

**UNITED STATES COURT OF APPEALS
FOR THE D.C. CIRCUIT**

Smith Lake Improvement and Stakeholders Association, <i>Petitioner,</i>)	
)	
v.)	Petition for Review
)	
Federal Energy Regulatory Commission, U.S. Secretary of Interior, and U.S. Secretary of Agriculture, <i>Respondents.</i>)	
)	

The Smith Lake Improvement and Stakeholders Association (SLISA) hereby petitions the Court for review of final actions by the Federal Energy Regulatory Commission: “Order Issuing New License,” 130 FERC ¶ 62,271 (Mar. 31, 2010) (Attachment 1), “Order Denying Rehearing and Clarifying License,” 141 FERC ¶ 61,127 (Nov. 15, 2012) (Attachment 2), and “Notice Rejecting Request for Rehearing,” 142 FERC ¶ 61,039 (Jan. 16, 2013) (Attachment 3).

SLISA also petitions for review of the written concurrence finding that no consultation was required of the Secretary of Interior, through the U.S. Fish and Wildlife Service (Apr. 11, 2008) (Attachment 4), issued for the FERC license under the Endangered Species Act section 7.

Finally, SLISA petitions for review of the mandatory conditions of the U.S. Secretary of Agriculture, through the Forest Service, established by June 29, 2007 Letter (Attachment 5), incorporating the terms of the May 4, 2007 Settlement Agreement (Attachment 6), for the FERC license under authority of Federal Power Act section 4(e).

Dated: March 15, 2013

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing was today served on each party who participated in the underlying agency proceeding (FERC P-2165) by electronic mail or by first-class mail if no e-mail address was provided:

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Attachment 1

UNITED STATES OF AMERICA 130 FERC ¶ 62,271
FEDERAL ENERGY REGULATORY COMMISSION

Alabama Power Company

Project No. 2165-022

ORDER ISSUING NEW LICENSE

(ISSUED: March 31, 2010)

INTRODUCTION

1. On July 28, 2005, Alabama Power Company (Alabama Power) filed, pursuant to sections 4(e) and 15 of the Federal Power Act (FPA),¹ an application for a new major license to continue operating its existing 211.485 megawatt (MW) Warrior River Hydroelectric Project No. 2165. The project is located in north central Alabama on the Black Warrior River, and on the Sipsey Fork² in Cullman, Walker, and Winston counties; and in west central Alabama on the Black Warrior River in Tuscaloosa County. As discussed below, one of the project's two developments uses a federal dam. The project occupies 2,691.44 acres of federal lands administered by the U.S. Forest Service (Forest Service), and 18.7 acres of federal lands administered by the Bureau of Land Management (BLM).³ As discussed below, I am issuing a new license for the project.

BACKGROUND

2. An original license for the Warrior Project was issued in September 1957, which expired on August 31, 2007.⁴ Since then, Alabama Power has operated the

¹ 16 U.S.C. §§ 797(e), and 808 (2006), respectively.

² The Sipsey Fork is a headwater tributary to the Black Warrior River. On October 28, 1988, the Wild and Scenic Rivers Act was amended to include 61.4 miles of the Sipsey Fork and its headwaters as part of the National Wild and Scenic Rivers System. Public Law 100-547 102 Stat. 2736 (1988).

³ The project is required to be licensed under section 23(b)(1) of the FPA, 16 U.S.C. § 817 (2006), because it occupies federal lands, is located on navigable waters, and uses a government dam.

⁴ 18 F.P.C. 327 (1957).

project under an annual license pending the disposition of its new license application.⁵

3. On January 29, 2001, the Commission approved Alabama Power's request to use the Alternative Licensing Process and prepare an Applicant Prepared Environmental Assessment (APEA).⁶ Alabama Power conducted scoping meetings, completed studies, and filed an APEA with its license application on July 28, 2005.

4. On March 5, 2007, the Commission issued public notice in the *Federal Register* accepting the license application, soliciting motions to intervene and protests, and soliciting comments, final recommendations, terms and conditions, and prescriptions.⁷ In response, comments and recommendations were filed by the Smith Lake Improvement and Stakeholders Association, Inc. (Lake Association),⁸ the U.S. Department of the Interior (Interior), Alabama Department of Conservation and Natural Resources (Alabama DCNR), Forest Service, and Alabama Rivers Alliance and American Rivers (Rivers Groups). The Lake Association, Interior, Alabama DCNR, and the Rivers Groups timely filed motions to intervene.⁹ None of the intervenors oppose the project.

5. A draft Environmental Assessment (EA) was prepared by Commission staff and issued on March 7, 2008. Phillip Hoyt Condra, David Billings, Interior, the Lake Association, Alabama Power, Rivers Groups, and the U.S. Army Corps of Engineers (Corps) filed comments on the draft EA. The comments were

⁵ See *Alabama Power Company*, Notice of Authorization for Continued Project Operation, September 6, 2007 (unpublished).

⁶ 18 C.F.R. § 4.34(i)(1-2)(2009).

⁷ Commission staff held a public and an agency scoping meeting on March 12, 2002 in Birmingham, Alabama, to provide interested persons an opportunity to provide input for the EA.

⁸ The Lake Association did not participate in pre-filing consultation or scoping.

⁹ The motions to intervene were timely and unopposed, and therefore, automatically granted under Rule 214(c)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1) (2009).

addressed in a final EA issued on March 2, 2009.¹⁰ Comments on the final EA were filed by Marvin Feldman and the Lake Association.

6. The motions to intervene, comments, and recommendations have been fully considered in determining whether, and under what conditions, to issue this license.

