Georgia Power

Environmental & Natural Resources
241 Ralph McGill Blvd, NE
Atlanta, Georgia 30308-3374

February 1, 2022
ELECTRONIC MAIL

Ms. Stacey Wix
Georgia Environmental Protection Division
Mountain District Office
16 Center Road
Cartersville, Georgia 30120

Re: NPDES Permit No. GA0001449 – Plant Bowen
ELG Progress Report

Dear Ms. Wix:

In accordance with Part III.C.7.e. of the above referenced permit, Georgia Power is submitting the February 2022 progress report for compliance with the Effluent Limitations and Guidelines for Steam Electric Generating Facilities. As required by Part III.C.7.e.(1) of the permit, a copy of the 2022 Integrated Resource Plan has been submitted directly to the EPD Director's Office.

If you have any questions or require additional information, please contact Erika Fly at 404-506-7031 or ekyeager@southernco.com.

Sincerely,

Scott Hendricks
Water & Natural Resources Permitting Manager

Cc: Audra Dickson

Georgia Power

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Summary

Georgia Power has continued significant efforts to meet the FGDW limits in the ELG Rule, regardless of EPA's regulatory reconsideration that reintroduces significant uncertainty. Georgia Power's continued efforts and process to develop a holistic environmental compliance strategy for Plant Bowen are illustrated in the 2022 IRP provided to EPD. Georgia Power's ELG compliance strategy allows for sufficient time to complete the 2022 IRP process, finalize the design of the potential treatment technology, and accommodates consideration of the on-going regulatory uncertainty resulting from EPA's rule reconsideration.

Background

Part III.C.7.e of the above referenced permit requires the submittal to EPD of a written progress report describing the status of achieving compliance with the Effluent Limitations Guidelines (ELG's) for Flue Gas Desulfurization Wastewater (FGDW) discharges at Outfall 01F.

Part III.C.7.e.(1) requires the separate provision to the EPD Director's office of a copy of the 2022 Integrated Resource Plan (IRP). This requirement has been fulfilled.

Part III.C.7.e.(2) requires an identification of the technology selected if pursuing the effluent limits in Part I.A.5.b of the permit. That is addressed below.

This report has been prepared to detail progress at Plant Bowen in meeting the E*ffluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category* for FGDW. The report provides progress towards meeting the generally applicable effluent limits for FGDW provided in 40 C.F.R. § 423.13(g)(1)(i); and information regarding the subcategory for Permanent Cessation of Coal Combustion as provided in 40 C.F.R. § 423.13(g)(2)(i).

40 C.F.R. § 423.11(t) identifies the following four factors in setting applicability dates for ELG compliance. Those factors also serve as useful guideposts to describe the progress and steps taken at Plant Bowen to achieve compliance with the FGDW ELGs. For convenience, those four factors are provided below:

1. Time to expeditiously plan (including to raise capital), design, procure, and install equipment to comply with the requirements of the rule;

2. Changes being made or planned at the plant in response to:

   (i) New source performance standards for greenhouse gases from new fossil fuel-fired electric generating units, under sections 111, 301, 302, and

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307(d)(1)(C) of the Clean Air Act, as amended, 42 U.S.C. 7411, 7601, 7602, 7607(d)(1)(C);

(ii) Emission guidelines for greenhouse gases from existing fossil fuel-fired electric generating units, under sections 111, 301, 302, and 307(d) of the Clean Air Act, as amended, 42 U.S.C. 7411, 7601, 7602, 7607(d); or

(iii) Regulations that address the disposal of coal combustion residuals as solid waste, under sections 1006(b), 1008(a), 2002(a), 3001, 4004, and 4005(a) of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. 6906(b), 6907(a), 6912(a), 6944, and 6945(a).;

3. For FGDW requirements only, an initial commissioning period for the treatment system to optimize the installed equipment; and

4. Other factors as appropriate.

Compliance Progress

Plant Bowen's progress towards meeting the FGDW ELGs is provided for each of the four factors described in the ELG Rule:

(1) As part of the NPDES permit renewal application, Georgia Power provided EPD with an August 2021 ELG Schedule. This schedule remains unchanged for the Bowen FGDW project, and progress is on schedule to perform the conceptual design and front-end planning efforts reflected as line item 7. Plant Bowen continues to pursue compliance with the FGDW permit limits with plans to expand the current physical-chemical treatment system for arsenic and mercury treatment, as well as adding the biological treatment systems necessary for meeting the selenium and nitrate-nitrite limits. Significant recent activities include: 1) completion of a study conducted to determine equipment optimization opportunities; and 2) finalization of the scope for the ELG project. Currently, the project is being evaluated under the Georgia Power procurement process with potential contractor award in 2022.

(2) Georgia Power continues to evaluate potential impacts at Plant Bowen resulting from regulation of coal combustion residuals and greenhouse gases. These regulations, as well as others, are addressed in the January 2022 Environmental Compliance Strategy provided to EPD in Technical Appendix Volume 2 of the 2022 IRP. These regulations remain in flux and potentially



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impose additional economic obligations, operational and compliance challenges at Plant Bowen that require careful consideration through our regulatory process with the PSC.

(3) Georgia Power has no updates regarding the need for a 9-month FGDW optimization and commissioning period as identified in line items 11 and 12 of the August 2021 ELG Schedule. The optimization and commissioning period is still anticipated to commence in April 2025, and any deployed FGDW treatment system will need this optimization period to gain an understanding of performance under seasonal variations in plant dispatch and ambient weather conditions.

(4) On October 13, 2021, pursuant to 40 C.F.R. § 423.19(f) Georgia Power submitted to EPD a Notice of Planned Participation (NOPP) for Units 1 and 2 at Plant Bowen. The NOPP informed EPD that Plant Bowen Units 1 and 2 intend to permanently cease coal combustion by no later than December 31, 2028, and are therefore eligible for the alternative limits at 40 C.F.R. § 423.13(g)(2)(i). Attachment L of the IRP confirms the request for decertification of these units by December 31, 2028, and Georgia Power awaits the PSC's determination of this request.

Plant Bowen Units 3 and 4 continue to pursue the generally applicable effluent limits as specified in Part I.A.5 of the permit, but Georgia Power remains mindful of EPA's August 3, 2021, Notice of Rulemaking Initiative that indicates potential revision of Best Available Technology for FGDW treatment with publication of a revised rule scheduled in Fall of 2022. Any potential revisions to EPAs selection of Best Available Technology and the associated effluent limits, could warrant revisions to the Plant Bowen FDGW compliance strategy. This rulemaking initiative is identified within line item 7 of the August 2021 ELG Schedule.