SPECIAL REPORT

ENERGY

AFTER THE V.C. SUMMER ICEBERG

Which lifeboat is safe for Santee Cooper ratepayers and South Carolina taxpayers?

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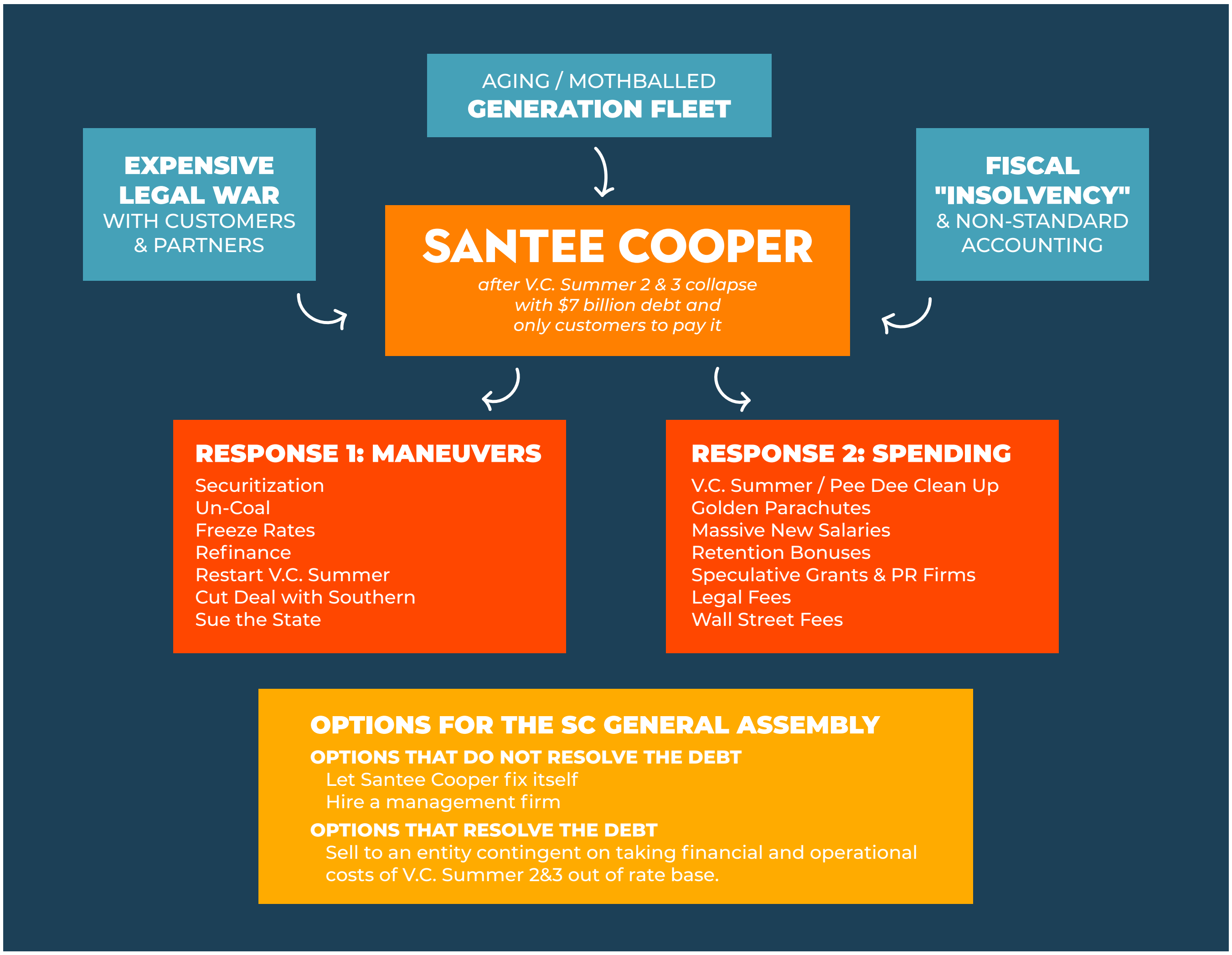
AGING / MOTHBALLED
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WITH CUSTOMERS
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after V.C. Summer 2 & 3 collapse
with $7 billion debt and
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OPTIONS THAT RESOLVE THE DEBT
Sell to an entity contingent on taking financial and operational
costs of V.C. Summer 2&3 out of rate base.

EXECUTIVE SUMMARY

As the South Carolina General Assembly moves ever closer to receiving a report from the state Department of Administration on the future of Santee Cooper, the South Carolina Public Service Authority, it is time for a basic review of the current state of affairs with this state agency and the options available for its future.

As the chart adjacent indicates, this paper's chapters will focus on the current **situation** at Santee Cooper post-V.C. Summer collapse, the **responses** of Santee Cooper leadership to the crisis, and the **options** available to the legislature based on H.4287.

Of all the options put forth to date, only the sale of Santee Cooper has the potential to reduce or eliminate the enormous future costs to be borne by the ratepayers and provide the ability to protect ratepayers in the future.

Santee Cooper faces:

- A mountain of **debt** with only ratepayers to turn to, even after funds received from Toshiba in the bankruptcy settlement (p.7).
- A complicated federal and state **legal** situation with exposure to broad class-action plaintiff claims (p.9).
- A **generation fleet** whose dominant base load assets—the Winyah and Cross coal-fired plants and the one- third interest in the V.C. Summer Unit 1 nuclear plant—produce power at go-forward total costs well above market value. Then there's the environmental issue with coal. (p.24).
- A **balance sheet**, that if reconfigured to IOU standards, shows the utility is technically if not fiscally "insolvent"—having much more debt than the value of its functional, used-and-useful assets, which is made possible only by its self-regulation (p.26).

In response, the leadership has proposed a host of **maneuvers** (p.39) and questionable plans which do not reduce the debt burden significantly, will probably increase costs, and will continue to **spend** ratepayer funds (p.46) at an alarming rate.

The legislature has set a menu of three options for the future of Santee Cooper. **Self-help** (p.52) will yield more of the same, outside **management** (p.51) has not worked in similar circumstances. Neither **self-help** or new **management** will eliminate the requirement for Santee Cooper to charge its customers for not only the remaining roughly $4 billion in principal value of V.C. Summer 2 and 3 debt outstanding as of today, but over double that amount over time as the interest on that debt is also being charged to customers.

Only a **sale** (p.50) will allow for the write-down of financial and operational costs of V.C. Summer 2&3 out of the rate base, which is ultimately necessary for ratepayer relief and taxpayer protection.

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VOICES

SC CIRCUIT JUDGE JOHN W. HAYES, III, ON DEFENDANT SANTEE COOPER IN JESSICA COOK ET AL. V. SANTEE COOPER ET AL.:

I reject Defendants' contention that the Enabling Act's framework favors bondholders over the citizenry ... That a government agency needs more reminding that it serves the people is a conclusion I cannot accept ... I disagree Defendants' misconduct is obscured by its debts; it is instead magnified ... The thrust of the Complaint is that Defendants' malfeasance resulted in billions of dollars of unnecessary debt. Defendants' actions are what may have "impaire[ed] the security" of any debtholders, not the filing of this lawsuit.

MIKE COUICK, PRESIDENT & CEO OF THE ELECTRIC COOPERATIVES OF SOUTH CAROLINA TO RATEPAYER PROTECTION COMMITTEE, SC HOUSE OF REPRESENTATIVES, FEBRUARY 4, 2018:

[In testing the market for a sale,] [i]f you get really good answers back, about a lot of things—about ratepayers, about personnel going to be OK, that existing employees are going to be OK, at the same time rates are going to go down, it may be hard for the General Assembly to say no at that point. Why would you say no to something that works across the board?

INTERNATIONAL CONSULTING FIRM ICF ON ITS EVALUATION OF RESPONSES TO THE REQUEST FOR EXPRESSIONS OF INTEREST AND INDICATIVE OFFERS FOR SANTEE COOPER:

Three critical economic objectives were met among the four full acquisition proposers (passing threshold criteria): (i) all offered purchase prices that fully pay off or provide for defeasance of Santee Cooper's debt, (ii) all project decreases in customer rates relative to ICF's BAU [Business As Usual] rates, and (iii) three of the four make no request to recover the costs of the abandoned Summer 2 and 3 nuclear power plants.

THE U.S. SUPREME COURT IN SMYTH V. AMES, 169 U.S. 466 (1898), ON "USED AND USEFUL" TEST CITED IN "USED AND USEFUL," JAMES J. HOECKER, ENERGY LAW JOURNAL, VOL. 8:303:

In our opinion, the broad proposition advanced by counsel involves some misconception of the relations between the public and a railroad corporation. It is unsound in that it practically excludes from consideration the fair value of the property used, omits altogether any consideration of the right of the public to be exempt from unreasonable exactions, and makes the interests of the corporation maintaining a public highway the sole test in determining whether the rates established by or for it are such as may be rightfully prescribed as between it and the public.

ELLEN WEAVER, PRESIDENT & CEO OF PALMETTO PROMISE INSTITUTE:

What drives our efforts? While we concur with the principle that has driven previous efforts to divest Santee Cooper—that the State of South Carolina should not be in the utility business—most importantly, this is about the long-term interests of real South Carolina ratepayers. Our independent experts' review of the facts and financials demonstrate that only an infusion of private capital can remove the V.C. Summer debt burden from Santee Cooper and SC Electric Cooperative customers.

SERIES INTRODUCTION

ENERGY

On July 31, 2017, investor-owned SCANA and state-owned Santee Cooper announced that they would abandon Units 2 and 3 of the V.C. Summer nuclear project in Fairfield County. Shortly thereafter, Palmetto Promise Institute began a series of research projects on the impact that abandonment would have on ratepayers, bondholders, and the taxpayers of the Palmetto State.

Our body of research, of which this work is a part, is housed on our website as **The Santee Coooper Resource Center**. The individual projects in this series includes:

1. ***Santee Cooper's Uncertain Future*** (March, 2018) This was our original comprehensive study of not only the politics & history of Santee Cooper but of future electric rates that must be charged to cover the V.C. Summer debacle. We updated these rates based on new data from Santee Cooper in May, 2018 as ***Santee Cooper Rate Increase Projections***.

2. ***Statement Shock: A Santee Cooper Utility Bill*** (May, 2018) shows in a one-page utility billing statement format the comprehensive picture of the financial situation at Santee Cooper and what that means to the individual customer.

3. ***Santee Cooper vs. SCANA/SCE&G: Which Ratepayers Will Pay More?*** In 2018, much of the action in response to the failed V.C. Summer nuclear project was focused on SCE&G and its parent company SCANA. This economic analysis showed how Santee Cooper ratepayers faced a much more uncertain and unsettling future. This data was presented in graphical form as ***Peering into the V.C. Summer Hole***.

4. ***Santee Cooper by the Numbers*** All of the numbers related to Santee Cooper and VC Summer with rate increase scenarios in a one-page format. Details from Santee Cooper financial reports compiled by our economists can be found in the ***Santee Cooper Report Card***.

5. ***The Future of Santee Cooper*** This animated video explains how we got in the situation we are in with Santee Cooper, and where we go from here.

6. ***Santee Cooper Dashboard*** Modeled on a vehicle's in-dash instrument cluster, this graphic provides Palmetto Promise Institute's assessment of critical information on Santee Cooper at a glance.

7. ***After the Iceberg: Which Lifeboat is Safe for Santee Cooper Ratepayers and South Carolina Taxpayers?)***. This latest analysis provides a fact-based assessment of why selling Santee Cooper is the only option that will provide relief to Santee Cooper and Co-op customers.

1. NO WAY OUT: SANTEE COOPER'S MOUNTAIN OF DEBT

Note: Even with the understanding that interest is only an obligation in the period that it is due, this data represents total costs to customers.

TABLE A. SANTEE COOPER DEBT SERVICE SCHEDULE

(thousands of dollars) 10/31/2019

	Total Principal on Outstanding Revenue Obligations	Total Interest on Outstanding Revenue Obligations	Total Debt Service on Outstanding Revenue Obligations
2019	64,188	324,534	388,722
2020	96,658	315,942	412,600
2021	154,324	311,142	465,466
2022	141,380	307,238	448,617
2023	271,234	303,047	574,281
2024	111,892	289,868	401,759
2025	124,248	284,516	408,764
2026	122,342	278,992	401,334
2027	110,239	276,061	386,299
2028	141,452	270,088	411,541
2029	152,496	264,280	416,776
2030	119,812	254,308	374,119
2031	127,826	250,584	378,410
2032	124,507	245,056	369,563
2033	184,778	238,882	423,660
2034	184,162	230,936	415,098
2035	196,697	218,948	415,645
2036	216,859	209,072	425,931
2037	170,796	199,241	370,037
2038	147,941	190,584	338,525

TABLE A. SANTEE COOPER DEBT SERVICE SCHEDULE

(thousands of dollars) 10/31/2019

	Total Principal on Outstanding Revenue Obligations	Total Interest on Outstanding Revenue Obligations	Total Debt Service on Outstanding Revenue Obligations
2039	138,743	183,064	321,807
2040	152,677	175,991	328,668
2041	187,853	168,207	356,060
2042	179,021	158,683	337,703
2043	199,644	149,724	349,368
2044	247,598	139,734	387,332
2045	270,161	127,292	397,453
2046	303,738	114,677	418,415
2047	248,388	99,784	348,172
2048	255,016	88,105	343,121
2049	254,586	76,062	330,648
2050	203,901	64,401	268,302
2051	215,017	53,590	268,607
2052	230,805	42,064	272,869
2053	234,936	29,823	264,759
2054	189,680	17,371	207,050
2055	110,718	7,423	118,140
2056	37,945	1,821	39,767

	Principal	Interest	Total Future Cost to Ratepayers
	$6,624,258,000	$6,961,135,000	$13,585,388,000

2. *UN*-USED AND *UN*-USEFUL: SANTEE COOPER'S SHAKY LEGAL GROUND

IN THIS CHAPTER:

- South Carolinians in all 46 counties, including the Upstate, have much at stake in a number of legal proceedings pitting electric co-op customers, Central Electric Power Cooperative and Santee Cooper against each other.
- Santee Cooper has acknowledged that the class action litigation poses existential threats and "may possibly have a material adverse effect on the Authority's ability to transact its business or meet its obligations under the Revenue Obligations Resolution."
- It is important to note that the political and administrative process is taking place simultaneously with the legal process. The Department of Administration is to report its three options to the General Assembly as soon as January 15 as discovery is beginning for the February *Jessica Cook et al.* trial. If the General Assembly decides to allow Santee Cooper to continue operating as a state-owned entity either according to its own plan or under management of another utility, the majority of the potential legal outcomes means that Santee Cooper and co-op customers continue to foot the bill for the unfinished V.C. Summer nuclear project and that the South Carolina legislature and government agencies will continue to be embroiled with V.C. Summer fallout for many years to come.

The South Carolina Public Service Authority ("Santee Cooper") is unknown to many South Carolinians north of Columbia. But if familiarity with Santee Cooper is weak in the mind of the average South Carolinian, particularly in the Piedmont section of the state, an understanding of the existence of the Central Electric Power Cooperative (CEPCI or "Central") is an even smaller circle. Drawing the ring even more tightly, knowledge of the *Jessica Cook* case and the statewide importance of that litigation is nearly non-existent, even among members of the South Carolina General Assembly.

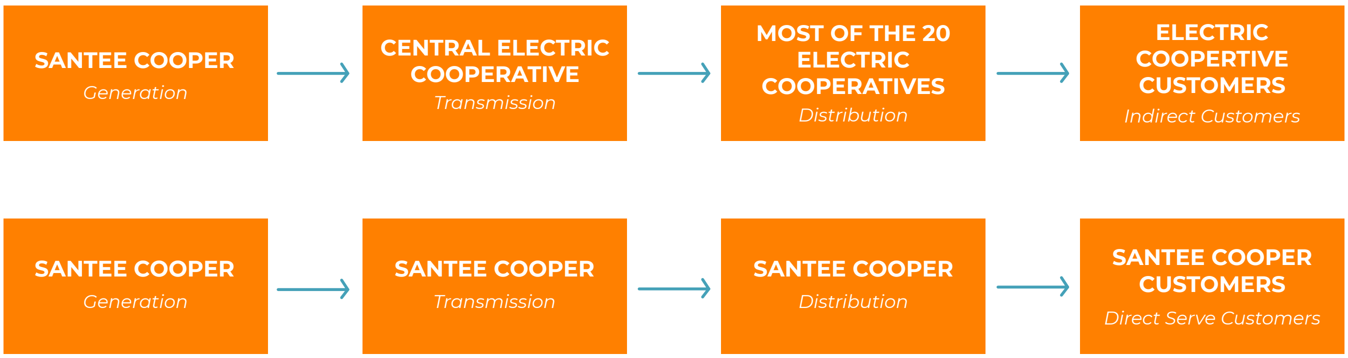
This is unfortunate, because in terms of its influence on the pocketbooks of millions of South Carolinians, the case of *Jessica Cook et al. v. Santee Cooper* could very well be the most important case of which few have heard. South Carolinians in all 46 counties, including the Upstate, have much at stake in the legal proceedings pitting electric co-op customers and Santee Cooper direct serve customers against each other.

We will attempt to shed some light on this case and do so in layperson's terms.

As Benjamin Franklin discovered, the use of electricity has a beginning, a middle and an end. In modern terms, that would be *generation* (clouds), *transmission* (lightning) and *distribution* (the kite string). Admittedly, the analogy isn't perfect, but it emphasizes that power must be produced, sent long distances at high voltage levels, then stepped down in intensity over generally shorter distances for the end user. In the Jessica Cook-Central-Santee Cooper relationship, Santee Cooper is primarily a generator of electricity, Central Electric Power Cooperative is primarily[1] a transmitter of electricity, and the electric cooperatives are the distributors of the power.

Ms. Jessica Cook is a resident of Hampton County, S.C. who receives power at her home on account of her membership in the local co-op assigned to her property, the Palmetto Electric Cooperative. Palmetto Electric Cooperative, which serves portions of Beaufort, Jasper, and Hampton Counties is a part of (one of the parent organizations of) Central.

FIGURE 2. SANTEE COOPER CUSTOMERS



The Electric Cooperatives of South Carolina organization (formed in 1941) is currently composed of 19 of the 20 member "distribution cooperatives," or "co-ops." Co-ops are not-for-profit entities that form a network of community-based companies. The ratepayers of co-ops aren't just customers and consumers, they are *members*. Members elect the boards of the co-ops. Each cooperative is an independent organization.

The distribution cooperatives, or co-ops, were formed because of a disparity in the availability of electricity in rural areas. A co-op traditionally had about half as many consumers per mile of line as an investor-owned (for-profit) utility. The Central Electric Power Cooperative (formed in 1948) provides purchasing power to all 20 co-ops. It owns transmission systems, negotiates purchase power agreements with generators and arranges for the transmission of the power to local cooperatives. Member cooperatives agree to have Central serve as a wholesale power aggregator, a sort of "Super Customer" to generators of electricity. Central purchases power from Santee Cooper, Duke Energy and the Southeast Power Authority for the co-ops and delivers power to them. Cooperatives then deliver power to members. Central manages power supply contracts, provides transmission planning and construction, engages in load management, works to expand solar and other renewables, promotes energy efficiency, handles industrial billing, and serves as an industrial recruiter though its South Carolina Power Team.