PROJECT DESCRIPTION

A. Project Area

The Warrior Project consists of two hydroelectric developments: the Lewis Smith (Smith) development located on the Sipsey Fork of the Black Warrior River at River Mile (RM) 444, and the John Hollis Bankhead (Bankhead) development located 78.5 miles downstream on the Corps' Bankhead Lock and Dam No. 17 on the Black Warrior River at RM 365.5.¹¹ The Black Warrior River connects with the Tombigbee River about 154 river miles downstream of the Bankhead development. Between the Smith and Bankhead developments there are several municipal and industrial water withdrawals as well as Alabama Power's 1,021-MW Gorgas Steam Plant located at RM 399.

B. Project Facilities

Smith Development

7. The Smith development consists of a 300-foot-high, 2,200-foot-long earth-and-rock-fill dam with a top elevation of 550 feet mean sea level (msl). The dam impounds Smith Lake with a surface area of 21,200 acres at a normal surface elevation of 510 feet msl.¹² A 95-foot-long emergency spillway, with a top

¹⁰ All further references in this order to the EA are to the final EA, unless otherwise noted.

¹¹ The Black Warrior River Basin has five dams, four of which are Corps dams. Beginning from the headwaters of the Black Warrior, they are Alabama Power's Smith dam at RM 444; the Corps' Bankhead Lock and Dam at RM 365.5 (which includes the second development of the Warrior Project No. 2165); the Corps' Holt Lock and Dam at RM 347 (which includes Alabama Power's Holt Project No. 2203); the Corps' Oliver Lock and Dam at RM 338.1; and the Corps' Selden Lock and Dam at RM 261.2). The Black Warrior River flows into the Tombigbee River which joins the Alabama River to form the Mobile River.

¹² Smith Lake is dendritic and consists of several branches that extend 35
(continued)

elevation of 522 feet msl, is located at the right abutment of the dam. The spillway leads to a 350-foot-wide channel discharging into Mill Creek, about 3,000 feet downstream of the spillway. Mill Creek then flows into the Warrior River about 2.5 miles downstream from the dam. Since the reservoir has never reached 522 feet msl, the spillway has never been utilized. A 105-foot-high concrete intake structure is located in the reservoir about 120 feet upstream of the dam and leads to two nearly 630-foot-long power tunnels located in the right abutment. The power-tunnel intake is protected by trashracks with 6-inch open bar spacing and is submerged, drawing water from the reservoir between elevations 402 feet and 473 feet msl. The powerhouse is built into the dam at the right abutment. The powerhouse contains two generating units with a total rated capacity of 157.5 MW under a net head of 210 feet. Power is transmitted to a substation located at the downstream base of the powerhouse. The facilities are described in more detail in ordering section B(2).

8. The Smith development occupies 2,691.44 acres of federal lands (part of the William B. Bankhead National Forest) administered by the Forest Service.

Bankhead Development

9. The Alabama Power Bankhead development is located at the west end of the Corps Bankhead Lock and Dam No. 17. The Corps facility includes a dam, reservoir, gated spillway, and navigation lock. The 1,400-foot-long earth-and-rock-fill dam has a top elevation of 273.5 feet msl. The dam impounds a reservoir with a surface area of 9,200 acres at a normal surface elevation of 255 feet msl. The dam includes a 1,230-foot-long gated spillway with 22 gates, and a navigation lock at the east end of the dam.

10. The Alabama Power facility consists of an intake area, power tunnels, and powerhouse, all integral with the Corps dam. Flow for the powerhouse is provided through a three-bay intake that is protected by trashracks with 6-inch open bar spacing. The intake area also includes two monoliths, the first containing an 8-foot-wide gated sluice for discharging trash, and the second a non-overflow section. The powerhouse contains one vertical shaft 53.985-MW generating unit. Flows are discharged to the tailrace at the base of the dam. Power is transmitted to a substation located at the downstream base of the powerhouse. The licensed facilities are described in more detail in ordering section B(2).

miles upstream from the Smith dam.

11. The Bankhead development occupies 18.7 acres of federal lands which are located on the west shore of the Bankhead development and are administered by the BLM.

Recreational Facilities

12. There are three existing project recreation sites, which are all located at the Smith development. These sites include: (1) a boat launch area, which has a dock and signage, located at Smith Lake that provides public access at a winter pool elevation of 496 feet msl; (2) the Smith dam tailrace area fishing structure and day-use area with picnic tables; and (3) the Smith Lake Visitor Center. These recreation facilities are located within the project boundary and not on federal lands.

C. Project Boundary

13. Each development has its own existing project boundary, which consists of lands necessary for the safe operation and maintenance of the project and other purposes, such as recreation, shoreline control, and protection of environmental resources. Alabama Power proposes no changes to the existing project boundary.

14. The Smith development encompasses a total area of 26,823 acres, of which 2,691.44 acres are federal lands (the Bankhead National Forest, which includes a portion of the Sipsey Fork National Wild and Scenic River).¹³ The Smith development project boundary encloses Smith Lake, Smith dam, the powerhouse, a section connecting the powerhouse to the west embankment, the abutment connecting the powerhouse to the spillway (including a trashgate), the project tailrace and a section of the Sipsey Fork downstream of the dam, and the three recreation facilities described above. The boundary includes Smith Lake up to normal pool elevation of 510 feet msl, and lands used for flood control between 510 feet and 522 feet msl. The boundary downstream of Smith dam includes about 6.4 miles of the Sipsey Fork and tributaries delineated by elevation 300 feet msl, and 2.3 miles of the Sipsey Fork delineated by elevation 275 feet msl. The boundary also includes a section of Mill Creek located southwest of Smith dam, roughly delineated by elevation 522 feet msl. APC owns the lands up to elevation 510 feet msl, and either owns or leases the flood rights to lands between 510 feet and 522 feet msl.

¹³ Of the total 2,691.44 acres of Forest Service lands, 2,186.44 acres are inundated and 505 acres are above water.

