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Santee Cooper IRP Stakeholder Process 2024-2026

Stakeholder Working Group Meeting #6 – Meeting Summary

Date: May 6, 2025

Time: 10:01 – 2:28pm EDT

Location: Virtual Meeting via Zoom, Vanry Associates facilitating

Meeting: Santee Cooper Stakeholder Working Group Session #6

This summary includes meeting logistics, presentations, and discussions.
It is organized into the following sections:

- Meeting Information & Materials
- Session Participation
- Topics, Presenters, and Discussion
- Commitments and Next Steps
- Appendix - List of External Stakeholder Working Group Members & February Meeting Attendees

Meeting Information & Materials

The Santee Cooper Resource Planning team held its sixth IRP Stakeholder Working Group meeting on Wednesday, May 6, 2025. The IRP Stakeholder Working Group is integral to Santee Cooper's commitment to engage stakeholders in its ongoing integrated resource planning process. The sixth meeting covered several key topics, including a review of the 2024 IRP Update, a discussion about quantitative reliability metrics, and an overview of the integration cost methodology and modeling of operating reserves. The meeting concluded with an overview of nuclear technologies. The presentation that was shared during the meeting is posted to the Stakeholder Working Group section of the Santee Cooper 2024-2026 IRP Stakeholder Process webpage, along with meeting summaries from the first five working group meetings.

Session Participation

The Stakeholder Working Group includes a set membership of organizations representing diverse interests and perspectives, including government, regulatory agencies, and environmental, social, and customer groups. The Santee Cooper Resource Planning team invited each organization to join the working group and assign a primary and secondary member.

Appendix A lists the working group member organizations and the members who attended the May 6, 2025, meeting.

Topics, Presenters, and Discussion

The presentation, which included the meeting agenda and associated timing, was emailed to members on Tuesday, April 29, 2025.

Welcome and Agenda

– Stewart Ramsay, Meeting Facilitator, Vanry Associates

Stewart opened the sixth meeting of the Stakeholder Working Group with a welcome and a review of the agenda. The meeting covered updates to Working Group business and the 2024/2025 IRP and included a discussion on quantitative reliability metrics and integration cost modeling. Guest speaker Chad Boyer from the Electric Power Research Institute (EPRI) spoke about nuclear technologies in the afternoon. The planned presentation from Google was postponed as Katie Ottenweller could not attend due to illness. The adjusted agenda allowed for a longer lunch and an opportunity for more in-depth discussion on all topics. Stewart finished up by reminding participants of new Zoom features allowing them to share reactions and confirmed where to find the feature for raising hands.

Working Group Business

– Clay Settle, Manager, Resource Planning, Santee Cooper

Following the pattern of previous meetings, Clay reviewed the action items from the last meeting. First, Stewart followed up with Anna, who had had connection issues in Meeting 5, to review her questions on Data Center costs, and completed that action item.

For the 2026 IRP, Santee Cooper recommended deferring commitments on load sensitivities, emphasizing that it's too early to make firm assumptions given current market and policy uncertainties. They highlighted that their existing low-load scenario already reflects a conservative outlook—it assumes minimal growth and removes one major industrial customer from the forecast. As a result, this scenario is already more cautious than a baseline forecast that includes that customer. The team suggested revisiting this topic during the actual development phase of the 2026 IRP. Members acknowledged this as prudent, and no objections were noted to the recommendation.

During meetings, Clay requested that participants not use AI transcription tools, as Santee Cooper provides official summaries to serve as the record.

Finally, although the resource team had requested feedback following the coal retirement technical session, no participants have submitted comments to date.

- Anna Sommer (Southern Environmental Law Center) asked whether verbal stakeholder feedback shared during meetings "counted," or if formal feedback had to be in writing. Clay and Stewart clarified that verbal feedback would be considered, and anything intended as a recommendation or request should be submitted in writing to be tracked. Commitments made by Santee Cooper will be reviewed and recorded by the Vanry team after each session.
- Anna acknowledged that clarification and said she would submit a reiteration of her position regarding the Coal Retirement Study assumption.