Since at least 1950, Central and Santee Cooper have operated pursuant to the "Coordination Agreement," a power contract that was amended in 1980, 1988, 2009 and 2013. The upshot of the Agreement is that Central pays about 70% of Santee Cooper's capital costs and about 61% of other costs. Central was also responsible for paying about $2.8 billion of the costs of the failed V.C. Summer project. The Central contract with Santee Cooper (which doesn't end until 2058) is worth $50 billion ($20 billion net current value) and is Santee Cooper's single largest source of revenue (about 60%).[2]

The most recent Coordination Agreement signing was nearly a decade in the making. It was described in glowing terms in the Santee Cooper magazine:

> *May 20, [2013] dawned dark and stormy, but even the swirling clouds couldn't dampen the spirits of 100 or so electric cooperative and utility leaders gathered expectantly under*

> *a tent by Lake Moultrie. Indeed, the partnership strengthened by that morning's contract signing ceremony proved more powerful than the storm, which kept a respectful distance as Santee Cooper President and CEO Lonnie Carter and Central Electric Cooperative President and CEO Ronald J. Calcaterra took pens in hand.*[3]

Then came the July 31, 2017 collapse of the V.C. Summer nuclear project expansion in Fairfield County, a joint project of Santee Cooper and SCE&G. The happy occasion celebrated in 2013 seems light years away now. Here is what the Cooperatives told the Ratepayer Protection Committee of the South Carolina House after the demise of V.C. Summer 2 & 3:

> The current situation at Santee Cooper is not acceptable. We are paying more for less. Economic development will be difficult given rates that must be paid. There is a lack of confidence, a need for *transformation* [emphasis ours]. Co-ops believe that 70% of the funds from the Toshiba settlement should go to our members.[4]

This powerful statement by Electric Cooperatives of South Carolina CEO Mike Couick was backed up by resolutions passed by Electric Cooperative Boards of Directors: "…the continuation of the status quo at Santee Cooper is unacceptable….the funds received by Santee Cooper from the Toshiba settlement…is cooperative members' money. Our members should not receive anything less than the full benefit of that amount."[5]

Now, in a class action suit approved by the South Carolina court system, the members of the co-ops and direct served Santee Cooper customers, represented by Ms. Jessica Cook and seven other plaintiffs, have taken legal action against their co-ops (while technically Palmetto is the only co-op named in the suit), the Central Electric Power Cooperative, Santee Cooper and SCANA to prevent exposure to charges from Santee Cooper to cover the entire $4 billion V.C. Summer 2 & 3 debt.

Could the plaintiffs prevail in court against Santee Cooper?

In ***Jessica S. Cook et al. v. Santee Cooper, Santee Cooper's Board of Directors (certain former and current Directors named), SCE&G, Palmetto Elec. Coop., & Central Elec. Pwr. Coop. (case no. 2017-CP-25-348 in Hampton County, S.C, Fourteenth Judicial Circuit),***[6] originally heard in the court of Judge John W. Hayes, III, the plaintiffs represent a class in connection with the decision to suspend and abandon construction of V.C. Summer Nuclear Units 2 and 3. Central was named as a defendant in *Cook* in September, 2017 and calling the claims "intertwined," asserted a cross claim against Santee Cooper in February, 2018. Santee Cooper also asserted cross-claims against SCE&G in *Jessica Cook*. We will return to those claims in a moment.

Central argues that the claims of the *Cook* plaintiffs are virtually identical to their own—that Central was a *victim* of Santee Cooper (being forced to pass along Santee Cooper's unfair charges due to the handcuffing represented by the Coordination Agreement), not a co-perpetrator in league with Santee Cooper against ratepayers, as *Jessica Cook* alleges.

In response to Central's cross claim, Santee Cooper asked the court to "sever," meaning that the cross-claims of Central would have to be handled as a separate case. Retired Justice of the S.C. Supreme Court Jean Toal, who has been assigned to serve as mediator as well as trial judge, overseeing all state Santee Cooper litigation on behalf of the high court, agreed with Santee Cooper and rejected Central's petition to have its arguments heard at the same time as a cross-claim in *Jessica Cook*. Toal also transferred the Cook case to Greenville County from Hampton County and set a date of February 24, 2020 for a three-week trial.[7]

However, as there are a number of claims common to Central and the ratepayer plaintiffs in *Jessica Cook*, customers of the electric co-ops could be in essence giving voice to Central's case against Santee Cooper in February with a possible separate legal action ("a second bite at the apple") by Central itself. The *Jessica Cook* allegations and causes of action (which we have arranged into "claims") that are essentially the same questions of law as Central's are also similar to the arguments presented in a federal court case. (More on the federal case later.)

For simplification purposes, we arrange the most *salient* and most *common* state and federal plaintiff arguments into "claims": [8]

Claim #1. Santee Cooper violated/lacked state statutory authority by setting, imposing, and collecting rates to the plaintiffs (Jessica Cook et al. and Central which passed them along to the plaintiffs through their co-ops) that were not "just and reasonable." This argument made by the plaintiffs is that according to state statute [§58-31-55 (A)(3)(a)], Santee Cooper's rates must be "just and reasonable." To the plaintiffs, including costs for V.C. Summer in rates charged to co-op and direct serve customers would not be *just* due to the fact that Santee Cooper bungled (or let SCANA bungle depending on one's point of view) V.C. Summer, and then abandoned it *voluntarily*. The plaintiffs argue that the fact that the customers are being charged for generation that was never received (and never will be) exceeded the authority granted by state statute and was therefore not *just*.

Claim #2. Santee Cooper violated its state statutory authority by charging plaintiffs for generation that was not "used and useful." For this, the plaintiffs seek the establishment of a Constructive Trust. A second statutory argument being advanced by the plaintiff class is the doctrine of "used and useful."[9] Specifically, the complaint seeks a declaration that:

> *Imposition, collection, and expenditure of the rate increases associated with the voluntarily abandoned Project exceeded Santee Cooper's statutory authority because S.C. Code Ann. § 58-31-200 does not authorize Santee Cooper to depart from the longstanding "used and useful" doctrine embraced by the South Carolina Supreme Court and S.C. Code Ann. §§ 58-31-30(13), -360.*[10]

Central levelled allegations and cross-claims against Santee Cooper predicated upon the "used and useful" doctrine in this manner:

> *28. S.C. Code Ann. § 58-31-30 subsections (A)(7) and A(13) expressly impose the "used and useful" test on Santee Cooper's ability to include costs for facilities in rates charged to its customers. Accordingly, while Santee Cooper has statutory authority to build and maintain facilities for the manufacture, distribution, purchase, and sale of power, and has authority to impose charges for the use of those facilities, Santee Cooper has no authority to collect charges for facilities that are not used or useful, for services that are not rendered, or for commodities that are not furnished.*
>
> *29. Because Santee Cooper and SCE&G have abandoned the construction of V.C. Summer Units 2 and 3, those facilities will not be used and useful, and Santee Cooper will not render any services or furnish any commodities in connection with those facilities.*
>
> *30. Thus, Santee Cooper has exceeded its statutory authority and violated South Carolina law by imposing and collecting charges related to the construction of the abandoned V.C. Summer Units 2 and 3. As a creature of statute, Santee Cooper has only those rights granted by statute, and its attempt to charge Central for the abandoned project is ultra vires and unlawful.*[11]

The “used or useful” test derives from United States Supreme Court decisions that mandate states to exclude certain non-performing capital investments from a utility’s base of property eligible for a rate of return. Specifically, the test emanated from concerns arising from the U.S. Constitution’s Takings Clause.[12] (The phrase also appears in the Public Service Authority section of the state code of laws.)[13]

A detailed but straight-forward description of the “used and useful” doctrine was articulated by California’s utility regulatory body just two years ago:

> *The principle of used and useful is commonly applied to utility property. According to this principle a utility must demonstrate that the new plant is used and useful before being allowed to include the investment in its rate base. The used and useful standard has a twofold meaning. At the preliminary level it implies that the facility is built and provides service to customers. In addition the principal [sic] requires an examination of the utility’s prudence in deciding to construct or purchase the utility plant.*
>
> *In other words according to the used and useful standard to be included in the rate base the new asset must be required and operate in an effective and efficient manner. When the utility is found to be imprudent, assets are excluded from rate base, and the cost recovery for the remaining book value of the asset is denied. In those circumstances costs are borne by shareholders rather than ratepayers.*
>
> *On the other hand, when assets are retired prematurely, for reasons other than imprudence, assets would be excluded from the rate base, which means the utility would not be permitted to earn a rate on return on assets, but the remaining book value of the asset will be amortized in customer rates.*[14]

Here, the plaintiffs’ baseline contention is that the “used or useful” doctrine effectively precludes Santee Cooper from imposing upon its customers the massive cost of a failed nuclear power plant, one that was terminated before it produced a single watt of electricity.[15]

Essentially, plaintiffs argue that Santee Cooper violated the U. S. Supreme Court’s “used and useful” test by charging for project costs “without offering anything meaningful in return.” In other words, since the nuclear plant will not be commissioned and was never “used or useful,” consumers cannot be billed for it. Conversely, as a matter of constitutional accounting, plaintiffs’ position is that the defunct plant may not be recognized as an asset in calculating cost of service charges to Santee Cooper’s ratepayers.

Santee Cooper rejects all these claims, contending that the “used or useful” doctrine is inapplicable to a state-owned utility. Said differently, Santee Cooper draws no parallels between debt and equity holders. Without private owners or profits, Santee Cooper posits that the “used or useful” doctrine has no role in the legal calculus. Last summer in federal court, Santee Cooper argued in support of its motion to dismiss the then-operative complaint:

> *Santee Cooper is not an investor-owned utility. It is a body corporate and politic owned by and for the benefit of the people of South Carolina. S.C. Code Ann. §§ 58-31-30, -80. Santee Cooper does not have shareholders. Therefore, its rates are not designed to provide a rate of return to shareholders. Santee Cooper does not earn or retain a profit … A test whose purpose is to govern an investor-owned utility’s rate of return has no application as to Santee Cooper.*[16]

The plaintiffs disagreed, contending flatly that the “used and useful test applies to Santee Cooper’s conduct.” Plaintiffs explained that “[e]lectricity rates are typically set on the “rate base” of the operating property of a public utility that is ‘used and useful for the convenience of the public in the territory served’ … Here, of course, V.C. Summer is not “used and useful.” It will never provide electricity to anyone.”[17] From the plaintiffs’ vantage point a “public utility” is a utility that is subject to rate regulation by a *public authority*. “Public” does not connote governmental or private ownership.

Naturally, plaintiffs in the federal case rejected the contention that for-profit status is a prerequisite for applying the “used or useful” test. Beyond that, plaintiffs asserted that even if the doctrine were inapplicable that would not remove all legal impediments to Santee Cooper charging ratepayers for its nuclear debacle. Rather, the U.S. Constitution still prohibits confiscatory takings in the form of rate hikes:

> *Santee Cooper must offer a rate of return on investment sufficient to attract new bondholders, and provide existing bondholders a guaranteed return, putting Santee Cooper’s own financial interests in conflict with the interests of its ratepayers, who have no choice but to purchase electricity from Santee Cooper while residing within its exclusive service area. The policy considerations that inform the application of the used and useful principle to investor-owned utilities are the same in the bondholder context.*[18]

Claim #3. Contractually, Santee Cooper may charge its customers only for costs that are “reasonable” and for “service.” In addition to *statutory* claims, plaintiffs and cross-claimants make *contractual* breach claims as well. According to the words of the Coordination Agreement, Santee Cooper is allowed to charge Central for costs “that are reasonably recovered” for “service during a given period.” Plaintiffs (individual customers) find a connection to the Agreement with Central quite natural as all customers of co-ops are “beneficiaries” of the Agreement if not parties.

Plaintiffs argue in common with Central that there will never be any “service.” They also argue that Santee Cooper was aware that the load flowing from a massive 45% ownership in V.C. Summer 2 & 3 was not needed, but negligently proceeded with the project anyway. Plaintiffs target Central in this complaint as well. Central responds that it pushed Santee Cooper to reduce its ownership in V.C. Summer.

Claim #4. In a violation of due process under the South Carolina Constitution, Santee Cooper kept candid assessments to themselves, acted in bad faith, and concealed material facts. Plaintiff Cook argues that “material facts about the prospects and future of the construction effort were concealed or not communicated accurately during the various rate setting processes used by Santee Cooper.”[19] Central provides about 60% of Santee Cooper’s revenues[20] and 70% of Santee Cooper’s capital costs,[21] argued that “the V.C. Summer project was plagued with a litany of problems, problems well known to Santee Cooper but not shared outside the company.”[22] In its brief, plaintiffs cited internal communications about the V.C. Summer situation that included Santee Cooper CEO Lonnie Carter, Santee Cooper Vice President for Nuclear Operations and Construction Michael Crosby, and Santee Cooper’s man stationed on site, Marion Cherry:

- “[Sub-module] Production work in Lake Charles [Louisiana] is still in the ditch.”[23]
- “[T]he [V.C. Summer contractor] Consortium’s inability to fulfill their contractual commitments in a timely manner places the project’s future in danger.”[24]
- “[M]issed deadlines [have] put potentially unrecoverable stress on the milestone schedule.”[25]
- Santee Cooper has “no real confidence in [the Consortium’s] ability to provide modules as scheduled” and has “received so many new schedules that they are meaningless.”[26]

- “CA01 is in the toilet” and meeting the schedule will require “divine intervention.”[27]

- It is “past time to end the Lake Charles Debacle” because “sub-module deliveries are going to kill the project.”[28]

- The “schedule is a joke.” “Someone should be fired for thinking this would be acceptable to us.”[29]

Central argues that while all of these emails were being traded back and forth, Central, bondholders, ratepayers, elected officials and the general public were being told a much sunnier story, to the point that the 2014 Santee Cooper *Annual Report* (issued in April, 2015) actually suggested that Santee Cooper was working to “accelerate” the completion dates.[30]

Central also points out that when Bechtel Corporation was hired to conduct an independent assessment of the V.C. Summer project progress some eighteen months before its demise, the report was kept from Central. Central did not learn of the existence of the report until the following year and was denied a copy of the report at that time as well. (The Bechtel Report was eventually acquired and released by the office of Governor Henry McMaster over the objections of SCE&G.)[31]

Other claims in plaintiff briefs include illegal taking, denial of due process, negligence, gross negligence, and unjust enrichment.[32]

DOMINION VERSUS SANTEE COOPER

The maneuvering between Santee Cooper and Dominion is an ongoing legal death match. On October 21, 2019 Dominion wrote and filed with the court in *Jessica Cook* a letter demanding assistance with legal costs for a host of cases involving V.C. Summer.

Then, on November 21, 2019, Dominion sought to move the *Jessica Cook* case from state court to federal district court. Santee Cooper’s chief legal counsel, Mike Baxley, issued the following statement in response:

> ***Dominion’s weak legal maneuver follows a series of unfavorable rulings in the South Carolina Court, including orders this week commanding Dominion to cease inappropriate efforts to extract legal costs from Santee Cooper. This attempt to leave town under cover of darkness likely also reflects concern that during related depositions, according to media reports, former SCANA executives refused to answer questions, asserting rights under the Fifth Amendment.***[33]

The plot thickens, the V.C. Summer hot potato serving as an example of the quotation made popular by President John F. Kennedy: “Victory has a hundred fathers while defeat is an orphan.”

WHAT DO THE PLAINTIFFS SEEK?

Specifically, returning to *Jessica Cook*, the plaintiffs have called for the return from defendants of:

- The entire Toshiba settlement [paid by V.C. Summer contractor Toshiba to SCE&G and Santee Cooper proportionally after Toshiba’s bankruptcy];

- All profits, performance bonuses, retirement packages (“golden parachutes”), and other benefits associated with the Project received by Defendants;

- All funds received from the sale of the Project or parts thereof; and
- All increased rates that were paid associated with the project.
- The plaintiffs have also argued that the "Defendants have a duty and obligation in **equity** to make restitution to Plaintiffs and the Class."[34]
- Central calls on the court to create a constructive **trust** and "…order Santee Cooper to pay Central 70% of the discounted lump sum payment received by Santee Cooper [from Toshiba settlement] from Citibank, with such payment to be distributed by Central to its member cooperatives." (By our calculation, that would be 70% of $831.2 million, or about $582 million, which Santee Cooper has begun to tap to hold rates steady.)

WHAT WILL HAPPEN?

Co-op customers are suing Santee Cooper, their local co-ops and the Central Co-op. The plaintiffs in the *Cook* case are suing SCE&G (now Dominion) as well. To add to the confusion, Santee Cooper is also cross-claiming SCE&G, and SCE&G had at one time put Santee Cooper on notice that it intended to seek arbitration to see that Santee Cooper pay its share of nine (9) actions related to the V.C. Summer project to date defended by SCE&G without Santee Cooper's assistance.

Given those parties and those claims, here are some of the possible outcomes of the *Jessica Cook* litigation should the case remain in state court:

1. The court, for any one of a variety of procedural or legal reasons, could be **unable to determine** which entity or entities are liable for compensating the *Jessica Cook* plaintiffs in the wake of V.C. Summer. A variation is that for some reason **none** of the entities are found liable under the claims we highlighted above, or others. Result: Santee Cooper and Central customers must cover their entity's respective legal fees and Santee Cooper will continue to pass along V.C. Summer debt to Central and direct served customers.

2. **Santee Cooper alone** could be found liable. Given SCE&G's lead role in V.C. Summer, this is highly unlikely. Result: bankruptcy or default for Santee Cooper.

3. **SCE&G alone could be found liable**. For Santee Cooper to be untouched by the *Jessica Cook* litigation, barring any other circumstances, SCE&G must be the unquestioned loser. Given Santee Cooper's awareness of the situation at V.C. Summer, it is unlikely that the Authority could escape completely unscathed.

   In the admittedly tendentious words of SCE&G (on Dominion letterhead):

   …Santee Cooper was involved in every major decision made since the inception of the Project. Santee Cooper dedicated full-time employees to the site, where they had complete access to the status of the Project at all times. Santee Cooper had full access and the right to participate in every significant meeting regarding the Project, and, in fact, did have its own employees participate regularly in meetings between SCE&G and the Consortium of Westinghouse and Stone & Webster. Santee Cooper employees accompanied SCE&G to module manufacturing sites, the Nuclear Regulatory Commission (NRC), and sites in both China and Japan in attempts to both understand the status of the Project and evaluate the best options available to mitigate project delays. SCE&G continually and consistently solicited and considered Santee Cooper's input. Tellingly, Santee Cooper's ongoing false narrative

omits any reference to Santee Cooper's own role in the oversight of the Project and fails to acknowledge its causative role in the abandonment of the Project.[35]

Result: A total and complete victory by Santee Cooper, meaning the court (or mediation) would find that the South Carolina Public Service Authority of itself would owe the *Jessica Cook* plaintiffs nothing ($0), Central Electric Power Cooperative nothing ($0)—not its claimed portion of the Toshiba settlement, not the charges for the never to be commissioned nuclear units at Jenkinsville, and therefore not even its legal fees. Santee Cooper would continue to be allowed to bill Central for the cost of service under the Coordination Agreement presumably minus any settlement received from SCE&G. Customers of electric cooperatives would not be due any refunds from Santee Cooper except for that provided by an SCE&G settlement. This result would also be unlikely.

4. The court could find that all defendants bear some responsibility: **Santee Cooper, SCE&G, Palmetto Electric Cooperative**, and **Central Electric Power Cooperative**. Result: this could lead to additional litigation, but only SCE&G would have shareholders to turn to for any costs related to its V.C. Summer liability. Santee Cooper and Central customers would be the ones to bear the weight of any judgment and legal fees. The key question in the case would be which entity could achieve a net gain, if any entity does. The only hope for Santee Cooper customers would be a net due to Santee Cooper from SCE&G, but if liability is shared, it is unlikely that such a settlement will cover all Santee Cooper's expenses for V.C. Summer.