15. The Bankhead development consists of 126 acres of land, which includes an intake canal, powerhouse, penstocks, tailrace, substation, lands on the west river bank owned by Alabama Power, and 18.7 acres of federal lands administered by the BLM. These lands are included in the project boundary to provide for an access road that is necessary for maintenance of the project. The Corps owns and operates the Bankhead dam, Bankhead Lake, the spillway, and navigation lock; thus, these features are not included in the project boundary.

D. Current Project Operation

Smith Development

16. The Smith development is primarily operated to provide peak generation five days a week,¹⁴ with seasonal variation in storage and generation as determined by a guide curve developed by Alabama Power.¹⁵ Storage is regulated to provide for hydroelectric generation, recreation, protection of environmental resources, flood management, municipal water needs, and to provide flows for downstream needs such as navigation, fisheries, and water quality. Turbine operations change on a daily and hourly basis in response to power needs. Discharges from the development to the tailrace range from leakage (about 35 cubic feet per second (cfs) during non-generation) to 10,000 cfs. During the spring/summer (April 1 to June 30), the Smith development is operated near target elevation 510 feet msl to provide recreational opportunities at the lake. Fall drawdowns for flood management begin July 1 and continue until water levels reach a winter pool level of 495 feet msl December 1 through January 31, at which time refill of the lake begins. Full pool is reached by April 1.

¹⁴ Alabama Power's current license requires the project be operated for flood control and hydroelectric power generation. Elevations between 488 and 510 feet msl provide 394,300 acre-feet of power storage. Elevations between 510 and 522 feet msl provide 280,600 acre-feet of storage for retention of flood waters. Articles 17 and 18 of the current license require that reservoir levels and discharge from storage be controlled by reasonable rules and regulations of the Secretary of the Army in the interest of navigation. Article 33 details the flood control operations for Smith dam, including elevations and release rates. Article 34 stipulates that the bottom of the power pool is to be elevation 488 feet msl.

¹⁵ The guide curve is a series of target elevations for Smith Lake that Alabama Power attempts to maintain during the year.

17. During a flood event, Alabama Power is required, as specified by the Corps, to maintain outflows down to, but not lower than, 2,100 acre-feet in each 24-hour period. After passage of the flood peak downstream, Alabama Power is required to evacuate flood storage as soon as reasonable and practicable. Operation during a flood is guided by the Corps' March 1965 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix A, for the Lewis M. Smith Reservoir,¹⁶ and update as filed by Alabama Power.¹⁷
18. During periods of low inflows, water is released from Smith Lake to help maintain downstream water quality, aquatic habitat, power generation, navigation, and recreation opportunities. A drought curve developed by Alabama Power is used to identify drought conditions in the reservoir and to initiate operational measures necessary to minimize the effect of low inflows on Smith Lake. This curve is defined as follows: in December and January water surface elevations are maintained at, or below, 488 feet msl; February through April between 488 feet and 506 feet msl; April through June at, or below, 506 feet msl; and June through November between 506 feet and 488 feet msl.
19. Smith Lake provides navigation flows for the Black Warrior and Tombigbee rivers. The current license does not quantify a navigation flow, but requires the licensee to provide navigation flows as specified by the Corps, or as the Commission may prescribe. The Corps estimated, to meet minimum navigation needs, the Smith development would need to release about 245 cfs to maintain a 540 cfs inflow to Bankhead Lake. Adequate flows for navigation are passed at the project during high and normal water years, however inadequate flows have been released during recent drought years.
20. Flows released from the project are used to maintain water quality near the Gorgas Steam Plant. Typically, from May through October, cold water releases from Smith dam are utilized by the Gorgas Steam Plant for use in once-through

¹⁶ The manual was placed in the record on March 23, 2010, FERC Accession No. 20100324-0408.

¹⁷ Alabama Power filed an update to the Corps' 1965 Reservoir Regulation Manual with their license application. Alabama Power's update provides clarification and a tabular representation of the regulation plan and schedules as described in the Corps' 1965 Manual, and makes no substantive changes to operation of the project as specified in the Corps' 1965 Reservoir Regulation Manual.

cooling. The Gorgas Steam Plant may divert up to 1,513 cfs of river flows for cooling, returning nearly all this flow to the river for downstream water users.

Bankhead Development

21. Alabama Power operates its facilities at the Bankhead development as described in the Corp's August 1975 Black Warrior-Tombigee River Basin Reservoir Regulation Manual, Appendix E, for the John Hollis Bankhead Reservoir.¹⁸ The Bankhead dam is operated primarily for hydroelectric generation and navigation, providing limited flood control capabilities because of minimal storage. During normal inflows, the powerhouse is operated to maintain target lake elevations between 252 feet msl and 255 feet msl while generating power.¹⁹ During floods, when inflows exceed the turbine discharge capacity (about 11,500 cfs which occurs 20 percent of the time), or when Bankhead Lake exceeds 255 feet msl, Alabama Power notifies the Corps, which manages high inflows by releasing the flows through a series of 22 spillway gates. During low flows, an elevation of 252 feet msl provides sufficient depth in the reservoir for navigation.

22. Alabama Power operates the Bankhead development powerhouse in a daily peaking mode with no seasonal storage.²⁰ Although the current license allows a drawdown to 252 feet msl, Alabama Power currently restricts the drawdown at Bankhead Lake to 253.7 feet msl to maintain sufficient water levels in the reservoir for multiple uses, including recreation and municipal water supplies.

E. Proposed Project Operation and Environmental Measures

23. The Warrior Project generates an average of 430,968-megawatt hours (MWh) of energy annually. Alabama Power proposes no new capacity. Alabama Power proposes to continue operating the project as a peaking facility and implement measures to address environmental effects. Alabama Power proposes to: (a) continue regulating Smith Lake levels according to the Smith Lake guide

¹⁸ The manual was placed in the record on March 23, 2010, FERC Accession No. 200100324-0407.

