. The integrated approach refers to the use of professionally recognized standards, concepts, and methods and the judicious use and application of technology, tools, equipment, and materials to achieve objectives in a manner that is effective, economically prudent, environmentally responsible, and attentive to customer's and the at large community's expectations. The Supervisor of Right of Way Management oversees the IVM program and receives support from two engineering technicians. Management of vegetation for the electrical distribution system utilizes contract services from a qualified vegetation management provider.

Santee Cooper also educates and assists property owners on the appropriate trees and vegetation to be planted near power lines and works to prevent the public from creating safety hazards or violating the safety codes by locating within transmission rights of way.

Santee Cooper's effective tree and vegetation management programs reduce the chances for trees, large limbs, and other vegetation to damage transmission and distribution assets. In so doing, they have greatly reduced associated repair costs and kept the frequency and duration of customer outages low.

Costs associated with tree and vegetation management programs are included in the transmission and distribution NFOM figures above.

C. SAFETY, RELIABILITY, AND ENVIRONMENTAL IMPACT

1. <u>Safety</u>

Safety is the cornerstone in everything Santee Cooper does to serve South Carolina. Santee Cooper continuously utilizes good utility practices and industry-wide engineering and management best practices to assess and implement safety improvements to its facilities and processes.

Santee Cooper's Corporate Safety Council is a committee consisting of personnel from each line of business who assist with aligning safety efforts and activities with corporate business functions. In April 2023, the Corporate Safety Council, in coordination with the Corporate Engagement and Oversight Committee and Santee Cooper executives, approved Santee Cooper's official Safety Manual with the aim of providing consistent safe work practices for all Santee Cooper personnel. The Safety Manual provides, in one document, specific safe work practices which are readily accessible to all personnel to help train, plan, and perform work activities. It will help Santee Cooper maintain a safe and healthy workplace for employees.

Santee Cooper continuously seeks to improve its safety practices. Safety improvements are brought forth in numerous ways, but mainly through our safety committees. Those concerns are then brought forth to the Safety Council for discussions on how to best address them. If an identified safety improvement cannot be immediately addressed or it needs to undergo a more vigorous planning and funding effort, then the proposed improvement is included in Santee Cooper's capital improvement program and prioritized accordingly.

Santee Cooper's safety commitment has long-been recognized by the American Public Power Association, which awards members for maintaining safety. Santee Cooper's employees earned the utility first place in its group for the 2024 American Public Power Association's ("APPA") Safety Award of Excellence program, which honored safe operating practices in 2023. Santee Cooper has earned first or second place in the APPA Safety Award of Excellence 17 years in a row and 30 times total.

The Recordable Incident Rate ("RIR") is a calculation used by the Occupational Safety and Health Administration ("OSHA") to describe the number of employees per one hundred full-time

employees that have been involved in an OSHA-recordable injury or illness. Santee Cooper's RIR for 2023 was 0.82 and through March 2024 was 0.49. As Santee Cooper's load grows and places increasing requirements on employees and assets, it will continue to invest in the safety of its employees and customers and to employ industry best practices.

2. <u>Reliability</u>

Maintaining optimum performance and reliability is of utmost importance to Santee Cooper. In fact, system reliability is essential to Santee Cooper's core mission and responsibilities, and it continually works to maintain, promptly restore, and improve its system, including its generation, transmission, and distribution assets.

a. Generation

To achieve low-cost, reliable power over the long-term, Santee Cooper continues to invest in its generation resources through capital replacements, major component maintenance, efficiency improvement projects, and control system upgrades. As a result of these investments, along with the efforts of a talented and engaged team, Santee Cooper maintains a high level of reliability for its fleet of generators. Santee Cooper uses widely available industry standards to measure the reliability of its generation system. Generation's key performance metrics include weighted forced outage rate ("WFOR"), weighted equivalent forced outage rate ("WEFOR"), availability factor ("AF"), and capacity factor ("CF"). <u>Attachment A</u> provides the recent historical AF, CF, and forced outage rate.

It is worth noting that Santee Cooper's WEFOR for its largest assets (Cross, Winyah, and Rainey) averaged 5.9% over the five-year period of 2018-2022, which was 53% lower than the industry average of 12.6%.

b. Transmission

Santee Cooper measures the reliability of its transmission system with several metrics that are benchmarked internally and against similar utilities in the industry.

For internal benchmarking of reliability over time, Santee Cooper uses the Average Substation Availability Index ("ASAI"), which represents the average transmission system availability to customer delivery points during the defined reporting period. The calculated ASAI does not include minutes for pre-arranged outages (e.g., maintenance); unplanned outages at the customer's request; outages caused by a failure or problem with the customer's equipment within the customer's system; outages that occur during a major storm; and momentary outages less than 1 minute in duration. The Company's annual goal is to have an ASAI of 15.77 outage minutes (or less) per customer delivery point. In 2023, the Santee Cooper transmission system met the internal ASAI goal ending the year with 15.27 minutes of outage time per customer delivery point. Over the past 10 years, Santee Cooper has only missed this reliability goal twice (in 2015 and 2019). This is a testament to local and trained in-house line workers responding and performing switching to sectionalize the system as needed to get the customer's power back on. It is also a testament to the training and relationship that exists with Santee Cooper's electric cooperative customers and partners, who often assist in emergency switching to restore power.

For visibility on the number of unplanned sustained outages, Santee Cooper also considers Outages per Hundred Miles per Year ("OHMY"). This metric is benchmarked with similar utilities participating in the North American Transmission Forum. ("NATF"). When considering 3 years' worth of data (2020 - 2022) specific to sustained outages on overhead transmission for voltages ranging up to 299 kV, and when compared to other transmission utilities in the Southeastern Electric Reliability Corporation (SERC) region, the Santee Cooper transmission system has an OHMY rate of 1.7, which ranks in the mid-second quartile.

Santee Cooper also considers Average Outage Duration, or the length of time a transmission facility is out of service for unplanned outages. This metric is also benchmarked with similar utilities participating in NATF. This metric will differ from ASAI due to the networked nature of Santee Cooper's transmission system, *i.e.*, customers can often be served by multiple delivery paths in the event of unplanned system events. When considering 3 years' worth of data (2020 - 2022) specific to sustained outages on overhead transmission for voltages ranging up to 299 kV, and when compared to other transmission utilities in the SERC region, the Santee Cooper transmission system has an Average Outage Duration of 4.17 hours, which is best in class and leads the first quartile.

c. Distribution

Santee Cooper uses outage information, captured using its GE PowerOn OMS, to calculate monthly and year-to-date metrics each month including System Average Interruption Duration Index ("SAIDI"), Customer Average Interruption Duration Index, System Average Interruption Frequency Index ("SAIFI"), Momentary Average Interruption Frequency Index ("MAIFI"), Customer Minutes of Interruption ("CMI"), and Customers Affected. Santee Cooper routinely benchmarks its reliability performance against other companies. Santee Cooper aims for its SAIDI to be less than 25 minutes per year. Accomplishing that goal, Santee Cooper's most recent annual SAIDI is 22.3 minutes. Also of note, Santee Cooper's SAIDI was 23.7 minutes for 2022, which placed Santee Cooper tenth, or in the top 2%, out of almost 500 companies according to data the Energy Information Administration compiled. This top tier distribution reliability ranking demonstrates Santee Cooper's commitment and ability to deliver the reliable service its customers require and expect. Table 2 below contains the annual reliability statistics.

	Santee Cooper Annual Reliability Statistics								
Year	SAIDI	SAIFI	CAIDI	MAIFI	CMI				
2023	22.264	0.34	65.52	3.14	4,569,012				
2022	23.703	0.455	52.085	3.16	4,697,847				
2021	20.748	0.335	61.932	2.58	4,004,525				
2020	23.902	0.389	61.394	3.00	4,501,191				
2019	18.942	0.266	71.282	2.69	3,489,973				

Table 2 – Annual Reliability Statistics

3. Environmental Impact

With regard to the environment, Santee Cooper holds itself accountable to its stakeholders – customers, employees, and every person and community in South Carolina. Santee Cooper has teams dedicated solely to environmental stewardship and it is committed to sustainable practices that protect and enhance the environment—from improving habitats by supporting indigenous flora and fauna and recreating vital wetlands, to beneficially reusing byproducts and working to be a zero-waste company.