BATTERY STORAGE RFP

Clay provided a brief update on the battery storage Request for Proposals (RFP), in place of project lead David Millar, who was unavailable. The RFP was issued on March 10, 2025, and focuses on deploying battery energy storage systems (BESS) at the retired coal and oil-fired units of the Jefferies Generating Station, which also hosts a hydroelectric facility. This location was selected to leverage existing transmission infrastructure (up to 300 MW) and qualify for investment tax credits available to energy communities.

The RFP seeks proposals for projects sized at 100 MW, 200 MW, or 300 MW, with submissions due on May 13, 2025. The team expects to complete bid evaluations by July of this year. The proposed structure

involves a tolling agreement in which the selected developer would own and operate the system, while the utility would control dispatch. Specific technical questions should be directed via email for response by David Millar.

- Eddy Moore (Southern Alliance for Clean Energy) began the discussion by asking about the target online date, the possibility of a summary report on bids (e.g., how many were received, price ranges), and whether this project would involve Central, like prior solar RFPs. He also complimented the decision to use the Jefferies site. Clay replied that the battery projects from the RFP are intended to meet the needs identified in the IRP starting in 2027, though the exact start date should be confirmed in the proposal documents. Clay committed to follow up with David Millar regarding when a summary of the RFP process can be shared with the working group. He also acknowledged that while specific contract outcomes can't be predicted, any resource implementation would involve collaboration with Central as required.
- Eddy followed up to ask how the interconnection would work—whether it's part of a broader cluster or a standalone process. Clay explained that Jefferies qualifies under Santee Cooper's Open Access Transmission Tariff OATT for a more streamlined process because it's a brownfield site with retired generation.
- Stephen Thomas (Century Aluminum) asked what kind of generation would be used to charge the batteries, and whether charging from inefficient coal plants at low output might offset the intended efficiency gains. Clay explained that the batteries from the RFP will not be tied to a specific generating resource. Instead, they will charge from the broader grid when energy is abundant or inexpensive, typically during off-peak periods or when there is excess generation, such as solar during sunny afternoons. Bob Davis added that charging sources vary and may include coal or combined-cycle units at night, as well as solar during the day, especially in winter when dual peaks occur. Batteries may be charged overnight for the morning peak and again midday to handle the afternoon increased demand. Stewart noted that batteries are typically operated within efficient parameters to minimize wear. Bob emphasized that using batteries can reduce the need to cycle or restart generators, avoiding operational costs and wear on traditional units.

STAKEHOLDER WORKING GROUP SCHEDULE

Clay began a review of the ongoing IRP working group schedule. The current session would cover the 2024 IRP update, changes to modeling assumptions and methodologies for the 2025 update, integration cost approaches, and reliability-related metrics. Several key studies are underway, including updates to the load forecast, to be discussed at the next working group meeting, and the market potential study, which was reviewed in a recently held technical session.

Adjustments to the timeline were noted: the market potential study's projected timeline needs to shift earlier, as it is now expected to finish in early 2025 in time for the triennial planning cycle. Similarly, the effective load-carrying capability (ELCC), reserve margin, and integration studies being conducted by PowerGEM (formerly Astrapé Consulting) are all targeted for completion by the end of Q1 2026, ahead of the 2026 IRP.

The next working group meeting, scheduled for June, will include discussions on assumptions for the 2025 update, portfolio strategies, metrics, and updates on coal retirement studies and the 2025 load forecast.

- Taylor Allred (Coastal Conservation League) asked why a low-load sensitivity, excluding probable new loads, can't be included in the 2025 update? Clay replied that the current low-load case already uses a conservative P5 probabilistic forecast *and* removes the equivalent of one large industrial customer

(~400 MW). This results in a lower forecast than simply excluding probable new loads. Still, the team is open to discussing this idea further with Greg and Carl.

Clay continued to outline the 2025 IRP update schedule, highlighting milestones in the stakeholder and working group process including technical sessions and future working group meetings. The 2025 IRP update filing is scheduled for September 16**;** after which, non-disclosure agreements (NDAs) will be offered for member access to the data room that will include modeling files, inputs, outputs, and results. A follow-up working group meeting will review the IRP results, followed by a general notice meeting later in the year.