5. **Santee Cooper** and **SCE&G** could both be found liable. Again, the hope for Santee Cooper customers would be a net due to Santee Cooper from SCE&G. But even so, the situation would be volatile. Would direct serve customers receive a rebate while a second Central lawsuit gets up to bat? This is Central's concern. Without direct serve customers shouldering a significant portion of V.C. Summer costs, Santee Cooper would be forced to find revenue from Central. In any of the scenarios where Santee Cooper is found liable, the ratepayers would not be made 100% whole. Even if the court were to award the plaintiffs only the value of the settlement with Toshiba, to pay $582 million, Santee Cooper would be forced to tap any remaining Toshiba funds still on hand that have been used heretofore to keep rates down. Rates would necessarily rise or if that were enjoined, the utility could become insolvent.

Bankruptcy or Default?

In its latest annual report, Santee Cooper acknowledged that class action litigation poses existential threats:

> *The Authority cannot predict the outcome of these lawsuits. If determined adversely to the Authority, these actions may possibly have a material adverse effect on the Authority's ability to transact its business or meet its obligations under the Revenue Obligation Resolution."* [36]

So, what would be the very *worst* case scenario for Santee Cooper should the plaintiffs win over Santee Cooper (or Santee Cooper and SCE&G) in court? We assume here that the nature of such a legal victory that would require Santee Cooper (or Santee Cooper and SCE&G) to refund any V.C. Summer costs paid by Santee Cooper customers already, disallow future costs from being passed along, as well as granting customers a share of the Toshiba settlement and covering all plaintiff legal expenses. Given the fact that Santee Cooper is a state agency with no shareholders, *there could indeed be a "material adverse effect on the Authority's ability to transact its business or meet its obligations."* An adverse ruling could set up a conflict between ratepayers, who would not want to see their rates skyrocket, and bondholders, who would demand to be paid.

IS BANKRUPTCY AN OPTION FOR SANTEE COOPER?

With most any win for the plaintiffs, Santee Cooper would need protection. Could Santee Cooper simply file for bankruptcy protection? Businesses, utilities, and public-private partnerships seek bankruptcy protection all the time. (One of the co-authors of Palmetto Promise's *Uncertain Future* openly called for bankruptcy as the best solution to the problem of rising rates due to V.C. Summer.)[37]

To be sure, a Chapter 9 bankruptcy by Santee Cooper could bring greater order to the process and bring stakeholders together in a single courtroom under adult supervision. Chapter 9 is designed to protect public entities and simultaneously take into consideration the interests of creditors:

> *The purpose of chapter 9 is to provide a financially-distressed municipality protection from its creditors while it develops and negotiates a plan for adjusting its debts. Reorganization of the debts of a municipality is typically accomplished either by extending debt maturities, reducing the amount of principal or interest, or refinancing the debt by obtaining a new loan.*[38]

But, there is some question as to whether Chapter 9 bankruptcy is an option for state agency Santee Cooper. This past April, Santee Cooper Board Chairman Dan Ray, a Wall Street veteran, testified at the Statehouse: "Currently as Santee Cooper is structured, it cannot file bankruptcy. It can have a default."[39] In September of 2017, soon after pulling the plug on V.C. Summer 2 & 3, *Debtwire* classified Santee Cooper among those "Municipal Entities Whose Ability To File Chapter 9 Is *Unknown* [emphasis ours] at this Time".[40]

But, in its Supreme Court filing the previous June, less than a year earlier, Santee Cooper used the term "bankruptcy" as a potential consequence of a legal defeat and a resultant default. Quoting John Tiencken, who is currently General Counsel to Central (and was formerly president, CEO, and general counsel of Santee Cooper), Santee Cooper advised the state's highest Court:

> ***It is possible, of course, that Santee Cooper's bondholders could take a piece of that burden for the failure of the nuclear plant but that would only happen in the event of a bankruptcy of Santee Cooper caused by litigation, which prevents Santee Cooper from recovering costs of the nuclear plant. And, of course, that path has implications for the state's credit reputation and for the many people who invested in the formerly AA rated Santee Cooper.***[41]

In that same Supreme Court brief seeking consideration in original jurisdiction, Santee Cooper acknowledges the instability caused by litigation and legislation:

> *Fitch Ratings and S&P Global Ratings revised their outlooks on Santee Cooper's bonds from "stable" to "negative" based on concerns about litigation between Santee Cooper and Central and the ability of Santee Cooper to recover Project-related costs … Further, Moody's Investors Service announced that Santee Cooper's outstanding debt may be downgraded "due to pending legislation, litigation, and a weak balance sheet …."*[42]

In its 2010 annual report, Santee Cooper implied it had a Chapter 9 safety valve but didn't need it:

> *In December 2009, GASB issued Statement No. 58, "Accounting and Financial Reporting for Chapter 9 Bankruptcies," (GASB 58). The objective of this Statement is to provide account-*

ing and financial reporting guidance for governments that have petitioned for protection from creditors by filing for bankruptcy under Chapter 9 of the United States Bankruptcy Code. GASB 58 was effective for reporting periods beginning after June 15, 2009. The Authority is in sound financial condition; therefore, the Statement does not apply since the Authority has not petitioned for bankruptcy protection.[43]

As it is difficult to determine at this stage, we will assume for analysis purposes that bankruptcy is *not* an option for Santee Cooper if a defeat in court removes its ability to collect its full costs for V.C. Summer and renders the Authority insolvent due to a rate covenant default likely followed by a monetary default.

DEFAULT?

Jeff Armfield, Santee Cooper's then CFO testified in March 2019: "if some of the litigation that's ongoing ... would not allow Santee Cooper to pass through and recover costs associated with the new nuclear debt and rates, **then Santee Cooper would not be able to maintain its credit rating and would, at some point, become insolvent.**"[44]

In an August 2018 presentation to the Public Service Authority Evaluation and Recommendation Committee,[45] Santee Cooper detailed the risk of a default flowing from pending litigation, and identified who is legally empowered to call Santee Cooper's debt due and payable:

Major Bond Covenants (cont.)

santee cooper®

Santee Cooper has a duty to comply with provisions, covenants and agreements contained in its Revenue Bond Resolution so long as Obligations are outstanding

EVENTS OF DEFAULT UNDER THE REVENUE BOND RESOLUTION

- Failure to punctually pay principal when due
- Failure to punctually pay interest on Obligations due, with default continuing for 30 days
- Failure to perform any covenant or agreement of the Revenue Bond Resolution, with failure continuing for 90 days after notice of default
- Authority adjudicated bankrupt or insolvent, or should it institute proceedings to be adjudicated bankrupt or insolvent
- Default under Indenture or Revenue Bond Resolution
- Default under any other evidence of indebtedness (i.e., Santee Cooper's credit facilities)

In the event of default the Trustee or bondholders of 25% in principal amount of outstanding Obligations may declare principal & interest immediately due

  - This right of the Trustee is also codified at S.C. Code Ann. § 58-31-40

But as Santee Cooper acknowledged in its state Supreme Court filing: "*A default would ruin Santee Cooper's credit rating and render future investment in Santee Cooper risky and expensive.*" [46]

Santee Cooper admits that the bond trustee and/or bondholders of 25% of principal could seek a declaration of default under the revenue bond resolution. The trustee could also then seek the appointment of a receiver who is empowered to call Santee Cooper's bonds due, and seek to enforce their rights. The receiver would also be authorized to institute formal receivership.

In Santee Cooper's view,[47] the receiver is legally able to "take control and operate Santee Cooper." The receiver may also "fix, collect and receive rates, tolls, and charges sufficient to provide revenues" to pay the certain items specified in Section 58-31-30(13). Santee Cooper asserts that the "statute also provides that the rates collected by the receiver must be sufficient to pay 'all costs and disbursements of such suit, action or proceeding.'"

Santee Cooper has stated that its trustee, The Bank of New York Mellon Trust Company, N.A., would possess the authority to seek the appoint of a receiver, who in turn, would wield a wide range of authority:

> *At any such time the Trustee, subject to the rights of the holders of outstanding Original Bonds and Revenue Bonds, shall be entitled to the appointment of a receiver of the business and property of the System, of the moneys, securities and funds of the Authority pledged under the Revenue Obligation Resolution, and of the Revenues, and of the income therefrom, with all such powers as the court or courts making such appointment shall confer.*[48]

History shows that the possibility of default cannot be ruled out. Robert W. Doty, in his four-volume work, *From Turmoil to Tomorrow: The Emerging New World of Municipal Finance*. American Governmental Financial Services Company (AGFS) 2010,[49] took particular notice of the risks attendant to revenue bonds. Doty observed:

> *The categories of municipal securities that present the more serious risks include: industrial development bonds (IDBs) and other "conduit" financings for private profit-making or nonprofit corporate obligors, new or significantly expanded governmental revenue based enterprises (such as Jefferson County's sewer system, Menasha, Wisconsin's steam utility, Alameda, California's telecom system, and Harrisburg's solid waste facility), housing and healthcare securities, land-based securities (known somewhat pejoratively as "dirt bonds"), charter schools, and other municipal securities issues dependent, directly or indirectly, upon the performance of private parties.*[50]

Revenue bonds like Santee Cooper's are a form of "conduit" financing. Beyond that, it seems fair to apply these observations to Santee Cooper's predicament. Default is generally unlikely (because technically Santee Cooper could simply raise rates to the level necessary) — but possible. And it's more likely when the bonds involved are not "general obligation."

In the case of Santee Cooper, the documentation we have seen thus far underlying its bonds does not expressly use the term "conduit" debt. Other South Carolina bond issues, however, recognize the concept, and make clear that conduit debt is not a state obligation.[51]

It is a crucial distinction that, as noted, Santee Cooper's debt takes the form of revenue-backed bonds and does not constitute a "general obligation" of the State of South Carolina and its taxpayers. Yet there is concern in some quarters that in the event of a Santee Cooper default, which could be massive and could come close to an amount equaling the whole State budget for a year, the question may arise as to whether State credibility is nevertheless on the line to the extent that state government must step up and somehow make good.

Also crucial is that Santee Cooper's bonds are part of publicly traded portfolios,[52] which adds to the stakeholder mix the ranks of deep-pocketed investors with the means, motive and opportunity to pound the table in the event of default either as existing bond holders or as purchasers of distressed debt. Either way, in the event of an actual default, Santee Cooper would be placed under a microscope and perhaps at the mercy of creative and aggressive lawyers.[53] Already, hedge funds have filed claims against Westinghouse in connection with the V.C. Summer nuclear project.[54]

It is not hard to see a scenario where bondholders would be forced to knock heads with innocent ratepayers. This was the concern of Judge Hayes, whose court originally heard this case:

> *I reject Defendants' contention that the Enabling Act's framework favors bondholders over the citizenry … That a government agency needs more reminding that it serves the people is a conclusion I cannot accept … I disagree Defendants' misconduct is obscured by its debts; it is instead magnified … The thrust of the Complaint is that Defendants' malfeasance resulted in billions of dollars of unnecessary debt. Defendants' actions are what may have "impaire[ed] the security" of any debtholders, not the filing of this lawsuit.*[55]

Standard & Poor's reports that "many" of Santee Cooper's bond issues are "enhanced by bond insurance. But collecting could lead to further litigation and attempting to manage the utility while fending off bondholders would take the State and Santee Cooper into rough and relatively uncharted waters given that Santee Cooper is a state agency.

The Sixth Way

6. In our look ahead to outcomes of the *Jessica Cook* litigation, we posited five possible outcomes. There are many others, but there is at least a sixth. It is important to note that the political and administrative process is taking place simultaneously with the legal process. The Department of Administration is to report its three options to the General Assembly as soon as January 15, 2020. Concomitant with that process, Justice Toal is mediator and trial judge. Mediation appears to have stalled and discovery is beginning in *Jessica Cook* for the February trial.

If at trial, Dominion and Santee Cooper are *both* more and more likely to be found as bad actors in their conduct and coverup in regard to the V.C. Summer debacle, and if a bondholder haircut and a possible damage to the state's credit reputation are appearing likely, the door could be open wide for a sale. The acquiring company could offer a "full solution" that would remove the cloud, resolve all liability and settle with plaintiffs as a condition of the sale. Not so different from the outcome of the Dominion acquisition of SCE&G nearly simultaneous with the settlement of *Lightsey v. SCE&G et al.* and the PSC approval of lowered SCE&G rates and rebates to compensate ratepayers for some of the V.C. Summer loss.

If the General Assembly decides to allow Santee Cooper to continue operating as a state-owned entity either according to its own plan or under management of another utility, the majority of the potential outcomes mean that Santee Cooper and co-op customers continue to foot the bill for the unfinished V.C. Summer nuclear project and that the South Carolina legislature and government agencies will continue to be embroiled with V.C. Summer fallout for many years to come.

When the Public Service Authority Evaluation and Recommendation Committee hired international consulting firm ICF to test the market, ICF showed that interest in purchasing Santee Cooper is there, even with the demand that nuclear debt be defeased and written-down. The sixth way, a free-enterprise solution, could be just what the doctor ordered for an ailing Santee Cooper.

REVENUE BOND CASE STUDIES[56]

Washington Public Power Supply System (WPPSS), a public utility known as "whoops" for reasons that will become apparent, filed for Chapter 9 in 1983 as the result of a construction halt of planned nuclear reactors. The WPPSS saga's applicability to Santee Cooper may be limited. Still, its outcome may provide some indication of what a bankruptcy might yield. In the 1970s and 1980s, WPPSS sold bonds to finance construction of five nuclear plants. Construction costs skyrocketed amid bad management and unsatisfactory safety conditions. Meanwhile, demand for nuclear energy had dropped, forcing construction to halt.[57] That left $2.25 billion in outstanding bonds. *Management then raised the price of electricity, which resulted in consumer outrage and ultimately default and bankruptcy.*[58] In the end, bondholders recovered only 40 cents on the dollar.[59] No federal or state bailout ensued in the case of WPPSS.[60] [61]

The Southern Connector. Closer to home, Southern Connector in the Upstate defaulted on toll road revenue bonds on New Year's Day 2010.[62] This was South Carolina's first public-private partnership (3P) default. Efforts to consensually restructure the debt failed. The South Carolina General Assembly was unable to reach agreement on resolving the default, passed no legislation, and left the matter to the Courts. On June 24, 2010 the Debtor filed a voluntary petition under Chapter 9 in the U.S. Bankruptcy Court for the District of South Carolina. As reported at the time, the Southern Connector toll road continued to operate in the aftermath of the bankruptcy filing. Further, the road's management represented that drivers would not see any changes during the pendency of the bankruptcy. To be sure, the road continues to operate and, as a result of the bankruptcy reorganization process, the bondholders received new debt in exchange for the-then non-performing bonds.[63] As part of the plan, the South Carolina Department of Transportation assumed responsibility for maintenance and repair of road and, in return, it received a portion of future road revenues.

Cleveland, Ohio. Cleveland defaulted on its short-term bank loans in 1978, but did not file for bankruptcy as the city's creditors did not call their outstanding loans due. Significantly, unlike Cleveland, Santee Cooper lacks taxing power and the size of its payroll is relatively meager. Instead, in the event of a Santee Cooper default, the state-owned and run utility would be left to squeeze ratepayers, seek a government bailout, or seek a buyer.

Puerto Rico. In a January 2018 decision, the U.S. District Court for the District of Puerto Rico dismissed claims brought by bond insurance companies regarding payment of Puerto Rico Highways and Transportation Authority debt. This decision that raised questions about the protections offered by Chapter 9 to revenue bonds.[64] [65] A March 2019 ruling by the U.S. Court of Appeals for the First Circuit, which affirmed the District Court's January 2018 decision, casts further doubt over the status of revenue bonds in a Chapter 9 bankruptcy.[66] The decision has already struck fear into the bond market. Revenue bonds account for nearly 65 cents of every dollar of the $3.8 trillion municipal market since 1990.[67] By decision dated July 31, 2019, a full panel of the First Circuit denied a motion for rehearing.[68] Options now include petitioning the U.S. Supreme Court.

Glendale, Arizona. In October 2015, a $29 million industrial revenue bond offering issued by Glendale, Arizona, defaulted, another case of a public-private partnership gone bad. In less than a three-year span of time, this investment grade debt had disintegrated into the realm of junk and default. The genesis of the Glendale default begins in 2010. Back then, representatives of Vieste, LLC and Vieste Energy, LLC (collectively "Vieste") approached Glendale to discuss building a waste facility that would convert Glendale's solid waste into electricity.[69][70] To raise money for Phase I of the project, the Phoenix Industrial Development Authority approved[71] and issued approximately $28 million in industrial revenue bonds pursuant to an official statement dated April 17, 2013 (the "Official Statement"),[72] and Vieste SPE, a special entity formed by Vieste and its principals would be the actual borrowers.[73] The Official Statement made clear that the bonds did not constitute obligations of the State of Arizona.[74]

Due to problems with the project, legal squabbling ensued in early 2015, and default followed in October of that year.[75] Glendale and Vieste then reportedly reached a standstill agreement, which effectively placed a brake on things further spiraling downwards until October 1, 2015, a bond payment date, when Vieste missed a bond payment.[76] Last September, a state court granted the Indenture Trustee's motion for the appointment of a receiver.[77] Under the court's order, the receiver was empowered to dispose of the assets pledged to the project. Accordingly, pursuant to an Order, dated November 20, 2018, the receiver proceeded with asset sales.[78]

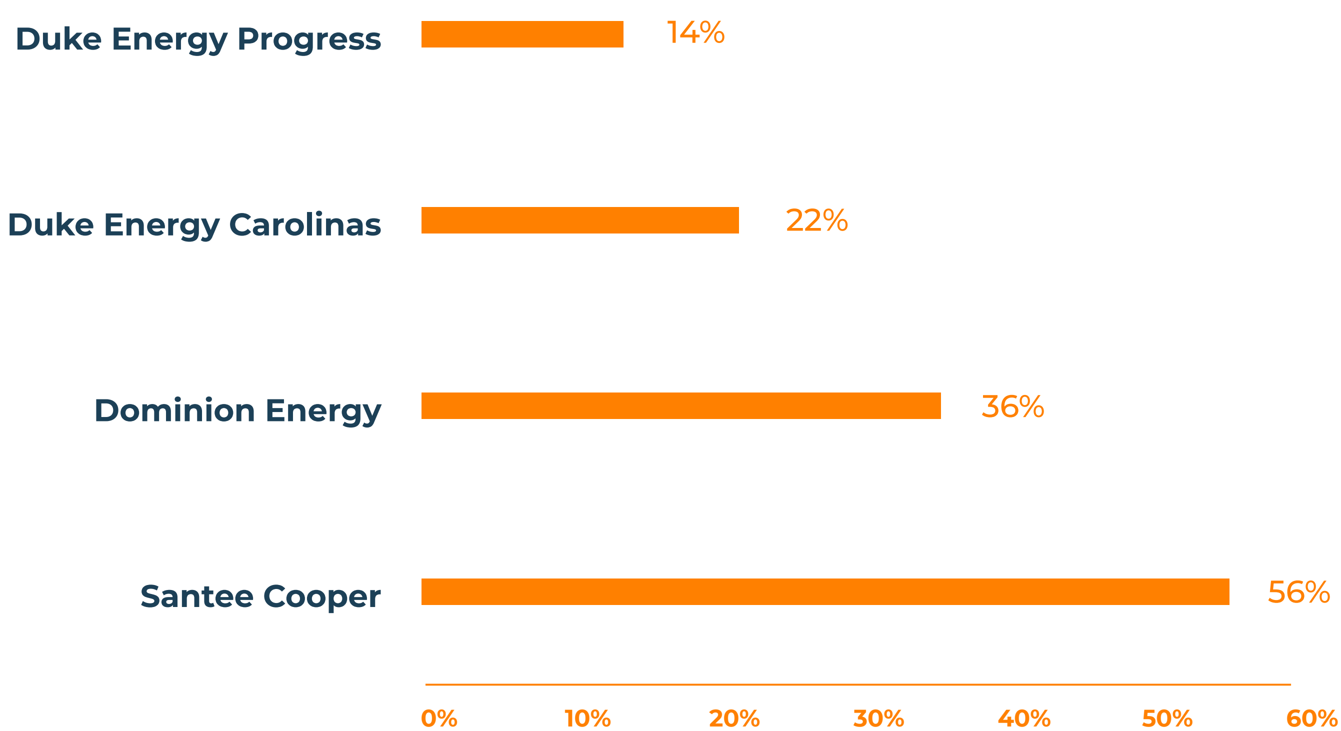
In May 2019, the receiver announced: "At this time, the Trustee estimates that the final distribution will be in the range of $1,000,000 to $1,200,000.00, net of legal, receivership and trustee fees."[79] $1.0 million - $1.2 million recovery is in the 3.5% range of the $29 million in bonds initially issued.[80] The project's failure also spawned litigation by bondholders who lost virtually all of their investment. So far, the bondholders have faced an uphill legal battle seeking redress beyond that offered by the receiver.

