Georgia Power

Environmental Affairs
241 Ralph McGill Blvd, NE
Atlanta, Georgia 30308-3374

December 20, 2024
ELECTRONIC MAIL

Mr. Brian Boutelle
Georgia Environmental Protection Division
Mountain District Office
16 Center Road
Cartersville, Georgia 30120

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

Dear Mr. Boutelle:

In accordance with Part III.C.7.g. of the above referenced permit, Georgia Power is submitting the December 2024 progress report for compliance with the Effluent Limitations and Guidelines for Steam Electric Generating Facilities.

If you have any questions or require additional information, please contact Jean Brown at 404-506-6360 or jeabrown@southernco.com.

Sincerely,

Dominic Weatherill
Environmental Affairs Supervisor

Cc: Whitney Fenwick

Georgia Power

Plant Bowen – NPDES Permit No. GA0001449

ELG Progress Report – December 20, 2024

Summary

Georgia Power Company ("the Company") Plant Bowen remains on track to meet the Flue Gas Desulfurization Wastewater ("FGDW") compliance deadlines in the 2020 Effluent Limitations Guidelines ("ELG") Rule, and the National Pollutant Discharge Elimination System (NPDES) permit, by no later than December 31, 2025.

The Company's ELG compliance strategy for Plant Bowen continues to incorporate the Integrated Resource Planning ("IRP") process with the Georgia Public Service Commission ("PSC"), while also acknowledging the on-going regulatory uncertainty resulting from the U.S Environmental Protection Agency's ("EPA's") May 7, 2024, publication of the ELG Supplemental Rule. The rule establishes new requirements for FGDW treatment, but also retains the final 2020 rule limitations". *See 89 Fed. Reg. at 40, 254.*

This report summarizes 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 describes activities completed to meet 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).

Units 1 and 2

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 of Georgia Power's intent to permanently cease coal combustion for Units 1 and 2 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). However, as reported to EPD on August 3, 2022, the PSC ordered that Plant Bowen Units 1 and 2 not be retired as part of the 2022 IRP, but rather the decision for decertification and retirement be reassessed as part of the 2025 IRP. In October 2023, the Company filed a 2023 IRP Update in response to extraordinary load growth and an accelerated capacity need beginning in the winter of 2025/2026 – a full three years earlier than projected in the 2022 IRP. With the growth in the Company's projected load forecast and the increase in the magnitude of capacity needs in 2028 and beyond, for planning purposes, the Company assumed a retirement date at the end of 2035 for Plant Bowen Units 1-2 in the 2023 IRP Update. The Company will submit unit retirement studies related to Plant Bowen

Plant Bowen – NPDES Permit No. GA0001449

ELG Progress Report – December 20, 2024

Units 1-2 in the 2025 IRP and will make a formal recommendation at that time regarding the retirement or continued operation of these units.

The PSC decision in the 2022 IRP to reassess the timing of decertification of Plant Bowen Units 1-2 in the 2025 IRP does not impact the FGDW compliance strategy for Plant Bowen, as the FGDW system is a common environmental control for all four generating units.

Units 3 and 4

Plant Bowen continues to pursue compliance with the FGDW permit limits by no later than December 31, 2025, pursuing expansion of 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.