- Jake Duncan (Vote Solar via chat**)** asked what the filing date for the full 2026 IRP. Clay replied that the target filing date is September 30, 2026**.**

2024 IRP Update and 2025 IRP Update

– Clay Settle, Manager, Resource Planning, Santee Cooper

Clay reviewed the Public Service Commission (PSC) 2024 IRP Update directives and previewed methodological changes planned for the 2025 IRP cycle. Presenting a near-verbatim summary of the PSC's April 3 approval orders, he encouraged member input as Resource Planning is working through how to best cover these in working group sessions and incorporate related stakeholder feedback into future IRPs.

Clay began with a discussion of the following PSC directives:

- Santee Cooper shall continue to provide updates regarding its plans for the Cross Generating Station retirement evaluation and associated transmission evaluations, as well as the results of the study in support of the 2026 Triennial IRP in the Stakeholder Working Group.
- Santee Cooper shall continue to monitor hydrogen availability and discuss price forecast assumptions with IRP stakeholders in the Stakeholder Working Group prior to the 2026 Triennial IRP.
- Santee Cooper shall continue to discuss updates related to the Inflation Reduction Act and Infrastructure Investment and Jobs Act incentives in the Stakeholder Working Group.
- Santee Cooper shall perform production cost model benchmarking studies of its Encompass model in conjunction with its comprehensive IRPs and discuss the results in the Stakeholder Working Group.
- For future IRPs and IRP Updates, Santee Cooper shall monitor, track, and report annually the forecasted versus actual load consumption for Economic Development Load.

Clay asked for questions:

- Anna asked if tracking includes stages of development, reasons for attrition, or customer types. Clay replied that he will consult with the load forecasting team; confidentiality concerns may apply.
- Anna also inquired about the approach for production cost benchmarking. Clay responded that**,** likely, the approach will be similar to Dominion's benchmarking model outputs (e.g., capacity factors) against historical data. Santee Cooper uses GenTrader for fuel forecasts, SERVM for resource adequacy, and EnCompass for IRP modeling.
- Eddy suggested that Georgia Power reports large loads in three stages: contract signed, service requested, or early stages. He inquired if Santee Cooper would do the same and provided a link for more information. Clay indicated that he would take the idea back to the team.

Clay continued the review of PSC directives:

- Santee Cooper shall update its GHG Rule Portfolio modeling assumptions in the 2025 IRP Update to reflect the latest EPA guidance available at the time the modeling is performed. Santee Cooper shall discuss changes to its assumptions based on changes to the GHG Rule in the Stakeholder Working Group prior to the 2025 IRP Update.
- Santee Cooper shall provide updates in future IRPs and IRP Updates regarding the planned solicitation for a battery energy storage system of up to 300 megawatts of four-hour duration which, according to Santee Cooper's Reply Comments, would be sited at the Jefferies Generating Station, to leverage existing interconnection capacity and the Energy Communities tax credit bonus per the Inflation Reduction Act.
- In advance of future IRPs and IRP Updates and as required by S.C. Code Ann. Section 58-27-40(A)(3), Santee Cooper shall continue to host the Stakeholder Working Group. Further, Santee Cooper shall provide updates to the Commission about the activities of the group and Santee Cooper's plans to incorporate lessons learned into future IRP filings.
- Santee Cooper shall discuss its plans to prepare the next Market Potential Study in the Stakeholder Working Group ahead of the Market Potential Study update in 2025.
- Taylor expressed his appreciation for the improved meeting summaries and the inclusion of Stakeholder comments in the IRP record.

Clay concluded this section by letting the team know that Santee Cooper is preparing the next Market Potential Study in coordination with the Stakeholder Working Group in advance of the formal 2025 update. A technical session has already been held to begin discussing the study, and Steven, along with the programs team, will continue to provide progress updates as the work advances.

