

CREDIT OPINION

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New Issue

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South Carolina Public Service Authority

New Issue: Moody's has assigned an A1 on South Carolina Public Service Authority's new revenue bonds; outlook stable

Summary Rating Rationale

Moody's Investors Service has assigned an A1 rating with stable outlook to the South Carolina Public Service Authority's (Santee Cooper) \$400 million 2016 Tax-Exempt Series B ; \$50 million 2016 Tax-Exempt Refunding Series C and \$300 million Series 2016 Taxable Series D bonds. The bonds are expected to be sold in late June 2016. The bond issuance was expected and proceeds will fund Santee Cooper's ongoing capital improvement program including its share of the construction of Summer Nuclear Units 2 and 3. Moody's has an A1 rating on Santee Cooper \$7.1 billion outstanding revenue bonds and P-1 rating on the outstanding commercial paper notes.

The A1 rating considers Santee Cooper's strong fundamental credit factors as it participates in the construction of the 2200 MW Summer Nuclear Units 2 and 3. While slow productivity levels and remaining first-in-kind engineering risks have affected the construction progress of the two units, a settlement with the contractor and enhancements to the EPC agreement we believe have set the stage for better cost containment and meeting construction timetables. Credit pressure rises if that is not the case.

The A1 rating incorporates our view of the sound financial and operating record of this well managed state-owned electric and wholesale water utility that serves 2 million residents providing power supply and transmission services in every county in South Carolina (Aaa/stable). Also considered is the strengthening economy of South Carolina; the strong self-regulated cost recovery process; revenue certainty with the 50-year wholesale power supply contract to 2058 with Central Power Cooperative (Central) (not rated); that more than 75% of costs can be automatically passed through to wholesale power customers; and the continued demonstration by the Santee Cooper board of directors of the willingness to increase rates to maintain sound financial metrics. The board approved a 7.43% cumulative retail base rate increase for 2016-2017.

The rating also weighs heavily the established strong generation ownership and management record; the current and forecasted competitive position within South Carolina prior to and forecasted for after the Summer expansion project is operational; Santee Cooper's sound financial liquidity; and financial forecasts which indicate satisfactory debt service coverage margins. Management has forecasted at 1.4x debt service coverage ratio which maintains the five year historical median through the next decade. The board as part of its recent rate

setting process included an increase in the Capital Improvement Fund charge to strengthen debt service coverage ratios above forecasted levels.

Santee Cooper has financed about 70% of the capital costs remaining on the Summer nuclear construction project. The project is about 33% constructed. While there has been progress, challenges remain related to first-in kind engineering issues and the Nuclear Regulatory Commission's (NRC) Inspections, Tests, Analysis, Acceptance, Criteria (ITAAC) process. Productivity levels below the expected pace have continued to slow construction which could result in higher costs and more schedule delays. On a positive note, Santee Cooper's share of the two nuclear units will provide long term fuel diversity and the generation will represent significant non-carbon energy supply, potentially a credit positive given the federal EPA's still expected carbon reduction regulations. The US Supreme Court stay of the federal Clean Power Plan presents some near term uncertainty but Santee Cooper continues to develop plans to transition to lower carbon. In 2021, it estimates 40% of its generating fleet will be non-carbon emitting.

