

South Carolina is building \$5 billion of new gas while still paying for a reactor that never ran.

Gigawatt-scale data centers and new manufacturing are stacking load onto a grid that is retiring coal, restarting V.C. Summer, and carrying billions in stranded nuclear debt. Every one of those forces reshuffles the projects on your list. Invizion helps electric utilities re-sequence a capital portfolio in a click — and defend every decision.

1,000 MW¹ Load of a single proposed data center in Colleton County — a \$6 billion campus five times the size of SC's largest existing centers.	\$5B² Estimated cost of the 2,200 MW Canadys gas plant, a Dominion-Santee Cooper joint venture.	\$9B³ Spent on the V.C. Summer reactors that never generated a kilowatt-hour — debt still on customer bills.	\$332M⁴ Dominion Energy South Carolina's requested annual revenue increase in its 2026 rate case.
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THE SOUTH CAROLINA LANDSCAPE

Four forces are moving your project list at once

None of these is theoretical, and none waits for your next budget cycle. Together they mean the capital plan you approved last year may already be the wrong plan.

DEMAND — LOAD GROWTH

Gigawatts of new load, arriving fast

A single proposed data center near Walterboro would draw about 1,000 MW — roughly Santee Cooper's entire share of the planned Canadys gas plant — against existing Google and Meta centers that each use around 200 MW¹

Duke's Carolinas data-center pipeline has swung from more than 100 requests to under five, but if the survivors land it could reach nearly 5,000 MW — about 10% of Duke's output — and Dominion still counts nine potential centers.⁵ Every large new customer is a capacity commitment competing for the same capital.

RELIABILITY — ADEQUACY

Nuclear-heavy today, thinner margins tomorrow

Nuclear is South Carolina's single largest source of electricity, and the state generated about 100.5 million MWh in 2024 on roughly 24,700 MW of summer capacity.⁶

But coal is retiring and load is climbing at the same time, so the reliability margin now depends on new gas and nuclear projects landing on schedule — which is exactly why utilities are committing billions to Canadys and other builds.²

GENERATION — THE TRANSITION

Coal out, gas and nuclear back in

The 2025 Energy Security Act (H.3309) cleared the way for new gas and faster siting.⁷ Dominion and Santee Cooper are building the 2,200 MW, ~\$5 billion Canadys plant with a \$431 million pipeline, and Duke is proposing a 1,400 MW, \$3.2 billion plant near Anderson targeted for 2031.²

Santee Cooper is retiring the Winyah coal plant within the decade and converting Georgetown to gas.⁸ Meanwhile the abandoned V.C. Summer reactors may restart under a Brookfield deal, with Santee Cooper keeping up to 25% ownership.⁹

CAPITAL — GRID & LEGACY DEBT

Fund the build-out while the old debt is still on the books

Utilities are financing new plants and the transmission to connect gigawatt loads at the same moment they carry the V.C. Summer legacy — about \$9 billion spent on reactors that never ran.³

Dominion is asking regulators for a \$332 million revenue increase at a 10.5% ROE, and Santee Cooper has authorized up to \$700 million in new debt for gas projects.^{4,8} New obligations don't replace the backlog. They stack on top of it, and something on the list has to move.

WHO RUNS SOUTH CAROLINA'S GRID

Two big IOUs, a state-owned utility, and a large co-op system

South Carolina's grid is carried by PSC-regulated investor-owned utilities, the state-owned Santee Cooper, and the electric cooperatives that buy through Central. The pressures are shared; the accountability path differs.

Investor-owned utilities

Rates & capital recovery regulated by the SC PSC

Dominion Energy South Carolina ~820,000 electric customers · Midlands & Lowcountry⁴

Duke Energy Carolinas Upstate SC · Oconee & Catawba nuclear¹⁰

Duke Energy Progress Pee Dee SC · part of Duke's nuclear-heavy Carolinas fleet¹⁰

Dominion (formerly SCE&G) became a Dominion Energy company after Dominion acquired SCANA in 2018 for \$14.6 billion in the wake of V.C. Summer.¹¹

Public power & cooperatives

State-owned board & member-governed, not PSC rates

Santee Cooper State-owned · 165,000+ direct customers; power for co-ops in 46 counties¹²

Central Electric Power Cooperative G&T for 19 distribution co-ops · 2M+ South Carolinians¹³

19 distribution cooperatives Serving ~70% of the state's land mass¹³

A Brookfield restart deal would pay Santee Cooper \$2.7 billion, cutting roughly \$2.6 billion of V.C. Summer debt off customer bills.³

Every capital dollar has to be defensible

Whether you answer to the Public Service Commission or a state board, the question is the same: why this project, why now, why at this cost?