Santee Cooper continuously operates its fleet of generating resources in compliance with all federal, state, and local laws and regulations, including those pertaining to environmental matters. This includes the operation and maintenance of several environmental mitigation systems, including Selective Catalytic Reducers ("SCR") for the reduction of nitrous oxides, Wet Flue Gas Desulfurization ("WFGD") systems for the reduction of sulfur dioxide, and beneficial use streams of combustion byproducts such as bottom ash, fly ash, and gypsum. Santee Cooper has previously excavated and closed its ash pond impoundments at the former Grainger Generating Station in Conway, South Carolina, and it has returned those former impoundments to natural wetlands. It continues excavation and closure of ash impoundments at Jefferies, Winyah, and Cross Generating Stations. In addition, to comply with the EPA's ELG Rule, Santee Cooper is currently constructing two wastewater treatment systems at Cross Generating Station and Winyah Generating Station. Those two systems are expected to be completed and in operation by December 31, 2025.

Since 2005, Santee Cooper has significantly reduced emissions of sulfur dioxide (SO₂) and nitrogen oxides ("NOx") from its fossil-fired units. Specifically, it has reduced SO₂ emissions and NOx emissions by 93% and 82%, respectively. It has reduced mercury emissions by more than 90% over the same timeframe. Santee Cooper has further cut carbon dioxide ("CO_{2"}) emissions 35% compared to 2005 levels.

Notably, Santee Cooper's retirement of fossil units at Grainger and Jefferies generating stations contributed to this decline as has an increased reliance on natural gas generation. Additionally, Santee Cooper's improvements to emissions control devices, installation of new or improved environmental technology, and greater use of more efficient generating units have helped with emissions reductions over the years.

Although associated costs are not included in these proposed rates, the 2023 Integrated Resource Plan ("2023 IRP"), which was approved by the Public Service Commission of South Carolina in March 2024, focuses on increasing the energy derived from renewable and natural gas resources and reducing reliance on coal. The preferred portfolio includes procurement targets of 300 MW of solar resources annually beginning in 2026 and considers implementation of battery energy storage systems ("BESS") in the early 2030s. The plan proposes a new natural gas combined cycle unit to be online in 2031 to accompany the solar expansion and provide a means to retire the Winyah Generating Station and further reduce carbon emissions.

D. SYSTEM INVESTMENTS

System investments, as explained more fully below, are critical to continue to provide reliable and efficient service to Santee Cooper's customers and to comply with current regulatory requirements related to environmental, security, and NERC Reliability Standards. System

investments range from those made to support compliance with increased regulatory requirements related to NERC standards for reliability, security, and critical infrastructure to those made to comply with environmental laws and regulations.

These investments are essential to avoiding/mitigating unexpected costly repairs. While such repairs are costly and disruptive on their own, system failures can also cause substantial related costs to support system needs while equipment is out of service.

In determining the necessary revenue requirements for the proposed rate adjustment, Santee Cooper considered its current and future system investments, which are or will be financed via debt or through the Capital Improvement Fund. The proposed rates are based on Planning Year 2025 and formulated from the 2024 Budget, which budget includes \$713 million for system investments, with \$512 for debt service and \$201 allocated to the Capital Improvement Fund.

1. Generation

For existing generation assets, Santee Cooper determines its investments through good utility practice and industry-wide engineering and management best practices. Management and staff continuously evaluate a wide range of potential capital projects related to corporate and operational objectives such as safety, environmental stewardship, reliability, and efficiency to develop annual budgets and long-term capital plans.

Although associated costs are not included in the proposed rates, for new generation assets, Santee Cooper plans new resources through a comprehensive planning program. The 2023 IRP, which resulted from that planning program, identifies a preferred portfolio of assets that will reliably and affordably meet the electric power needs of Santee Cooper's retail and wholesale customers, dramatically reduce Santee Cooper's carbon footprint, and add flexibility and innovation to support a growing state economy. The 2023 IRP also includes a Short-term Action Plan to provide a sound basis for near-term resource decisions, planning, and implementation activities.

As described above, the preferred portfolio in Santee Cooper's 2023 IRP includes: addition of procured solar resources targeting 300 MW annually starting in 2026; a major natural gas combined cycle resource to be online in 2031 to support the retirement of the Winyah coal-fired generating station; and continued work with Central and engagement with market participants to identify options and transmission arrangements that would allow the development of resources or purchases to meet capacity needed prior to 2031. Santee Cooper is exploring how best to implement the natural gas combined cycle resource and is evaluating a possible joint build with DESC.

To achieve low-cost, reliable power over the long-term, Santee Cooper will continue to invest in its generation resources through capital replacements, major component maintenance, efficiency improvement projects, and control system upgrades. Specifically, Santee Cooper is initiating a resiliency plan that strategically invests in the system to ensure its ability to provide highly reliable service to its customers over time. To accomplish this, the five-year capital improvement plan includes \$434 million in capital maintenance and \$224 million of generation-

related costs targeted at reducing the frequency of unplanned outages and the number of forced reductions in station power levels through, among other things, boiler tube component replacements and control systems upgrades.

Further, and as discussed above, Santee Cooper currently has several projects underway to comply with existing environmental laws and regulations. At the Cross Generating Station and the Winyah Generating Station, Santee Cooper is constructing wastewater treatment systems to comply with the ELG Rule. These two systems are expected to be completed and in operation by December 31, 2025. Also, the CCR Rule (2015) established compliance standards which require closure of certain landfills and ash ponds, which are included in the capital budget to remove future liabilities related to the environmental retirement obligations for Cross and Winyah. The Company is also reviewing and evaluating compliance options for the GHG Rule issued on April 25, 2024; however, any costs incurred to comply with that Rule are not incorporated in this rate study and proposed rate adjustment and will be the subject of future studies and rate proposals.

The 2024 Budget, from which Planning Year 2025 was formulated and on which the proposed rates are based, includes \$257 million from 2024-2028 for the wastewater system projects at Cross and Winyah Generating Stations, \$163 million from 2024-2028 for the closure of certain landfills and ash ponds to comply with the 2015 CCR rule, and \$13 million from 2024-2028 of Solid Waste Landfill costs at Cross Generating Station for the closure of the landfill.

These generation investments benefit customers because they ensure a continued reliable system; substantially reduce carbon emissions while keeping costs to customers low; and provide Santee Cooper the flexibility to adapt to changing loads and generation needs and opportunities as they develop. Moreover, Santee Cooper's planned investments provide the best energy mix to reliably and efficiently address growth, to support current and future economic development, and to replace existing facilities that approach the end of their economic lives. These investments in the above-described mix of generation assets will provide flexible, reliable capacity to meet the economic development needs of a wide swath of South Carolina while enabling much greater use of renewable energies.

2. Transmission

Santee Cooper plans its transmission system to (1) operate within the applicable facility ratings during normal conditions as well as single and other selected contingency conditions and (2) maintain system voltages which are consistent with good utility practice. The transmission system is planned to provide voltage at the delivery point connection to a customer during normal conditions as well as single and other selected contingency conditions. No transmission facilities may operate outside of their continuous ratings during normal conditions or outside their emergency ratings during selected contingency conditions.

The primary concerns on the transmission system are that: (1) all facilities remain within their continuous ratings during normal operating conditions; (2) all facilities remain within their emergency ratings during selected contingency conditions; (3) the voltage on the transmission system remains within the ratings of the facilities on the system; and (4) the voltage at the delivery point connection to each customer is within the operating range of standard equipment for the

voltage class of the delivery point connection. The guidelines for testing the transmission system are categorized by thermal loading contingency criteria and bus voltage criteria.

In addition to the Corporate Transmission System Planning Reliability Criteria, the Santee Cooper transmission system is planned to meet the requirements of all approved NERC Reliability and SERC Regional Standards that are applicable to Santee Cooper.³

NERC Standard TPL-001 establishes transmission system performance requirements within the planning horizon to develop a Bulk Electric System that will operate reliably over a broad spectrum of system conditions and following a wide range of probable contingencies. This standard requires that an annual assessment be conducted, and Corrective Action Plans are identified where analyses indicate an inability of the system to meet performance requirements. These plans may include installation or modification of transmission or generation facilities, protection systems, use of operating procedures, etc.