¹⁹ Article 32 of the current license allows daily reservoir fluctuations of up to 3 feet, between elevations 255 and 252 feet msl, for power generation. Because of navigation requirements, the pool is not drawn down below elevation 252 feet msl.

²⁰ Water entering the lake each day is released on the same day (i.e., daily inflows equal daily outflows).

curve; (b) continue operating the Bankhead development between elevations 255 feet and 252 feet msl; (c) develop a drought management plan that includes Alabama Power's Smith Lake drought curve; (d) install minimum flow release valves and provide a 50-cfs minimum flow to the Smith development tailrace during non-generation periods; (e) continue to, as a voluntary measure, hold constant or slightly increase lake levels for a 14-day period during spring to enhance black bass spawning in Smith Lake; and (f) construct an aeration system at the Smith development and implement measures to enhance and monitor dissolved oxygen (DO) in the Smith development and Bankhead development tailraces as required in the water quality certificate. Alabama Power also proposes to continue to operate and maintain the existing recreation facilities, make some improvements to the facilities, and provide funding to assist in the development of other non-project recreational facilities.

WATER QUALITY CERTIFICATION

24. Under section 401(a)(1) of the Clean Water Act (CWA),²¹ the Commission may not issue a license authorizing the construction or operation of a hydroelectric project unless the state water quality certifying agency either has issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year. Section 401(d) of the CWA provides that the certification shall become a condition of any federal license that authorizes construction or operation of the project.²²

25. On July 2, 2004, Alabama Power applied to the Alabama Department of Environmental Management (Alabama DEM) for water quality certification for the Warrior Project, which the Alabama DEM received on July 2, 2004. On July 1, 2005, the Alabama DEM timely issued certification with seven conditions, which are set forth in Appendix A of this order and are incorporated into this license by ordering paragraph D. This certification requires Alabama Power to: (1) maintain a DO concentration of no less than 4.0 milligrams per liter when the project is operating; (2) implement structural or operational measures at Smith and Bankhead developments, if necessary, to meet the DO requirement; (3) monitor DO and water temperature at the Smith and Bankhead developments for a period of three years; (4) provide a DO assessment at the end of first, second, and third years of monitoring; and (5) provide a final assessment of the project's

²¹ 33 U.S.C. § 1341(a)(1) (2006).

²² 33 U.S.C. § 1341(d) (2006).

effectiveness in maintaining the state's water quality standard for DO within six months after the end of the three-year monitoring period. The Alabama DEM requires that Alabama Power prepare a plan for measures to assure compliance with dissolved oxygen standards. Article 401(a) requires Alabama Power to file its plan with the Commission for approval before implementing the plan.

COASTAL ZONE MANAGEMENT ACT

26. Under section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA),²³ the Commission cannot issue a license for a project within or affecting a state's coastal zone unless the state CZMA agency concurs with the license applicant's certification of consistency with the state's coastal zone management program, or the agency's concurrence is conclusively presumed by its failure to act within 180 days of its receipt of the applicant's certification.

27. By letter of November 10, 2004, the Alabama DEM notified Alabama Power that the project is not located within the state-designated coastal management zone, and that no consistency certification is required.

SECTION 4(e) FINDINGS AND CONDITIONS

28. Section 4(e) of the FPA²⁴ provides that the Commission may issue a license for a project located within any reservation²⁵ only if it finds that the license will not interfere or be inconsistent with the purposes for which such reservation was created or acquired.²⁶

29. The Smith development occupies 2,691.44 acres within the Bankhead National Forest, which are under Forest Service supervision. I have reviewed the Organic Administration Act of 1897,²⁷ which established the purposes for forest reservations, and the presidential proclamations that created the Bankhead

²³ 16 U.S.C. § 1456(c)(3)(A) (2006).

²⁴ 16 U.S.C. § 797(e) (2006).

²⁵ Reservations are defined in section 3(2) of the FPA, 16 U.S.C. § 794(2) (2006).

²⁶ The project occupies 18.7 acres of BLM land. Nothing in the record indicates that this land is a reservation.

²⁷ 16 U.S.C. § 475 (2006).

National Forest.²⁸ There is no evidence in this proceeding to indicate that relicensing the Warrior Project would interfere with the purposes of the Bankhead National Forest. Therefore, I find that this license will not interfere, or be inconsistent, with the purposes for which the Bankhead National Forest was created.

30. FPA section 4(e) also requires that the Commission include in licenses for projects located within a federal reservation any conditions that the Secretary of the department under whose supervision the reservation falls deems necessary for the adequate protection and utilization of such reservation.

31. On March 10, 2005, the Forest Service filed preliminary terms and conditions for the project under section 4(e) of the FPA. On May 4, 2007, the Forest Service filed an “Agreement Between Alabama Power and the Forest Service Regarding Re-licensing Issues Related to the Warrior River Project” (Agreement), which was initially filed with the Commission on March 6, 2006. By letter filed July 3, 2007, the Forest Service confirmed that the terms of the Agreement are to be included as license conditions under FPA section 4(e). Accordingly, Part II of the Agreement is set forth in Appendix B of this order and incorporated into this license order by Ordering Paragraph (E).²⁹ Exhibits A and B of the Agreement, to which some of the Part II provisions refer, are also included in Appendix B, for informational purposes only.

32. The Forest Service’s section 4(e) conditions require Alabama Power to provide \$4,952,000 in funds to the Forest Service, as well as additional services valued at \$2,625,000. The funds would be distributed over the term of the license, and would be used for the following: (1) data collections and studies associated with conducting resource surveys, fish inventories, and ecological monitoring of Forest Service lands and the Sipsey River National Wild and Scenic River Corridor; (2) public education; (3) shoreline management activities; (4) clean-up

²⁸ The Bankhead National Forest was established as the Alabama National Forest by Proclamation 1423 (Woodrow Wilson), 40 Stat. 1740 (January 15, 1918); the name was changed to Black Warrior River National Forest by Proclamation 2178 (Franklin D. Roosevelt), 49 Stat. 3526 (June 19, 1936); the name was changed to William B. Bankhead National Forest, 56 Stat. 327 (June 6, 1942).