3. BEHIND THE CURVE: SANTEE COOPER AND COAL

IN THIS CHAPTER:

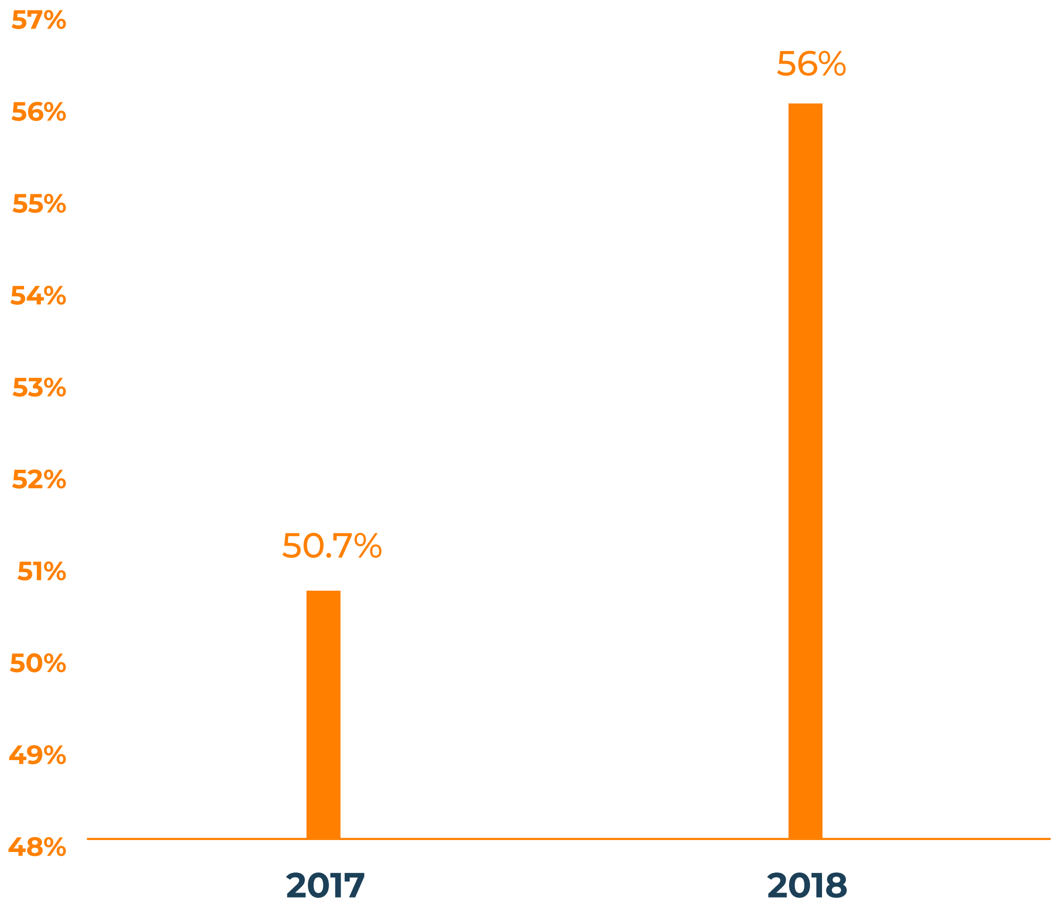
- Unlike other utilities operating in South Carolina, Santee Cooper depends on an environmentally-challenged coal fleet that produces over half of its self-generated power.
- Coal made up about 27% of all electricity generation in the U.S. in 2018, compared to more than 50% of Santee Cooper's electricity generation.
- In its August 2018 analysis of Santee Cooper, Standard & Poor Global Ratings noted that the cost of potential future carbon regulations have not been built into Santee Cooper's financial outlook, saying, "Santee Cooper relied on coal-fired generation to meet 42% of 2017 energy needs, and this could increase. We view costs of complying with existing regulations as manageable, but note that cancelling the nuclear project removes a tool from the authority's arsenal to reduce emissions in response to any future regulations."

FIGURE 5. DEPENDENCE ON COAL: SANTEE COOPER VS. OTHER UTILITIES (2018)



Source: South Carolina Energy Office

FIGURE 6. DEPENDENCE ON COAL: SANTEE COOPER LAST 2 YEARS



Source: South Carolina Energy Office

Key takeaways: Unlike other utilities operating in South Carolina, Santee Cooper depends on an environmentally-challenged coal fleet that produces over half of its self-generated power.

4. LOUDER THAN WORDS: THE SANTEE COOPER BALANCE SHEET SPEAKS

IN THIS CHAPTER:

- Financially, Santee Cooper is insolvent if we look at its 2018 balance sheet and ratios and compare it to the balance sheet and ratios it could be reporting by applying adjustments in accordance to the precedent set by SCE&G. Santee Cooper and SCE&G were partners. If Santee Cooper was a publicly held utility, it would have already gone through the same write-downs, lawsuits, and precedent set between SCE&G and the state.

- If the courts rule that Central Electric Cooperative customers don't have to pay "their share" of V.C. Summer 2&3 costs, Santee Cooper's debt could be considered in default due to its bond covenant that it is able to collect rates to cover all costs. Furthermore, it will be technically insolvent due to its inability to raise rates enough on the remaining customer base to cover its costs, debt, and retain customers.

- If the courts rule that Santee Cooper can charge Central and its customers for V.C. Summer 2&3, then Santee Cooper can try to float the debt as long as possible and charge customers for the $9 billion project (including interest costs) through 2056, hoping that lenders will keep lending them money to pay off the debts that are coming due (e.g. Santee Cooper will be using borrowed money to pay off borrowed money—this is like a Ponzi scheme and cannot last forever). This strategy is incredibly risky and costly to taxpayers and ratepayers. It also leaves Santee Cooper, and therefore its ratepayers, exposed to short-term interest rate fluctuations on substantial sums of money.

In March 2018, a colleague and I used 2017 financial statements to estimate that Santee Cooper electrical rates would need to increase 7-14% on all customers to cover the interest and debts associated with V.C. Summer 2&3. We were careful to note, that our estimates included only the rate increases needed to cover V.C. Summer 2&3 associated debt and not any additional debt that would need to be undertaken to expand the entity's capital base to replace the future electric production capacity of V.C. Summer 2&3. Santee Cooper's 2018 financials provide another year of data but raise new questions for customers and investors alike. - K.G

A BRIEF HISTORY:

In 2010, Santee Cooper and SCE&G began construction on two nuclear power reactors called V.C. Summer 2&3. Santee Cooper owned 45% of the project, SCE&G owned 55%. The project experienced many setbacks and delays and ended in 2017 when the two entities halted construction due to escalating costs and a drastically delayed timeline. V.C. Summer 2&3 never produced power, it never generated revenue; and it never will produce power or generate revenue. SCE&G, a subsidiary of SCANA at the time, immediately impaired the asset on its balance sheet and expensed the full book value of construction costs (less the small amount of salvage value). Additionally, South Carolina courts ruled in favor of SCE&G ratepayers and returned over $2 billion in rates that had been paid to fund V.C. Summer 2&3, effectively saying that the utility could not charge customers to cover the costs of the failed project.[81] SCE&G was an investor-owned utility ("IOU"), whereas, Santee Cooper is owned and operated by the State of South Carolina. Santee Cooper and SCE&G were in identical circumstances due to the failed V.C. Summer 2&3 plant, but because Santee Cooper is owned by the State, it doesn't have to report to the same regulatory boards that investor-owned utilities do. This has enabled Santee Cooper to use accounting methods and definitions that investor-owned utilities wouldn't be allowed to use. As investors, customers and taxpayers, we seek a clear view of Santee Cooper's financial position to inform our decision-making. To obtain this clear view, we need to look at Santee Cooper with the same scrutiny we apply when looking at Santee Cooper peers and competitors (e.g. investor-owned utilities).

IF SANTEE COOPER WERE AN INVESTOR OWNED UTILITY WHAT WOULD ITS FINANCIALS LOOK LIKE?

To understand Santee Cooper's financials as reported, and through the lens of investor-owned utilities, we must define the difference between *assets* and *regulatory assets*.

Assets are tangibles and intangibles that are valuable or create value. Assets could include raw materials like coal and oil, a building that generates power or has the capability to generate power, or even a brand or trademark.

Regulatory Assets are slightly different. These have value solely because a governing body *says the thing has value*. Regulatory assets are unique to utilities and regulated industries and are called "regulatory assets" because the governing regulatory body must deem the expense collectable in rates in the future to be classed as an asset. Basically, a utility spends money, and instead of paying its bill immediately, it asks permission to charge customers for it in the future. So instead of showing up as an expense on the income statement, the account sits as a regulatory asset on the balance sheet until some future collectible date.

If Santee Cooper were an investor-owned utility it would have to perform asset tests to determine whether or not, and at what level of valuation, an asset truly is an "asset ," and if so, at what value it may be shown on the entity's balance sheet. To be treated as an asset, property must be used (e.g. have contributed to revenue creation) or be useful. If an asset is deemed not productive, or not as productive, the asset is considered impaired and its carrying value is reduced. V.C. Summer 2&3 was never used and it will never be used. It does not meet either test to be considered an asset for an investor owned utility.

State-run Santee Cooper classes the $4.2 billion associated with V.C. Summer 2&3 as a regulatory asset; however, this has been disallowed for investor owned utilities. Santee Cooper's partner in V.C. Summer 2&3 was an investor owned utility (SCE&G) and the regulating body for all non-state-jurisdictional utilities is FERC (Federal Energy Regulatory Commission). FERC ruled that SCE&G could not charge customers for the V.C. Summer 2&3 failed project. This meant that the costs of the project were not a regulatory asset[82] and would need to be written off the balance sheet (a loss to equity).

Let's look at Santee Cooper's 2018 balance sheet and ratios and compare it to the balance sheet and ratios it would report as an investor owned utility. This is done by applying adjustments in accordance with the precedent that has been set by SCE&G (SCANA) that has already played out regarding V.C. Summer 2&3:[83]

Assumption 1: Santee Cooper is an investor-owned utility.

Assumption 2: Fully impair the construction costs of V.C. Summer 2&3 in accordance with FERC (this reduces regulatory assets by $4.23 billion).

Assumption 3: The asset impairment for V.C. Summer 2&3 is assumed to be an extraordinary loss on the income statement and will not be used in income statement ratios.

Assumption 4: No adjustment made for $189 million the State of South Carolina claims that Santee Cooper owes for unpaid sales tax on V.C. Summer 2&3 construction.

Assumption 5: No adjustment made for any compensation due to rate-payers for being charged for construction in the years before V.C. Summer 2&3 was terminated which may be court-ordered for investor owed utilities (precedent SCE&G[84]).

TABLE 1. SANTEE COOPER BALANCE SHEET HIGHLIGHTS & ADJUSTED BALANCE SHEET (in thousands of dollars)

	2018 Santee Cooper Annual Report	Comparative Industry Adjustments	Adjusted 2018
Assets			
Current Assets			
Unrestricted cash & cash equivalents	475,601		475,601
Unrestricted investments	474,269		474,269
Restricted Cash	53,600		53,600
Restricted investments	18,666		18,666
Receivables	225,636		225,636
Inventory	372,556		372,556
Regulatory Assets - nuclear*	14,419	(14,419)	-
Prepaid expenses & other current assets	91,591		91,591
Total Current Assets	**1,726,338**		**1,711,919**
Noncurrent assets			
Restriced cash & investments	135,961		135,961
Capital Assets			
Utility plant	7,678,064		7,678,064
Long lived assets - asset retirement cost	265,116		265,116
Accumulated depreciation	(3,933,151)		(3,933,151)
Total utility plant - net	4,010,029		4,010,029
Regulatory asset-asset retirement obligation	710,326		710,326
Regulatory asset - OPEB	153,235		153,235
Regulatory assets - nuclear*	4,220,920	(4,220,920)	-
Other noncurrent assets	1,236,320		1,236,320
TOTAL Noncurrent Assets	**10,699,543**		**6,478,623**

	2018 Santee Cooper Annual Report	Comparative Industry Adjustments	Adjusted 2018
Total Assets	12,425,881		8,190,542
Total Deferred Outflows of Resources	239,411		239,411
Total Assets & deferred outflows of resources	12,665,292		8,429,953
Liabilities			
Current Liabilities			
Current portion of long-term debt	63,450		63,450
Accrued interest on LT debt	46,383		46,383
Revolving credit agreement	86,234		86,234
Commercial paper	173,898		173,898
Accounts payable	230,970		230,970
Other current liabilities	99,952		99,952
Total Current Liabilities	**700,887**		**700,887**
Noncurrent Liabilities			
Construction liabilities	21,504		21,504
Net OPEB liability	172,774		172,774
Net pension liability	338,128		338,128
Asset retirement obligation liability	716,666		716,666
Unamortized debt discounts and premiums	386,877		386,877
Long-term debt-NET	7,355,557		7,355,557
Other credits and noncurrent liabilities	95,974		95,974
Total noncurrent liabilities	**8,700,603**		**8,700,603**
Total liabilities	**9,401,490**		**9,401,490**
Total Deferred Inflows of Resources	**966,279**		**966,279**
Total Net Position	**2,297,523**		**(1,937,816)**
Total liabilities, deferred inflows & net position	**12,665,292**		**8,429,953**

* Adjustment made to impair VC Summer 2&3 assets instead of book as regulatory asset, based on precedent set by FERC and the lawsuit between ratepayers and SCE&G (SCANA) in South Carolina 2018.

Note: Adjustments DO NOT include the $189 million liability due to the State of South Carolina for sales & use taxes not paid on construction materials in VC Summer 2&3. This is Santee Cooper's 45% share of the project that the State says is now due. Source: Santee Cooper Annual Report 2018 page 66.

THE IOU BALANCE SHEET

As shown in Table 1, once Santee Cooper is adjusted to investor-owned utility standards, its asset position is greatly reduced as well as its total net position (which is Santee Cooper's version of Retained Earnings). "Net position" is totally wiped out and must become negative to fully realize the loss according to IOU standards.

It is important to understand what "Net position" is for Santee Cooper. Santee Cooper has never had equity holders or an equity investment, so this isn't a shareholder account. The net position is the amount over and above Santee Cooper's costs that customers have paid in utilities bills. This is also known as CIFR or "capital improvements funding requirement;" it is an arbitrary percentage over and above Santee Cooper's (or any investor-owned utility's) total costs of operation and doing business that it charges customers. For investor-owned utilities, the regulatory board would approve this markup or "adder" above costs and it would look something like the following:

Rate Base Customers Pay = Operating Expenses + Principal + Interest Costs + CIFR

In equilibrium, principal borrowed would generate, and be equal to, the asset base and depreciation in the long-run. CIFR is important because it is what generates "retained earnings" or, the "Net Position." Santee Cooper's net position of $2.297 billion is the cumulative of excess rates paid by customers over the entity's entire history. If Santee Cooper were to begin to write off V.C. Summer 2&3 against its net position, that $2 billion cushion came from past ratepayers. From an efficiency perspective, ratepayers are not in a position to price risk or make decisions on capital investments because ratepayers are involved due to geographic bad luck, not because they chose to invest in Santee Cooper. Stockholders and bondholders are pricers of risk, they are diversified, and they are being compensated, through interest, for their expertise. Every dollar of "net position" that pays for V.C. Summer 2&3 is a dollar paid by South Carolina ratepayers in the past.

Definitions

CIFR or CIF= Capital Improvements Funding Requirement
CRFR= Costs to be recovered from Future Rates
EBITDA= Earnings before interest, taxes, depreciation, and amortization
EBITA= Earnings before interest, taxes, and amortization
OPEB= Other Post-Retirement Employee Benefits

TABLE 2. SANTEE COOPER SELECTED RATIOS

	Santee Cooper 2018	Adjusted Santee Cooper 2018
Debt Service Coverage	-1.411476059	-1.411476059
Current Ratio	2.463076074	2.44250357
Quick Ratio	1.931526765	1.910954262
Times Interest Earned	-1.626929648	-1.626929648
Revenue/Regulatory Assets	0.353727275	2.088584362
Operating Income/Regulatory Assets	0.116719096	0.689168455
Operating Income/Reg. Assets + CRFR	0.090711208	0.255921919
Regulatory Assets/Total Assets	0.509840711	0.25637876
Total Debt Ratio	0.756605507	1.147847114
Debt/EBITDA	15.79713311	15.79713311
CIFR (net position margin)	0.097723467	0.097723467
Debt/Assets	0.756605507	1.147847114

RATIO ANALYSIS FOR SANTEE COOPER AS AN INVESTOR OWNED UTILITY

Table 2 presents selected 2018 financial ratios for Santee Cooper computed from Santee Cooper's annual report in Column 1, and using Santee Cooper's balance sheet adjusted for IOU standards in Column 2. The current, quick, and times-interest-earned ratios, are all measures of a firm's liquidity, or ability to meet short-term obligations. A liquidity ratio below one could indicate an inability to pay the next period's debts, and possible insolvency. The quick ratio is a better measure of liquidity than the current ratio when a company has inventories that are not easily converted to cash: for example, just under a third of Santee Cooper's inventory is nuclear fuel which is very difficult to resell. Given the liquidity ratios, Santee Cooper was fine to pay its current liabilities in 2018.

The times-interest-earned ratio shows the firm's ability to fund interest payments with operating income. A ratio of 1.63 shows that Santee Cooper could pay all of its interest expenses for the year 1.63 times. Time-interest-earned only includes interest payments and not principal payments and other obligations, so it is important to look at more comprehensive ratios like EBITDA Coverage (see expanded EBITDA coverage in Table 3, on adjacent page).

The regulatory asset ratios show the percentage of assets on Santee Cooper's balance sheet that are classed as "Regulatory Assets," and how revenue and operating income compare to the regulatory asset line item. Regulatory assets are amounts that Santee Cooper expects to collect in higher rates at some point in the future. In the case of V.C. Summer 2&3, "nuclear regulatory assets," it will be paid for by ratepayers through 2056.

As shown by Regulatory Assets/Total Assets, in 2018 regulatory assets accounted for 51% of all assets on the entity's balance sheet. This is nearly double what it would be if V.C. Summer 2&3 were fully expensed (26%). For comparison, Regulatory Assets/Total Assets historically has hovered around 10% for Santee Cooper through 2016.[85] This quantifies that Santee Cooper is charging, and will need to charge, higher rates to cover costs it has already incurred as opposed to collecting rates to cover *current* period operating expenses. Whereas it needed its rates to cover 10% of its "asset base" in 2016, today it needs its rates to cover 50% of its asset base.