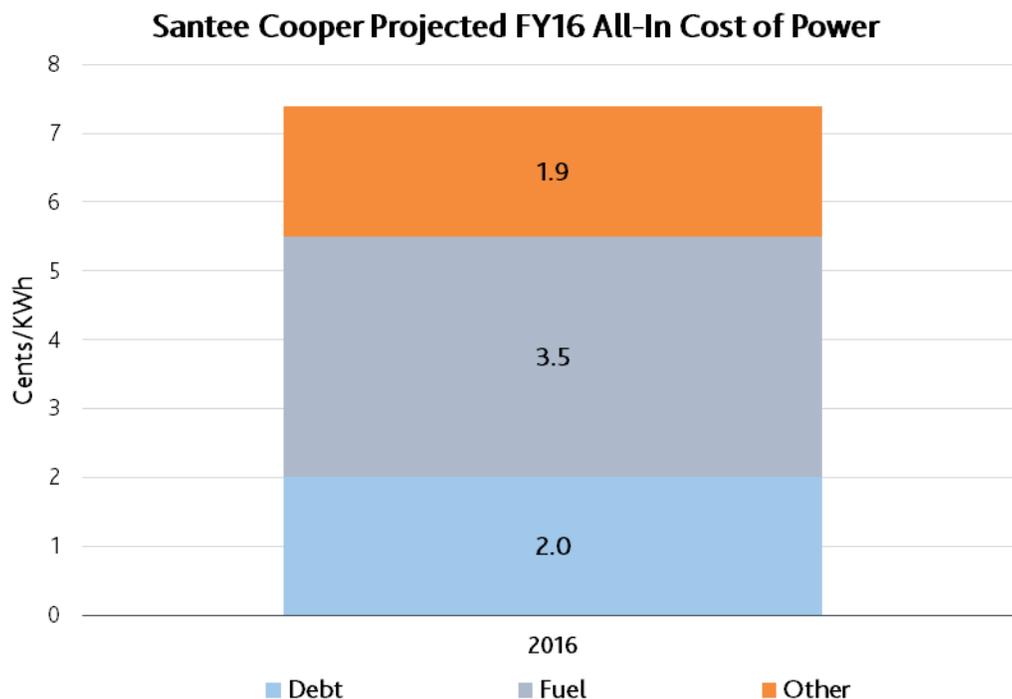
Another positive credit factor is the South Carolina economy continues to transition to a more diversified employment base as heavy manufacturing lost overseas during the recession has not fully returned. Job growth in education, health services, aerospace, and autos continue to be positive with the state's unemployment rate close to the national average in 2015 and personal incomes improving. However, per capita personal income remains well below average at 80% of the US average. Santee Cooper energy sales in 2015 have fully recovered to prerecession levels. The state's sound business climate and the projected population growth suggests improved economic trends continuing in 2016 which should be positive for Santee Cooper in beneficial electricity load growth. Additional electricity sales would be a mitigating factor in the management of the increasing debt service.

Santee Cooper has an established sound financial record including strong liquidity (average of 237 days liquidity on hand between 2011-2015). Adjusted days liquidity in 2015 was 271 days (including unused bank line and commercial paper capacity). ([Median in 2014 for public power electric utilities that own generation was 214 days](#)) and debt service coverage metrics (Santee Cooper median adjusted debt service coverage was 1.62 times between 1993-2015 and 1.48 times between 2013-2015). Adjusted debt service coverage was 1.41 times in 2015. ([Median for all US public power electric utilities that own generation in 2014 was 1.56x](#)). Forecasted adjusted debt service coverage for 2015-2020 is below 1.50 times at 1.37 times. Leverage ratios have always been above average and the new nuclear related debt keeps the debt ratio above average but is comparable to its 10-year historical average. Almost \$1 billion of principal has been paid off since 2007. But Santee Copper now has one of the highest amounts of total outstanding debt of any US public power electric utility. The utility also has one of the largest amounts of retail and wholesale sales volumes and on a debt per Mwh basis the ratio is still above average compared to peers.

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Exhibit 1

Santee Cooper Projected FY16 All-In Cost of Power



Inclusive of Summer 2 and 3 financing costs
 Source: Santee Cooper

Credit Strengths

- » Santee Cooper governing board has full authority to establish rates without external regulation. Almost 75% of annual revenues are subject to automatic pass through adjustment for cost increases
- » Major portion of sales are under long-term contract to 2058 with the Central Cooperative, an association of 20 electric distribution cooperatives that have a long history with Santee Cooper as wholesale power supplier
- » Management team with strong experience and a sound record of executing large generation projects
- » Competitive rates now for wholesale and retail customers in the service area and the new nuclear assets will be source of long term baseload generation
- » Major customers including the Central customers bear fuel cost risk with a monthly fuel cost adjustment mechanism
- » Sound financial liquidity
- » Below-average power production costs and strong generation performance of existing generation portfolio
- » Authority is owned by the Aaa-rated state of South Carolina; authority, is fiscally separate from state ; economic trends indicate a continued broad recovery with employment and income gains all positive for customer sales growth

Credit Challenges

- » Significant leverage particularly considering the financing of construction of the nuclear expansion project.