²⁹ Parts I and III of the Agreement contain general recitals and agreements (e.g., purpose and effective date of the Agreement, severability, and enforceability).

of informal recreation sites; (5) annual study reports on cultural resources and for the Forest Service to manage cultural resources; (6) encroachment processing; (7) the upgrade and improvement of recreation resources at the existing Houston, Corinth, and Clear Creek Recreation Areas; and (8) the modification of culverts at road crossings in the Bankhead National Forest.

33. Staff did not agree that the 4(e) conditions, were needed for project purposes or to protect resources affected by the project, as discussed below. However, all of the conditions are included in this license because they are mandatory under section 4(e) (see Appendix B).

34. With regard to data collection and studies (item no. 1 above), the Forest Service listed several types of monitoring studies (i.e., long term monitoring of plant and animal species and their habitats) in the Sipsey Fork and Brushy Creek watersheds; a systematic inventory of National Forest stream fish during high and low water conditions; a Bald Eagle survey on National Forest shoreline; water quality monitoring; and a survey and inventory of point source discharges that would be funded by Alabama Power. The 4(e) condition lacks sufficient detail to determine its benefits or its relationship to project effects. I therefore have no basis for concluding that this measure would be needed to fulfill project purposes. However, I have included this measure in this license as a mandatory condition pursuant to section 4(e) of the FPA.

35. With regard to funding public education and shoreline management (items no. 2 and 3 above), the Forest Service provides no details on its measures. As discussed in the EA,³⁰ staff recommended that Alabama Power develop and implement a public education and outreach program and a revised shoreline management plan,³¹ instead of providing funds to the Forest Service. Staff determined that its recommended measures would satisfy the intent of the measures outlined in the Forest Service's 4(e) conditions and therefore did not recommend the Forest Service provision for funding.³² I concur with staff's findings in the EA. Therefore, this license includes a public education and

³⁰ See EA at 129.

³¹ The shoreline management plan would require, as a condition of any new residential lake shore use permit, a 15-foot shoreline buffer zone on lands owned by Alabama Power.

³² However, I have included the Forest Service measures in this license as a mandatory condition pursuant to section 4(e) of the FPA.

outreach program plan (Article 416), and a revised shoreline management plan (Article 418) in addition to the Forest Service's mandatory conditions. Article 419 approves the Exotic Species and Aquatic Plant Management Program, and the Mosquito Control Program previously filed with the Commission, and requires that these programs be included in the revised shoreline management plan required by Article 418.

36. With regard to funding site clean-up (item no. 4 above), the Forest Service does not provide any detail or identification of its informal recreation sites that may benefit from the proposed site clean up. Staff did not recommend the measure because it does not address a project effect, and is not related to a project purpose.³³ I, therefore, have no basis for concluding that this measure would be needed to fulfill project purposes. However, I have included this measure in this license as a mandatory condition pursuant to section 4(e) of the FPA.

37. With regard to funding annual cultural resource reports (item no. 5 above), the Forest Service signed, as a concurring party, the Programmatic Agreement (PA), which incorporates by reference the final Historic Properties Management Plan (HPMP), dated March 2006. Commission staff executed the PA with the Alabama State Historic Preservation Officer (SHPO) on May 11, 2006, which requires Alabama Power to implement its HPMP for the term of any new license issued for the project. The Forest Service provides no supporting information or justification that annual study reports on cultural resources, separate and apart from the final PA and HPMP, are necessary. Staff did not recommend the measure because it would provide no additional project-related benefits.³⁴ I concur with staff's finding. However, I have included this measure in this license as a mandatory condition pursuant to section 4(e) of the FPA.

38. With regard to funding encroachment processing (item no. 6 above), the Forest Service does not describe this measure or provide any details on, or justification for this measure. In the EA staff did not recommend this measure because the Forest Service had not established a relationship to project effects and project purposes.³⁵ I concur with staff's finding. However, I have included this measure in this license as a mandatory condition pursuant to section 4(e) of the FPA.

³³ See EA at 140.

³⁴ *Id.*

³⁵ See EA at 141.

39. With regard to providing funds to upgrade and improve three Forest Service recreation areas (item no. 7 above), staff concluded in the EA,³⁶ that the three recreation areas would not fill any demonstrated project need and the substantial cost of the measures outweighs the benefits. As discussed in the EA, staff found that upgrading the Houston Recreation Area could result in disturbance to the flattened musk turtle and its habitat and therefore, could affect the species.³⁷ I concur with staff's conclusions in the EA. However, I have included this measure in the license as a mandatory condition pursuant to 4(e) of the FPA.³⁸

40. The Forest Service's 4(e) conditions require Alabama Power to provide funds to modify culverts in the Bankhead National Forest (item no. 8 above). As discussed in the EA,³⁹ staff found that there had been no data presented by the Forest Service to support the need to replace or modify stream culverts at road crossings in the Bankhead National Forest where streams are entering Smith Lake. Staff concluded that there is no direct relationship to continued project operation and did not recommend the measure be implemented by Alabama Power.⁴⁰ I concur with staff's conclusions in the EA. However, I have included this measure in the license as a mandatory condition pursuant to 4(e) of the FPA.

SECTION 18 FISHWAY PRESCRIPTIONS

41. Section 18 of the FPA⁴¹ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.

42. By letter filed May 3, 2007, Interior requested that the Commission reserve authority to prescribe fishways. Consistent with Commission policy, Article 410

³⁶ See EA at 138.

³⁷ See EA at 75-77, 139.

