

FEDERAL ENERGY REGULATORY COMMISSION
Washington, D.C. 20426
November 21, 2018

OFFICE OF ENERGY PROJECTS

Project No. 2413-124 – Georgia
Wallace Dam Pumped Storage Project
Georgia Power Company

Courtenay R. O'Mara, P.E.
Hydro Licensing & Compliance Manager
Southern Company Generation
241 Ralph McGill Blvd., NE
Bin 10193
Atlanta, GA 30308-3374

Reference: Additional Information Request for the Wallace Dam Pumped Storage Project

Dear Ms. O'Mara:

We have reviewed your license application for the Wallace Dam Pumped Storage Project, filed on May 31, 2018. Based on our review, we need additional information before we can complete our evaluation of your license application. Pursuant to section 4.32(g) of the Commission's regulations, please provide the additional information requested in the enclosed Schedule A within 60 days from the date of this letter. If the requested information causes any other part of the application to be inaccurate, that part must also be revised and refiled with the Commission by the due date.

The Commission strongly encourages electronic filing. Please file the requested information using the Commission's eFiling system at <http://www.ferc.gov/docs-filing/efiling.asp>. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov, (866) 208-3676 (toll free), or (202) 502-8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426. The first page of any filing should include docket number P-2413-124.

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If you have any questions, please contact Allan Creamer at (202) 502-8365, or via email at allan.creamer@ferc.gov.

Sincerely,

Stephen Bowler, Chief
South Branch
Division of Hydropower Licensing

Enclosure: Schedule A

SCHEDULE A ADDITIONAL INFORMATION

EXHIBIT B – PROJECT OPERATION

1. Figure 5 in Exhibit B (page 15), provides the daily inflow statistics for Lake Oconee from 1997 through 2016, in a composite flow duration curve. Please provide this data in tabular form.
2. Pages 13 through 15 of Exhibit E list Georgia Power Company's (Georgia Power) proposed measures for relicensing the Wallace Dam Pumped Storage Project (Wallace Project). Measures include, but are not limited to: (a) installing and operating a forebay oxygen line diffuser system in Lake Oconee on the northeast side of Wallace Dam; (b) constructing two new project recreation sites (Jerry's Highway 44 and Area C-5); (c) constructing new amenities and upgrading existing project recreation sites; and (d) stabilizing shorelines at four recreation areas on Lake Oconee and at the downstream Pond 2 waterfowl impoundment. These proposed measures have the potential to cause erosion and sedimentation in and near the water.

Pages 25 and 92 of Exhibit E make reference to using proper erosion control and restoration practices, or Best Management Practices (BMPs), during, and immediately following, all construction activities to minimize effects associated with the measures mentioned above. However, the license application does not describe, or otherwise discuss, the area of land that would be disturbed or modified by the proposed construction activities, or the erosion and sedimentation BMPs to be implemented. To facilitate our review of the license application and any potential, project-related effects, please provide: (1) the approximate area in acres) of each major type of disturbance; (2) the total area of land that would be temporarily disturbed; (3) the total area that would be permanently modified; and (4) a description of the BMPs, in the case of each type of land disturbance, that would be used to minimize erosion and other effects on water quality, fish and aquatic habitat, vegetation, and wildlife.

EXHIBIT E – WATER RESOURCES

3. On Page 27 of Exhibit E, you state that the Georgia Environmental Protection Division (Georgia EPD) has indicated that revised water quality criteria, including criteria for chlorophyll *a*, total nitrogen, and total phosphorus, may go into effect by 2019. To facilitate our review of Lake Oconee water quality and the Wallace Project's effects on water quality, please provide an update on Georgia EPD's

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efforts to revise the water quality criteria for Lake Oconee, including whether those criteria have become final and when the new criteria go into effect.

4. Page 30 of Exhibit E states that Georgia Power would continue to operate the Wallace Project to support the minimum flow requirements at the downstream Sinclair Project No. 1951 during droughts. However, there is no information in the license application regarding the frequency and length of time the project is operated to support the Sinclair Project's minimum flow requirement. Please provide this information, on an annual basis, from time the Wallace Project was built to the present.

EXHIBIT E – AQUATIC & FISH RESOURCES

5. Page 3 of Exhibit A and page 47 of Exhibit E describe the trash racks in front of the project intakes and those in front of the downstream draft tubes for the pump-back units. Specifically, Georgia Power states that the intake trash racks have a clear bar spacing that varies from 9.5 to 10.5 inches, and the downstream draft tube trash racks have a clear bar spacing of 10.5 inches. No other information on the trash racks is provided. To facilitate staff review of the project's effects on fish entrainment and turbine mortality, please provide: (a) the overall dimensions of each set of trash racks, both for the intakes and the downstream draft tubes; (b) the number and width of the individual bar racks; and (c) an estimate of the intake velocity for both the intake trash racks and the draft tube trash racks, including the calculations used to develop the estimate(s).