Additional investments are being made to provide additional transmission system reliability, grid security, as well as grid hardening/resiliency. Examples of reliability investments are transmission structure/component/equipment condition-based replacements, the addition of fault indicator technology, the installation of automatic sectionalizing equipment, and other asset replacements or upgrades in order to improve overall system performance. In order to maintain compliance with ever increasing regulatory requirements, the transmission operations and maintenance groups have continued to increase infrastructure standards around grid security, specifically to meet and maintain NERC reliability and cybersecurity compliance. The transmission operations and maintenance groups have continued to mature the Targeted Capital Maintenance Program with the intent of hardening and adding resiliency to the transmission system. This program targets capital replacements in areas that are difficult to access and /or would otherwise require specialized equipment. These targeted maintenance replacements are in areas where if there were to be a pole or component failure, it would lead to an extended sustained outage due to complex geography or the need for specialized equipment. The Targeted Capital Maintenance Program is based on proactively conducting maintenance replacements in swamps, at river crossings, marsh areas, etc.

Santee Cooper is experiencing significant load growth in the areas in which it is responsible for providing transmission service and is projecting continued accelerated growth over the current planning horizon, and South Carolina is one of the fastest growing states in the nation and continues to see tremendous residential, commercial, and industrial growth. This growth requires that Santee Cooper construct additional transmission facilities over the next 5 years and beyond to continue to provide reliable service to its customers. Santee Cooper's current plans contemplate the completion of five new transmission substations or switching stations and more than 200 miles of new transmission lines over the next 5 years. Santee Cooper's planned transmission investments will support the projected continued load growth and provide additional flexibility to facilitate this future growth in a sustainable and cost-effective way. Example investments include the Marion – Conway 230 kV Line and Conway 230 kV Switching Station projects, which as of March 2024 are projected to cost approximately \$86M and \$26M, respectively. These projects are required to

³ These Standards can be found at www.nerc.com and www.serc1.org.

provide additional transmission support to eastern portions of Horry County, which is one of the fastest growing areas in the state. These projects provide an additional 230 kV source into the area and mitigate thermal loading under contingency conditions. This project also results in the rebuild of existing 115 kV facilities in the area, providing additional resilience to residents served from these facilities as the new facilities are constructed in accordance with modern design standards aimed to withstand more extreme environmental conditions.

Santee Cooper attempts to reduce the impact of planned new facilities on the environment and local communities by utilizing existing right-of-way corridors when feasible. In many cases, the construction of new transmission facilities includes the replacement of existing facilities that are at or near the end of their useful life. The replacement facilities are constructed to modern design standards, utilizing materials that are more resilient to extreme weather events and less costly to maintain. This provides increased reliability and lower operating and maintenance costs for these facilities. In some instances, these facilities can also provide more flexibility to access low-cost, clean energy resources as well as additional capacity to support economic development growth.

3. Distribution

Santee Cooper's distribution system investments are primarily related to new construction to serve new customers. The Myrtle Beach Metropolitan Statistical Area has been one of the fastest growing in the country for several years. A recent U.S. News and World Report analysis lists it as the fastest growing area in the country for the past three years (2021, 2022 and 2023), and fast growth was also documented in previous reports leading up to 2020. In addition to the lines necessary to serve the new customers, the load growth prompts new substation additions along with feeder exits and line upgrades. Other significant investments are guided by the municipalities that Santee Cooper serves. A municipality may commit a portion of their franchise fees, which Santee Cooper will match, to convert existing overhead lines to more resilient underground lines.

Just as with transmission, Santee Cooper must continually add new distribution infrastructure to serve its fast-growing customer base. In the next five years, Santee Cooper plans to construct a new substation in the Carolina Forest area, one of its fastest growing areas, and potentially another substation at the Camp Hall Industrial Park in Berkeley County. Santee Cooper has also identified specific projects with its municipal customers in the next five-year period for overhead to underground conversions.

Santee Cooper also plans to upgrade its existing OMS system to an Advanced Distribution Management System ("ADMS"). That will allow better integration with the Company's SCADA system, grant distribution controllers greater oversight of the distribution system, and enable more timely responses to outages. An ADMS will also allow Santee Cooper to integrate its distributed energy resource management system ("DERMS") in the future and enable the Company to consider adding automation, such as fault location, isolation, and service restoration, to reduce outage times and customer interruptions. Other upgrades include continuing to upgrade electromechanical relays to microprocessor relays. Santee Cooper further plans software upgrades to enhance and support its distribution operations, such as a work management upgrade and replacement and a GIS upgrade. Santee Cooper's distribution investments will help it achieve its goal of continuing to operate a highly reliable distribution system at the level its customers have come to expect. New customers will benefit by having the necessary infrastructure to connect them to Santee Cooper's distribution grid; existing customers will benefit from a more aesthetic and resilient underground system; and all customers will benefit from Santee Cooper's addition of sufficient capacity to serve the system and provide redundancy for N-1 failures, which helps maintain the distribution system's excellent reliability.

V. CONCLUSION

Santee Cooper operates and maintains its electric generation, transmission, and distribution facilities as well as transmission facilities owned by Central as a fully integrated electric system to provide electric service to over 2 million South Carolinians. This system is vital to providing reliable power for homes, schools, and hospitals. It is also a key driver in retaining current industrial customers and attracting new industry to the State. Santee Cooper's maintenance programs and effective tree and vegetation management are important programs that help ensure reliability.

Santee Cooper is committed to providing safe and reliable electric service in a manner that respects the natural environment. Santee Cooper's safety focus is confirmed by the metrics described above and align with industry best practices. Santee Cooper's plans to grow its system in a way that complies with environmental laws and regulations, continues to reduce emissions, and helps its customers meet sustainability goals.

As its system continues to grow, Santee Cooper will be required to continue to invest in its system to pursue the preferred portfolio identified in the 2023 IRP, prevent or mitigate unexpected costly repairs, comply with environmental laws and regulations and other regulatory requirements pertaining to reliability and security, and maintain the high level of reliable service its customers have come to expect. The proposed rates ensure that Santee Cooper is financially stable and capturing revenues sufficient to recover its prudently incurred investments and will enable Santee Cooper to continue to maintain its safe, reliable, competitively-priced electric service, while respecting the natural environment.

ATTACHMENT A

Annual Availability Factor										
Generating Station	Unit	2018	2019	2020	2021	2022	2023			
	1	93.88%	89.69%	97.75%	91.54%	67.38%	91.51%			
Cross Pineville, SC	2	6.66%	72.06%	96.30%	89.26%	66.44%	54.75%			
	3	72.04%	92.99%	96.85%	61.26%	95.85%	89.67%			
	4	87.12%	82.08%	97.13%	75.82%	92.62%	92.99%			
	1	93.35%	88.38%	89.73%	91.38%	90.01%	77.42%			
Winyah	2	94.39%	94.75%	69.20%	71.68%	93.12%	91.85%			
Georgetown, SC	3	89.52%	97.91%	92.47%	75.29%	95.10%	89.16%			
	4	91.23%	86.14%	97.26%	43.21%	86.37%	71.10%			
	1	90.84%	94.03%	94.22%	92.88%	96.84%	85.27%			
	2A	85.13%	96.51%	96.47%	95.06%	97.68%	93.85%			
Rainey	2B	95.01%	83.30%	96.33%	95.66%	98.78%	98.36%			
Iva, SC	3	97.38%	97.34%	97.99%	96.23%	98.32%	97.92%			
	4	97.14%	97.15%	94.22%	97.10%	96.78%	98.04%			
	5	97.42%	98.52%	96.03%	92.88%	99.10%	98.12%			
Cherokee Gaffney, SC	1	77.51%	85.74%	86.17%	90.85%	93.40%	90.73%			
Myrtle Beach	1	78.91%	94.26%	100.00%	96.67%	94.90%	94.97%			
	2	94.65%	92.79%	99.92%	99.94%	99.34%	96.19%			
	3	88.95%	99.77%	99.94%	75.93%	99.82%	99.77%			
	4	0.00%	0.00%	0.00%	0.00%	N/A	N/A			
	5	99.47%	79.82%	94.24%	100.00%	81.37%	72.78%			
Hilton Head	1	99.89%	100.00%	100.00%	100.00%	41.49%	99.79%			
	2	88.98%	0.00%	0.00%	100.00%	99.88%	77.30%			
	3	99.88%	96.86%	92.13%	95.52%	93.45%	99.43%			
Summer										
Nuclear Unit 1	1	89.10%	95.90%	91.10%	82.50%	99.40%	87.90%			
Jenkinsville, SC										
Jefferies Lake Moultrie	1	96.78%	99.91%	95.81%	99.12%	79.56%	89.41%			
	2	99.88%	95.27%	95.97%	99.64%	99.95%	99.48%			
	3	98.64%	98.47%	99.92%	86.48%	98.80%	88.05%			
	4	99.85%	97.86%	99.77%	99.19%	96.80%	93.40%			
	6	97.80%	99.58%	100.00%	99.67%	99.11%	100.009			

