

# Winyah Generating Station 2022 Annual Progress Report for Permanent Cessation of Coal Combustion Subcategory Under 2020 ELG Rule

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Water & CCR Environmental Services

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## 1 Introduction

Santee Cooper plans to retire the Winyah facility by the end of 2028 per the 2020 Integrated Resource Plan (IRP), allowing for submittal of a Notice of Planned Participation (NOPP) for the permanent cessation of coal combustion (retirement) subcategory. A NOPP including all the information required under 40 CFR 423.19(f) was submitted in October 2021.

The 2020 ELG rule also required submittal of annual progress reports. Per the rule, the annual report should include the following:

- 40 CFR 423.19(f)(3) *Annual Progress Report* - Annually after submission of the Notice of Planned Participation in paragraph (f)(1) of this section, a progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.
- 40 CFR 423.19(f)(4) *Contents* - An Annual Progress Report shall detail the completion of any interim milestones listed in the Notice of Planned Participation since the previous progress report, provide a narrative discussion of any completed, missed, or delayed milestones, and provide updated milestones.

## 2 Progress Amidst Challenges

Santee Cooper made progress toward replacing the Winyah coal units in 2022, while encountering a number of challenges. Among the challenges faced in 2022 include the following, which were noted in the original NOPP submittal:

- Central Electric Cooperative chose to opt out of Santee Cooper's proposed shared resource, a new 2x1 natural gas combined cycle (NGCC) facility to be built at the Winyah Generating Station. Santee Cooper was informed of this decision on April 28, 2022 per the terms of the coordination agreement. This triggered a new round of work for both utilities to develop non-shared resources to replace the Winyah coal units. More discussion of the progress made in working with Central follows.
- EPA's has revealed little about their intentions in revising the 2020 Steam Electric Effluent Limitation Guidelines, adding additional uncertainty to station retirement.

In spite of these challenges, substantial progress has been made, as detailed below.

### Technology and Siting Efforts

Santee Cooper hired a consultant to evaluate potential technologies for a 2x1 NGCC facility. This led to development of a layout that can be used elsewhere if necessary, along with additional understanding of the construction schedule. Santee Cooper also commissioned and received a FEED study concerning natural gas supply at the Winyah

site. The utility has not been able to move forward with this plan given Central's decision to opt-out, but it did result in improved understanding of the project.

#### Coordination with Central and a New Path Forward

Santee Cooper works with its largest customer, Central Electric Power Cooperative, Incorporated, under the terms of a power system coordination and integration agreement (the Coordination Agreement). Central's portion was 59% of Santee Cooper's total generation sales in 2021. Under the Coordination Agreement, Santee Cooper is the predominant supplier of Central's energy needs. The Coordination Agreement provides for close cooperation on planning of future resources and gives Central the ability to "opt-out" of future generation resources. In order to retire Winyah, the first step under the Coordination Agreement was for Santee Cooper to propose a shared resource to Central. Santee Cooper proposed a 2x1 NGCC unit at Winyah per the terms of the 2020 integrated resource plan on January 11, 2022, and Central notified Santee Cooper of its decision to opt out of this proposed shared resource on April 28, 2022. At that point, both parties had 180 days under the Coordination Agreement to develop and share plans for two non-shared resources, whose combined contribution to the system would be sufficient to offset retirement of the Winyah coal units and fulfill all the requirements offered by the proposed shared resource. Both parties have until October 25, 2022 to share their plans for their own non-shared resources to meet this need.

#### Progress Toward Development of a New Integrated Resource Plan (IRP)

Santee Cooper's plans to retire Winyah's coal units are based on the utility's 2020 Integrated Resource Plan (IRP). The utility is in the process of developing a new IRP and has spent much of 2022 working with consultants and stakeholders to determine its future generation strategy. Three stakeholder meetings have been held to date (March 1, April 29, and June 28); presentations and meeting materials are available to the public at Santee Cooper's Integrated Resource Plan website. Current plans call for additional stakeholder meetings to be held as necessary as the utility shares its preliminary IRP results. The IRP will be filed with the Public Service Commission (PSC) by May 15, 2023.

#### Alternatives for a Non-Shared Resource Site

Santee Cooper has worked diligently to find an appropriate new site for a non-shared resource, commissioning several studies including in-field wetlands, cultural resources, protected species, and phase I environmental site assessment studies. Additional work is ongoing.