2025 IRP UPDATE METHODOLOGY CHANGES

Clay outlined key updates to assumptions and modeling methods for the 2025 IRP Update. Santee Cooper plans to maintain a similar portfolio strategy to that used in the 2024 IRP update, with no major shifts anticipated unless there are significant changes to greenhouse gas regulations. However, the methodology for developing thermal resource assumptions—specifically for capital costs, O&M costs, and performance characteristics—will change. In previous IRPs, the team used data from EPRI's TAGWeb, a Black & Veatch front-end engineering design (FEED) study, and internal estimates to model thermal resources like combined cycle units, CTs, and nuclear assets. In the 2024 update, capital costs were adjusted to align with Dominion's 2024 IRP update, while other inputs still relied on TAGWeb and prior estimates. For 2025, Santee Cooper has engaged Sargent & Lundy to provide updated assumptions for thermal resources. As a leading industry consultant with active project development experience, Sargent & Lundy will supply capital cost, O&M, and performance inputs, with the goal of ensuring more current and industry-aligned data for the IRP modeling.

- Anna asked if these assumptions would be shared before modeling. Clay replied that, yes, they'll be presented at the June meeting.
- Anna asked whether Sargent & Lundy is also the owner's engineer for the Kennedy project, to which Clay replied yes.
- Eddy asked whether the new assumptions would be site-specific, like the previous Winyah study? Clay replied that, no, the Sargent & Lundy assumptions are for a generic site, but aligned with their site-specific work.
- Jake Duncan asked whether the 2025 assumptions will be shown alongside the 2024 for comparison. Clay responded that this is not currently planned and could be considered.

- Findlay, in support of Jake's suggestion, recommended highlighting significant changes and the basis for these, even if a full comparison isn't shown.

Clay continued the discussion to cover adjustments to renewable resource assumptions for the 2025 update. Santee Cooper is considering adjusting the first-year-available dates for solar and onshore wind resources. For solar, given the practical lead times associated with procurement, contracting, and interconnection, the utility now views 2028 as a more realistic target, rather than the 2026 forecast in the previous update. Although there are no finalized plans, another solar RFP may be initiated later this year or early next year, with potential projects from the current RFP, currently in negotiation, expected to be included in the modeling. These updates aim to better reflect the likely development timelines and commercial operation dates for new solar capacity.

For onshore wind, Santee Cooper is reassessing the previously assumed 2029 availability date. The utility's research and development (R&D) team is selecting a consultant to conduct a comprehensive wind resource study, focusing on site suitability, wind speeds, and applicable technologies within South Carolina. Given the lack of utility-scale wind projects in the state and the typical five- to seven-year development timeline for such projects (including siting, planning, interconnection, and procurement), the utility now proposes pushing the availability date to 2034. This timeline assumes a 2026 IRP decision to proceed, followed by a development process beginning in 2027. The outcome of the wind study will inform future updates and help validate or adjust this proposed schedule

Clay asked for questions:

- Eddy asked whether earlier solar deployment would be feasible using energy-only interconnection. Clay indicated that he would raise this with the team, noting capacity value implications.
- Findlay asked about provisional interconnection options. Clay indicated that Santee Cooper will investigate, but he was unsure if these were currently available in Santee Cooper's OATT. Findlay followed up by referencing and sharing the current filing docket number 2019-326-E (via chat) from Dominion and Duke as an example of using provisional service.
- John Burns and Hamilton Davis (Carolina's Clean Energy Business) supported exploring both provisional and Energy Resource Interconnection Service (ERIS) options, citing benefits in flexibility and system efficiency.

Quantitative Reliability Metric
– Clay Settle, Senior Manager, Resource Planning
– Bob Davis, Executive Consultant, nFront

Clay began by reviewing the suite of quantitative metrics used to evaluate portfolios in the IRP process, emphasizing that the same set used in the 2023 IRP and 2024 update will also be applied in the 2025 update. He provided a high-level overview of each metric, noting that more detailed explanations are available in the IRP documentation. These metrics include net present value to estimate total system power costs, min-max regret to evaluate potential cost risks when choosing one portfolio over another, and a reliability metric that assesses the share of non-dispatchable resources. Other metrics discussed include fixed cost obligations, fuel cost resiliency under varying price scenarios, CO_2 emissions, generation diversity (measured by coefficient of dispersion), the proportion of clean energy, the impact of load uncertainty, and the projected rate impact on customers. Bob agreed with Clay's explanation and highlighted that reliability uncertainty stands apart as a more qualitative metric. He acknowledged that their current reliability approach, borrowed from Dominion's IRP process, is an area ripe for improvement and will be addressed further in the session. Clay then elaborated on how reliability will be handled in the 2026 IRP, explaining that portfolios will be passed