Annual Capacity Factor										
Generating Station	Unit	2018	2019	2020	2021	2022	202			
	1	54.78%	41.93%	20.07%	39.00%	17.51%	22.23			
Cross	2	2.11%	2.92%	-0.62%	9.45%	0.45%	10.56			
Pineville, SC	3	55.75%	61.21%	40.54%	41.75%	67.65%	64.0			
	4	70.24%	54.41%	62.24%	54.38%	62.29%	66.3			
	1	20.57%	8.49%	36.34%	55.50%	36.90%	32.8			
Winyah	2	18.69%	12.41%	30.75%	36.87%	30.56%	35.6			
Georgetown, SC	3	11.88%	5.07%	16.65%	31.13%	22.89%	16.6			
	4	12.51%	4.56%	8.18%	1.54%	3.57%	21.1			
	1	54.73%	59.91%	58.55%	53.87%	61.03%	78.3			
	2A	47.39%	58.01%	57.33%	45.44%	53.81%	69.6			
Rainey	2B	53.30%	52.28%	55.31%	48.21%	54.54%	74.9			
Iva, SC	3	6.61%	6.93%	5.00%	7.44%	13.43%	5.99			
	4	6.81%	7.64%	4.25%	6.95%	13.34%	9.11			
	5	6.78%	7.68%	3.67%	6.37%	12.96%	7.15			
Cherokee Gaffney, SC	1	66.14%	71.38%	44.59%	47.13%	53.55%	14.8			
Myrtle Beach	1	0.06%	-0.20%	-0.17%	-0.16%	0.13%	-0.1			
	2	0.17%	-0.20%	-0.15%	-0.14%	0.30%	-0.1			
	3	0.00%	-0.12%	-0.11%	-0.05%	0.51%	-0.0			
	4	0.00%	0.00%	0.00%	0.00%	N/A	N/			
	5	0.18%	-0.08%	-0.07%	-0.04%	0.17%	-0.0			
Hilton Head	1	0.01%	0.01%	0.00%	0.03%	0.30%	0.03			
	2	0.00%	0.00%	0.00%	0.03%	0.41%	0.03			
	3	0.16%	0.06%	0.00%	0.05%	0.53%	-0.0			
Summer										
Nuclear Unit 1 Jenkinsville, SC	1	87.10%	97.50%	91.10%	82.70%	101.50%	88.8			
Jefferies Lake Moultrie	1	0.24%	6.15%	6.09%	5.61%	4.69%	6.95			
	2	35.76%	34.61%	35.07%	34.40%	34.53%	34.4			
	3	1.57%	5.40%	5.18%	5.45%	5.59%	6.80			
	4	35.08%	35.15%	37.08%	34.43%	33.06%	32.4			
	6	0.00%	-0.67%	-1.14%	-1.26%	-0.77%	-1.2			

Annual Forced Outage Rate							
Generating Station	Unit	2018	2019	2020	2021	2022	2023
	1	2.04%	0.54%	1.51%	1.31%	3.15%	3.60%
Cross Pineville, SC	2	15.67%	25.48%	0.00%	5.37%	35.50%	8.16%
	3	4.94%	6.26%	1.30%	8.52%	1.67%	2.19%
	4	10.65%	6.68%	1.00%	1.84%	4.41%	2.20%
	1	14.50%	0.46%	4.93%	5.08%	2.75%	3.42%
Winyah	2	5.15%	4.59%	3.26%	4.92%	3.72%	3.90%
Georgetown, SC	3	17.71%	5.83%	0.91%	0.69%	1.81%	3.22%
	4	0.77%	1.82%	6.99%	0.00%	8.99%	3.29%
	1	0.43%	0.65%	0.50%	0.38%	0.10%	0.91%
	2A	0.84%	2.40%	0.01%	0.11%	0.01%	0.10%
Rainey	2B	0.23%	0.08%	0.22%	0.14%	0.02%	0.00%
Iva, SC	3	0.00%	0.46%	0.27%	0.59%	0.00%	0.72%
	4	4.15%	0.23%	22.54%	5.91%	0.00%	0.36%
	5	0.03%	0.00%	0.67%	1.71%	0.93%	0.00%
Cherokee Gaffney, SC	1	13.60%	0.24%	6.41%	0.29%	0.56%	8.25%
	1	98.22%	40.33%	0.00%	99.76%	90.90%	99.17%
	2	92.40%	100.00%	66.31%	70.21%	47.19%	99.80%
Myrtle Beach	3	97.96%	0.00%	52.12%	98.87%	12.32%	0.00%
-	4	100.00%	100.00%	100.00%	100.00%	N/A	N/A
	5	50.65%	99.95%	99.12%	0.00%	93.19%	99.98%
Hilton Head	1	79.69%	0.00%	0.00%	0.00%	99.05%	0.00%
	2	99.91%	0.00%	0.00%	0.00%	0.00%	99.92%
	3	1.10%	19.08%	97.07%	26.37%	79.62%	75.28%
Summer							
Nuclear Unit 1	1	0.00%	4.08%	0.73%	8.36%	0.00%	4.20%
Jenkinsville, SC							
Jefferies Lake Moultrie	1	0.00%	0.00%	0.00%	4.35%	46.24%	0.16%
	2	0.00%	0.01%	0.10%	0.17%	0.12%	0.80%
	3	0.11%	0.73%	0.00%	24.77%	0.45%	0.33%
	4	0.11%	0.27%	0.01%	0.15%	3.24%	0.08%
	6	100.00%	6.55%	0.00%	0.00%	0.00%	0.00%

CUSTOMER SERVICE REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to describe Santee Cooper's customer service focus and program, which have produced quality service and yielded above-average satisfaction to Santee Cooper's residential, commercial, industrial, and wholesale customers. This report also discusses steps Santee Cooper is taking to further improve its customers' experience and satisfaction and how the requested rate increase will enable Santee Cooper to take those steps and maintain its high level of customer service and satisfaction.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Bryan Lewis, who is the Director of Retail Customer Service and Chad Hutson, who is the Director of Wholesale and Industrial Services.

III. SUMMARY OF THE REPORT

Santee Cooper has a robust, committed customer service program, involving multiple roles and departments who actively work through face-to-face or telephonic meetings or via electronic platforms to offer a variety of services and programs to Santee Cooper's diverse customer base.

For instance, Santee Cooper's customer service roles and departments include a Chief Customer Officer, a Director of Retail Customer Service, and a Director of Wholesale and Industrial Services, which are involved in the provision of services designed to improve the customer experience, such as billing assistance, conservation and energy efficiency assistance, distribution design engineering, and addressing of metering issues. They also provide points of contact for customers to obtain assistance, support, and troubleshooting services and to provide feedback to Santee Cooper. Santee Cooper further offers a wide range of programs, incentives, and support services, including energy efficiency initiatives and audits, demand-response programs, flexible billing options, and personalized customer support, which are designed to enhance customers' experiences. Notably, Santee Cooper has developed these programs in response to customer feedback and in an effort to meet customers' desires for affordability, reliability, and energy efficient solutions.

Historically, Santee Cooper's customer service departments and services have resulted in above-average and high customer satisfaction.