When looking at how income covers regulatory assets, we see that operating income covers only 12% of regulatory assets and 9% of all "costs to be recovered from future rates" categories (this includes CRFR, and regulatory assets for pensions, OPEB, and nuclear.)[86] This shows that customers are paying a lot for costs Santee Cooper incurred years ago, and customers are paying significantly more to cover those costs than they have in the past.

Santee Cooper's revenue has remained relatively stable but its debt has ballooned due to V.C. Summer 2&3. Looking at the debt ratio, total debt ratio reported in 2018 was 0.76, which says for every $1 of assets Santee Cooper has, it has $0.76 of liabilities outstanding. However, 0.76 is the debt ratio when V.C. Summer 2&3 is treated as a regulatory asset. However, when Santee Cooper is treated as an IOU (Column 2) its debt ratio is 1.15; Santee Cooper's debt exceeds its assets: for every dollar of assets Santee Cooper has, it owes $1.15. When debts exceed assets, an entity is technically insolvent—if Santee Cooper were an IOU, it would be *insolvent*.[87]

Insolvency, bankruptcy and default, are all related terms, but do not mean the same thing. In some situations, an entity can be technically insolvent but not in default or bankruptcy so as long as it is able to cash flow its obligations. The question becomes, if Santee Cooper is technically insolvent as an IOU, does it have the cash flow to pay its coming liabilities? To answer this question, we need to look at Santee Cooper's cash flows and compare them to its debt obligations both now and in the future. To do this, we use Santee Cooper's debt schedule, without commercial paper, as reported in its 2018 annual report (shown in Column 1 on adjacent page) and then match those obligations with projections for Santee Cooper's cash flow.

Projecting cash flow for utilities is much easier than projecting cash flow for "unregulated" industries, because most utilities have regulated prices and monopoly territories. In projecting Santee Cooper's cash flow (EBITDA and EBITA) income years, we applied the following assumptions:

1. In Columns (2) and (3), we assume zero growth in operating revenue and depreciation during the timespan. This assumes that Santee Cooper continues managing expenses and revenues as it currently does. This could also imply that Santee Cooper does not have any electricity rate increases during the period.

2. Columns (4) and (5) assume an increase in operating revenue of 3% per year and no growth in depreciation (this assumes Santee Cooper gets all of the benefits of higher rates with nothing in additional costs—this would be the case if Santee Cooper increased rates by 3% each year

(that would equate to a cumulative increase in rates of 16% at the end of the first 5 years, and over 34% after 10 years).

Note: There is no difference between Santee Cooper's reported numbers and the numbers if it were treated as an IOU for this analysis because the extraordinary losses from V.C. Summer 2&3 are excluded from the ratio analysis.

TABLE 3. SANTEE COOPER SELECTED DEBT COVERAGE FINANCIALS & RATIOS

	1	2	3	4	5
	Principal & Interest Due	EBITDA/ principal+interest	EBITA/ principal+interest	EBITDA/ principal+interest	EBITA/ principal+interest
2018 Actual	515,489	1.15	0.79	-	-
2019*	387,827	1.53	1.05	1.58	1.08
2020*	466,786	1.27	0.87	1.35	0.93
2021*	510,063	1.17	0.80	1.27	0.87
2022*	454,559	1.31	0.90	1.47	1.01
2023*	783,862	0.76	0.52	0.88	0.60
2024*-2028*	431,493	1.38	0.95	1.65	1.13
2029*-2034*	416,712	1.43	0.98	1.98	1.36
2035*-2039*	406,626	1.46	1.00	2.35	1.61

EBITDA 2018	595,139
EBITA 2018	**408,189**

Note: The principal and interest column does NOT include commercial paper ($173,898,000) which is used for short-term financing and liquidity. In 2018, if commercial paper repayments were included that would bring the EBITDA and EBITA coverage ratios down to 0.86 and 0.59, respectively.

*Projected debt liabilities for future periods, published by Santee Cooper in its Annual Report 2018, page 54. Projected ratios are reported and are estimates using 2018 EBITDA and EBITA (this assumes Santee Cooper experiences zero growth in revenue and expenses for our base case). Columns 4 & 5 assume 3% growth in Operating Income each year, which would be roughly equivalent to a 3% increase in utility rates each year.

Table 3 shows Santee Cooper's ability to cover its principal and interest obligation (which is the same whether we treat it as an IOU or not). The debt coverage ratios displayed (EBITDA coverage and EBITA coverage) are calculated with numbers from the income statement and NOT the balance sheet. These ratios and numbers stay the same regardless of whether we use Santee Cooper's reported numbers or its adjusted numbers as an IOU.[88] It is important to note that none of these ratios include the use of short-term commercial paper which Santee Cooper was heavily reliant on in 2018 (See

“Note” on Table 2). Commercial paper can be a means of injecting working capital into a business but is not a long-term solution to excessive debt.

Debt coverage ratios show a firm’s ability to cover its yearly debt and interest liabilities. The denominator ideally includes all contractual obligations due within the coming year and the numerator is an estimate of cash flow available to pay those debts. Both EBITDA and EBITA can represent cash flow. Earnings before interest, taxes, depreciation and amortization is the most generous measure, whereas EBITA (earnings before interest, taxes and amortization) can be a better approximator to ensure the company also maintains the ability to reinvest in its own infrastructure and maintain its capital base because it is cash flow after depreciation. Coverage ratios for utilities are usually low because utilities set rates (with board approval) to cover all costs, including depreciation, amortization, taxes and interest. The interpretation of these coverage ratios will be slightly different than companies in “unregulated” industries because of this price-setting ability.

Table 3 (previous page) displays Santee Cooper’s projected debt coverage ratio over the next several decades. Debt coverage ratios should be above 1. Anything below 1 says the liabilities coming due exceed the firm’s ability to pay with operating income. In unregulated industries, a coverage ratio below 1 can indicate forthcoming default on debt obligations. For investor-owned utilities, a debt ratio below 1 would indicate either a need to increase rates to cover those coming liabilities, or potential default in the future if rate increases are not allowed.

In Column (2), EBITDA Coverage for Santee Cooper with no rate increases, is above 1 but declines gradually over the years until it drops to 0.76 in 2023. This shows that given current rates, Santee Cooper has the cash flow to pay liabilities until 2023. But in 2023, cash flow will need to increase dramatically to be able to pay off the obligations due. The 2023 obligations are underfunded by about 24% (EBITDA Coverage of 0.76). Bondholders and customers should be wondering, how is Santee Cooper going to come up with this cash?

Next, we can look at the effect of yearly rate increases by looking at Column (4). If operating income increases by 3% per year starting in 2018, Santee Cooper will only be able to cover 88% of its scheduled liabilities. That means that even if Santee Cooper increases rates every single year by 3% (so a cumulative increase of almost 16%[89] by 2023) it still will not have enough operating income to cover its contractual obligations. This is significantly higher than Santee Cooper saying it will not raise rates for 5 years[90] and its quoted rate increases of 7% total during the years 2021-2024.[91]

EBITDA is a great estimate to capture pure cash flow because depreciation and amortization are non-cash expenses. However, customers may be interested in how Santee Cooper is performing financially inclusive of maintaining its infrastructure and ability to produce power with competitive technologies. To look at how well Santee Cooper can cover its debts *while also investing in capital*, we can use EBITA as a proxy for cash flow net of capital investments.[92] In the long run, annual depreciation should equal average capital investments and EBITA shows operating income after depreciation is taken out. Column 3 shows Santee Cooper’s ability to meet annual obligations while also maintaining capital investment at 2018 levels. We see that EBITA coverage is expected to be below one in all but two years until 2035. This tells us two very important things:

1. Santee Cooper does not have the cash flow from operations to invest in its asset base and remain solvent with its current rate schedule; e.g. the entity is functionally insolvent without raising rates.

2. Even with 3% per year rate increases through the periods shown in Column 5, Santee Cooper still lacks the cash flow to maintain its asset base and pay its debt obligations.

This leads bondholders and customers to many questions, including:
"How is Santee Cooper going to get the cash it needs to pay off its outstanding bonds AND invest in capital projects that will produce electricity for years to come? If Santee Cooper has been operating efficiently, there won't be much room to cut expenses without jeopardizing product quality or the customer experience, so "how much are rates going to need to increase to cover that gap, or how can Santee Cooper restructure its debts?" If rates are going to go up; we must remember that customers are dynamic participants in this market and when prices go up, they purchase less electricity. This means when Santee Cooper needs to increase revenues by 10%, it will need to raise rates by more than 10%.[93]

From the debt coverage ratios, it doesn't appear that Santee Cooper can continue to serve customers, invest in its asset base and repay existing debt obligations at the same time given current rates.

Note: in its bond covenants, Santee Cooper promises to maintain and invest in its asset base.[94]

ADDITIONAL V.C. SUMMER COSTS AND CONSEQUENCES

There are additional points of concern when considering Santee Cooper's financial health and ability to act as a going-concern:

- The absence of Removal and Restoration Costs – Santee Cooper has not yet assessed and reported any removal, restoration, and maintenance costs associated with the defunct V.C. Summer 2&3 nuclear project.

- Santee Cooper's asset base and depreciation – Because Santee Cooper scrapped the V.C. Summer 2&3 project, it lost the ability to bring additional electricity generation on the grid for customers. Given that Santee Cooper invested over $4 billion to bring on new power generation in V.C. Summer 2&3 construction, we can infer that if management was acting prudently, they expected to need that new source of power generation and that $4.2 billion was the most efficient means of obtaining that new power source. What is Santee Cooper doing now to replace the future power generation that was lost in scrapping V.C. Summer 2&3? Is it going to take another $4.2 billion to complete a new project, or will the price tag be even higher? At what point will these future costs need to be included in electricity rates?

- Santee Cooper is state-run and does not explicitly need FERC's approval under the Federal Power Act; but it has a debt covenant where the entity promises bondholders that it will follow FERC and essentially act like an investor owned utility. In its agreements with debtholders, the entity has agreed to be bound by FERC's rules and regulations. For example, in Santee Cooper's Revenue Obligation Resolution from April 26, 1999, Santee Cooper agrees to maintain its accounts in accordance with FERC, among other Federal regulatory agencies.[95] Given Santee Cooper's low debt coverage ratio in 2023 and low EBITA coverage ratios, how are bondholders reconciling these covenants with Santee Cooper's projections to not increase rates for the next five years?

CONCLUSION

Santee Cooper has the cash flow to pay existing debt obligations through 2022; however, how the entity is going to invest in its capital base remains to be seen. Unless rates increase considerably, Santee Cooper lacks the operating cash flow to meet its debt obligations in 2023. Rates would need to increase significantly more than the 7% Santee Cooper is disclosing to both meet debt obligations and invest in its capital base. Ultimately, this is a political problem and Santee Cooper's path to sustainability will most likely take one of three forms:

1. Similar to SCANA, its debts will be modified or renegotiated as a part of an asset sale.

2. If the courts rule that Central Electric Coop customers don't have to pay "their share" of V.C. Summer 2&3 costs; Santee Cooper's debt will be considered in default due to its bond covenant that it is able to collect rates to cover all costs.[96] Furthermore, it will be insolvent due to its inability to raise rates enough on the remaining customer base to cover its costs, debt, AND retain customers. Santee Cooper's outstanding debt in 2018 was $7,725,522,000.[97]

3. If the courts rule that Santee Cooper *can* charge Central and its customers for V.C. Summer 2&3, then Santee Cooper can try to float the debt as long as possible and charge customers for the $9 billion project (including interest costs) through 2056 and hope that lenders will keep lending them money to pay off the debts that are coming due (e.g. Santee Cooper will be using borrowed money to pay off borrowed money). However, this will only last until 2058. That is the year the Coordination Agreement between Central and Santee Cooper expires. If the debt is not substantially paid off by 2058, Central will not renew the agreement and in 2059, Santee Cooper will lose 60% of its revenue base. At that point, Santee Cooper faces a downward spiral of attempting to impose large costs on a tiny customer base. Either way, the strategy of delaying debt payments is incredibly risky and costly to taxpayers and ratepayers. It also leaves Santee Cooper (ratepayers) exposed to short-term interest rate fluctuations on substantial sums of money.

Santee Cooper's financials are concerning whether we look at them as reported or through the lens of an investor-owned utility. We are left with many questions: How much do rates need to increase to cover the debt and provide electricity for years to come? And, in the end, how much will customers and South Carolina citizens end up paying for V.C. Summer 2&3?

APPENDIX A

SANTEE COOPER SUMMARY FINANCIALS 2018 AND SELECTED DEBT COVENANTS

TABLE 4. INCOME STATEMENT - SANTEE COOPER 2018

Operating Revenues	
Sale of Electricity	1,780,763.00
Sale of Water	6,507.00
Other Operating Revenue	16,350.00
Total Operating Revenue	**1,803,620.00**
Operating Expenses	
Electric Operating Expenses	
Production	147,353.00
Fuel	603,361.00
Purchased/interchanged power	190,095.00
Transmission	25,623.00
Distribution	13,426.00
Customer Accounts	15,015.00
Sales	5,296.00
Administrative & General	90,326.00
Electric Maintenance Expenses	**113,550.00**
Water operating expenses	**3,320.00**
Water maintenance expenses	**1,116.00**
Total operating and maintenance expenses	**1,208,481.00**
Depreciation	**186,950.00**
Sums in lieu of taxes	**4,630.00**
Total operating expenses	**1,400,061.00**
Operating Income	**406,559.00**

Nonoperating Revenues (expenses)	
Interest revenue	11,103.00
Net increase in FMV of investments	5,213.00
Interest Expense on LT debt	(356,259.00)
Interest Expense on commercial paper	(5,581.00)
Amortization income (expense)	(3,965.00)
Costs to be recovered from future revenue	(4,286.00)
Subsidy on Build America Bonds	7,612.00
Other - net	133,257.00
Total nonoperating revenues (expenses)	**(212,906.00)**

Distributions to the State	(17,397.00)
Change in net position	176,256.00

Net position - beginning	**2,121,267.00**
Total net position - ending	**2,297,523.00**

For interested parties, according to Santee Cooper's master Revenue Obligation Resolution (April 26, 1999) to be in outright default on all bond obligations, Santee Cooper can voluntarily admit they are insolvent, or legislators, or another reigning authority can decide Santee Cooper is insolvent (this could happen explicitly or implicitly if South Carolina legislators, or courts, decide Santee Cooper cannot collect rates to cover the failed nuclear project, V.C. Summer 2&3.[98] Furthermore, in Santee Cooper's debt covenants listed in its 2018 annual report, the entity must be able to set rates to cover all operating expenses, all well as principal and interest payments.[99]

Santee Cooper also highlights a debt covenant in its 2018 Annual Report that states that Santee Cooper's debt obligations are senior to its operating expenses and capital improvement fund. Although this is indicative of a revenue bond, it is concerning for customers given Santee Cooper's debt levels. If the State decided to treat Santee Cooper like an investor-owned utility and disallow higher rates to cover V.C. Summer 2&3, Santee Cooper wouldn't have the revenue to support both its capital improvement fund and debt obligations.[100]

5. FLOODING THE ZONE: SECURITIZATION, RATE-FREEZES AND OTHER STAY-ALIVE GAMBITS

IN THIS CHAPTER:

- Securitization is a form of refinancing that involves the converting of financial assets, which are future payment obligations from third parties—from one form of financing to a supposedly lower-cost, higher-leveraged form of financing—so that it can be sold to "The Giant Pool of Money" known as Wall Street.

- Santee Cooper is already as "securitized" as it can possibly get. Santee Cooper has already used low-cost, primarily tax-exempt debt to finance their adventures in nuclear project development and other initiatives. If you refinance low-cost, tax-exempt debt with....low-cost, tax-exempt debt—which is what you would do in a securitization—how do you create lower costs by simply substituting one bond for another of equal cost? The answer is that you don't, and that the only folks who are better off in such a shell game are the investment bankers and attorneys who collect fees on the deal.

- The concept of paying off old debt on Santee Cooper's balance sheet and replacing it with new debt does nothing to change the leverage variable (cost of borrowing), which is the main benefit provided by securitization.

Santee Cooper has been floating a number of ideas to give the impression that they are hard at work developing workable plans to self-fix their myriad financial and management issues. These include:

- **"Un-Coal" (eventually).** We say eventually because reducing its dependence on coal will be a heavy lift. Data from the South Carolina Energy Office showed that Santee Cooper actually increased its dependence on coal over the last two years. Closing coal-powered plants and reducing dependence on coal would bring Santee Cooper in line with the operations of investor-owned utilities, but the V.C. Summer debt load will allow for little in the way of capital expenditures for access to natural gas-fired generation.

- **Freeze Rates (for a while).** As a part of its efforts to ward off a sale, Santee Cooper is proposing to rejigger its debt obligations to hold rates steady for a period of years. Given the long timeline for paying off V.C. Summer and other obligations, this is doable in the short-term, but does little to reduce the massive debt burden that co-op and direct-serve customers will face in the long-term.

- **Refinance (a fraction).** Similarly, refinancing to save $40 million over 16 years is a rearranging of the deck chairs in the face of principal + interest payments of nearly $14 billion until 2056.

- **Restart V.C. Summer (nearly impossible).** One of the first trial balloons floated in the interim by Santee Cooper was to resurrect the two additional reactors in Jenkinsville (Fairfield County) in partnership with a consortium which includes KEPCO, a South Korean government-owned energy company. This could safely be described as a gimmick given the problems incurred by SCE&G and its contractors in an attempt to finish the two reactors originally, and the problems with its twin, the Vogtle plant in Georgia. Such a gambit also fails to recognize the many hurdles: obtaining a FERC license (the old one was surrendered in January), finding financing (Vogtle just hit $27 billion), finding buyers for the power, securing clear title to the materials at the site which is in litigation, obtaining rights to the AP1000 technology under a Westinghouse/Toshiba patent, and avoiding the issue of foreign ownership (two of the three companies in the consortium are foreign-owned and foreign companies are not allowed to own nuclear generation in the United States).

- **Cut Deal with The Southern Company (non-compliant).** After H.4287 passed the General Assembly, Santee Cooper reached an agreement with The Southern Company. This isn't illegal per se, but was considered an improper and imprudent attempt to bypass the legislature's intent. Its real value was also questionable. The Department of Administration and the Chairman of the Senate Finance Committee warned Santee Cooper that their attempts to enact Memoranda of Understanding with other utilities would constitute activity that would run afoul of H.4287, the Santee Cooper joint resolution.
- **Sue the State (pro forma).** In a "friendly" lawsuit, Santee Cooper has asked a court to issue a declaratory judgment as to whether the state insurance reserve fund (IRF) could be tapped by Santee Cooper for expenses related to the fallout over the shutting down of V.C. Summer 2&3. Legal bills are mounting, particularly after the demand by Dominion that Santee Cooper shoulder some of the costs for multiple lawsuits. A ruling declaring the insurance reserve fund off the table (which is expected) would allow Santee Cooper to claim its efforts with IRF have been exhausted and possibly tap private insurance for some of the costs. It is a Catch 22. Tapping the fund entangles the state. Failure to tap the fund could impact Santee Cooper's private rates going forward. Neither is a positive for taxpayers or ratepayers.
- **Securitization (maybe).** Pool obligations to achieve lower interest rates.

WHAT *IS* SECURITIZATION?

Securitization. It sounds so comforting. After all, it has the word *security* in it. Call the *security guard*. Arm the *security system*. Grab the *security blanket*.