#### Evaluation of Technology Alternatives for the ELG Rule

Given the coordination-related delays in initiating the project, Santee Cooper seriously evaluated the membrane technology which is the technology basis for the 2020 ELG Rule's Voluntary Incentive Program (VIP). Per the terms of the 2020 Rule, Santee

Cooper could then opt to automatically transfer into the VIP subcategory via submission of a transfer NOPP by December 31, 2025. This will allow sufficient time to install the new technology if necessary. Santee Cooper has requested that DHEC add alternative limits for the VIP subcategory to the draft permit accordingly.

### 3 Ongoing Planning and Coordination Efforts

Moving forward, Santee Cooper will be working to complete its IRP process in 2023 and to initiate its official siting process under Act 90.

#### IRP Process

Current plans call for additional stakeholder meetings to be held as necessary as the utility shares its preliminary IRP results. The IRP will be filed with the Public Service Commission (PSC) by May 15, 2023. Upon submission, the PSC must approve, modify, or deny an IRP within 300 days (March 10, 2024, in this case), and interested parties may intervene. If the PSC modifies or rejects the IRP, Santee Cooper would have 60 days to provide an updated version, which must, in turn be reviewed by the Office of Regulatory Staff who will submit a report to the PSC within 60 days. Within 60 days of receiving the report from the Office of Regulatory Staff, the PSC must determine whether to accept the revised IRP or mandate further changes. Annual updates to the approved IRP are then required, and the process must be repeated at least every three years.

#### Siting Process

As a result of Act 90 of 2021, Santee Cooper must now file an application with the Public Service Commission for a Certificate of Public Convenience before Santee Cooper may commence construction of a proposed generating plant and associated facilities, provided the proposed facility is capable of operation at a capacity of more than 75 MW (S.C. Code Ann. 58-33-180 (A)(1); S.C. Code Ann. § 58-33-20 (2)(a)). Before the Commission will issue such a certificate, Santee Cooper must demonstrate, by a preponderance of evidence, that the construction and operation of the proposed facility is in the public interest. The length of time from filing an application with the Commission and the issuance of a final certificate can take as long as a year.

#### Permitting Process

Santee Cooper will continue to evaluate potential sites for the non-shared resource, involving additional field studies, and will initiate its permitting efforts upon completion of this effort, likely taking place in a parallel path to the state-defined siting process discussed above. Efforts will focus on avoiding wetland and navigable waters impacts to the maximum degree possible to facilitate a compressed schedule.

## 4 Timeline for Winyah Retirement or Installation of New Technology

Progress toward the milestones Santee Cooper suggested in its 2021 NOPP submittal is below. Comments on milestone initiation and completion are italicized. New milestones are shaded.

**Table 1. Updated Milestones.**

Milestone	Estimated Completion Date
Select site, initiate project	12/31/2021 <i>Completed 1/11/2022; however, efforts had to be redirected to a new non-shared resource on 4/28/2022 given Central's decision to opt-out.</i>
Procure consultants, select technology	6/30/2022 <i>This effort moved forward on schedule as described previously, but will need to be reinitiated given Central's decision to opt-out on 4/28/2022.</i>
Submit transfer NOPP to pursue VIP option as necessary.	12/31/2025
Apply for and receive federal and state permits, initiate construction upon receipt, commission new asset.	12/31/2028 <i>Initiation of the permitting effort has been delayed given the new need for a non-shared resource and associated state approvals.</i>
Permanently idle all Winyah units (or) operate under the VIP option	12/31/2028

## 5 Additional Information

Santee Cooper provides some additional information related to the project and our previous correspondence as follows:

- In its 2021 NOPP submittal, Santee Cooper noted that Unit 4 had been idled in 2020 but was still available as necessary. Due to load growth over the last year, Unit 4 will be returned to service in 2023.

- For a generating facility fueled by natural gas, a line extension from and/or an upgrade to an existing natural gas pipeline will likely be required. Most gas pipelines are interstate and are under the jurisdiction of the Federal Energy Regulatory Commission (FERC) pursuant to the Natural Gas Act (NGA). Before such a line extension or upgrade can be made, the natural gas pipeline must file and obtain a certificate of public convenience from FERC under the NGA. It is difficult to predict how long it would take for the gas pipeline to obtain such a certificate. At this time Santee Cooper anticipates that the natural gas supply company will be responsible for obtaining certification and any additional permits for gas supply lines as necessary.