Significantly, while the requested rate increase is not driven by specific customer service needs, it will allow Santee Cooper to keep investing in its customer service offerings and enable it to remain committed to the provision of quality, innovative, and improving customer service.

IV. DISCUSSION

A. OVERVIEW OF SANTEE COOPER'S CUSTOMER SERVICE ROLES

Santee Cooper has a number of staff roles and departments responsible for providing customer service and support for its residential, commercial, industrial, and wholesale customers. For example, Santee Cooper's Chief Customer Officer is responsible for overseeing distribution operations, system operations, rate design and billing, and customer service for retail, industrial, and wholesale customers.¹ Examples of additional customer service roles and departments are outlined below.

1. <u>Residential and Commercial Customer Service Roles/Departments</u>

Santee Cooper's Retail Customer Service Department plays an integral role for both residential and commercial customers by managing all processes from metering to billing. This involves tasks such as starting, stopping, or transferring services, supplying electric meters for measuring energy usage, and offering various programs and services. This Department's primary goal is to consistently provide exceptional customer service to retail customers.

There are several other departments that are critically involved in providing customer service to residential and commercial customers. A description of each and the communication methods they employ with customers is below.

- *Customer Service Retail Offices* Santee Cooper has two retail office locations: one in Moncks Corner at 1 Riverwood Drive and the other at 1703 N. Oak Street in Myrtle Beach. The main role of these offices is to assist customers who prefer face-to-face interactions and to offer bilingual support to a diverse customer base. These offices also have responsibilities that include:
 - Aiding customers in starting, stopping, or transferring service;
 - Addressing billing and payment inquiries;
 - Processing payments for walk-in and drive-through customers;
 - Promoting assistance from third-party organizations;
 - Processing voucher payments;
 - Engaging in field coordination for meter installation, collection, and addressing meter issues
 - Collaborating with local governments to ensure compliance with permitting requirements;
 - Working with third-party bank partners to enable payment options at other convenient locations;

¹ The Chief Customer Officer has a team that includes two directors, the Director of Wholesale & Industrial Services and the Director of Customer Service Retail, that are focused primarily on customer service.

- Promoting and providing information on all available programs and services;
- Facilitating program enrollment; and
- Aiding customers and connecting them with high bill energy advisors.

The retail offices' main communication channels consist of in-person interactions, phone calls, or emails, which allow customers to directly communicate with a Customer Service Representative from Monday to Friday (8 am - 5 pm).

Notably, insights gathered from customer interactions at retail offices enable Santee Cooper to enhance its processes, programs, services, website content, and communication topics. These retail offices and their regular customer interactions are critical to facilitating program enrollment and aiding with high bill energy explanations.

• *Customer Care Center* – Santee Cooper has a Customer Care Center, the primary role of which is to provide customers with services similar to those provided by the retail offices, but to do so via phone, chat, or email. It promotes and provides customers with information on all programs and services and provides the technical support for MY Energy Link and Pay As You Go Electric applications. The Customer Care Center also manages the internal switchboard for the entire corporation and receives calls for all aspects of Santee Cooper business.

While the normal hours of operation for the Customer Care Center is Monday to Friday (8 am -5 pm), the staff have the ability to work remotely and can provide afterhour 24/7 support when needed, and therefore, serve as a critical vehicle for communication during storms and large outages. Staff at the Customer Care Center also actively seek opportunities to enhance the customer experience, such as by suggesting improvements to processes, programs, services, website content, and customer communication topics.

- *Retail Billing Department* This department's primary role is to handle customer billing, support billing systems, make rate adjustments, and provide assistance to builders and developers. The Retail Billing Department's responsibilities also include:
 - Managing and overseeing all aspects of retail billing;
 - Coordinating with Technology Services for updates and enhancements to the billing system;
 - Conducting testing and billing runs to ensure proper operation;
 - Managing credit and collection processes (including reporting, customer contact, assistance, and write-offs);
 - Overseeing the pre-pay program Pay As You Go Electric (including push messaging, cut-off schedules, and updates);
 - Promoting, processing, and collaborating with local agencies for customer assistance;

- Monitoring the billing system through daily, weekly, and monthly reporting, and inputting billing cycles, read cycles, and billing exceptions;
- Managing new premise management for developments and housing to ensure accuracy and clarity in all financial transactions with approximately 215,000 retail customers; and
- Dispatching field activities.

Customers can directly communicate with a Billing Representative Monday through Friday (8 am - 5 pm) through various channels such phone calls or email.

- Conservation and Energy Efficiency Departments The Conservation and Energy Efficiency Departments play a vital role in delivering innovative programs and services to customers. They focus on energy conservation and efficiency and are dedicated to empowering customers with knowledge and tools to conserve energy and promote sustainability. These Departments' primary functions include:
 - Offering customers new programs, energy-saving tips, conducting energy audits for homes and businesses, and providing rebates;
 - Managing renewable program offerings such as solar and green power;
 - Developing and managing electric vehicle programs;
 - Supporting small businesses and key accounts;
 - Conducting rate analysis;
 - Administering rebate programs;
 - Continuously administering new and existing conservation and energy efficiency programs and providing guidance for future resource planning to foster conservation efforts; and
 - Providing informative content for customer-facing communications and facilitating the promotion and website support of helpful information for customers.

These Departments' main channels of communication are in-person, via phone call, email, or chat, including providing customers with direct access to an Energy Advisor or Engineer Monday to Friday (8:00 am - 5:00 pm). They also engage with customers at community booths and meetings with homeowners' associations/property owners' associations.

- *Distribution Design Engineering* This team focuses on supporting various projects, including design and franchise initiatives for builders, developers, municipalities, and retail customers. Its responsibilities involve:
 - Coordinating with builders and developers to ensure projects align with customer and system requirements, as well as working with contractors to ensure infrastructure readiness;
 - Managing and assisting customers with outdoor lighting programs;

- Overseeing Overhead to Underground franchise conversion projects with local municipalities;
- Providing valuable insights for system planning to enhance system reliability and offering system support for interconnection, such as with solar installations; and
- Staying informed about facility updates and sharing crucial information regarding building, development, and grid connectivity.

The Distribution Design team's main communication channels are via phone call or email providing customers with direct access Monday to Friday (8:00 am - 5:00 pm).

- *Distribution Metering* The primary objective of the Distribution Metering team is to deliver meter support to all retail customers. Responsibilities encompass:
 - Installing meters for new services;
 - Conducting meter testing and analysis;
 - Ensuring accurate updating of metering data in customer billing systems; and
 - Providing system-level metering data to help derive insights for enhancing system resilience and ensuring reliability for customers.

This Department's main communication channels are phone calls and emails, accessible Monday through Friday from 8:00 am to 5:00 pm.

Notably, this Department is continuously evolving with the integration of data from smart meters and advancements in network technologies. Santee Cooper completed deployment of the latest metering technology to all retail customers in 2021 – Advanced Metering Infrastructure ("AMI") meters, more commonly known as smart meters.

New industry technologies like smart meters allow Santee Cooper to continue to deliver on our mission by improving our already outstanding power reliability record and to better manage the energy load on our system. The smart meters provide significant benefits to the customer and the electric utility, which include, but are not limited to, recognized:

Customer Benefits of Smart Meters

- <u>Improved Billing Accuracy</u>: AMI meters provide precise measurements of electricity consumption, reducing billing errors and ensuring customers are billed accurately.
- <u>Real-Time Usage Information</u>: Customers can access near real-time information about their electricity usage, helping them understand their consumption patterns and potentially adjust behaviors to save energy and costs.
- <u>Remote Service Connections/Disconnections:</u> AMI meters enable utilities to remotely connect or disconnect service, eliminating the need for physical visits, which saves time and inconvenience for customers.
- <u>Faster Problem Detection and Resolution:</u> The meters can quickly identify problems such as outages or meter malfunctions, allowing utilities to address issues promptly, thereby minimizing downtime for customers.

- <u>Time-of-Use ("TOU") Rates, Three-part Rates, and Incentives:</u> With AMI meters, utilities can implement TOU pricing, Three-part Rates, and offer lower rates during off-peak hours, which encourages customers to shift usage to times when electricity is cheaper.
- <u>Enhanced Customer Service</u>: With access to more detailed data, customer service representatives can better address customer inquiries or concerns, providing more accurate and efficient assistance.