- » Potential for excess capacity above 15% reserve margin once new nuclear units start commercial operation; currently forecasting slow demand growth and loss of major industrial customer. Expected lowering of the capacity factor on older coal units should reduce excess capacity and improve carbon record
- » First-in-kind engineering such as modular construction issues highlights AP 1000 reactor design used in Summer 2&3 has construction risk which have caused project delays
- » Complexity and changes in the ITAAC process could be source of future Summer Nuclear Units 2 and 3 delays
- » Customer concentration, with a significant amount of sales under long-term contract to 2058 to Central, an association of 20 electric distribution cooperatives
- » Exposure to environmental regulatory uncertainty since a significant amount of energy is from coal-fired generation
- » Significant large industrial load that may be more susceptible to competition or customer relocation
- » Toshiba Corporation (B3, negative), the parent of Westinghouse has guaranteed the Westinghouse obligations in the EPC contract.

Rating Outlook

The rating outlook for Santee Cooper is stable despite the challenges facing the utility as it finances a very large capital program to diversify its power supply to construct two new nuclear units. Current forecasts indicates a stable competitive position. A new EPC agreement with a cost and schedule settlement and new construction contractor could provide new stability to the project. Absence of improvement in construction productivity rates could be pressure on rating.

Factors that Could Lead to an Upgrade

- » Due to the size of the capital program and the ultimate 40% interest that Santee Cooper has in Summer Nuclear Units 2&3, the rating is not likely be upgraded in the near-term
- » The rating could face positive pressure should Santee Cooper improve competitiveness while financial metrics such as adjusted DSCR(including the cp interest) improve consistently well above 1.50x and closer to historic average
- » Santee Cooper is able to reduce leverage with the sale of a portion of its current ownership in Summer 2&3

Factors that Could Lead to a Downgrade

- » The rating could be lowered if customers over the next several years react negatively to increases in power costs and Santee Cooper's debt service coverage ratio (including payment of commercial paper interest) weakens to below the three year average of 1.40 times
- » The rating could also be lowered should any new NRC regulatory changes or first-in kind engineering risks significantly impact the cost of the expansion program and be disputed outside of the new EPC agreement or should the modular construction issues become irresolvable
- » The rating could also be lowered if there were political interference in the way Santee Cooper operates, affecting its financial strength or operating flexibility

Key Indicators

Exhibit 2

Key Indicators

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY			
	2013	2014	2015
Total Sales (mWh)	26,364,000	27,353,000	26,498,000
Debt Outstanding (\$'000)	6,719,406	6,850,820	7,664,374
Debt Ratio (%)	88.7	86.8	88.9
Adjusted Days Liquidity on Hand (incl. Bank Lines)(days)	282	310	271
Adjusted Debt Service Coverage (x) (Post Transfers/PILOTs - All Debt)	1.50	1.53	1.41

Source: Moody's, Santee Cooper Financial Statements

Recent Developments

*Summer Contractor Dispute Settlement A Credit Positive for Project Progress

The settlement between the Summer project owners and the contractor remains a credit positive development. See Moody's October 2015 report: Vogtle and Summer Agreements Are Credit Positive, But Challenges Remain. There has been limited experience on site thus far but we expect that the change in contractor; settlement of past disputes and enhancements to the EPC agreement including performance bonuses, could improve project productivity. Credit pressure rises if that is not the case.

Some of the most important items in the October 2015 settlement included:

*Fluor takes over as main construction subcontractor;

*Provides project owners the option to fix the cost of the project if executed prior to November 1, 2016; Santee Cooper has not made the decision yet to take option. On May 26, 2016 SCANA filed with the Public Service Commission of South Carolina of its intention to exercise the Fixed Price option. Moody's believes this is a credit positive. See Moody's June 9, 2016 report: [Santee Cooper to Benefit from Fixed-price Option on South Carolina Nuclear Power Project](#).

*Provides production tax credit (PTC) completion bonuses to incentivize meeting federal 2020 deadline. While Santee Cooper doesn't now qualify for PTCs, it is making case to US Congress;

*EPC contract was amended to limit Contractor's ability to seek further increases limiting changes to circumstances that could constitute nuclear regulatory changes with explicit agreed upon Change in Law language;

*Delay liquidated damages were enhanced to \$463 million/unit under capped non-fixed price and \$338 million/unit under fixed priced option.