But *securitization*, though it has positive aspects, has a sting in its tail. Securitization is a term for a process used in finance not exclusive to utility world. The textbook definition of "securitization" in the financial sector is the pooling of financial assets (in the form of a set of obligations on the part of one or more borrowers to make payments over time) into a large enough, creditworthy enough bundle be able to market it and achieve a relatively low, attractive cost of capital in the process. By increasing either or both the size of the pool of financial assets and these assets' creditworthiness, their ability to be securitized—that is, turned into marketable securities that have a capital cost advantage in the form of a lower interest rate—is enhanced. As debt is typically far lower cost than equity, a securitization works best when equity and junior debt is converted into higher quality senior debt. Securitization is a form of refinancing that involves the converting of financial assets, which are future payment obligations from third parties, from one form of financing to a supposedly lower cost, higher leveraged form of financing so that it can be sold to The Giant Pool of Money known as Wall Street. Securitization of **bundled** old financial obligations and stranded assets has already been used by 65 investor-owned utilities (IOUs) and has hit the $50 billion mark.[101]

Another kind (or purpose) of securitization is the one that became a thing when Florida Power & Light petitioned the Florida legislature to allow it to recover costs of hurricanes (2004 and 2005) through a mechanism that would allow a third party to sell "hurricane recovery bonds" that would repay FP&L. But unlike traditional financing, with securitization, the interest rate would be lower and the costs would be removed from rate base because of the **involvement of the state**. A less risky credit profile would mean lower interest rates on the debt, and being financed with 100% debt rather than FP&L's balance sheet, consisting of roughly half debt and half equity, would be a lower cost for capital recovery imposed upon customers. Even without the state putting its credit on the line, it is **"better financing"** as a result of substituting debt for equity. Rejiggering with the assumption that customers will continue to dutifully pay their utility bills and the oversight of a third party could lower the cost of money.

Stretching debt out could be another goal of securitization.[102] There is a micro example here as well—have you noticed how long automobile loans run these days? You can afford so much more car if you are willing to pay a lot of interest and for the rest of your life. Experian is now reporting that 80% of new car loans are longer than 60 months and that there are *96-month* car loans available.

Securitization was proposed in South Carolina during the 2019 legislative session as a reaction to the SCANA-Santee Cooper V.C. Summer nuclear site crisis. According to S.110, "…[a]s part of the securitization authorized by this section, the State of South Carolina covenants with bondholders…" A special purpose entity (SPE) would be established to receive funds from utilities that collect the debt payments as a part of customer bills. The SPE would oversee refinancing and make the payments. Supporters argue that this legislation was worth debating because lower rates based on the credit of the state or sought through a state process would benefit ratepayers and state liability would be limited. Or would it?

Here's the "secret" that anyone who can read a balance sheet would get instantly: Santee Cooper is already as "securitized" as they can possibly get. Their balance sheet shows clearly that Santee Cooper today has roughly $7 billion of total debt outstanding. Against that amount, they show $2.3 billion of what they call "Net Position"—which those in the commercial world would call equity. On first glance, therefore, Santee Cooper is approximately 75% leveraged—a high degree of debt and much higher than most any investor-owned utility in the entire United States. Santee Cooper has already used low-cost, primarily tax-exempt debt to finance their adventures in nuclear project development and other initiatives. If you refinance low-cost, tax-exempt debt with….low-cost tax-exempt debt, which is what you would in a securitization, how do you create lower costs by simply substituting one bond for another of equal cost? The answer is that you don't and that the only folks who are better off in such a shell game are the investment bankers who collect fees on the deal.

But that picture requires some additional explanation. You see, Santee Cooper isn't just financed with 75% debt: in reality, they are financed with over 100% debt. Because, unlike a normal business that makes a bad investment, like Santee Cooper has done in its nuclear nightmare, Santee Cooper hasn't written off any of its $4.2 billion of nuclear "investment." There it is on Santee's balance sheet, shown as a "Regulatory Asset"—all $4.2 billion of money sunk into a large pit in the middle of Fairfield County.

If Santee Cooper recognized on its accounting statements what any business in a competitive industry is forced to do—writing off a bad investment instead of sticking its costs to its customers because of monopoly status—Santee Cooper's Net Position would be around minus $2 billion. Since that is the true state of affairs of Santee Cooper, one can conclude that they are already fully leveraged—fully funded by as much debt as they possibly could incur, and that there would be absolutely no ability in the capital markets to add additional debt onto the debt that already exists.

But, there's more. Santee Cooper itself, in explaining to the General Assembly last year why it needs to remain a state-owned enterprise, pointed out a fact associated with its existing debt: that to buy out the existing nearly $7 billion of debt and try to replace it with new capital, a buyer (or Santee itself if it was so inclined) would need to pay bondholders not only the full par value of the debt, but an additional close to $1 billion in what are called “debt defeasance” costs (“make whole” costs that would be paid to current bondholders). The way Santee Cooper structured and sold its bonds, many of these debt instruments require a significant premium if Santee Cooper—or any other party—wants to buy out and retire these bonds. Paying an additional billion dollars in order to replace 100% debt financed obligations funded dominantly with tax-exempt debt with 100% new tax-exempt debt doesn’t sound like a fundamentally logical or economically viable proposition for Santee Cooper, for the state, and certainly not for the long-suffering ratepayers. This is at best a shell game being conceived not to solve the economic problem created by V.C. Summer 2 and 3 but to obfuscate and confuse people into thinking there is a possible solution that entails preservation of the “status quo” ownership and management of the utility.

Debt refinanced through securitization would have to be backed by collateral of some kind. The debt would have to hit someone’s balance sheet and affect someone’s credit rating. If the state had enacted a securitization process for SCE&G, the *ratepayers* and the *equity shareholders* would be a part of the collateral process. But the state would be involved as well by setting up the SPE. The bill was worth debating, but at the end of the day, SCANA got sold, and the bill remains in committee.

But securitization isn’t dead, it appears. As the clock counts down to the day that the Department of Administration will present three options for the future of Santee Cooper, securitization could be back in play.

- Another danger of securitization in terms of Santee Cooper is the fact that the enabling legislation setting up Santee Cooper includes this language: “…that the State will not alter, limit or restrict the power of the Public Service Authority to, and the Authority shall, fix, establish, maintain and collect rents, tolls, rates and charges for the use of the facilities of or for the services rendered or for any commodities furnished by the Public Service Authority, at least sufficient to provide for payment of all expenses of the Public Service Authority…” This restricts the state government from setting the electricity rates that pay Santee Cooper’s debts and allow it to operate. Securitization statutes typically double down on the state eschewing any interference with rates (as in capping or restricting them in some manner to erect guardrails to protect ratepayers) needed to pay back the new bonds. That’s shades of the Base Load Review Act, where the state law turned out to be a safe harbor for bad debts to the detriment of ratepayers. We don’t want the same for Santee Cooper ratepayers or taxpayers.

- There is also the question of how securitization will play in a highly-regulated, vertically integrated electric utility state like South Carolina. Of the 24 states (and DC and Puerto Rico) that have securitization laws, most are in states with some form of energy choice. Examples of securitization of government-owned utilities are rare, and the stuff of nightmares. Securitization is most famously associated with a New York municipal electric utility, the Long Island Power Authority (LIPA).

THE LONG ISLAND POWER AUTHORITY (LIPA): A CAUTIONARY TALE

The Long Island Power Authority (LIPA) serves Long Island and part of New York City. LIPA faced a number of challenges, including debt for the Shoreham nuclear power plant that was built but never placed into service. The Utility Debt Securitization Authority (UDSA) was established on LIPA's behalf by the New York State Legislature. UDSA's statutory authority allowed for debt securitization—even though these LIPA bonds were not general obligation bonds and LIPA lacked taxing power. (General obligation bonds are backed by the credit/taxing authority of the jurisdiction that issues them. Revenue bonds are backed by revenue from a specific project.)

In 2013, UDSA issued a $2 billion LIPA debt offering. That was conceived as a one-shot deal, but the Legislature soon amended its 2013 LIPA legislation to permit a second UDSA debt offering. In 2015 UDSA floated a second bond issue of $1 billion. That led New York State Comptroller Tom DiNapoli to complain that the "one-time" restructuring of LIPA's debt in 2013 by securitization quickly gave ground to another round of restructuring and debt in 2015.[103]

For the state entity known as LIPA (New York's Santee Cooper equivalent), the only players pleased with the securitization process have been *lawyers, accountants and bankers.*

We mentioned earlier that that there can be several goals or purposes of securitization. That could be the case with Santee Cooper. We will not know for sure until the utility presents its self-help plan. But it is fair to speculate that such a plan could have a renewable energy component. In Colorado, Missouri, New Mexico, Minnesota, Utah and Montana (and presumably other places), environmentalists see this type of bonding mechanism as a way for government to put its credit where its mouth is so to speak to promote a green policy agenda.

Under the Colorado plan, funds from state-government securitization of debt would be used to pay off dirty old coal power plants before they have been fully depreciated and funnel the money toward green energy. To make up for the loss of jobs and property tax revenue that the decommissioning of a plant would cause, the state would actually build in funds from the restructuring of the debt that could flow into the impacted communities for job training, etc.[104] That's a lot of government involvement in a private industry and in a community.

The Calculations

Now, let's go a bit deeper into how securitization could work in the specific case of Santee Cooper, meaning some or all of the Santee Cooper debt, which according to the Santee Cooper investor website represents about $6.62 billion in principal and $6.96 billion in interest to be paid until the year 2056.[105]

Now, if the definition of securitization is "improving the credit support and thereby reducing the 'cost of money' of the underlying financial obligation," compared to an investor-owned utility (IOU), state-owned Santee Cooper is in essence *already* securitized. Nevertheless, for the sake of argument, let's run some numbers.

With old SCANA (now Dominion), if there were securitization, it would work something like this:

SCANA's operations are financed with roughly 50% equity (unrecovered costs in regulatory assets)/50% debt (borrowing) and have a blended pre-tax cost of capital of roughly 8.5%. If the State of South Carolina were to "securitize" the V.C. Summer units 2 and 3 net regulatory asset of about $2.5 billion using 100% debt (borrowing), with a rate guarantee from the South Carolina Public Service Commission (as outlined in the Senate bill) at today's rates, a 20-year debt could be financed at an interest rate of about 3.5%. The difference in the "cost of money" for SCANA customers could have resulted in annual savings of 5% in interest. The back of envelope calculation would be:

(8.5% - 3.5%) x $2.5 billion = $125 million annual savings

That would have been the effect of the Senate bill had the state desired to wander further out into the deep end with private utilities post-Dominion purchase of SCANA.

Contrast this with Santee Cooper, which funds itself with 100% debt.

The concept of paying off old debt on Santee Cooper's balance sheet and replacing it with new debt does nothing to change the leverage variable (cost of borrowing), which is the main benefit provided by securitization.

As for the nature of Santee Cooper's current debt, most of Santee Cooper's current debt cannot be taken out/refinanced without very significant "defeasance" ("make whole" costs that would be paid to current bondholders).

Santee Cooper itself has estimated that it would cost about $1.5 billion dollars in debt defeasance costs,[106] over and above the principal value of the debt itself, to pay off the debt, because the lenders (who make their money charging interest after all) would be entitled to not only their full principal payment, but also to be "made whole" for the lost interest, over the remaining term of the debt to be repurchased, between the interest rate they were originally promised and a much lower interest rate.

Santee Cooper's average cost of debt today is low...4.5%. If that debt were to be taken out by Santee and "securitized," it would simply entail replacing one form of debt with another form of debt—the level of financial leverage would clearly stay the same as it is old debt being exchanged for new debt. As a simple example with math that is realistic, let's say Santee Cooper wanted to "securitize" $4 billion in V.C. Summer 2 and 3 related debt. Assume that debt carries an interest rate of 4.5% today and we can refinance it under a securitized structure for an attractive interest rate equal to 20-year U.S. Treasuries plus 100 basis points. A recent[107] 20-year Treasury STRIP[108] cleared at 2.06%, resulting in an effective interest rate of 3.06%—a savings of close to 1.5%.

While that sounds like a good deal, because of the defeasance/makewhole costs associated with Santee Cooper's debt, it would cost Santee Cooper at a minimum $4.7 billion to buy out the $4.0 billion of face value of their old debt. Additionally, on a debt take-out and refinancing/securitization plan of this magnitude, the costs associated with legal, financial advisory, debt underwriting and similar costs could easily rise to $50 million or more. The simple math, on a 20-year term basis, doesn't look attractive for ratepayers:

> *Status Quo*
> *Annual interest = 4.5% * $4 billion = $180 million * 20 years = $3.6 billion + $4.0 billion principal repayment*
> *= $7.6 billion total ratepayer cost*

Securitization
*Annual interest = 3.06% * $4.7 billion = $143.8 million * 20 years = $2.87 billion + $4.7 billion principal repayment + $0.05 billion transaction costs*
= $7.62 billion total ratepayer cost

<u>So, after all of that, and using favorable assumptions, all securitization has actually done is made the lawyers and bankers some money. Ratepayers have gained no value at all, even under conservative assumptions that give the securitization scenario the benefit of the doubt.</u>

One could thus describe securitization for Santee as a classic act of "re-arranging the deck chairs on the Titanic."

SECURITIZATION'S IMPACT ON CENTRAL

One last thing. Remember the car loan analogy? More and more expensive cars financed for longer and longer? If the goal of securitization or other refinancing is primarily a stretching operation—stretching out that nuclear debt for longer and longer into the future, the state agency known as Santee Cooper may be in that 96-month auto loan situation, except Santee Cooper will be looking at 443 months. Rates may be lower for a while, but its obligations will have stretched as far as the term of the Coordination Agreement with the Central Electric Cooperative.

The term of the Coordination Agreement and its role in Santee Cooper debt are very important because it means that Santee Cooper's largest customer (about 60% of income) is committed to buy from Santee Cooper only until 2058 and that commitment to buy is a portion of the collateral for Santee Cooper's borrowing. Stretched agreement. Stretched borrowing. Yes, 2058 is a long time from now, but several upstate co-ops have already bolted to Duke Energy and some municipal electric systems are buying from NTE (a merchant generation company) and Southern Power, a subsidiary of Southern Company. Santee Cooper could be vulnerable after 2058. What if upon expiration of the Coordinating Agreement all the co-ops bolted to Duke-Dominion-Southern Company and Santee Cooper had no customers for all that generation?

Securitization comes back to: whose credit is on the line, the quality of the debt in the pool, whether interest rates are rising or falling, and whether securitization affects which groups will ultimately be responsible and will pay for the nuclear mistake. Freezing rates today and stretching out debt to "save" Santee Cooper is unfair to the next generation.

The Bottom Line

Deeper government involvement in utilities in South Carolina and the ultimate outcome being only the enrichment of Wall Street bankers, accountants and attorneys are reasons enough to reject securitization.[109] There is also no guarantee to prevent future V.C. Summer-level debacles at Santee Cooper. The same goes for the other gambits. But what we have not discussed here the most salient reason: these maneuvers are *unnecessary*.

Three options will be on the table for the legislature to consider: new outside management, self-managed reforms, and sale to another entity. With the former two options, these maneuvers are Hail Marys to delay debt or simply kick the can down the road and both run the risk of a financial explosion. But with a sale, paying off (and writing down) the asset and removing it from the rate base entirely would be required of any buyer, making stop-gap water-treading options moot. Last ditch maneuvers are an unsafe and unnecessary harbor into which to navigate Santee Cooper.

6. THE METER SPINS: SPENDING AT SANTEE COOPER

TABLE B

SANTEE COOPER:

A METER READING GUIDE

PALMETTO PROMISE INSTITUTE

WHAT ARE THE OBLIGATIONS?

DEBT

NUCLEAR + NON-NUCLEAR DEBT + INTEREST

$14,000,000,000[1] total over 38 years

SALARIES & BONUSES

NEW CEO ANNUAL SALARY

$1,100,000[15] annually

New CEO Bonus

$250,000[8] annually

New CEO Relocation Package

$40,000[9] (one time)

New Deputy CEO

$750,000[10] annually

New Deputy CEO Bonus

$165,000[11] annually

Former CEO Retirement Package

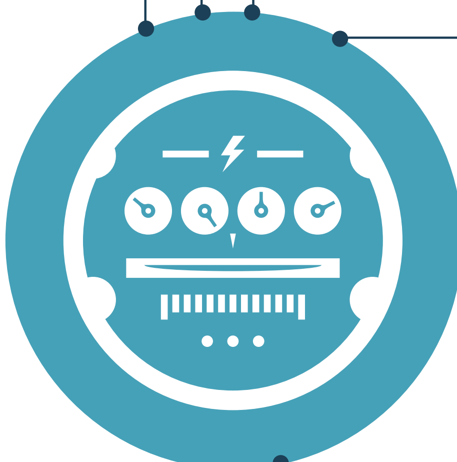
up to $800,000[12] annually
(up to $16 million over 20 years)

Bonuses to Executives

$5,600,000[13] (2009-2016)

Retention Bonuses to Executives

$511,000[14] (2019)



CLEAN UP

Preserve defunct V.C. Summer 2&3

$7,000,000[2] so far

Preserve defunct Pee Dee Campus

$ 2,500,000[3] annually

LEGAL & OTHER FEES

Legal Fees for lawsuits & criminal defense

$9,000,000[4] (2018)

Legal Fees (accumulating)

?[5] (2019-) (at $475 per hour)

Fee for DOA investment banking expertise

$15,000,000[6] (2019-2020)

Fee for Wall Street investment advice

$1,000,000[7] ($250k per month)

GRANTS AND PR

Grants and No Interest Loans for Outside Projects

$121,000,000[16] (2010-2018)

PR Firm to Defend Rate Increases & Opposition

$20,000[17] annually (or one time?)

WHO IS PAYING? LOW INCOME RATEPAYERS.

"CUSTOMER REVENUES FUND SANTEE COOPER OPERATIONS."[18]

—-Santee Cooper Spokesperson (July 2019)

AVERAGE PER CAPITA INCOME IN SERVICE AREA[19]	
Horry County Per Capita Income	$25,804[20]
Berkeley County Per Capita Income	$27,010[21]
Georgetown County Per Capita Income	$28,748[22]
Rural Electric Co-Op Customer Per Capita Income	12 counties served by SC co-ops are in "persistent poverty"[23]

NOTES

[1] **Principal & Interest Due.** Santee Cooper provides a debt service schedule on its website. The schedule (dated December 31, 2018; accessed July 18, 2019) shows Total Principal on Outstanding Revenue Obligations ($6,990,677), Total Interest on Outstanding Revenue Obligations ($7,389,801) and Total Debt Service on Outstanding Revenue Obligations ($14,380,473) to the year 2056 (38 years). The most recent (2018) Annual Report shows a slightly smaller figure, $14,347,592. We round down to the nearest billion.

[2] **Preserving V.C. Summer 2 & 3**. In a February 2018 letter to Governor Henry McMaster, Santee Cooper estimated the cost for storage of parts from the V.C. Summer site to be in the $3 million per year range, with maintenance and preservation of the site to be $16 million ($8 million every six months) per year. Santee Cooper has since revised their figure to about $4 million per year. https://www.postandcourier.com/business/santee-cooper-will-pay-million-a-year-to-preserve-site/article_0f00de2c-175d-11e8-8189-7bc01a37f57b.html https://assets.sourcemedia.com/6d/39/d13892a2473ba7a7d9b4312dbd30/finn-letter-to-gov.%20McMaster%202018-02-21.pdf

[3] **Preserving Pee Dee Energy Campus**. The Pee Dee Energy Campus near Kingsburg in Florence County, was approved by the Santee Cooper board in May 2006. It was slated to cost between $1.5 and $2 billion. It was suspended in August 2009 and cancelled in April 2010. According to WMBF (2017), the utility had maintenance, security, and preservation costs of $16.5 million per year. Those costs will decrease if the parts of the kit used to construct the plant are successfully sold. https://www.wmbfnews.com/story/36179993/class-action-lawsuit-claims-santee-cooper-raised-rates-for-unused-pee-dee-power-plant/

[4] **2018 Legal Fees at $9 million**. Santee Cooper legal fees grew by $7 million to reach a total of $9 million for 2018. https://www.postandcourier.com/business/santee-cooper-to-resume-paying--an-hour-lawyer-bills/article_3425ac04-50b0-11e9-8a4a-eb61bad75f97.html

[5] **Old Legal Costs at $475/hour**. The rate of $475 per hour was reported when Santee Cooper Chairman Charlie Condon opposed paying old invoices billed at that rate.