through a reliability verification process using SERVM. This process involves generating portfolios through EnCompass modeling, testing each for loss of load expectation (LOLE) under extreme weather scenarios via SERVM, adjusting the portfolios to meet a 0.1 LOLE threshold, and feeding those adjustments back into EnCompass for updated cost modeling. As a result, reliability will be ensured through this iterative process, and all final portfolios will meet standard reliability expectations without requiring a separate metric.

- Chelsea Hotaling (Energy Futures Group representing Southern Environmental Law Centre) asked if the data center load would be separated from the peak load forecast in SERVM**.** Clay confirmed that the data center load will be divided into a separate load shape to better reflect the different seasonal load patterns, particularly higher summer cooling demands, which differ from the winter-driven peaks of other loads. This separation is intended to improve the realism of reserve margin and resource adequacy evaluations.
- Chelsea reflected on two different modeling approaches—adjusting in SERVM first or trying to trigger additional resources in EnCompass—and asked which is preferred. Bob acknowledged that her testimony from the 2023 IRP was consistent with their current thinking. They are still evaluating the best path forward to ensure that no portfolio is unintentionally disadvantaged and are keeping their options open.
- Eddy asked whether reliability needs could be met using demand-side resources such as energy efficiency or demand response**.** Clay responded that this might be difficult to assume at scale (e.g., 200 MW) without specific non-firm customer participation, but it's a valid idea that they will consider. Bob added that one approach might be to assume a generic, technology-neutral resource with defined cost and performance, applied consistently across portfolios to avoid biasing results.
- Anna asked if the "generic resource" Bob mentioned would be technology neutral. Bob confirmed this and noted that while a conceptual approach for now, more discussion would be needed. He emphasized the importance of not skewing results by assigning one technology type to some portfolios and a different one to others, especially in sensitive comparisons like "no new fossil" portfolios versus traditional ones.
- Anna asked what study year(s) might be used for the SERVM reliability assessment. Bob said they haven't decided yet, though SERVM typically models multiple years. Clay added that 2030 is the planned study year for reserve margin studies, but for the 2026 IRP's reliability checks, the year(s) are still under discussion. Joel Dison (PowerGEM) noted that a near-term year is more useful due to lower uncertainty, and Clay agreed.
- Anna raised a concern that reliability checks should align with major decisions, such as retirements or large investments, so the analysis reflects actual future conditions**.** Noting this is a valid point, Clay and Bob acknowledged that aligning reliability checks with key decision years, such as major retirements or capacity additions, makes the analysis more meaningful.
- Eddy reiterated the importance of choosing a study year for reliability checks that reflects the timing of major IRP decisions, like retirements and growth-driven investments**.** Clay agreed that this reasoning made sense and clarified that the intention is to evaluate reliability in the context of the timing of major decisions. Bob echoed this, saying they are considering multiple years of analysis for scenarios like coal retirements.
- Clay added that, in addition to conducting a reliability assessment for the 2026 IRP, they are also considering reporting several reliability-related outputs**.** These include loss of load hours, loss of load probability, and expected unserved energy. While not formal metrics, these outputs would offer transparency across portfolios. Bob added that, because all portfolios will be adjusted to meet the

same LOLE standard, they may all end up with the same level of reliability, potentially making a comparative reliability metric redundant, and they still plan to report these figures in the IRP.

Integration Cost Methodology and Modeling Operating Reserves
– Clay Settle, Senior Manager, Resource Planning
– Bob Davis, Executive Consultant, nFront
– Joel Dison, Technical Manager, PowerGEM

Joel outlined the purpose and general methodology of an upcoming operational study intended to assess the impact of renewable energy fluctuations on system reliability. The focus is on determining the level of 10-minute operating reserves—often called regulating reserves—needed to accommodate the rapid, weather-driven variability introduced by renewables like wind and solar. While the system already manages frequent load fluctuations (e.g., motors switching on or off), renewables add a second, more unpredictable layer of variation that the system must be equipped to manage moment-to-moment.