Santee Cooper Benefits of Smart Meters

- <u>Remote Meter Reading:</u> AMI meters enable utilities to collect consumption data remotely, eliminating the need for manual meter reading, which reduces operational costs and errors associated with manual data entry.
- <u>Load Management and Planning</u>: Utilities can analyze real-time data to better manage loads and plan infrastructure investments, optimizing the distribution system and reducing strain during peak periods.
- <u>Faster Outage Detection and Restoration:</u> AMI meters provide immediate alerts in the event of outages, allowing utilities to pinpoint affected areas and restore service more quickly, improving overall reliability.
- <u>Fraud Detection and Theft Prevention:</u> With more accurate and frequent data, utilities can detect abnormal consumption patterns indicative of tampering or theft, helping to reduce revenue losses.
- <u>Grid Optimization:</u> The data from AMI meters enables utilities to optimize the grid, reducing losses and improving overall efficiency, which can lead to cost savings and environmental benefits.
- <u>Support for Renewable Integration:</u> AMI meters provide insights into the impact of distributed generation, such as rooftop solar, helping utilities manage the integration of renewables into the grid more effectively.

Overall, AMI meters offer a wide range of benefits for both customers and electric utilities, including improved accuracy, efficiency, reliability, and the ability to support modern grid management practices and customer services.

2. Industrial and Wholesale Customer Service Roles/Departments

Regarding wholesale and industrial services, Santee Cooper's Director of Wholesale and Industrial Services provides primary support to and serves as a point of contact for wholesale and industrial customers, which includes Central Electric Power Cooperative, Inc. ("Central") and municipal customers. This Director receives support from a Manager of Contract Administration and a financial analyst. The Wholesale and Industrial Services Department is responsible for administering contracts for wholesale and industrial customers², such as the Coordination Agreement, pursuant to which Santee Cooper indirectly provides service through Central to 14 of the 19 cooperatives in South Carolina.³ The Manager of Contract Administration also assists with customer service related to the Coordination Agreement. This Manager's primary functions are to: ensure proper administration and billing under the Coordinate and resolve miscellaneous items related to the Coordination Agreement and wholesale power contracts that arise throughout the year. Santee Cooper's technical and operations personnel, who work under the direction of the Senior Manager of Transmission Line Operations, handle the day-to-day operations and support for the cooperatives. These personnel directly interact with individual cooperatives to ensure system reliability and outage identification and resolution.

Regarding industrial customers, Santee Cooper has a manager and two engineers who administer contracts for service under the Large Light and Power Schedule and act as a single point of contact for 29 customers - 27 of which are directly served by Santee Cooper (including Joint Base Charleston) and 2 of which are served indirectly through Central. Santee Cooper also serves the Lake Moultrie Regional Water System under Schedule L. The Industrial Services department maintains close relationships with its industrial customers and engages in a variety of functions, including: coordinating operations and maintenance activities to minimize customer impact and maintain high levels of reliability; ensuring billing accuracy; supporting analysis of customer usage and optimal rate structures; maintaining web portals; and facilitating agreements with customers to accommodate new load and expansion of existing customer facilities.

Multiple Customer Communication Channels

As mentioned above, Santee Cooper offers multiple methods by which customers can communicate, access information, and/or provide feedback. Those include:

- *Phone*: This is Santee Cooper's primary communication channel, offering customers direct access to knowledgeable representatives for inquiries, program support, or concerns.
- *In-Person:* For those who prefer face-to-face interaction, the two Retail Offices provide personalized assistance. Customers also can make payments at bank partner locations and retailers like Kroger and Walmart.
- *Online:* Various online channels, including email, live chat, and self-service portals, offer customers the ability to communicate and conduct business online.
- *Mobile App:* Santee Cooper's user-friendly mobile application allows customers to manage their accounts, report issues, and access relevant information on the go.

² Santee Cooper also provides wholesale electric service to several South Carolina cities, including Georgetown, Bamberg, and Seneca, and to the Piedmont Municipal Power Agency ("PMPA") and the Town of Waynesville, North Carolina.

³ In 2023, revenues from sales pursuant to the terms of a Coordination Agreement between the Authority and Central amounted to approximately 58% of revenues from sales. Notably, the Coordination Agreement provides for two standing committees, the Joint Operating Committee and Joint Planning Committee, to coordinate the planning and operation of the system.

- *Social Media:* Active social media channels enable Santee Cooper to engage with customers, share updates, and address queries or feedback in real-time.
- *Website*: Santee Cooper's corporate website serves as a hub for customers to find information on doing business with Santee Cooper, programs, services, and support for new projects. This also includes Chatbot technology.

These varied communication channels provide multiple avenues for customers to provide feedback or raise concerns. In addition to customers' utilization of such communication channels, Santee Cooper obtains customer feedback through surveys and by holding numerous meetings with customers each year.

B. PROMOTION OF CUSTOMER SERVICE THROUGH ENERGY PROGRAMS AND OFFERINGS

Santee Cooper's customer service program also includes a variety of energy programs and offerings designed to meet the expectations and needs of its diverse customer base. Those programs are outlined below.

Residential & Commercial Customer Bases

Santee Cooper places a high priority on meeting the varied needs of its residential and commercial customers. Residential customers typically seek affordability, reliability, and energy efficiency solutions, while commercial customers prioritize cost-effectiveness, sustainability, and scalability. To cater to these needs, Santee Cooper offers a range of programs, incentives, and support services, including energy efficiency initiatives, demand-response programs, flexible billing options, and personalized customer support. For example, Santee Cooper provides the following:

- Through Residential Energy Advisors, offers free home energy audits, energy efficiency tips, rebates, loans for energy efficiency upgrades, solar, electric vehicle programs; and meter data options on an hourly, daily, or monthly basis.
 - Santee Cooper also offers Payment Assistance Options and the Community Cares program that allows neighbors to help neighbors pay their power bill. These programs have helped customers manage through the difficulty of paying their bill by the due date.
 - The Residential Energy Advisors help eligible low-income customers obtain Low-Income Home Energy Assistance Program funding to meet their home energy needs.
- Through Commercial Energy Advisors, provides businesses with free energy audits, energy efficiency tips, rate analysis, rebates for energy efficiency upgrades, and program offerings for solar and electric vehicles.
- For Key Accounts (such as larger energy users and those with numerous accounts, such as municipalities and national accounts), offers dedicated energy advisors who offer extra assistance.

• Has a project design department, which collaborates closely with builders and developers in the Horry, Georgetown, and Berkeley areas, ensuring they have a single point of contact for their projects from inception to completion.

By offering and enhancing such programs, Santee Cooper aims to ensure customer satisfaction and provide a positive experience for both residential and commercial customers.

Industrial Customer Base

Santee Cooper also places a high priority on meeting the needs of its industrial customer base. To meet those needs, the Authority has members of the Industrial Services team serve as the single point of contact for customers, visit each customer onsite annually to receive feedback about Santee Cooper, and give the customer an opportunity to address any service issues, explain their current outlook, and discuss any opportunities to perform maintenance on Santee Cooper's equipment. Additionally, all industrial customers have direct, 24/7 access to the Director of Wholesale Power and Industrial Services for support.

Moreover, Santee Cooper addresses the needs of its industrial customers by:

• Having Meetings with Large Light and Power Customers

Santee Cooper and the Industrial Services team host a Spring and Fall in-person meeting with its Large Light and Power Customers. These meetings allow customers to directly interact with Santee Cooper's executive team and provide Santee Cooper with an appropriate platform to update customers on current issues and directives that are impacting them. Furthermore, at these meetings, Santee Cooper staff provides customers with detailed information related to its financial initiatives, fuel cost and hedging strategies, resource planning, rate offerings and studies, and current legislation that could impact Santee Cooper.

• Providing Web Portal Access

Santee Cooper provides customers access to their monthly invoices through an online web portal. The portal also provides historical billing information, presentations from previous industrial customer meetings, real time customer load data, and historical usage in a user-friendly format.