[5] **Future Legal Bills**. Legal fees for 2019 are expected to remain high due to a plethora of lawsuits. The most high-profile suits are those by Westinghouse and the Central Electric Power Cooperative.

Westinghouse, who as a part of Toshiba was the contractor for V.C. Summer 2&3, claims that Santee Cooper has been dragging its feet on selling material left over from the reactor site. Westinghouse claims a number of opportunities to sell parts and equipment have been missed because Santee Cooper doesn't acknowledge any ownership of the material by Westinghouse and therefore refused to share any of the proceeds with the Pennsylvania company. https://www.thestate.com/news/politics-govern-ment/article228533024.html

Central Co-Op is demanding in a separate, ongoing (2018-) suit that Santee Cooper not be allowed to charge their electric cooperatives for V.C. Summer 2&3 expenses and that the Co-ops deserve a portion of the $831 million settlement Santee Cooper received from Toshiba, the contractor for the project. https://columbiabusinessreport.com/news/ener-gy/73934/

Mini-Bond holders are also suing, claiming Santee Cooper misled them about the risks of the V.C. Summer project. They allege they should have been paid more because of the higher risk. https://www.postandcourier.com/business/lawsuit-santee-cooper-misled-investors-about-failed-sc-nu-clear-project/article_2dc4cd10-612a-11e9-a41c-8f4e5 72cf265.html

Another bond-holder class-action lawsuit related to the **Pee Dee Energy Campus** claims that Santee Cooper has been charging "illegal rates" because the utility was charging customers for $800 million in bonds even though the plant was mothballed. Conway attorney and former State Representative George Hearn said Santee Cooper didn't cut rates when the project was cancelled. https://www.myhorrynews.com/news/suit-says-san-tee-cooper-charging-for-plant-it-didn-t/article_8f-14cb60-844a-11e7-8a3e-a32fd721c476.html

Ratepayers. In addition to bondholders, residential and small business ratepayers are in court alleging that the Santee Cooper board failed the ratepayers by voting to continue the project even after Westinghouse, the project contractor, filed for bankruptcy. https://www.postandcourier.com/business/santee-cooper-customers-sue-to-recoup-money-they-paid-for/article_54ccec6a-89ce-11e7-ba53-6ff651ad0089. html

[6] **Department of Administration Costs**. Senate Finance Chairman Hugh Leatherman put Santee Cooper on notice that it would have to be prepared to pay up to $15 million for investment banking expertise that will be required for the state Department of Administration to assess offers to purchase, manage or restructure Santee Cooper. https://www.postandcourier.com/opinion/editorials/editorial-sc-utility-company-santee-coo-per-might-try-a-little/article_3d77a534-a748-11e9-9ba6-03c1ca1f467f.html

[7] **Wall Street Investment Advice**. Santee Cooper hired Centerview Partners, a Wall Street investment bank to assist with negotiations with SCANA and perhaps to vet potential sale offers. Santee Cooper testified to a Senate committee that it had been paying Centerview for four months at $250,000 per month. https://www.postandcourier.com/business/san-tee-cooper-hired-consultant-at-a-month-to-seek-settlement/article_894ec8d2-32c5-11e8-b17f-83261b203363.html

[8] **New CEO Bonus**. According to the Post & Courier, the new CEO will have a chance to earn an extra $250,000 in performance bonuses. https://www.postandcourier.com/business/santee-cooper-hires-new-ceo-and-deputy-to-

reform-state/ar-ticle_c1855574-a248-11e9-8cb3-f7332db032d7.html

[9] **New CEO Relocation Package**. According to the Post & Courier, the new CEO will receive up to $40,000 to relocate to South Carolina (most likely from Arizona). https://www.postandcourier.com/business/santee-cooper-hires-new-ceo-and-deputy-to-reform-state/ar-ticle_c1855574-a248-11e9-8cb3-f7332db032d7.html

[10] **New Deputy CEO Salary**. According to the Post & Courier, the new Deputy CEO, Charlie Duckworth, will earn a salary of $560,000. https://www.postandcourier.com/business/santee-cooper-hires-new-ceo-and-deputy-to-reform-state/ar-ticle_c1855574-a248-11e9-8cb3-f7332db032d7.html

[11] **New Deputy CEO Bonus**. According to the Post & Courier, the new Deputy CEO will have a chance to earn an extra $165,000 in performance bonuses. https://www.postandcourier.com/business/santee-cooper-hires-new-ceo-and-deputy-to-reform-state/ar-ticle_c1855574-a248-11e9-8cb3-f7332db032d7.html

[12] **Former CEO Golden Parachute**. *The Nerve* reports that former CEO Lonnie Carter would receive $344,572 for the rest of his life from the state retirement system along with $455,192 for 20 years from a Santee Cooper retirement plan. Total: up to $799,764. https://thenerve.org/santee-cooper-execs-get-big-bo-nuses-pay-hikes-while-nuclear-debt-mushrooms/

[13] **Performance Bonuses for Executives**. Rick Bundrett reports in The Lancaster News that from 2009 to 2016, during the time that V.C. Summer was spinning out of control, Santee Cooper, a state agency, paid $5.6 million in bonuses to 15 executives. No bonuses were paid for 2017. https://www.thelancasternews.com/content/guest-column-santee-cooper-has-always-been-generous-rate-payer-money
https://thenerve.org/santee-cooper-execs-get-big-bo-nuses-pay-hikes-while-nuclear-debt-mushrooms/

[14] **Stay Bonuses**. During a hearing before a Select Senate Committee in March 2019, Santee Cooper reported that it would be paying 7 of its executives $511,000 in bonuses in coming months. Senator Shane Massey called the bonuses "tone deaf." The Post & Courier reported the figure at $594,000. https://www.thestate.com/news/politics-govern-ment/article228424789.html
https://www.postandcourier.com/news/tone-deaf-sc-run-utility-gave-in-executive-bonuses-with/article_5eb483a8-5008-11e9-8d6e-3393ead83505.html

[15] **New CEO Salary**. According to the Post & Courier, the new CEO, Mark Bonsall, will earn $1.1 million per year. Former CEO Lonnie Carter "earned an annual salary of $540,929 before he retired two years ago." https://www.postandcourier.com/business/santee-cooper-hires-new-ceo-and-deputy-to-reform-state/ar-ticle_c1855574-a248-11e9-8cb3-f7332db032d7.html

[16] **Economic Development Deals**. Rick Bundrett reports in a guest column in The Lancaster News that Santee Cooper spent $121 million from August, 2010 to April, 2018. This included a $3 million grant for land in Berkeley County, a $15 million loan and $5 million grant for a port in Dillon, and $2.25 million for property in Newberry County. https://www.thelancasternews.com/content/guest-column-santee-cooper-has-always-been-generous-rate-payer-money

[17] **Public Relations Firm to Fight Accurate Data**. In the spring of 2019, Santee Cooper paid $20,000 to push back against "rampant misinformation" about the utility. https://www.thestate.com/news/politics-govern-ment/article229364389.html

[18] **Source of Funds for Wasteful Spending**. Rick Bundrett reports that in response to an emailed question about whether residential customers would have to pay for these expenses, Santee Cooper spokesperson Mollie Gore responded with this quote. https://www.thelancasternews.com/content/guest-column-santee-cooper-has-always-been-generous-rate-payer-money

[19] **Service Area**. The customers who are directly served by Santee Cooper are primarily in Georgetown, Horry and Berkeley Counties in South Carolina.

[20] **Horry County Per Capita Income**. According to the US Census Bureau's Quick Facts, the Per Capita Income in the Last 12 Months in 2017 dollars of Horry County, SC is $25,804. 16.1% of Horry County citizens live in poverty. https://www.census.gov/quickfacts/fact/table/horry-countysouthcarolina/BZA010216

[21] **Berkeley County Per Capita Income**. According to the US Census Bureau's Quick Facts, the Per Capita Income in the Last 12 Months in 2017 dollars of Berkeley County, SC is $27,010. 11.7% of Berkeley County citizens live in poverty. https://www.census.gov/quickfacts/fact/table/berke-leycountysouthcarolina/INC110217

[22] **Georgetown County Per Capita Income**. According to the US Census Bureau's Quick Facts, the Per Capita Income in the Last 12 Months in 2017 dollars of Georgetown County, SC is $28,748. 17.1% of Georgetown County citizens live in poverty. https://www.census.gov/quickfacts/fact/table/georgetowncountysouthcarolina/RHI825218

[23] **Poverty of the Rural Electric Co-Op Customer**. According to the National Rural Electric Cooperatives Association (NRECA), using data from the U.S. Department of Agriculture (USDA), twelve (12) counties served ten (10) by South Carolina electric cooperatives are in "persistent poverty." All of those co-ops receive their electricity from Santee Cooper through Central Electric Co-op. https://www.cooperative.com/content/public/maps/persistent-poverty/index.html https://www.ruralhealthinfo.org/states/south-caroli-na

7. WHERE DO WE GO FROM HERE?: OPTIONS FOR THE SC GENERAL ASSEMBLY

IN THIS CHAPTER:

- According to Joint Resolution H.4287, the General Assembly has three options: Sale; Management Contract; or Internal Reform.
- Selling Santee Cooper would reduce customer rates from the expected "business as usual" rate. By contrast, absent a sale of Santee Cooper and elimination of debt, rates will continue to rise. Santee Cooper's New York equivalent, the Long Island Power Authority (LIPA), provides an example of the downside of a public utility recruiting a management company to handle a utility's own core responsibilities. From LIPA, we learn that outsourcing management while maintaining the patina of operating as a government agency is the recipe for a taxpayer-fueled Frankenstein. Though restructured, managed, and securitized, LIPA failed to deliver for either ratepayers or taxpayers.
- No internal reform, including management agreements, purchasing agreements, and securitization can entirely remove the nuclear debt and other Santee Cooper debt. Such a choice would be ill-informed.

The Joint Resolution Options

H.4287

The Department of Administration shall establish a process to ***conduct a competitive bidding process for the sale*** *of some or all of the Public Service Authority ("Santee Cooper") and to receive* ***management proposals*** *that do not involve a sale of Santee Cooper but are designed to improve the efficiency and cost effectiveness of Santee Cooper's electric operations including, but not limited to, a management arrangement, joint venture, or alternative arrangement. This process shall not be limited to the individuals or entities that responded to ICF's Requests for Expressions of Interest for its February 1, 2019, report to the Public Service Authority Evaluation and Recommendation Committee.*

Santee Cooper shall also submit a proposal to the department, as an alternative to a sale or management proposal, ***setting forth its plans for reform, restructuring, and changes in operation****. Santee Cooper's proposal shall be given to the department simultaneously with the sale and management proposal deadline set by the department.*

This process must be established in accordance with commercially reasonable terms that are customary in connection with bids and proposals of this type. Nothing in this joint resolution precludes the department, through its professional services experts, from negotiating with entities offering bids or management proposals, or Santee Cooper, to improve their proposal.

The department shall determine the date when the bids and proposals must be received; however, the process to receive bids, management proposals, and Santee Cooper's proposal shall be concurrent.

Evaluating the Options

The General Assembly has three options (A,B,C).

A. Sale.
B. Management Contract.
C. Internal Reform.

Option A: Sale. Write down and the calculation of utility rates.

The case for a sale of Santee Cooper is a simple case of mathematics; the special case of utility mathematics.

RR = B x r + O + d + T

where Rates = Base (Rate Base) x (Allowed) rate of return + Operating Costs + depreciation + Taxes

The rates paid by a utility customer are calculated using an equation similar to that provided here. Rates equal the rate base (assets) multiplied by an approved rate of return plus operating costs plus depreciation plus taxes.

With a write-down of Santee Cooper's debt by a buyer, and the buyer's commitment to never charge for any of VC Summer 2 and 3's capital costs and "regulatory assets" in the future, the B will be smaller, so naturally the Rates will be lower.

International consulting firm ICF's careful analysis shows that several Santee Cooper purchase proposals include two key steps that would significantly reduce rates, which will help existing ratepayers and promote economic development.

First, the IOU-buyer would pay off the debt for the V.C. Summer project and eliminate it from rate base. "Rate base" (in the unique financial world of the regulated utility) is the assets that utilities earn guaranteed returns on, and a lower *rate base* delivers lower *rates* to customers.

Second, a smart, well managed IOU-buyer would replace Santee Cooper's aging generation fleet with less expensive generation and implement other efficiency measures.

ICF estimates that a write down of the Santee Cooper debt would account for an average of 72% of the cost reductions, with the remaining 28% coming from efficiencies in operations and less expensive power generation fuels.

According to calculations based on data from the SC Energy Office, **56**% of Santee Cooper's generation came from coal in 2018. That's much higher than SCE&G (36%), Duke Energy Carolinas (22%) or Duke Energy Progress (14%). Switching to more efficient natural gas could save **$300 million** per year.

The bottom line is that per ICF's evaluation, selling Santee Cooper would *reduce* customer rates from the expected $84/MWh to $79/MWh. By contrast, absent a sale of Santee Cooper and elimination of debt, rates will continue to *rise*.

Option B: Management Arrangement. The Case of the Long Island Power Authority (LIPA).

Would a **management arrangement** work for Santee Cooper? (See page 43)

In determining whether the legislature should choose Option B, a Management Arrangement for Santee Cooper, we don't have to look far for an example of how that might turn out.

When the Long Island Power Authority (LIPA) faced hard times after the collapse of the Shoreham nuclear project, it turned to National Grid and then to Public Service Enterprise Group, Inc. (PSEG) in 2014 as LIPA's "service companies," or *managers*. In neither case was there real improvement in LIPA's service or rates. As for its balance sheet, the company continued to load up on long-term debt.[110] Likewise, the accompanying *securitization* (see page 40) did not eliminate all that ailed LIPA. Rather, it restructured a portion of existing debt, into new debt. The Shoreham hangover lingered.

LIPA is an example of the downside of a public utility recruiting a management company to handle a utility's own core responsibilities. New York State's Moreland Commission, appointed by Gov. Andrew Cuomo in the aftermath of Hurricane Sandy had these conclusions in it January, 2013 report: LIPA should be *privatized* and management agreements splitting-off *ownership* from service appears to have created the bungled response to Sandy.[111] The report determined that "separation of ownership and operations leads to confusion, incompetence, and lack of accountability." [112]

> *The Interim Report provides sufficient evidence that LIPA's outsourcing of most of the day-to-day management and operations of its system to National Grid simply does not work. In short, the bifurcated LIPA-National Grid structure lends itself to mismanagement, a lack of appropriate investment in infrastructure, a lack of accountability to customers and excessive rates.*
>
> *The Report also recommended: …The disposition of LIPA's assets to a qualified Investor Owned Utility (IOU) that would serve as the sole utility manager and operator to the existing LIPA service area. This **privatization** would place the new service provider under the stronger regulatory environment recommended by the Commission, as opposed to remaining a self-regulated entity.*

From LIPA, we learn that outsourcing management while maintaining the patina of operating as a government agency is the recipe for a taxpayer-fueled Frankenstein. Though *restructured, managed, and securitized*, LIPA failed to deliver for either ratepayers or taxpayers.[113]

The agreement between LIPA and PSEG is set forth in a document titled, "AMENDED and RESTATED OPERATIONS SERVICES AGREEMENT between LONG ISLAND LIGHTING COMPANY d/b/a LIPA and PSEG LONG ISLAND LLC, Dated as of December 31, 2013" (OSA).[114] As part of the larger plan, nearly half of LIPA's $6.7 billion in debt was to be *securitized*.[115]

Problems with LIPA's arrangement with National Grid continued in LIPA's relationship with PSEG: *ownership remains divorced from the utility's management*. The Moreland report noted ostensible changes in management structure and responsibilities, but also concluded that the problematic division of labor was not fixed.[116]

LIPA continues to look like the bill collector and glorified bystander while PSEG is the kid operator reliant on an allowance. PSEG simply lacks skin in the game. A document titled, "COMPARISON OF KEY TERMS AND PROVISIONS for OPERATIONS SERVICES AGREEMENT between LONG ISLAND LIGHT-

ING COMPANY (d/b/a LIPA) and PSEG LONG ISLAND LLC", which outlines changes between the initial 2011 deal and the final agreement, only reinforces the impression that an unhealthy dichotomy marks the relationship between LIPA and PSEG.[117]

Against that backdrop, LIPA's PSEG management and securitization provide templates to be avoided in South Carolina. According to Comptroller DiNapoli: "LIPA ratepayers face higher bills, bear a debt burden that is projected to increase, and, in some ways, have less transparency and accountability regarding their electric service provider than before."[118]

Furthermore, LIPA is presently savoring the prospect of a bond rating uptick that was predicated upon its rate hikes.[119] LIPA picked ratepayers' pockets to keep creditors happy.[120] Even so, LIPA remains burdened with debt levels out of sync with similarly-rated utilities. A Moody's officer described LIPA's financial metrics as "somewhat weak" for the "rating" that LIPA yearns.

The bottom line is LIPA's debt is growing while PSG is getting paid. LIPA's annual financial statements reflect a continuous growth in the utility's long-term debt:

2018 – LIPA $8,233,016,000[121] + UDSA $4,457,610,000[122]
2017 – LIPA $7,978,731,000[123]+ UDSA $4,634,508,000[124]
2016 – LIPA $7,756,751,000[125] +UDSA $4,360,731,000[126]
2015 – LIPA $7,432,468,000[127] + UDSA $3,127,322,000[128]
2014 – $7.5 billion (combined LIPA & USDA)[129]
2013 – $6.9 billion (combined LIPA & USDA)[130]
2012 – $6,611,212,000[131]
2011 – $6,379,609,000[132]
2010 – $6,363,244,000[133]

During the years ended December 31, 2018 and 2017, LIPA paid PSEG Long Island an annual management fee of approximately **$64 million**.[134] In addition, for 2017, LIPA paid PSEG Long Island an incentive fee of approximately **$9.5 million**.[135] For 2018, PSEG Long Island was slated to earn an incentive fee up to approximately **$9.7 million**.[136]

That's the LIPA story. "Renting managers" who have no skin in the game but expect to be paid handsomely will likely add overhead and operating costs and will not eliminate debt significantly. The legislature should heed the lessons and reject a management arrangement as a solution for Santee Cooper.

Option C: Internal Reforms. None remove the debt.

No internal reform, including management agreements, purchasing agreements, and securitization can entirely remove the nuclear asset from rate base or prevent future V.C. Summers. Modernizing the Santee Cooper power supply and generation will either add debt or increase expenses. There are no shareholders in a state agency to turn to for solving Santee Cooper's capital problems. Internal reform would be "ill-informed."