EXHIBIT E – TERRESTRIAL RESOURCES AND THREATENED AND ENDANGERED SPECIES

6. On pages 64, 65, 78, 79, 83, and 92 of Exhibit E, you state that 3 acres of mature hardwood forest would be removed to construct the oxygen diffuser system, and that vegetation would also be removed or trimmed during the installation of enhancements of seven existing, and two proposed, project recreation sites. Page 56 of Exhibit E also indicates that you maintain vegetation within the project's 15.67-mile-long transmission line right-of-way (ROW), predominantly as herbaceous and shrub vegetation, under Southern Company's Transmission Vegetation Management Program. In addition, page 62 of Exhibit E mentions that Georgia Power uses several forestry management guidance documents for the project, including: (a) Georgia Power's Forestry Policy Manual; (b) Georgia Power's forestry and timber management program for Lake Oconee; (c) Georgia Department of Natural Resources' (Georgia DNR) Forestry for Wildlife

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Partnership guidelines; and (d) Georgia Forestry Commission's BMPs for blending timber and wildlife management.

The license application, however, does not describe specific, existing, or proposed vegetation management or forestry BMPs¹ for the Wallace Project, or describe the landscaping plans at the seven existing, and two proposed, project recreation sites. Nor does the license application identify how environmentally sensitive areas such as stream crossings, forested boundaries, wetlands, and potential sensitive species habitat (e.g., Bachman's sparrow habitat, granite outcrops) along the transmission line ROW are maintained. The ROW traverses mostly undeveloped forested or agricultural land, with numerous headwaters and small streams, including Jenkins Branch, Crooked Creek, Turkey Creek, and Rooty Creek, all of which drain south to Lake Sinclair. To facilitate our analysis of potential project effects on vegetation and wildlife habitat, please provide the following information regarding your vegetation management and forestry practices:

- a. Please describe the vegetation management practices that Georgia Power uses, or proposes to use, at its project buildings, recreation sites, access roads, and sensitive areas in the project ROW. Please describe: (1) the approximate area (in acres) of each type of maintained area; (2) the types and frequency of vegetation management practices/specific BMPs used, or proposed to be used, for each area; and (3) any proposed changes from existing vegetation management practices, including proposed revegetation² of the project recreation sites.
- b. Please provide a list of potential species that would be used in any plantings at the Georgia Power-managed areas mentioned in item (a) above.
- c. Please file a copy of Georgia Power's Forestry Policy Manual, and its forestry and timber management program for Lake Oconee, as well as Georgia DNR's Forestry for Wildlife Partnership guidelines and Georgia

¹ Examples of BMPs for terrestrial resources could include time-of-year restrictions on vegetation removal/trimming to protect nesting birds or other wildlife, as well as methods to (a) minimize the total area of disturbance, and (b) re-vegetate, and minimize the establishment of invasive species in, the disturbed areas.

² Tables 19 and 20 of Exhibit E provide costs for the proposed enhancements, including landscaping at the seven existing and the two proposed project recreation sites.

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Forestry Commission's BMPs for blending timber and wildlife management.

- d. Please describe the forestry-specific BMPs that Georgia Power implements, or proposes to implement, at the Wallace Project. Include BMPs associated with: (1) the removal of mature pines at future recreation sites (Areas A-2, B-3, and B-5); and (2) shoreline vegetation thinning at the Oconee WMA, as well as Areas A-2, B-3, and B-5, as referenced on page 62 of Exhibit E.
 - e. The license application, on page 62, specifies that Georgia Power's forestry and timber management program at Lake Oconee is managed by a registered forester. Please indicate if a registered forester would be responsible for the proposed vegetation removal and/or trimming, and describe any professional requirements for individuals doing the trimming.
 - f. Please describe the size and type of trees that would need to be removed, or trimmed, during any proposed construction-related activities, including any Georgia threatened Oglethorpe oak.
 - g. Please describe any time-of-year restrictions that would be implemented for the removal of trees or other vegetation.
7. The proposed shoreline stabilization effort at Old Salem Park, Parks Ferry Park, Long Shoals Boat Ramp, and Armour Bridge includes 16,500 feet (about 3.1 miles) of riprap in areas identified in figures B-1 through B-3 of the proposed shoreline stabilization plan (Appendix B of Exhibit E). Please indicate if you plan to use any measures other than riprap to stabilize the shoreline or enhance the riparian vegetative buffer zone in these areas.
 8. In the proposed Recreation Enhancement Measures Plan, Georgia Power proposes to install improved lighting at the nine recreational areas within the project boundary (page 78, and figures C1 through C9 of appendix C). To facilitate our analysis of project-related effects of artificial lighting on wildlife, please describe the lighting to be installed in each of these areas, including, if available, the type of lighting fixtures, shields, and lamps.
 9. Page 64 of Exhibit E states that once the proposed liquid oxygen facility becomes operational, local wildlife would adjust to the disturbance and resume use of adjacent habitats. To facilitate our review of the license application and any

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potential effects of this measure on wildlife, please provide the estimated level of noise (in decibels) that would be generated during operation of the proposed oxygen line diffuser system, the amount of time the noise would be present, including the level of anticipated noise generated during refilling of the oxygen tanks and an estimate for the number of refills that would occur annually.