*Established the guaranteed substantial completion dates under the EPC Contract to August 31, 2019 for Summer 2 and Summer Unit 3 and August 31, 2020;

*Toshiba Corporation guarantee will remain in place with respect to certain obligations of Westinghouse. Westinghouse has engaged the Fluor Enterprises, Inc., a subsidiary of Fluor Corporation as the new construction subcontractor.

Detailed Rating Considerations

Size and Market Position

South Carolina Public Service Authority (Santee Cooper) is a component unit of the State of South Carolina (GO bonds rated Aaa) and was created by the State Legislature in 1934. It is governed by a 12 member board of directors, 7 year staggered terms, appointed by the Governor with the advice and consent of the Senate. One board member has to come from each congressional district in the state. The authority provides electric service and wholesale water supply in several regions of state.

The authority's rates are not regulated by the state Public Utilities Commission and are set by the board of directors. Rates can be established on an emergency basis but typically there is a process which includes public hearings. Over 75% of Santee Cooper revenues are derived from cost recovery that is automatically passed through to customers.

Santee Cooper presently serves over one-third of the population of the state and serves in all 46 counties. Santee Cooper has aggressively used its economic development rate to attract new commercial and industrial customers. Santee Cooper serves on an all-requirements basis the Central Cooperative which is a generation and transmission cooperative that has 20 distribution cooperative members. Santee Cooper has approximately 172,000 retail customers; major growth is Myrtle Beach area. All of Santee Cooper's large

Financial Flexibility and Metrics

Santee Cooper has had a sound financial record with stable financial metrics and strengthened liquidity. Debt service coverage metrics ([median 1.61 times between 1993-2015](#)) has been stable. Debt service coverage for 2013-2015 was 1.48 times. FY 2015 adjusted debt service was 1.41x. Moody's recalculated Santee Cooper's debt service coverage excluding the distribution to the state since the payment comes after Santee Cooper's payment of debt service is made.

Base retail rates were raised with increases in 2016 and 2017 amounting to a total 7.43% rate increase. Santee Cooper has full cost recovery with fuel costs passed through monthly to its wholesale customers and annually to other customers providing certainty for timely recovery of a large portion of any mid-year cost increases. Debt service coverage is forecasted between 2016-2021 at about 1.40 times after distribution to the state. The distribution is made after payment of debt service. Leverage ratios have always been above average since Santee Cooper is a generation owner and the new nuclear related debt keeps the debt ratio above average. The debt ratio in [FY 2015 was 88.9%](#).

Santee Cooper Adjusted Debt Service Coverage (\$000; fiscal year ending 12/31)	2013	2014	2015	FY13-FY15 Average
Operating Revenue	\$1,816,576	\$1,997,347	\$1,879,553	
Interest income	11,431	36,565	16,766	
Gross revenue and income	1,828,007	2,033,912	1,896,319	
Operating Expenses (minus depreciation and excluding transfer to state)	1,327,370	1,445,481	1,326,449	
Net Revenue	500,637	588,431	569,870	
Debt service including CP interest	333,011	385,293	403,265	
Adjusted debt service coverage (x)	1.50x	1.53	1.41	1.48

LIQUIDITY

Liquidity ratios (including unused commercial paper capacity) are targeted at what Moody's would consider to be at a sound level given the size of the utility's construction program. Adjusted days liquidity on hand averaged [287 between 2013-2015](#).

Debt and Legal Covenants

DEBT STRUCTURE

Santee Cooper's outstanding revenue bonds are all fixed rate obligations.

Santee Cooper has substantially completed its plan to match the average life of its debt to better align it with the expected life of the nuclear capital assets. The Central Cooperative power purchase agreement, a source of 59.1% of the utility's revenues, terminates in 2058 which is after the date of final maturity on outstanding bonds.

Santee Cooper has an authorized \$750 million Commercial Note Program. Moody's has a P-1 rating on the program. The P-1 rating reflects the credit strengths of Santee Cooper; its strong internal liquidity; and the liquidity support provided through the revolving credit agreements and the terms and conditions of those agreements.