³⁸ To the extent that any of these Forest Service activities could affect the threatened flattened musk turtle, the Forest Service would have to ensure that such activities comply with the requirements of the Endangered Species Act.

³⁹ See EA at 138.

⁴⁰ See EA at 146.

⁴¹ 16 U.S.C. § 811 (2006).

of this license reserves the Commission's authority to require such fishways as may be prescribed by Interior for the Warrior Project.

THREATENED AND ENDANGERED SPECIES

43. Section 7(a)(2) of the Endangered Species Act (ESA) of 1973⁴² requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally-listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.

44. Federally listed species with the potential to occur in the Warrior Project vicinity include the endangered red-cockaded woodpecker, Cahaba shiner, Coosa moccasinshell, dark pigtoe, ovate clubshell, triangular kidneyshell, as well as the threatened Kral's waterplantain, Alabama streak-sorus fern, flattened musk turtle, orange-nacre mucket, fine-lined pocketbook, and Alabama moccasinshell. The Sipsey Fork Critical Habitat Unit 10,⁴³ is designated critical habitat for five mussel species, including the dark pigtoe, orange-nacre mucket, Alabama moccasinshell, triangular kidneyshell, and ovate clubshell.

45. In the draft EA, staff determined that the Warrior Project, as proposed by Alabama Power with staff's additional recommended measures, would have no effect on the 13 species listed above or the critical habitat of the Sipsey Fork Critical Habitat Unit 10. The FWS concurred with these findings by letter filed April 11, 2008.

46. On July 17, 2008, the FWS requested that the Commission re-evaluate any new information that may impact the presence of threatened and endangered species or critical habitat within the project boundaries. The FWS was specifically concerned with a newly identified location for the streak-sorus fern. On November 24, 2008, Alabama Power filed Addendum 1 to the Biological Assessment for Threatened and Endangered Species for the Warrior Hydroelectric Project, which included additional information regarding the potential impacts of changes in project operation, recommended by the Lake Association, on streak-sorus fern and the Sipsey Fork Critical Habitat Unit 10.

⁴² 16 U.S.C. § 1536(a)(2) (2006).

⁴³ The FWS designated 26 critical habitat units in the project area, including the Sipsey Fork Habitat Unit 10, which is located on Sipsey Fork partially within the project boundary.

47. On March 2, 2009, staff issued the final EA, which concludes that relicensing the Warrior Project as recommended by staff is not likely to adversely affect any listed species within the project boundary or any designated critical habitat. The FWS filed letters on April 21, 2009 and October 8, 2009 concurring with staff's determination.⁴⁴

48. While the Bald Eagle is no longer listed as an endangered and threatened species,⁴⁵ it is still protected under the Bald and Golden Eagle Protection Act, as amended,⁴⁶ and the Migratory Bird Treaty Act, as amended,⁴⁷ both of which prohibit the take of bald eagles.

49. In the EA, staff noted that bald eagles occur in Winston and Tuscaloosa counties in Alabama; however, bald eagles are a transient species unless nesting. The FWS has noted that this species has the potential to occur in any county in Alabama where suitable habitat exists. Bald eagles have not been documented nesting within the Warrior Project area, but they currently forage near the Smith development. In the EA, staff concluded that implementation of Alabama Power's proposal is not likely to disturb bald eagles in the Smith development and Bankhead development areas since no changes in project operations are

⁴⁴ By letter directed to the FWS and filed with the Commission on April 27, 2009, American Rivers and the Lake Association requested that the FWS deny the Commission's request for concurrence with the Commission's preliminary determination that relicensing the Warrior Project, as recommended by Commission staff, would not be likely to adversely affect the flattened musk turtle. Subsequently, by letter filed October 8, 2009, the FWS reconfirmed its concurrence stating, "the Service will continue to concur with FERC's determination that the flattened musk turtle and Alabama streak-sorus fern will not be adversely affected by the proposed operation of the project, and that the proposed operation will not affect critical habitat for the mussels within the boundaries of the project."

⁴⁵ On July 9, 2007, the FWS issued a final rule (Final Delisting Rule effective on August 8, 2007) removing the bald eagle from the list of endangered and threatened wildlife. *See* Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States From the List of Endangered and Threatened Wildlife. Final Rule. 72 Fed. Reg. 37346 (July 9, 2007).

⁴⁶ 16 U.S.C. §§ 668-668d (2006).

⁴⁷ 16 U.S.C. §§ 703-712 (2006).

proposed.⁴⁸ However, Alabama Power has proposed, and the license requires, that if nesting bald eagles are discovered at the Warrior River Project, all disruptive activities (i.e., timbering, construction) will be restricted in the nesting area (Article 414).

WILD AND SCENIC RIVER DESIGNATION

50. Section 7(a) of the Wild and Scenic Rivers Act⁴⁹ bars the Commission from licensing “the construction of” any dam, water conduit, or other project works “on or directly affecting any river which is designated as a component of the national wild and scenic rivers system” or from licensing any project works below or above a wild or scenic river that would “invade” or “unreasonably diminish” the scenic, recreational, and fish and wildlife values there. Section 7(a) does not bar the issuance of a license for the continued operation of the project where no new construction is proposed in the wild and scenic river.⁵⁰

51. On October 28, 1988, the Wild and Scenic Rivers Act was amended to include 61.4 miles of the Sipsey Fork of the West Fork River and its headwaters as part of the National Wild and Scenic Rivers System.⁵¹ The Forest Service manages the Sipsey Fork Wild and Scenic River segment to protect and enhance the outstanding remarkable values (i.e. scenery, recreation, and geology) for which the river segment was designated, while providing for public recreation and resource uses that do not adversely impact or degrade those values.