• Offering Non-Firm Rates

Santee Cooper offers non-firm rate offerings under Schedule L. These offerings provide mutual benefit to Santee Cooper as they allow customers who can reduce demand on short notice or shift production in response to a price signal a way to reduce cost and thereby allow Santee Cooper to increase system reliability and efficiency. As part of these programs, customers receive notifications from a call system ("Everbridge") by email, text, and voice message.⁴ Santee Cooper also offers real-time pricing options under Schedule L that requires a customer to schedule usage

⁴ Customers can manage the number of these communications and the method by which they receive these communications.

hourly based on a price that is communicated through an electronic interface with the customer, known as the Economy Power Purchasing System ("EPPS").

Wholesale Customer Base

Santee Cooper also strives to meet the needs of its wholesale customer base, which consists of both municipals and cooperatives, such as Central. It does so in multiple ways, including by having members of the Contract Administration team serve as the single point of contact for the Authority's wholesale customers.

Santee Cooper further addresses wholesale customers' needs by:

• Providing Web Portal Access

Municipal customers may utilize the same web portal available to industrial customers in order to access invoices and other data related to their historical usage.

Santee Cooper provides Central and its member cooperatives access to operational information via a cooperative web portal.

• Having Frequent Meetings

Santee Cooper generally meets annually, and in some cases monthly, with these customers to discuss their agreements and service to them and to provide feedback to them on any issues that are impacting Santee Cooper and its cost.

• Offering 24/7 Access

Additionally, municipal customers have 24/7 direct access to the Manager of Contract Administration and the Director of Wholesale Power and Industrial Services for support.

C. MEASUREMENT OF CUSTOMER SATISFACTION & RELATED SCORES

Santee Cooper gauges customer satisfaction through annual surveys, including ones conducted by third parties, MarketSearch and JD Power. As explained, those surveys consistently reveal high customer satisfaction with Santee Cooper.

1. MarketSearch Surveys

MarketSearch measures customers satisfaction by conducting customer interviews, which incorporate a combination of quantitative (closed-end) and qualitative (open-end) questions. The questions relate to satisfaction and confidence with Santee Cooper with regard to a variety of factors, including: service quality and reliability; accessibility and responsiveness; rates and value; management of costs; efforts with renewables; efforts with respect to economic development; experiences within the past year; factors affecting particularly positive or negative ratings in the quantitative portion of the interview; short- and long-term concerns; and perceived opportunities

for enhancing service and/or relationships. The interviews range from 15 to 30 minutes in length and are conducted by MarketSearch's senior management staff.

In 2023, MarketSearch determined that Santee Cooper's customer satisfaction scores were as follows for each customer segment:

Customer Segment	Customer Satisfaction Score		
Residential	96.1%		
Commercial	98.7%		
Industrial	97.4%		
Wholesale	75.0%		

Notably, the 2023 scores are similar to prior years' scores. Also, although the wholesale segment's satisfaction score is lower than the others, satisfaction among that segment is up from previous years and is at its highest level since 2015.

2. JD Power Survey

Santee Cooper also participates in the JD Power Electric Utility Residential Customer Satisfaction Study. That survey evaluates residential customers' satisfaction using six key factors. Santee Cooper has maintained a strong standing in 2nd place amongst the South Midsize utility segment.

D. EFFORTS TO IMPROVE CUSTOMER SATISFACTION

Santee Cooper is always striving to improve its customers' satisfaction. To do so, it engages in multiple efforts, including:

1. <u>Using Technology to Improve Customer Experiences and Autonomy</u>

Santee Cooper is committed to improving the level of customer service through significant technological advancements and service improvements. Recognizing the importance of efficient and responsive service, it is upgrading its customer information systems to better manage and streamline interactions. For example, it recently deployed AMI meters and implemented a new Meter Data Management system, which together offer more accurate and timely data to customers about energy usage. This technology not only improves billing accuracy but also empowers customers with detailed insights into their energy consumption, helping them manage their usage more effectively.

Further enhancing customer autonomy, Santee Cooper has upgraded its customer selfservice solutions to provide deeper insights into usage patterns. These tools are designed to give customers the information they need at their fingertips, fostering greater control over their energy costs. Furthermore, as noted above, it offers customers communication and interaction avenues through its website, mobile app, and social media. It also will be further introducing a new chatbot, which will provide instant responses to customer inquiries, reduce wait times, and improve access to information.

2. Using Customer Satisfaction Scores and Feedback

Santee Cooper utilizes customer satisfaction scores and feedback from customers to thoroughly analyze its performance against industry benchmarks and identify areas for improvement. Through targeted initiatives, it aims not just to meet, but to exceed customer expectations and align with industry best practices.

3. Investing in and Having Active Customer Service Teams

Santee Cooper engages with its customer service team to gather insights on how it can enhance the overall customer experience. Through collaborative brainstorming sessions, it identifies areas for improvement, analyzes customer touchpoints, and develops strategies to streamline processes and reduce customer effort.

Santee Cooper additionally invests in the development of its customer service team by providing regular training sessions, continuous improvement opportunities, and avenues for feedback on customer programs and services. With access to accurate and timely information, Santee Cooper's team is better equipped to serve our customers effectively. Furthermore, Santee Cooper aims to improve customer service by maintaining transparency with customers and by providing them with opportunities to raise and address comments and concerns. In that regard, for wholesale and industrial customers, Santee Cooper has recently created a new website for them which enables those customers to obtain more information about power usage and contract information and to run reports that may help them make business decisions.

Santee Cooper's commitment to improving customer service is steadfast, and it continuously explores new ways to enhance its service delivery. The goal is to ensure that every interaction with Santee Cooper is positive and satisfying for customers.

E. EFFORTS TO DELIVER MORE VALUE TO CUSTOMERS

Santee Cooper is dedicated to delivering the highest level of service and support to its valued customers. In an effort to deliver more value to customers, it uses customer feedback, from both surveys and information received from frontline customer service teams. In particular, it continuously assesses annual and quarterly survey feedback to identify areas where it can improve processes, programs, and services. Customer survey results contain detailed information and reveal areas where customers are Very Satisfied, Satisfied, Somewhat Dissatisfied, and Very Dissatisfied. This information, along with the surveys' open-ended questions, allows Santee Cooper an opportunity to focus improvements in the areas where it may be lacking and determine how to best adjust processes to meet emerging needs of customers. Santee Cooper also relies on the insights and experiences of frontline customer service team to ensure that Santee Cooper's processes are user-friendly and efficient for our customers.

Additional efforts to deliver more value to customers include conducting thorough research to determine which offerings would best benefit customers and the offering of services unique for customer needs, such as services related to distribution or economic development support. Santee Cooper also offers monthly training opportunities for all employees, which enables them to confidently provide customers with the assistance they require. Santee Cooper also invests in the creation of new and improved programs aimed at providing customers with a wide range of payment options, billing solutions, and energy efficiency initiatives.

V. CONCLUSION

Santee Cooper is committed to customer service to provide reliable service to its diverse customer base, as evidenced by above-average customer satisfaction scores, the variety of roles and departments devoted to customer service, the plethora of communication avenues available to customers to have Santee Cooper address needs or concerns, and the multitude of programs and services designed to satisfy customer needs and expectations. Santee Cooper anticipates a growth in customers in the coming years. Even with such growth, Santee Cooper's focus will remain on customer service and the utility will continue to strategically invest in and offer services and innovative programs to meet customers' needs and expectations. For example, Santee Cooper is upgrading its Customer Care and Billing Systems to a cloud-based environment to improve and ensure redundancy and disaster recovery while also gaining efficiencies.

Such customer service requires continued monetary investment. Although the requested rate increase is not driven by customer service expenses, the rate increase will ensure that Santee Cooper is financially stable and capturing revenues sufficient to recover its prudently incurred costs. It thus will enable Santee Cooper to continue to maintain its high levels of customer service and satisfaction, which is a necessary component of the utility's future success.

WORKFORCE SIZE AND COMPENSATION REPORT

I. PURPOSE OF THE REPORT

The purpose of this report is to provide details about Santee Cooper's workforce size and compensation and why our ability to recruit and retain a qualified, sufficient workforce is critical to the utility's continued ability to provide reliable and affordable service to its customers.

II. SPONSORS OF THE REPORT

This report was drafted by and prepared at the direction of Edwina Roseboro-Barnes, who is Director of Human Resources.