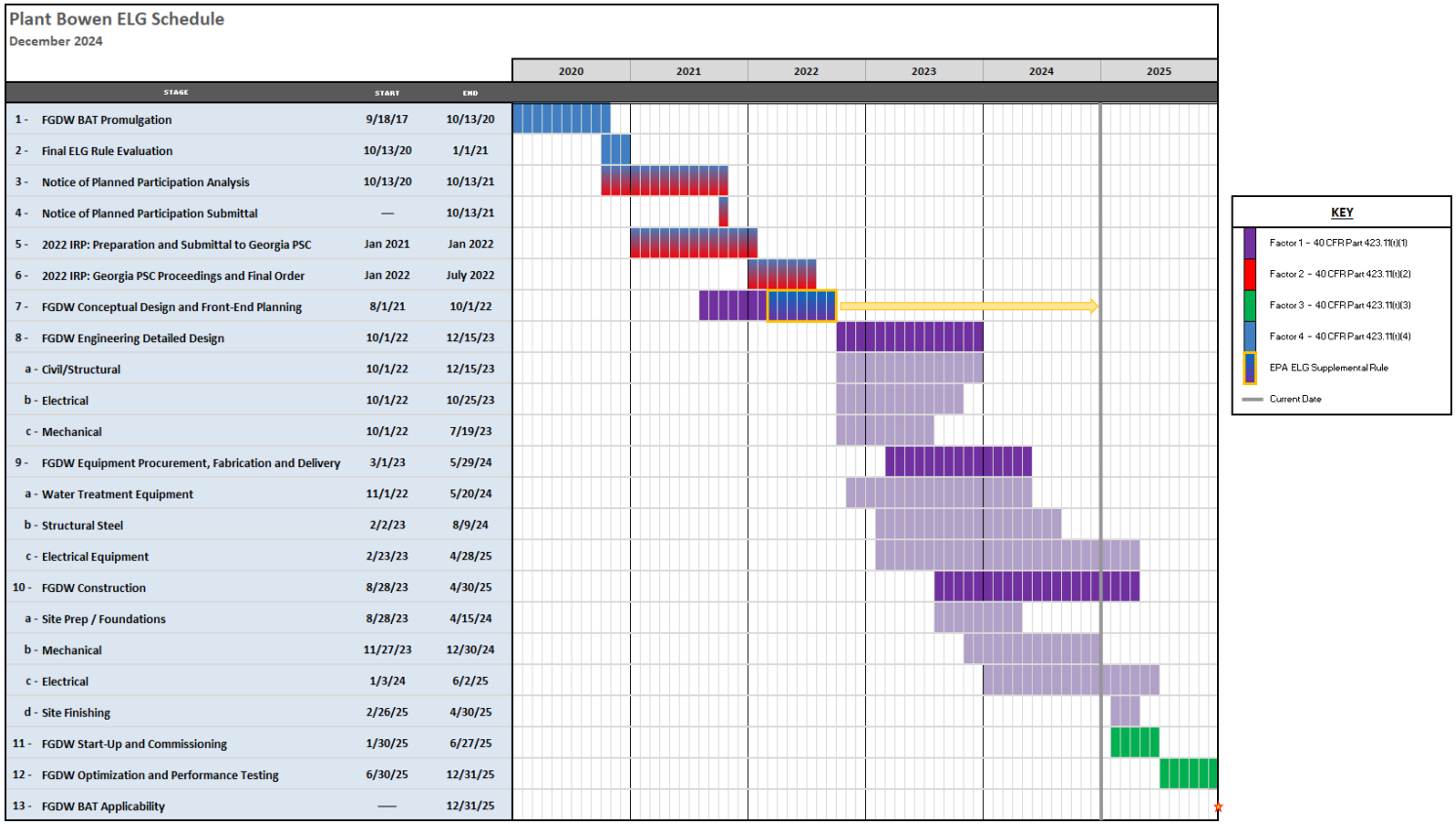
The FGDW project is being executed with an Engineering, Procurement, and Construction (EPC) Contractor. As of December 2024, the EPC Contractor has completed detail design, which encompassed the civil, mechanical, and electrical design work necessary to accomplish the FGDW treatment system project. The project is now completing the process of overlapping procurement, fabrication, and delivery of long lead-time equipment. The schedule provided in Figure 1 below reflects a few adjustments since the previous progress report submitted in June 2024. Of note, the updated schedule reflects an extension to the timeframe for electrical equipment delivery which has subsequently required temporary electrical equipment to be installed but does not impact the overall schedule. The schedule also illustrates that construction is progressing as planned, with mechanical work being largely completed in 2024.

Plant Bowen Units 3 and 4 remain on schedule to meet the generally applicable effluent limits specified in Part I.A.5 of the permit, but Georgia Power remains mindful of regulatory changes impacting coal-fired power plants, including the 2024 publication of the ELG Supplemental Rule.

Plant Bowen – NPDES Permit No. GA0001449

ELG Progress Report – December 20, 2024

Figure 1



STAGE	START	END
1 - FGDW BAT Promulgation	9/18/17	10/13/20
2 - Final ELG Rule Evaluation	10/13/20	1/1/21
3 - Notice of Planned Participation Analysis	10/13/20	10/13/21
4 - Notice of Planned Participation Submittal	—	10/13/21
5 - 2022 IRP: Preparation and Submittal to Georgia PSC	Jan 2021	Jan 2022
6 - 2022 IRP: Georgia PSC Proceedings and Final Order	Jan 2022	July 2022
7 - FGDW Conceptual Design and Front-End Planning	8/1/21	10/1/22
8 - FGDW Engineering Detailed Design	10/1/22	12/15/23
a - Civil/Structural	10/1/22	12/15/23
b - Electrical	10/1/22	10/25/23
c - Mechanical	10/1/22	7/19/23
9 - FGDW Equipment Procurement, Fabrication and Delivery	3/1/23	5/29/24
a - Water Treatment Equipment	11/1/22	5/20/24
b - Structural Steel	2/2/23	8/9/24
c - Electrical Equipment	2/23/23	4/28/25
10 - FGDW Construction	8/28/23	4/30/25
a - Site Prep / Foundations	8/28/23	4/15/24
b - Mechanical	11/27/23	12/30/24
c - Electrical	1/3/24	6/2/25
d - Site Finishing	2/26/25	4/30/25
11 - FGDW Start-Up and Commissioning	1/30/25	6/27/25
12 - FGDW Optimization and Performance Testing	6/30/25	12/31/25
13 - FGDW BAT Applicability	—	12/31/25