52. The Forest Service, in its May 4, 2007 filing of the Agreement, stated that, if adopted, the Agreement would fulfill its responsibilities under the Wild and Scenic Rivers Act. Part of the Smith development is situated within the Sipsey Fork Wild and Scenic River designated area. However, the project was constructed and operating prior to the designation of the Sipsey Fork, and Alabama Power does not propose to construct any new project works in the designated area.

⁴⁸ See EA at 70.

⁴⁹ 16 U.S.C § 1278(a) (2006).

⁵⁰ See *Portland General Electric Co. and Confederated Tribes of the Warm Springs Reservation of Oregon*, 111 FERC ¶ 61,450 at 62,922 (2005).

⁵¹ See Pub. L. 100-547, 102 Stat. 2736 (1988).

NATIONAL HISTORIC PRESERVATION ACT

53. Under section 106 of the National Historic Preservation Act (NHPA)⁵² and its implementing regulations,⁵³ federal agencies must take into account the effect of any proposed undertaking on properties listed or eligible for listing in the National Register of Historic Places (defined as historic properties) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. This generally requires the Commission to consult with the SHPO to determine whether and how a proposed action may affect historic properties, and to seek ways to avoid or minimize any adverse effects.

54. To satisfy these responsibilities, the Commission executed a PA with the Alabama SHPO on May 11, 2006, and invited Alabama Power, the Chickasaw Nation, the Mississippi Band of Choctaw Indians, the Muscogee (Creek) Nation of Oklahoma, the Poarch Band of Creek Indians, the Choctaw Nation of Oklahoma, the Bureau of Indian Affairs, and the Forest Service to concur with the stipulations of the PA. Alabama Power, the Mississippi Band of Choctaw Indians, the Choctaw Nation of Oklahoma, Bureau of Indian Affairs, and Forest Service signed the PA. The PA requires Alabama Power to implement the associated HPMP, dated March 2006, for the term of any new license issued for this project. Execution of the PA demonstrates the Commission's compliance with section 106 of the NHPA. Article 421 requires Alabama Power to implement the PA and associated HPMP.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES PURSUANT TO SECTION 10(j) OF THE FPA

55. Section 10(j)(1) of the FPA⁵⁴ requires the Commission, when issuing a license, to include conditions based on recommendations by federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act⁵⁵ to “adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat)” affected by the project.

⁵² 16 U.S.C. § 470 (2006) *et seq.*

⁵³ 36 C.F.R. Part 800 (2009).

⁵⁴ 16 U.S.C. § 803(j)(1) (2006).

⁵⁵ 16 U.S.C. §§ 661-667e (2006).

56. In response to the March 5, 2007 public notice that solicited comments, final recommendations, terms and conditions, and prescriptions, the FWS filed 11 recommendations under section 10(j).⁵⁶ Commission staff considered six of these measures under FPA section 10(j) as discussed below. The remaining five measures, which staff considered outside the scope of FPA section 10(j), are discussed in the next section.

57. This license includes conditions consistent with all six recommendations that are within the scope of FPA section 10(j). These recommendations include measures to: (1) provide annual stocking of coldwater fish in the Smith development tailrace⁵⁷ (Article 413); (2) incorporate into the license a drought management plan that supports the minimum flow released from Smith dam (Article 405); (3) release a minimum flow of 50 cfs downstream from Smith dam during non-generation periods, only when water levels in the tailrace reach 256.2 feet msl or less (Article 407). This license also requires that Alabama Power develop a final plan and installation schedule for installing release valves in the penstocks to provide the 50-cfs minimum flow to the Smith dam tailrace (Article 408); (4) exclude the 50-cfs minimum flow below Smith dam from any reductions which may be part of the drought management plan (Article 407); (5) enhance fish habitat in Smith Lake and downstream of Smith dam through placement of structures to provide cover, habitat, and velocity refuges for fish and aquatic resources (Article 412); and (6) implement the measures in Alabama Power's proposed Wildlife Program, which includes managing the shoreline for native vegetative species, managing timber for wildlife habitat, protecting bald eagle nesting areas, and establishing one or more public hunting areas for the disabled

⁵⁶ See FWS filing of May 3, 2007.

⁵⁷ The FWS recommended that the licensee and Alabama DCNR review the trout stocking program every five years. The review of the trout stocking program is not a specific measure to protect, mitigate, or enhance fish and wildlife resources. Furthermore, the FWS is a member of the Smith Tailrace Working Group that determined that fish stocking below Smith dam should be reviewed every ten years. The FWS did not object to a longer (i.e. ten-year) review period in either the draft EA or final EA. In order to coincide with Article 412 (Smith Development Fish Habitat Enhancement Plan) and Article 418 (Shoreline Management Plan), which require an evaluation of the enhancement measures every six years, I am requiring a review of the trout stocking program every six years.

(Article 414).⁵⁸ Article 414 also provides the Commission oversight for review and approval of any wildlife enhancement measures to be implemented.

SECTION 10(a)(1) of the FPA

58. Section 10(a)(1) of the FPA⁵⁹ requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

59. The FWS made five recommendations (see items A through D below) that were outside the scope of section 10(j) in that they were not specific measures to protect, mitigate damages to, or enhance fish and wildlife, or had no nexus to project effects. Consequently, I do not consider these recommendations under section 10(j) of the FPA. Instead, I consider these recommendations under the broad public-interest standard of FPA section 10(a)(1).

A. Aquatic Research and Culture Center, and the Habitat Enhancement Program

60. The FWS recommended, and Alabama Power proposes, funding for an Aquatic Research and Culture Center (Aquatic Center) and Habitat Enhancement Program (Habitat Program) to propagate species of concern. As discussed in the EA,⁶⁰ the proposed Aquatic Center and Habitat Program could facilitate the research to enhance and restore existing populations of threatened and endangered species within the state of Alabama. However, while the Aquatic Center and Habitat Program could potentially produce valuable information on the life cycle of aquatic species, such as mussels, and aid in their restoration, staff concluded in the EA that these measures have no direct relationship to project effects, and therefore staff does not recommend them. I agree with staff's analysis. However, Alabama Power may on its own enter into an agreement regarding the funding and development of the Aquatic Center and Habitat Program.