10. Page 61 of Exhibit E summarizes Georgia Power's company-wide Avian Protection Program (APP), and page 63 generally describes how the APP is applied to management of bald eagle nests within, and adjacent to, the project boundary. To facilitate our review of project effects on avian species, please provide: (a) a copy of the APP; (b) summaries of any monitoring data and/or reports collected by the Georgia Power on avian species at the Wallace Project; and (c) a description of any additional project-specific measures that are implemented as part of the APP to benefit avian species other than the bald eagle at the Wallace Project.

EXHIBIT E – RECREATION AND LAND USE

11. The proposed Recreation and Land Use Plan does not include provisions for monitoring the use of the project recreation facilities. Please revise the proposed plan to include a provision for monitoring the facilities on a 12-year minimum cycle, due to the high number of annual visits and projected increase in use at the project recreation facilities.
12. Two proposed recreation plans were submitted with the license application. To facilitate staff review of your proposed recreation measures and lessen confusion, please combine these two plans (Recreation and Land Use Plan and Recreation Enhancement Measures Plan) into one recreation plan.
13. Pages 72 and 73 of Exhibit E provide the acreage of the U.S. Forest Service recreation areas (Dyar Pasture, Redlands, and Swords) located within the project boundary. Some recreation amenities at these areas are within the project boundary, and some are not. Please provide maps showing which amenities are within the project boundary at each of the three Forest Service recreation areas.

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14. Page 78 of Exhibit E lists the upgrades that Georgia Power proposes to the courtesy docks at the Sugar Creek Boat Ramp, Armour Bridge, and the Long Shoals Boat Ramp. However, the license application is unclear as to the specific upgrades proposed. Please provide a detailed description of the upgrades to the courtesy docks at the three sites.

15. The proposed Recreation and Land Use Plan states that there are nature trails within Lawrence Shoals Park, and project recreation facility. However, neither the plan, nor the license application provides specific information on those trails, including their length. Please provide the names and lengths for the trails located within Lawrence Shoals Park.

GEOGRAPHIC INFORMATION SYSTEM (GIS) MAPPING INFORMATION

16. To facilitate our review of potential project-related effects on environmental resources, please submit the GIS data files used to create the maps in the license application and study reports.³ Any GIS data layer(s) documenting occurrences of federally-listed species or their habitats, or the locations of cultural and historic sites, should be filed with the Commission as “Not for Public Disclosure, Privileged.” Specifically, please provide the following, if available:
 - a. Project boundary, as shown on figures 2 through 4 of the license application;
 - b. Project facilities, including: (i) the transmission line ROW; (ii) access roads; and (iii) existing and proposed project recreation sites and amenities (e.g., boat ramps, piers, trails, campgrounds, fishing areas, parking areas pavilions, etc.), as well as areas identified as future recreation development, as shown on figures C-1 through C-9 of the Proposed Recreation Enhancement Measures Plan in appendix C;
 - c. Shoreline features, including: (i) shoreline conservation buffer, as identified in figure D-2 of the Proposed Shoreline Management Plan; (ii) proposed shoreline buffers to be maintained or removed, as shown on figure E3 of the Proposed Recreation and Land Use Plan; and

³ The GIS data layers shown in the license application include those that were updated as part of the 2016 field surveys to reflect the existing conditions at the Wallace Project, including land uses, upland habitat types and locations, locations of wetlands and littoral habitats, as well as observed rare, threatened, and endangered (RTE) species or potentially suitable RTE habitat.

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- (iii) proposed shorelines for riprap placement, shown on figures 11, 12, and 14 in Exhibit E;
- d. Areas of proposed vegetation clearing (e.g., proposed liquid oxygen facility and associated piping) and/or trimming at recreation sites (e.g., Long Shoals Boat Ramp/Area C1) to accommodate recreation enhancements;
- e. Habitat types/land cover, including wetlands, as shown on figures 4 through 56 of the Terrestrial Resources Study Report;
- f. Locations of non-native invasive plant occurrences, as shown on figures 57 through 64 of the Terrestrial Resources Study Report;
- g. Georgia DNR Species Occurrence layer, as shown on figure 4 of the RTE Species Study Report;
- h. Lake Oconee, RTE species observations, and potential RTE habitats, as shown on figures 5 through 15 of the RTE Species Study Report;
- i. Locations of restoration islands in Lake Oconee, as shown on figure B-1 of Georgia Power's July 27, 2015, AIR response;
- j. Waterfowl ponds shown on figure 6 of Exhibit E;
- k. Locations and types of fish attractors installed in Lake Oconee, as described on page 37 of Exhibit E, and shown in figure B-2 of Georgia Power's July 27, 2015, AIR response;
- l. Timber stands shown in the last (unlabeled) figure of appendix E, the Proposed Recreation and Land Use Plan, and figure B-3 of Georgia Power's July 27, 2015, AIR response;
- m. Public lands shown on figure 2 of the RTE Species Study Report, as well as state-managed lands and national parks and forests shown on figures 2 through 4 of Exhibit E; and
- n. Locations of Forest Service recreation areas and amenities inside the Wallace Project boundary, as shown on figures 3 and 4 of Exhibit E.

Document Content(s)

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