To evaluate this, the study will use a five-minute production cost simulation rather than the traditional hourly approach. By modeling both load and renewable output at this finer timescale, the analysis can identify where the system is unable to meet demand from one interval to the next—what Dison called "flexibility violations." These occur when online resources lack the ramping ability to adjust quickly enough to match the net load, even before renewables are added. Introducing additional renewable energy tranches will likely increase the frequency and magnitude of these violations.

To address the added variability, the study will calculate how much additional operating reserve is needed to bring those flexibility violations back down to baseline. This might involve committing more fast-responding resources, like combustion turbines or steam units, to be ready at all times. The resulting estimate of incremental operating reserves will be attributed specifically to the renewables, since these reserves would not be necessary under load-only conditions. While the study is complex, Dison emphasized that its main goal is to define the additional resource commitments required to integrate renewables without degrading system performance.

- Hamilton asked how the baseline for flexibility is established and whether storage resources would be counted toward meeting reserve needs. Joel said there's no North American Electric Reliability Corporation (NERC) standard to define the baseline; they observe the system's response without added renewables to set the baseline. On storage, Joel confirmed that if a battery meets the ramping requirement, it will be credited accordingly.
- Hamilton suggested it would be better to link flexibility thresholds to reliability standards (e.g., BAAL (Balancing Authority Ace Limit)) rather than just a "no change" baseline. Joel noted SERVM doesn't model Area Control Error (ACE) or frequency response directly, which makes tying it back to BAAL imprecise.
- Anna asked similar questions about the connection between SERVM results and NERC reliability standards. Joel acknowledged the challenge and promised to take the concern back for consideration. Anna noted that other utilities also wrestle with this and offered to connect her more experienced colleague with the modeling team.
- John asked whether the model would consider transmission constraints or inertia. Joel said the transmission modeling is limited to a pipe-and-bubble approach. Inertia and frequency response are not modeled in SERVM and would require a different kind of analysis.
- Eddy asked whether Santee Cooper's current operations rely on off-system flexibility and whether their system has enough inherent flexibility. Bob replied that Santee Cooper handles most reserves

internally, with considerable flexibility coming from coal units and combined cycles. Joel added that when needed, combined turbines (CTs) can be brought online to create ramping headroom. Clay noted that while coal units may appear to run flat, their ramp rates still support intra-hour adjustments, which is reflected in the integration study inputs.

- Eddy asked whether they could isolate the solar-driven component of net load excursions and whether they could look at up/down excursions separately. Joel confirmed that the analysis is based on net load**,** which reflects both solar and demand variation, often canceling each other out. He added that they focus more on upward excursions, where thermal generation needs to ramp up quickly, as this poses more operational risk today.

MODELING PLANS FOR THE 2026 IRP

Clay explained that for the 2023 IRP, 2024 and 2025 updates, integration costs were added directly to the cost of solar and wind in EnCompass modeling, but operating reserves were not increased in production cost runs.

For 2026, Santee Cooper plans to stop assigning cost penalties for renewable tranches, use updated EnCompass functionality to dynamically increase operating reserves based on renewable levels, and feed in the incremental reserve requirements from the upcoming PowerGEM study. Clay emphasized that this is new and untested, so the team will evaluate its feasibility and computational load throughout 2025. Bob clarified that if the computational burden proves too great, they may need to reconsider. The current goal is to model operating reserves directly rather than assign abstract costs.

Nuclear Technologies (Guest Presentation)
– Chad Boyer, Principal Technical Leader, Electric Power Research Institute (EPRI)

Chad Boyer began his presentation by outlining his background as a nuclear engineer with experience across the utility sector, nonprofit energy organizations, and major nuclear construction projects like the AP1000 builds in Georgia. Now part of the advanced nuclear technology team at EPRI, he focuses on project development and technical strategy, particularly helping utilities understand how to launch new nuclear initiatives. EPRI itself emerged in the 1970s as a response to grid reliability concerns, with a growing focus on nuclear reliability over time. He emphasized that EPRI's work is rooted in independent, research-driven insights rather than industry lobbying or advocacy.