III. SUMMARY OF THE REPORT

Santee Cooper's talented and diverse workforce enables the utility to provide reliable and cost-effective services to its customers. Santee Cooper's efforts to optimize have resulted in a 10% reduction in headcount since 2017. As a result, Santee Cooper's workforce size and compensation are not significant drivers behind the requested rate adjustment.

As Santee Cooper prepares for its future, it is important to recognize that Santee Cooper must continue to stay competitive in both the local and national labor market to provide the safe and reliable service that our customers expect.

IV. DISCUSSION

A. WORKFORCE NEEDS

1. Workforce Levels

As of April 15, 2024, Santee Cooper has 1,578 full-time equivalent employees. Its budgeted headcount is 1,635. Santee Cooper's workforce has decreased by almost 10% since 2017, as shown by the below table:

Year	Size of Workforce
2017	1745
2018	1683
2019	1634
2020	1592
2021	1564
2022	1527
2023	1578

While Santee Cooper has identified efficiency gains in order to reduce its headcount, it may need to expand its workforce to meet future demands. For example, the requirements associated with Effluent Limitation Guidelines regulations will require Santee Cooper to add 18 total employees at our Cross and Winyah Generating Stations. Santee Cooper also anticipates a potential increase in full-time equivalent employees if contract workers at the newly acquired Cherokee Plant are converted to full-time equivalent positions. Lastly, Santee Cooper anticipates the need to strategically and responsibly grow its workforce to continue to provide safe and reliable service to its customers while complying with environmental and other regulatory requirements.

2. <u>Special Skills and Knowledge Required by Santee Cooper's Workforce</u>

Operating an electric utility like Santee Cooper requires a workforce with a diverse set of skills and knowledge across several areas, including:

- *Electrical engineering* Understanding the principles of electrical engineering is crucial for managing the generation, transmission, and distribution of electricity. This includes knowledge of power generation technologies, grid infrastructure, and electrical systems.
- *Energy management* Proficiency in energy management involves optimizing the generation, transmission, and distribution of electricity to meet demand efficiently. This includes load forecasting, scheduling, and grid balancing.
- *Regulatory compliance* Knowledge of regulatory frameworks and compliance requirements is essential for ensuring that the utility operates within legal and regulatory guidelines. This includes understanding environmental regulations, safety standards, and utility regulations.

- *Grid operations* Skills in grid operations involve managing the flow of electricity through the transmission and distribution networks. This includes monitoring grid performance, identifying and resolving issues, and implementing grid upgrades and maintenance.
- *Renewable energy integration* As the energy sector transitions towards renewable energy sources, expertise in integrating renewable energy into the grid is vital. This includes knowledge of solar, wind, hydroelectric power generation, and energy storage technologies.
- *Cybersecurity* Protecting the utility's infrastructure from cyber threats is increasingly important in the digital age. Knowledge of cybersecurity principles and practices helps safeguard critical systems and data from cyberattacks.
- *Emergency Response and Disaster Management* Being prepared to respond to emergencies such as natural disasters or equipment failures is crucial for maintaining the reliability of the electric grid. This involves developing emergency response plans, conducting drills, and coordinating with relevant agencies.
- *Customer Service* Providing excellent customer service is important for maintaining customer satisfaction and loyalty. This includes effective communication, billing and account management, and addressing customer inquiries and concerns.
- *Finance and Business Management* Understanding financial and business management principles is necessary for ensuring the financial stability and sustainability of the utility. This includes budgeting, financial planning, and investment decision-making.
- *Environmental and Sustainability Knowledge* Given the focus on sustainability and environmental stewardship, knowledge of environmental issues and sustainable practices is beneficial. This includes reducing carbon emissions, minimizing environmental impact, and promoting energy efficiency.

Overall, operating an electric utility like Santee Cooper requires a multidisciplinary approach, with expertise spanning engineering, management, regulatory compliance, and customer service. Collaboration and teamwork are also essential for effectively managing all aspects of the utility's operations.

3. <u>Recruitment and Retention</u>

Santee Cooper's priority is to provide safe, reliable, and economical services to its customers. The production and delivery of power is inherently demanding and requires attention to detail and a focus on employee safety. This requires a dedicated workforce willing to work shift schedules to support its 24/7 operations and to respond to system emergencies such as winter

storms and hurricanes to maintain and/or restore reliable service to its customers. Therefore, recruiting, employing, and retaining highly skilled and qualified talent is imperative.

Santee Cooper has experienced difficulty in attracting and retaining some key positions, such as Engineers, Line Technicians, IT professionals, and other specialized, skilled workers throughout the organization. Also, within the last several years, it has experienced higher than normal turnover, which is likely due to a competitive job market, limited talent pool, and higher salaries offered by competitors. In an effort to mitigate the challenges, Santee Cooper utilizes several talent pipeline programs in partnership with local high schools, two-year technical colleges, and four-year colleges and universities for internships, cooperative education experiences, training and apprenticeship opportunities to develop a highly skilled pool of viable candidates.

Challenges in attracting and retaining a highly trained and skilled workforce can lead to an increased time to fill open positions, additional overtime for the current workforce (who need to perform the work associated with the open positions), and an increased need to supplement the workforce with contract workers to meet business needs.

B. COMPENSATION

1. Importance of Having a Competitive Overall Compensation Plan

It is critically important for Santee Cooper to offer competitive compensation and benefits as that allows it to attract and retain highly qualified employees and achieve staffing levels to optimize efficiency. (See Section A. "Workforce".)

Santee Cooper's compensation philosophy is to be an employer of choice by providing a highly competitive total rewards package that attracts, motivates, engages, and retains high performing employees. This philosophy applies to executive and non-executive employees.

Santee Cooper ensures that its employee compensation is reasonable by utilizing multiple industry salary surveys to compare and set its salaries. In particular, it uses the 50th percentile, which is the median of salaries paid for similar positions in the industry, to establish the respective job position pay range. It makes adjustments as appropriate and awards merit increases and promotions.

Santee Cooper uses the following salary surveys to establish competitive salaries:

- Willis Towers Watson General Industry and Energy Services;
- Payscale National; and
- Western Management Group.

2. <u>Direct Cost Savings Realized from Maintaining Favorable Employee</u> <u>Retention Levels</u>

Employee turnover can be expensive. Additionally, when employees leave, customers lose the value of Santee Cooper's investment in recruiting, training and developing the knowledge base of those staff members.

Thus, by maintaining favorable employee retention levels, Santee Cooper can avoid such costs of turnover. In fact, retention leads to direct cost savings for Santee Cooper as it allows the utility to avoid or minimize such direct costs as: advertising costs associated with vacancies, travel, time spent interviewing an employee, pre-employment screening (medical and background), technology resources and related expenses. Furthermore, retention of employees can avoid high costs associated with additional overtime related to unfilled positions.

3. <u>A Competitive Total Compensation Package for Employees Benefits Santee</u> <u>Cooper's Customers.</u>

A competitive total compensation package helps Santee Cooper recruit and retain high quality employees and meet its optimum staffing goals. The utility's dedicated workforce, particularly at the optimum levels, in turn provides benefits and exceptional service to Santee Cooper's customers and to the State of South Carolina. Notably, the workforce is effective, efficient, motivated, and competent as demonstrated by the utility's nationally ranked safety record, reliability standards, and Santee Cooper's commitment to innovation and improving the quality of life for the citizens of South Carolina.

4. <u>Compensation Expense Included in the Proposed Rates</u>

Neither Santee Cooper's workforce size nor compensation is a specific driver for the rate adjustment.

V. CONCLUSION

A specialized, well-qualified, and well-trained workforce is essential to Santee Cooper's ability to continue to provide safe, reliable, and efficient services to customers, as well as to ensure regulatory compliance. While Santee Cooper believes its workforce compensation is reasonable, there are challenges to recruiting and retention, including a competitive job market. Additionally, Santee Cooper anticipates the need to strategically and responsibly size its workforce to optimize efficiency, particularly as its customer base increases. Therefore, while neither workforce size nor compensation is a driver behind the current rate adjustment, it remains an important component of Santee Cooper's strategy and may potentially impact the need for future rate adjustments.