Environmental Affairs
Bin 10221
241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374

GEORGIA POWER
A SOUTHERN COMPANY

July 29, 2010
Electronic Filing (FERC efiling)

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Room 1-A – Dockets Room
Washington, DC 20427

BARTLETTS FERRY PROJECT, FERC PROJECT NUMBER P-485-063
Project Operations and Drought Management Plan Study
Progress Report

Dear Ms. Bose:

Through this correspondence, in compliance with Federal Energy Regulatory Commission (Commission) Integrated Licensing Process regulations at 18 CFR Part 5 § 5.15(b), and the Commission's March 17, 2010 Study Plan Determination for the Bartletts Ferry Hydroelectric Project, Georgia Power is electronically filing the Bartletts Ferry Project Operations and Drought Management Plan Study Progress Report (Report). The Report is provided under Attachment A.

If you have questions or comments regarding this correspondence filing, please contact me directly at (404) 506-1357 or gamartin@southernco.com or Courtenay O'Mara at (404) 506-7219 or cromara@southernco.com.

Sincerely,

George A. Martin
Environmental Specialist,
Hydro Relicensing Project Manager

Attachment A

BARTLETTS FERRY PROJECT, FERC PROJECT NUMBER P-485-063
Project Operations and Drought Management Plan Study
Progress Report

PROGRESS REPORT
PROJECT OPERATIONS AND DROUGHT MANAGEMENT PLAN STUDY
BARTLETTS FERRY PROJECT (FERC NO. 485)

JULY 2010

1. INTRODUCTION

Georgia Power is conducting a study to provide information on the existing project configuration, historic project flows, and project operation at the Bartletts Ferry Hydroelectric Project. This information will be used by the Federal Energy Regulatory Commission (FERC) to support its analysis of the potential need for a drought management plan at the project. The study is being conducted according to FERC's March 17, 2010 Study Plan Determination (SPD). The final report will be filed with FERC by January 18, 2011.

Data requested in FERC's SPD includes:

1. A detailed presentation of the physical characteristics of the Bartletts Ferry project to include: (1) normal full pond water surface elevation, minimum pond elevation, maximum pond elevation, target elevation or target range for project operation; (2) critical elevations for any large water intake in the reservoir or other water use which may be affected by fluctuating water elevations; (3) the pool elevation, water surface area, and storage for the top of the dam, top of spillgates, top of power pool, spillway crest, flood control storage, power storage, and dead storage; (4) the elevation of the turbine intakes and minimum elevation in which generation is no longer feasible; and (5) area-capacity curve and elevation-capacity curve in graphic and tabular format.
2. Historic flow and water surface elevation data for three representative drought years, including the drought year 2007. For each year provide water surface elevations and inflow and outflow for the Bartletts Ferry reservoir in daily time steps. The information should be provided in graphic and tabular format.
3. A more detailed discussion of project operation to address the following elements as described in further detail in the SPD: current license requirements for day-to-day operation and reservoir levels; the critical operation parameters of operation; and justification as to why licensing to elevation 510 feet mean sea level (msl) is necessary.

This Study Progress Report provides a portion of the information requested under Item 1 above. The remainder of the information is currently being developed and will be provided in the Project Operations and Drought Management Plan Study Report due by January 18, 2011.

2. STUDY PROGRESS

2.1 Activities Completed

Georgia Power has developed some of the critical physical elevation data requested in Item 1. These data were readily available in our files and are discussed below in the Preliminary Findings section.

2.2 Preliminary Findings

Specific data requested by FERC for three of the five sub-items listed under Item 1 (Physical Characteristics of the Bartletts Ferry Project, sub-items 1, 2, and 4) are provided below. All of the data requested, including that for sub-items 3 and 5, will be provided in the Project Operations and Drought Management Plan Study Report. The numbered sub-item is first identified in italics, followed by the requested information. All elevations are expressed in plant datum (PD).[1]

1. *Normal full pond water surface elevation, minimum pond elevation, maximum pond elevation, target elevation or target range for project operation*

   Normal full pond water surface elevation is 521 PD. We define the minimum pond elevation, the minimum elevation at which either one of the two Bartletts Ferry powerhouses can generate, as elevation 489 PD. The west (original) powerhouse (Units 1-4) cannot operate below elevation 489 PD. The east (newer) powerhouse (Units 5 and 6) cannot operate below elevation 510 PD. The maximum pond elevation is 521 PD. The Bartletts Ferry target operating range is between 519 and 521 PD during average flow years.

2. *Critical elevations for any large water intake in the reservoir or other water use which may be affected by fluctuating water elevations.*

   Surface water withdrawals and treated wastewater discharges in the project vicinity were identified in the Pre-Application Document. There are two water intakes located in the Bartletts Ferry reservoir within the FERC project boundary: Harris County, Georgia (permitted to withdraw 3 million gallons per day [mgd]); and Opelika, Alabama (authorized to withdraw 42 mgd). Additional information about these intakes was provided in an October 15, 2009 Additional Information Request Filing and in a March 4, 2010 Supplement to the Additional Information Request Filing. In summary, the critical elevation for the Harris County intake is 505.0 feet mean sea level (MSL) (505.84 PD) and the critical elevation for the City of Opelika intake is 508.6 feet MSL (509.44 PD). There are no

[1] Plant Datum (PD) = Mean Sea Level (MSL) + 0.84 foot.

permitted wastewater discharges or other permitted water uses within the project boundary which may be affected by fluctuating water levels.

4. *The elevation of the turbine intakes and minimum elevation in which generation is no longer feasible.*

The top of the intake to the west powerhouse (Units 1-4) is 489 PD. The bottom of the intake to the west powerhouse is 462 PD. The west powerhouse cannot generate below elevation 489 PD. The top of the intake to the east powerhouse (Units 5 and 6) is 510 PD. The bottom of the intake channel to the east powerhouse is 490 PD. The east powerhouse cannot generate below elevation 510 PD.

3. VARIANCE FROM STUDY PLAN AND SCHEDULE

There has been no variance from the study plan and schedule.

4. REMAINING ACTIVITIES

- Complete SPD Project Operations and Drought Management Plan Study Items 1-3 to including the following.
- Continue calculating daily discharge and inflow data from three representative drought years, including 2007.
- Continue compiling reservoir elevations from three representative drought years, including 2007.
- Continue drafting a more detailed description of project operation, including discussion of critical operating parameters.
- Prepare and file the Project Operations and Drought Management Plan Report by January 18,2011.

SERVICE LIST

O. Ben Harris
GPC VP Land Department
241 Ralph McGill Blvd., NE
BIN10150
Atlanta, GA 30308-374

George A. Martin
Environmental Specialist
Hydro Relicensing Project Manager
GPC Environmental Affairs
241 Ralph McGill Blvd., NE
BIN10221
Atlanta, GA 30308-374

Joel Galt
Supervisor
SCG Hydro Services
241 Ralph McGill Blvd., NE
BIN 10190
Atlanta, GA 30308

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