Chad then offered a historical overview of nuclear development in the U.S., noting that while water-cooled reactors (pressurized water reactors (PWRs) and boiled water reactors (BWRs)) dominate today's fleet, there were originally a wide range of reactor designs explored in both government and commercial pilot programs. Some early commercial utilities—like those behind Peach Bottom and Fermi 1—tested non-light-water designs, while Department of Energy (DOE) sites like Oak Ridge and Idaho led broader experimentation. Many of these early designs are now seeing renewed interest in the form of advanced reactors, including small modular reactors (SMRs) and microreactors, driven by evolving energy needs and deployment constraints.

Chad pointed to international developments, highlighting that while countries like China have led in deployment, new builds are accelerating worldwide. Several advanced reactor projects are in planning or early construction stages globally, and U.S. universities and national labs continue to support demonstration reactors. Vendors are exploring a range of technologies—molten salt, high-temperature gas, and fast reactors—with different benefits related to efficiency, safety, siting flexibility, and fuel utilization. Some are also focused on local manufacturing and supply chain independence, such as Holtec and Rolls Royce.

Finally, he addressed the deployment challenges, especially around timelines and risk. He outlined a potential timeline for bringing a reactor online by 2035, assuming technology selection and siting by 2026, permitting by 2029, and a four- to five-year construction window. While SMRs are gaining momentum, Chad noted a recent resurgence of interest in gigawatt-scale plants as utilities confront large-scale generation needs. Merchant generators are now also considering nuclear options, though none want to be "first movers" without cost-sharing or federal support. Globally, policy shifts and energy security concerns are reopening the door to nuclear in places like Belgium, Italy, and even potentially Germany.

- Findlay asked whether Chad's timeline was based on a traditional 10 CFR Part 50 process. Chad confirmed that most developers today are leaning toward Part 50 licensing, using it to fund and finalize designs, with Part 52 processes considered later.
- Findlay also asked whether anyone in the U.S., especially in regulated markets like Santee Cooper's, is seriously considering building large-scale reactors like the AP1000. Chad said yes—there's renewed interest in gigawatt-scale reactors in the last couple of years, especially where demand growth justifies it.
- Anna asked for clarification on Chad's deployment timeline slide, particularly whether it reflected first-of-a-kind or nth-of-a-kind assumptions. Chad clarified that the timeline reflects an nth-of-a-kind scenario, assuming several similar projects have already been built. The 2031 construction start date would ideally be timed to capture learnings from earlier projects.
- Eddie also dug into the timeline and asked whether it applied to AP1000s or only to advanced reactors like SMRs. Chad said the four-year construction timeline shown was really geared toward advanced reactors, but he noted that AP1000s could see improved timelines if lessons learned from recent builds (like Vogtle) are applied.
- Eddie then asked about the GE BWRX-300 SMR model that TVA appears to be advancing, noting that it seems most likely to be first across the finish line. Chad acknowledged it's gaining traction, with strong support from Ontario Power Generation (OPG), TVA's growing interest, and visible momentum from multiple utilities. He confirmed that OPG has moved the furthest, including securing a construction license.

Meeting Close

– Stewart Ramsay, Meeting Facilitator, Vanry Associates

Stewart closed the meeting with a review of next steps and action items. Members were reminded that a written summary of the meeting will be distributed for review and comment. The next Stakeholder Working Group meeting is scheduled for June 4, 2025, and the next General Notice meeting is tentatively planned for November. The facilitation team encouraged members to reach out if they have topics they wish to present or speakers they would like to invite, emphasizing the importance of stakeholder-driven dialogue in shaping the IRP process.