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ENDNOTES

[1] It is often difficult to know where Santee Cooper ends and Central begins in this long relationship. Central has served a key role in Santee Cooper since its inception. It was Central that borrowed funds from the federal Rural Electrification Administration to build transmission lines to connect to Santee Cooper. Santee Cooper made the loan payments and now owns these lines.
[2] The delivery is to: 64.7% wholesale, 18.6% military/large industrial, 16.7% retail. *Santee Cooper Power: Where It Goes 2018 Energy Sales*, Santee Cooper Fingertip Facts 2018, p. 10-11.
[3] *Powerful Partnership Works for South Carolina.* Mollie Gore, South Carolina Works 2013.
[4] Mike Couick, President & CEO of The Electric Cooperatives of South Carolina to Ratepayer Protection Committee, SC House of Representatives, February 4, 2018
[5] Resolution passed by Mid-Carolina Electric Cooperative in special called meeting of the board of directors, January 30, 2018.
[6] Central could "win" against Santee Cooper by prevailing in *Jessica Cook* or a separate case, including a win by Palmetto Electric Cooperative, a co-defendant that also filed a cross-claim against Santee Cooper.
[7] Jessica S. Cook et al. v. South Carolina Public Service Authority, et al., Case No. 2017-CP-25-348 (14th Cir. 2017), Order Granting Motions to Transfer Venue, Jean Hoefer Toal Acting Circuit Court Judge, November 5, 2019.
[8] There is a federal case as well: Timothy Glibowski et al. v. SCANA, SCE&G, Santee Cooper, Kevin Marsh, Jimmy Addison, Stephen Byrne, Martin Phalen, Mark Cannon, Russell Harris, Ronald Lindsay, James Micali, and Lonnie Carter (case no. 9:18-cv-273-TLW in the U.S. Dist. Court, Dist. Of S.C., Beaufort Division). Retrieved from: https://www.classaction.org/media/glibowski-v-scana-corporation-et-al.pdf
The arguments in this case are similar to the state case, including *Used and Useful and Takings without Just Compensation*. According to the complaint: "334. … Santee Cooper's and SCANA's advance charges to the Class for the Reactor project without offering anything meaningful in return violate the long standing 'used and useful' principle in utility proceedings." The Second Amended Complaint asserts a cause of action against Santee Cooper for an alleged *taking* without just compensation, in violation of the Fifth Amendment. Plaintiffs allege that defendants failed to disclose information or made misrepresentations to the South Carolina Public Service Commission and the public and mailed bills for electrical service at rates that contained project costs and expenses as part of scheme to enrich themselves. The complaint also contains Racketeer Influenced and Corrupt Organizations Act (RICO) allegations. Plaintiffs seek actual damages, treble damages under RICO, and attorneys' fees.
[9] Quarterly Report to the United States Securities and Exchange Commission. (For the quarterly period ended March 31, 2019). Dominion Energy South Carolina, Inc. Retrieved from: https://www.sec.gov/Archives/edgar/data/91882/000009188219000011/a2019331-10q.htm
[10] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al.*, Case No. 2017-CP-25-348, Fifth Amended Class Action Complaint, October 8, 2019, p. 22.
[11] Jessica S. Cook et al. v. South Carolina Public Service Authority, et al., Case No. 2017-CP-25-348 (14th Cir. 2017), Defendant Central Electric Power Cooperative, Inc.'s Answer to Fifth Amended Class Action Complaint and Amended Claims Against South Carolina Public Service Authority and Its Directors, July 25, 2019.
[12] In regard to "taking," see also opinion of Office of Attorney General Alan Wilson by Solicitor General Robert D. Cook on the constitutionality of the Base Load Review Act (BLRA), September 26, 2017. Retrieved from http://www.scag.gov/wp-content/uploads/2017/09/Corrected-OS-10190-Opinion-9-26-2017-01479070xD2C78.pdf-01479103xD2C78.pdf
[13] S.C. Code Ann. § 58-31-30. Retrieved from: https://www.scstatehouse.gov/code/t58c031.php
[14] Ghadessi, M. (2017, November 13). Utility General Rate Case – A Manual for Regulatory Analysts. Retrieved from: https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/PPD_Work/PPD_Work_Products_(2014_forward)/PPD%20General%20Rate%20Case%20Manual(1).pdf
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[16] Glibowski v. SCANA Corporation, et al. Civil Action No. 9:18-cv-273-TLW. Entry number 48. Filed on 07/23/18.
[17] Glibowski v. SCANA Corporation, et al. Civil Action No. 9:18-cv-00273-TLW. Entry Number 54. Filed on 08/29/18.
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[19] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al.*, Case No. 2017-CP-25-348 (14th Cir. 2017), Defendant Central Electric Power Cooperative, Inc.'s Answer to Fifth Amended Class Action Complaint and

Amended Claims Against South Carolina Public Service Authority and Its Directors, July 25, 2019, p. 29.
[20] Presentation to: Public Service Authority Evaluation and Recommendation Committee. (2018, August 22). *South Carolina Public Service Authority.* Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Investor-Communications/Eval-Committee-Meeting-8-22-18-FINAL.PDF
[21] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al*., Case No. 2017-CP-25-348 (14th Cir. 2017), Defendant Central Electric Power Cooperative, Inc.'s Answer to Fifth Amended Class Action Complaint and Amended Claims Against South Carolina Public Service Authority and Its Directors, August 9, 2019, p. 10.
[22] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al*., Case No. 2017-CP-25-348 (14th Cir. 2017), Defendant Central Electric Power Cooperative, Inc.'s Response in Opposition to Santee Cooper's Motion to Sever and Stay Central's Claims, October 4, 2019, p. 9.
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[24] Carter, Lonnie. Aug. 2013. Email.
[25] Carter, Lonnie. Email. Cited in court documents.
[26] Carter, Lonnie. Oct. 2013. Email.
[27] Crosby, Michael. Received by Lonnie Carter, 5 Feb. 2014. Email.
[28] Crosby, Michael. Received by Lonnie Carter, 5 Mar. 2014. Email.
[29] SCANA Employee. Received by Marion Cherry (Santee Cooper's full-time on-site manager at V.C. Summer). Email.
[30] Santee Cooper *2014 Annual Report, p21.*
[31] V.C. Summer Nuclear Generating Stations 2 & 3 Project Assessment Report. (2016, February 5). Retrieved from: https://assets.sourcemedia.com/8c/d8/6686933e49518782cdc7cc1b577f/bechtel-report-on-v.C.%20Summer%20nuclear%20project%20020516.pdf
[32] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al.*, Case No. 2017-CP-25-348, Fifth Amended Class Action Complaint.
[33] The Berkeley Observer, "Santee Cooper Opposes Dominion's Effort to Delay Trial," November 22, 2019. https://www.berkeleyobserver.com/2019/11/22/santee-cooper-opposes-dominions-effort-to-delay-trial/
[34] *Jessica S. Cook et al. v. South Carolina Public Service Authority, et al*., Case No. 2017-CP-25-348, Fifth Amended Class Action Complaint, July 25, 2019, p. 41.
[35] Correspondence, Carlos M. Brown, Senior Vice President & General Counsel, Dominion Energy to J. Michael Baxley, Senior Vice President & General Counsel, SC Public Service Authority, October 21, 2019.
[36] Living the Mission: Annual Report 2018. (2018). *Santee Cooper*. Retrieved from: https://www.cg.sc.gov/sites/default/files/Documents/Fiscal%20Transparency/Quasi-Public%20State%20%20Agencies%20in%20SC/Santee%20Cooper%20Annual%20Report%202018.pdf
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[38] Chapter 9 - Bankruptcy Basics. *United States Courts.* Retrieved from: https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/chapter-9-bankruptcy-basics Only a 'municipality' may file for relief under chapter 9. 11 U.S.C. § 109(c). The term 'municipality' is defined in the Bankruptcy Code as a 'political subdivision or public agency or instrumentality of a State.' 11 U.S.C. § 101(40). The definition is broad enough to include cities, counties, townships, school districts, and public improvement districts. It also includes revenue-producing bodies that provide services which are paid for by users rather than by general taxes, such as bridge authorities, highway authorities, and gas authorities.
[39] Dan Ray Testimony before SC Senate Select Committee on Santee Cooper, April 2019.
[40] Eye on Munis. (2017, September 7). *Debtwire*. Retrieved from: https://dkf1ato8y5dsg.cloudfront.net/uploads/9/20/eye-on-munis-pdf.pdf
[41] Santee Cooper, Notice of Petition for Original Jurisdiction, South Carolina Supreme Court, June 25, 2018, p.21.
[42] Santee Cooper, Notice of Petition for Original Jurisdiction, South Carolina Supreme Court, June 25, 2018, pp. 22-23.
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[82] Regulatory assets are essentially expenses the utility has paid that it will be able to charge customers for in the future. They are called "regulatory assets" because the governing regulatory body must deem the expense collectable in the future to be classed as an asset. Santee Cooper is state-run and has no such governing body. Santee Cooper has decided to include all V.C. Summer 2 & 3 expenses as "regulatory assets" for the time being, even though their partner in the project, SCE&G, wrote off the entire cost of the defunct project once it was known that the project would never generate revenue. SCE&G was a subsidiary of SCANA which was a publicly traded utility and had an equity account to buffer the losses. For a comprehensive timeline of SCE&G's history with V.C. Summer 2&3 see: Crees, A. The failed V.C. Summer nuclear project: A timeline. Retrieved from: https://www.chooseenergy.com/news/article/failed-v-c-summer-nuclear-project-timeline/

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[86] CRFR stands for "costs to be recovered from future rates" and OPEB stands for "Other post-retirement employee benefits".

[87] Definition of insolvency: in legal terminology, the situation where the liabilities of a firm exceed its assets. In practice, insolvency is the situation where an entity cannot raise enough cash to meet its obligations, or to pay debts as they become due. Properly called technical insolvency, it may occur even when the value of an entity's total assets exceeds its total liabilities. See: Insolvency. Business Dictionary. Retrieved from: http://www.businessdictionary.com/definition/insolvency.html
[88] Technically, when the project is expensed it would most likely be recorded as a charge-off on the income statement and reduce net income as an "extraordinary income/loss"; however, extraordinary items are not typically included in projections and ratios analysis which focuses on the long-run trends and annual performance of an entity; that is why I exclude the losses in the income-based ratios.
[89] Yearly rate increases are compounded. This means a 3% rate increase every year for 5 years is equal to 1.03^5 or 15.93%.
[90] Santee Cooper Online. "We can hold prices stable and here's how – Facts are Facts #18". Nov. 11, 2019. Retrieved from: https://www.santeecooper.com/news/2019/111119-We-Can-Hold-Power-Prices-Stable-And-Heres-How.aspx Many of the points in this blog post make the reader question how a business can cut expenses across the board and still provide a good product and customer service? Or has Santee Cooper been operating with such inefficiencies in the past that it truly can cut expenses and staff by 10% and maintain the same product and customer experience? If the latter is the case, it implies customers have been overpaying for years.
[91] Retrieved from: https://charlestonfyi.com/2019/07/30/santee-cooper-timeline/
[92] This is also maintained in Santee Cooper's master debt covenants agreement (1999). Santee Cooper agrees to maintain its asset-base to a level that will enable it to continue to serve customers in Section 8.3 "Maintenance of properties in Good Condition" page 30. See: South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 30). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[93] For a full discussion of elasticities of demand for electricity see our earlier paper "Santee Cooper's Uncertain Future". March 2019. Retrieved from: https://palmettopromise.org/report-santee-coopers-uncertain-future/
[94] See: South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 30). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[95] Section 8.6 "Book of Accounts" which states, "The Authority shall keep proper books of account in substantial compliance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission or other federal agencies having jurisdiction over public utility companies owning and operating properties similar to the properties owned and operated by the Authority, whether or not the Authority is at that time required by law to use such system of accounts." See: South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 31). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[96] South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 60). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[97] South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 35). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[98] South Carolina Public Service Authority Master Revenue Obligation Resolution (p. 35). (1999, April 26). Retrieved from: https://www.santeecooper.com/About/Investors/_pdfs/Revenue-Obligations/revenue-obligation-resolution.pdf
[99] Living the Mission: Annual Report 2018 (p. 60). (2018). *Santee Cooper*. Retrieved from: https://www.cg.sc.gov/sites/default/files/Documents/Fiscal%20Transparency/Quasi-Public%20State%20%20Agencies%20in%20SC/Santee%20Cooper%20Annual%20Report%202018.pdf
[100] "All Authority debt (Electric and Water Systems) issued pursuant to the Revenue Obligation Resolution is payable solely from and secured by a lien upon and pledge of the applicable Electric and Water Revenues of the Authority. Revenue Obligations are senior to: 1) payment of expenses for operating and maintaining the Systems; 2) payments for debt service on commercial paper; and 3) payments made into the Capital Improvement Fund." See: Living the Mission: Annual Report 2018 (p. 60). (2018). *Santee Cooper*. Retrieved from: https://www.cg.sc.gov/sites/default/files/Documents/Fiscal%20Transparency/Quasi-Public%20State%20%20Agencies%20in%20SC/Santee%20Cooper%20Annual%20Report%202018.pdf
[101] Though the comparison is a bit tenuous because of the rating of the debt, the bundling of mortgages into tranches for sale as CDOs or "collateralized debt obligations" that led to the bursting of the housing bubble was in the ballpark.
[102] "Accelerated depreciation" is an alternative. Debt would be paid off sooner, but utility bills could rise for existing customers in the short run.

[103] DiNapoli, T. (2015, July). Long Island Power Authority by the Numbers: A Public Authority in Transition. Retrieved from: https://www.osc.state.ny.us/reports/pubauth/lipa_by_the_numbers_7_2015.pdf
[104] As a side note, the kicker in this instance is what the closing of a power plant means to a utility: it means the loss of the equity, or the ability to bill its ratepayers for its use. This utility monopoly method of profit, tying income from customers to some rate-based asset is foreign to any other business, but the sine qua non of the electricity business where there is no competition. If you don't own generation, you don't make money. Colorado officials had to figure out how to give the utilities something in place of the plants that would no longer be online generating revenues. Yes, it is insane.
[105] (Yes, the principal is "only" $6.6 billion. Our analysis in the past has raised ire of the state electric utility because we cite the total principal and interest figure of $13.6 billion. We have a simple reason for doing this: the direct serve ratepayers of Santee Cooper and customers of the co-ops served by Santee Cooper won't be paying "principal only" loans for 37 years in the future, they will be paying it all.)
[106] While we are defining terms, here is another: "breakage." "Breakage" is the cost to pay off the debt, for example, the costs to an investor-owned utility for converting the debt of a non-investor-owned utility like Santee Cooper. Potential buyers are aware of breakage and prepared to pay it.
[107] Rate of return on 20-year U.S. Treasury STRIP, accessed October 15, 2019.
[108] Securities known as "STRIPS": Separate Trading of Registered Interest and Principal.
[109] An argument can also be made that future efforts to sell Santee Cooper could be harmed by securitization if it makes Santee Cooper's future financial flexibility less desirable. This will reduce the value of Santee Cooper to prospective buyers. The effect could be to strengthen Santee Cooper, but reduce its marketability and value. Cost reductions would accrue to whom? Prospective buyers will not have the flexibility to allocate those savings as they see fit. That would be true of any securitization savings and Southern Company operational savings.
[110] Long Island Power Authority (A Component Unit of the State of New York) Consolidated Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2019/03/LIPA-audited-2018-financial-statements.pdf ; Harrington, M. (2019, June 21). Moody's cites LIPA financial policies, rates in hinting at rating upgrade. *Newsday*. Retrieved from: https://www.newsday.com/long-island/lipa-moodys-bond-rating-1.32717790
[111] Moreland Commission on Utility Storm Preparation and Response: Interim Report. (2013, January 7). Retrieved from: https://moreland.ny.gov/sites/default/files/MAC-Interim-Report1-7-2013.pdf
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[113] Vecsey, T. (2018, January 23). New legislation would require LIPA to consider economic impact of rate increases. *Riverhead News-Review*. Retrieved from: https://riverheadnewsreview.timesreview.com/2018/01/85297/new-legislation-would-require-lipa-to-consider-economic-impact-of-rate-increases/
[114] Amended and Restated Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC. (2013, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2016/10/OSA.pdf
[115] Slavin, R. (2013, October 4). LIPA Trustees Approve PSEG Takeover. *The Bond Buyer*. Retrieved from: https://webcache.googleusercontent.com/search?q=cache:MXmNx9kQ_4oJ:https://www.bondbuyer.com/news/lipa-trustees-approve-pseg-takeover+&cd=1&hl=en&ct=clnk&gl=us&client=safari
[116] Moreland Commission on Utility Storm Preparation and Response: Interim Report. (2013, January 7). Retrieved from: https://moreland.ny.gov/sites/default/files/MAC-Interim-Report1-7-2013.pdf
[117]Exhibit C: Comparison of Key Terms and Provisions for Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC. Retrieved from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwi0_LnF-fPjAhUKmeAKHeSkB94QFjAAegQIABAC&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.aspx%3FDocRefId%3D%257BF4C9C771-CA99-40FE-9DD0-02ED87F60C36%257D&usg=AOvVaw2FbWQWQ-a_zpbZpOeq4VV-
[118] DiNapoli, T. (2015, July). Long Island Power Authority by the Numbers: A Public Authority in Transition. Retrieved from: https://www.osc.state.ny.us/reports/pubauth/lipa_by_the_numbers_7_2015.pdf
[119] Harrington, M. (2019, June 21). Moody's cites LIPA financial policies, rates in hinting at rating upgrade. *Newsday*. Retrieved from: https://www.newsday.com/long-island/lipa-moodys-bond-rating-1.32717790
[120] Harrington, M. (2019, June 21). Moody's cites LIPA financial policies, rates in hinting at rating upgrade. *Newsday*. Retrieved from: https://www.newsday.com/long-island/lipa-moodys-bond-rating-1.32717790
[121] Long Island Power Authority (A Component Unit of the State of New York) Consolidated Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.abo.ny.gov/annualreports/PARISAuditReports/FYE2018/State/LongIslandPowerAuthority2018.pdf

[122] Utility Debt Securitization Authority (A Component Unit of the Long Island Power Authority) Basic Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2019/03/UDSA-audited-final.pdf

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[124] Utility Debt Securitization Authority (A Component Unit of the Long Island Power Authority) Basic Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2019/03/UDSA-audited-final.pdf

[125] Long Island Power Authority (A Component Unit of the State of New York) Consolidated Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.abo.ny.gov/annualreports/PARISAuditReports/FYE2018/State/LongIslandPowerAuthority2018.pdf

[126] Utility Debt Securitization Authority (A Component Unit of the Long Island Power Authority) Basic Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2019/03/UDSA-audited-final.pdf

[127] Long Island Power Authority Consolidated Financial Statements and Required Supplementary Information. (2016 & 2017, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2018/07/LIPA-FS-062118_web.pdf

[128] Utility Debt Securitization Authority (A Component Unit of the Long Island Power Authority) Basic Financial Statements and Required Supplementary Information. (2014 & 2015, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2016/11/2015-UDSA-Financial-Statements.pdf

[129] Long Island Power Authority (A Component Unit of the State of New York) Financial Statements and Schedule of Expenditures of Federal Awards. (2014). Retrieved from: https://www.lipower.org/wp-content/uploads/2016/09/lipa-financials2014-2013.pdf

[130] Long Island Power Authority (A Component Unit of the State of New York) Financial Statements and Schedule of Expenditures of Federal Awards. (2014). Retrieved from: https://www.lipower.org/wp-content/uploads/2016/09/lipa-financials2014-2013.pdf

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[133] Long Island Power Authority (A Component Unit of the State of New York) Basic Financial Statements. (2011 & 2010, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2016/09/lipa-financials2011.pdf

[134] Long Island Power Authority (A Component Unit of the State of New York) Consolidated Financial Statements and Required Supplementary Information. (2017 & 2018, December 31). Retrieved from: https://www.lipower.org/wp-content/uploads/2019/03/LIPA-audited-2018-financial-statements.pdf

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