

# **Santee Cooper - Cross Generating Station**

## **Notice of Planned Participation - Annual Report of Progress**

(40 CFR Part 423 Section 19, Paragraph (j)(3) and (j)(4))

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Santee Cooper's Cross Generating Station (Cross) is a four-unit, coal-fired electric generating station located in Pineville, South Carolina. Cross is subject to EPA's Effluent Limit Guidelines (ELGs) under 40 CFR 423: Steam Electric Power Generating Point Source. Revised ELGs under the Steam Electric Reconsideration Rule were published on October 13, 2020 and included new requirements for flue gas desulfurization (FGD) wastewater (WW) discharges. Santee Cooper submitted a Notice of Planned Participation (NOPP) for Cross on a contingent basis, on October 13, 2021 to South Carolina Department of Health and Environmental control, now South Carolina Department of Environmental Services (SCDES), Water Facility Permitting Division, noting the potential for Cross to establish effluent discharge limitations set by the Voluntary Incentives Program (VIP) under 40 CFR Part 423 Section 13 Paragraph g3i.

The purpose of this document is to provide a progress report to SCDES regarding Cross's contingent election to comply with the voluntary incentive plan (VIP) requirements for FGD wastewater treatment required by 40 CFR Part 423 Section 19, Paragraph j3 and j4<sup>1</sup>.

*40 CFR Part 423.19.j(3) Annual progress report. After submission of the Notice of Planned Participation in paragraph (h)(1), a progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.*

*40 CFR Part 423.19.j (4) Contents. An Annual Progress Report shall detail the completion of interim milestones presented in the engineering dependency chart from the Notice of Planned Participation since the previous progress report, provide a narrative discussion of completed, missed, or delayed milestones, and provide updated milestones.*

### **Membrane Treatment (VIP) Milestone Progress**

The initial October 2021 NOPP was submitted to retain the VIP alternative as an option while biological treatment systems pilots for BAT continued, and additional data and cost were evaluated. As of the last annual report submitted in October 2023, Santee Cooper elected to retain the VIP option given regulatory uncertainty but proceed with EPA's 2020 BAT of physical-chemical and biological treatment with ultrafiltration based on the ranking methodology presented in the March 2023 Preliminary Engineering Report and subsequent Final Engineering Report.

EPA published a Final Rule on Clean Water Act 40 CFR Part 423 in the Federal Register on May 9, 2024, revising the effluent limitations guidelines of the steam electric power generating point source category for flue gas desulfurization wastewater, bottom ash transport water, combustion residual leachate and legacy wastewater. The 2024 ELG rule retains the 2020 ELG requirements and adds to the 40 CFR 423 Steam Electric Effluent Limitation Guidelines. Based on the current regulatory understanding, and progressing construction of the BAT system, the option to meet VIP limits is no longer a viable option for Cross Generating Station.

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<sup>1</sup> 40 CFR Part 423 revised May 9, 2024 89 FR 40293; previous reference 40 CFR Part 423 Section 19, Paragraph h3 and h4.

## Engineering Dependency Schedule Updates for VIP Option

		Baseline*		Revised#	
	Task Name	Start	End	Start	End
	<b>Santee Cooper Cross Station FGD VIP Engineering Dependency Chart</b>		12/31/2028		
<b>Define Phase</b>	<b>FGD WW Treatment Project Initiation</b>	1/1/2021	12/30/2021		
	Engineering contractor selected, project kickoff, compliance strategy, FGD characterization, develop FGD water balance	1/1/2021	12/30/2021		
	<b>FGD WW Pilot Testing</b>	1/1/2021	4/30/2023	1/1/2021	9/28/2023
	Provide FGD characterization data, develop specifications, provide bulk volumes for bench testing w/ vendors, obtain pilot approval, conduct pilots	1/1/2021	4/30/2023	1/1/2021	9/28/2023
	<b>EPA Final Rule</b>				<b>5/9/2024</b>
	<b>Finalize VIP FGD WW Treatment Specifications</b>			11/1/2022	<i>cancelled</i>
<b>Execution Phase</b>	<b>Complete VIP Detailed Engineering Design</b>	5/1/2023	9/30/2024		<i>Cancelled</i>
	<b>Permitting</b>	1/1/2024	9/30/2024		<i>Cancelled</i>
	<b>Construction</b>	10/1/2024	3/31/2026		<i>Cancelled</i>
	<b>Commissioning</b>	4/1/2026	11/30/2028		<i>Cancelled</i>
	<b>ELG Applicability Date</b>		<b>12/31/2028</b>		

\*Baseline- As provided to DHEC on 10/14/2021

### Best Available Technology (BAT) Status

Since the October 2023 Annual NOPP Report, a Wastewater Treatment Construction Permit was issued by SCDES on December 15, 2023 and construction began in January 2024 to meet the December 31, 2025 compliance date. Santee Cooper also worked with SCDES Bureau of Water (BOW) to add language to the Cross NPDES permit providing an option for VIP or the generally applicable effluent guidelines for best achievable technology (BAT). The revised Cross NPDES Permit was issued February 1, 2024 and effective March 4, 2024. This current NPDES permit also requires Santee Cooper to notify SCDES by December 31, 2024 if the facility will implement the BAT limits by December 2025 or chose to activate the NOPP to implement the VIP limits by December 2028.

With this NOPP annual report, Santee Cooper makes notice that Cross Generating Station will implement the generally applicable effluent guidelines based on the Best Available Technology (BAT) by December 31, 2025. The VIP NOPP will not be activated and this will be the final annual progress report for NOPP VIP option under the 2020 ELG Rule.