Commitments and Next Steps

ACTION ITEMS – noted during the meeting discussion	**By WHOM**
1. Members to send Santee Cooper specific requests or recommendations on the information presented at the April 10, 2025 Coal Retirement Technical Meeting prior to May 24, 2025.	All
2. Resource Planning will share the request for an RFP summary of the Jeffries-based BESS project with the RFP team and report back to members at the next working group meeting if this summary will be prepared, and if so, when it will be shared.	Clay
3. Resource Planning will share member feedback regarding tracking potential economic development load with the Load Forecast group.	Clay
4. For the next working group meeting, Resource Planning will consider presenting the 2024 cost assumptions alongside the 2025 assumptions for thermal resources.	Clay
5. Resource Planning will share member feedback regarding Energy Resource Interconnection Service (ERIS) and Provisional Interconnection Service with appropriate internal subject matter experts (SMEs). Members are to send information they would like shared to Clay and Will.	Clay & All

Next Steps:

- The next Working Group meeting is targeted for June 4, 2025
- The next general notice meeting is targeted for November 2025
- Members wishing to present a topic at a future meeting may contact Will Brown or Clay Settle

APPENDIX A

List of Stakeholder Working Group Members and Attendees

ORGANIZATION	MEMBER / ALTERNATE	MAY 6th ATTENDEE
Office of Regulatory Staff	Findlay Salter Jeffery Gordon Julian McElhaney **Shane Hyatt**	Findlay Salter Jeffrey Gordon Julian McElhaney Sam Christmus Shane Hyatt
SC Dept of Consumer Affairs	**Jake Edwards** Roger Hall	Jake Edwards Roger Hall
SC Dept of Natural Resources	Elizabeth Miller **Lorianne Riggin**	Elizabeth Miller
SC Dept of Environmental Services	**Rhonda Thompson** Robbie Brown	Robbie Brown
Central	**Caleb Bryant** Leslie Maley	Caleb Bryant Heather Zrust
J. Pollock	Jeffry C. Pollock **Jonathan Ly**	Jonathan Ly
Century Aluminum	**Michael Early** **Stephen Thomas**	Stephen Thomas
Nucor	**Bradley Powell** Karl Winkler	
Messer	**Michael Peters** Steven Castracane	
Google	**Katie Ottenweller** Will Cleveland	Will Cleveland
SC Association of Municipal Power Systems	**Adam Hedden** Eric Budds	Adam Hedden
Individual	**Charles Hucks**	
Individual	**Richard Berry**	
Individual	**Diane Bell**	Dianne Bell
Individual	**Denny Boyd**	Denny Boyd
Carolinas Clean Energy Business Association	Hamilton Davis **John Burns**	John Burns
Conservation Voters of South Carolina	Erin Siebert **Jalen Brooks-Knepfle** John Brooker	
Coastal Conservation League	Kennedy Bennett **Taylor Allred**	Kennedy Bennett Taylor Allred
Energy Justice Coalition	Shayne Kinloch **Zakiya Esper**	
South Carolina Appleseed Legal Justice Center	**Sue Berkowitz**	
South Carolina Research Authority	**Greg Wilcox**	
Southern Alliance for Clean Energy	**Eddy Moore** **Maggie Shober**	Eddy Moore Maggie Shober

Southern Environmental Law Center	Anna Sommer Chelsea Hotaling **Kate Mixson** Thomas Gooding	Anna Sommer Chelsea Hotaling Kate Mixson Thomas Gooding
Sierra Club	**David Rogers** Dori Jaffe Mikaela Curry Sari Amiel	Sari Amiel
Vote Solar	**Jake Duncan**	Jake Duncan
Santee Cooper Resource Planning	**Clay Settle** David Millar Rahul Dembla **Will Brown**	Clay Settle Will Brown
nFront Consulting	**Bob Davis** Jonathan Nunes	Bob Davis Jonathan Nunes
PowerGEM		Joel Dison
Energy Power Research Institute		Chad Bower Jeff Greene Michele Somerday
Vanry Associates	Peter Claghorn **Stewart Ramsay** Yvette Smith	Peter Claghorn Stewart Ramsay Yvette Smith

**Members listed in alpha order by first name*

Also in Attendance

GridLAB	Nikhil Kumar
Energy Futures Group	Nina Peluso
J. Pollock, Inc	Shawn McGlothlin
	Taylor McNair
	W. Potter