Santee Cooper now estimates that it has financed to date a substantial portion (70%) of the total construction budget for its share of the Summer Nuclear Units 2 and 3. The total budget is estimated at \$5.1 billion including transmission. In addition to future bond sales to fund the balance of the capital requirements, Santee Cooper expects proceeds from the sale of 5% of its ownership in Summer 2 and 3 to SCANA to be utilized to pay down debt. Santee Cooper is also capitalizing 25-30% of the nuclear construction project interest prior to COD which is unlike typical public power generation projects. Also, the utility is increasing its Capital Improvement Fund contribution from rates that should improve debt service coverage over the next several years.

METHODOLOGY SCORECARD FACTORS

Public Power Rating Methodology Factors - South Carolina Public Service Authority

The Santee Cooper current rating is A2 and the grid indicated rating is A1. The difference reflects Moody's view of the strong cost recovery process and Santee Cooper's record of strong utility management. The grid is a reference tool that can be used to approximate credit profiles in the public power electric utility sector in most cases. However, the grid is a summary that does not include every rating consideration. Please see Methodology on U.S. Public Power Electric Utilities with Generation Ownership Exposure for more information about the limitations inherent to grids.

Exhibit 3

Public Power Rating Methodology

Factor	Subfactor	Score	Metric	Weight
1. Cost Recovery Framework Within Service Territory		Aa		25%
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		Aa		25%
3. Generation and Power Procurement Risk Exposure		A		10%
4. Competitiveness	Rate Competitiveness	A		10%
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Aaa	287	10%
	b) Debt ratio (3-year avg) (%)	Baa	88.3%	10%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Baa	1.48	10%
Preliminary Grid Indicated rating from Grid factors 1-5				
		Notch		
6. Operational Considerations		-1		
7. Debt Structure and Reserves		0		
8. Revenue Stability and Diversity		0		
Grid Indicated Rating:		A2		

Source: Moody's Investors Service

DEBT-RELATED DERIVATIVES

None.

PENSIONS AND OPEB

The financial impact of unfunded pension and OPEB obligations of this issuer are minor and thus not currently a major factor in our assessment of its credit profile.

Management and Governance

Santee Cooper is governed by a 12 member board of directors, 7 year staggered terms, appointed by the Governor with the advice and consent of the Senate. One board member has to come from each congressional district in the state.

Legal Security

The bond resolution includes a sum-sufficient rate covenant and no debt service reserve account or additional bonds test but Santee Cooper must deposit annually into the Capital Improvement Fund an amount which, together with amounts deposited during the prior two years, equals 8% of required revenues in the preceding three fiscal years. The amount Santee Cooper is required to transfer to the state is restricted to a maximum of 1% of Santee Cooper's projected operating revenues. There is no external rate regulation except for federal regulation on transmission rates.

Use of Proceeds

The current offering proceeds of \$400 million of 2016 Tax-exempt Series B and \$300 million of 2016 Taxable Series D will fund Santee Cooper's ongoing capital improvement program including construction of Summer Nuclear Units 2 and 3. Santee Cooper is also issuing \$50 million of 2016 Tax-exempt Refunding Series C bonds for present value interest cost savings.

Obligor Profile

South Carolina Public Service Authority (Santee Cooper) is a component unit of the State of South Carolina (GO bonds rated Aaa) and was created by the State Legislature in 1934. It is governed by a 12 member board of directors, 7 year staggered terms, appointed by the Governor with the advice and consent of the Senate.

Methodology

The principal methodology used in this rating was US Public Power Electric Utilities With Generation Ownership Exposure published in March 2016. Please see the Ratings Methodologies page on www.moody.com for a copy of this methodology.

Ratings

Exhibit 4

South Carolina Public Service Authority

Issue	Rating
Revenue Obligations, 2016 Tax-Exempt Series B	A1
Rating Type	Underlying LT
Sale Amount	\$400,000,000
Expected Sale Date	06/29/2016
Rating Description	Revenue: Government Enterprise
Revenue Obligations, 2016 Tax-Exempt Series C	A1
Rating Type	Underlying LT
Sale Amount	\$50,000,000
Expected Sale Date	06/29/2016
Rating Description	Revenue: Government Enterprise
Revenue Obligations, 2016 Taxable Series D	A1
Rating Type	Underlying LT
Sale Amount	\$300,000,000
Expected Sale Date	06/29/2016
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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