The SC Public Service Commission regulates rates, capital recovery, and resource plans for the investor-owned utilities — Dominion Energy South Carolina and Duke — with the Office of Regulatory Staff representing the public interest⁴

Dominion's 2026 rate case seeks a \$332 million annual increase at a 10.5% ROE (up from 9.94%), about \$20 more a month for a typical residential customer — approvals are not a formality⁴

The 2025 Energy Security Act (H.3309) signed in May 2025, forces a six-month permitting decision window, adds annual rate-adjustment mechanisms, and creates a nuclear advisory council — reshaping how capital gets approved⁷

Santee Cooper is state-owned and sets its own rates through a board, but must still get approval to issue debt — it was cleared for up to \$700 million for gas projects in late 2025⁸

The Base Load Review Act legacy still shapes every filing: the V.C. Summer collapse led Dominion to acquire SCANA for \$14.6 billion in 2018, and ratepayers continue to carry the cost¹¹

The money is moving — can your plan absorb it?

South Carolina utilities are committing capital at a scale not seen in a generation. The constraint is readiness: which projects are shovel-ready, how the timing lines up, and how the old debt is retired alongside the new build.

\$700 million in new Santee Cooper debt (2025) for gas projects — ~\$120M toward Canadys, ~\$300M to convert Georgetown to gas, and \$270M+ for gas expansion⁸

\$2.7 billion from Brookfield under the V.C. Summer restart deal — removing roughly \$2.6 billion of stranded nuclear debt from Santee Cooper customer bills, with a decision expected by 2028⁹

\$431 million Kinder Morgan pipeline to supply the Canadys plant — new generation carries its own fuel-infrastructure capital²

\$8B+ in new generation alone across the \$5B Canadys and \$3.2B Duke Anderson plants — before the transmission needed to connect gigawatt-scale load²

IRA elective (direct) pay puts utility-scale solar, storage, and nuclear tax credits in reach for public power and co-ops like Santee Cooper and Central — if projects qualify and land on time.

SOUTH CAROLINA'S GRID, IN BRIEF

Questions South Carolina utility leaders are asking

Short, sourced answers — the same facts we dig into with utilities looking at their capital programs.

How fast is South Carolina's electricity demand growing?

A single proposed Colleton County data center would draw about 1,000 MW, and if Duke's Carolinas pipeline lands it could add nearly 5,000 MW — roughly 10% of Duke's output.¹⁵

What happened with the V.C. Summer nuclear project?

Construction of two reactors was abandoned in 2017 after about \$9 billion was spent and none ever ran; a Brookfield deal could now restart them, paying Santee Cooper \$2.7 billion and leaving it up to 25% ownership.³⁹

What is the South Carolina Energy Security Act?

H.3309, signed in May 2025, enables new gas generation (including the Dominion–Santee Cooper Canadys plant), imposes a six-month permitting decision window, and adds rate-adjustment mechanisms.⁷²

Does the Public Service Commission set my rates?

The SC PSC regulates rates and resource plans for investor-owned utilities such as Dominion and Duke; Santee Cooper is state-owned and sets its own rates by board. Dominion is currently seeking a \$332 million increase.⁴⁸

Is South Carolina still a nuclear state?

Yes — nuclear is the state's single largest source of electricity, and the potential V.C. Summer restart would add to a fleet that already includes Oconee, Catawba, V.C. Summer Unit 1, and H.B. Robinson.⁶⁹

How does Invizion help South Carolina electric utilities plan capital?

Invizion is scenario-based capital portfolio optimization for utilities. It lets you model how a data-center load surge, a new gas plant, a coal retirement, or a nuclear restart reshuffles your whole project list, re-sequence the portfolio automatically, and keep a defensible record of every decision for the PSC or your board.

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Sources

Every figure in this briefing is tied to a primary or authoritative source.

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ABOUT INVIZION

Capital program optimization for utilities

Invizion is a purpose-built capital lifecycle management platform for utilities. It integrates budgeting, CIP, scenario analysis, and funding-source tracking in one system — so utilities can re-sequence a capital portfolio in a click and demonstrate audit-ready, defensible decisions to regulators, boards, and rating agencies.

See how utilities keep capital plans current and defensible with Invizion.

Explore Invizion →