⁵⁸ See EA at 130.

⁵⁹ 16 U.S.C. § 803(a)(1) (2006).

⁶⁰ See EA at 79.

B. FWS Review of Permitting Process

61. The FWS has classified certain project owned lands as Sensitive Resources Lands (Class IV), which could contain habitat for rare, threatened, and endangered species, particularly those associated with the Sipsey Fork Critical Habitat Unit 10. The FWS asks that it be allowed to review any permits issued, or changes proposed, by the licensee to Class IV lands. In the EA, staff recommended that Alabama Power consult with the FWS when developing its revised shoreline management plan.⁶¹ I agree, therefore I am requiring that the FWS be consulted in the development of a revised shoreline management plan for the project (Article 418). In addition, Article 418 requires Alabama Power to review and update the shoreline management plan every six years, assuring that the FWS will be consulted on a regular basis.

C. Tailrace Assessment for Recreation

The FWS recommended that Alabama Power develop and implement recreation enhancements for the Smith tailrace. In the EA,⁶² staff did not recommend this measure because of its lack of specificity. Instead, staff recommended that Alabama Power conduct an assessment to determine whether informal access sites, located in the tailrace of the Smith development (Sites 96A and/or 96B which are used for bank fishing), are capable of, and suitable for more formal development. I find that an assessment would be appropriate, and require this measure in Article 420.

D. Funding Provisions for Fisheries and Wildlife

62. The FWS recommended the Fish Program⁶³ in which Alabama Power would provide a fund to be used at the Coosa River Project No. 2146, Warrior Project, and at other Alabama Power projects in the state to restore fisheries and their habitat. The FWS also recommended a Wildlife Enhancement Plan and Wildlife Habitat Enhancement and Restoration Program⁶⁴ in which Alabama

⁶¹ See EA at 137.

⁶² See EA at 137.

⁶³ The Fish Program is part of the “*Issue Resolution Process Summary for the Coosa River Project and the Warrior River Project*” filed by Alabama Power on March 3, 2006.

⁶⁴ The measures recommended by the FWS are a part of the Wildlife
(continued)

Power would provide the Forest Service funding for the wildlife habitat management measures as identified in Alabama Power's Wildlife Program.⁶⁵

63. The Commission has explained that, while a licensee and other entities are free to enter into cost-sharing agreements, including such provisions in a license is problematic because the Commission has no ability to enforce them.⁶⁶ Instead, under the FPA's comprehensive development standard, staff examines the specific measure that is proposed (and the total cost to implement) to decide whether it should be included in the license. Therefore, I am not requiring the funding measures for the Fish Program and the Wildlife Program. However, I am requiring that the specific measures for fisheries and wildlife described in these programs be implemented (Article 412 and Article 414).

E. Erosion Repair and Monitoring Plan

64. To protect aquatic resources in the Smith development tailrace, Alabama Power proposes to implement erosion and sediment control measures, which includes repairing two erosion sites and monitoring two other sites. In the EA,⁶⁷ staff recommended that Alabama Power develop and implement an Erosion Repair and Monitoring Plan to address soil erosion at the Smith development tailrace.⁶⁸ Article 417 requires this measure.

Program proposed by Alabama Power, which is further described in Appendix I of the license application (Wildlife Management Plan for the Warrior Hydroelectric Project).

⁶⁵ Funding is not a specific measure to protect, mitigate, or enhance fish and wildlife resources; therefore the funding portion of these measures was considered under 10(a).

⁶⁶ *See Settlement Policy*, 116 FERC ¶ 61,270, at P 22, 25, and 26 (2006).

⁶⁷ *See EA* at 130 and 147.

⁶⁸ The FWS was concerned about the frequency and length of the monitoring period for the Erosion Plan. Article 417 specifies that the FWS will be involved in developing the Erosion Plan and in determining the frequency and length of the monitoring efforts.

F. Recreation Measures

65. Alabama Power proposes to: (1) realign the existing parking lots, create additional parking, improve road access, and install fishing piers at the Cullman County-owned Smith Lake Park; and (2) improve the Alabama Department of Transportation's existing informal bank fishing site, located at the Brushy Creek Bridge (Route 278). In the EA,⁶⁹ staff noted that Alabama Power does not intend to include these recreation facilities as a project feature, and therefore, the facilities would remain outside the project boundary. Staff found that sufficient recreation occurs at the project and these facilities would not serve a project purpose. Staff concluded that it is reasonable to assume the county and the federal agencies will continue to operate and maintain these facilities throughout a new license term. Because there is no compelling need to bring these facilities into the project boundary as project recreation facilities, I am not requiring these measures. Alabama Power may choose to undertake the measures voluntarily outside the scope of the license.

G. Smith Lake Water Level Management

66. The Smith development is currently operated as a peaking facility, although peaking operations are moderated according to an informal guide curve to maintain target lake levels in Smith Lake. Alabama Power proposes to continue operating the Smith development as a peaking facility, within the constraints of the guide curve. Staff evaluated this proposal in the EA and concluded it would continue to: (1) protect lake resources; (2) enable water withdrawals; (3) provide for downstream navigation and water quality; (4) provide lake recreation benefits; and (5) provide flood control.⁷⁰ Staff recommended that these measures be adopted in a new license.

67. In the EA staff evaluated the Lake Association recommendation for more stable water levels in Smith Lake, and higher water levels in Smith Lake between Memorial Day and Labor Day.⁷¹ In its analysis, staff considered the developmental and non-developmental uses of the Black Warrior River and the multi-purposes served by the Warrior Project. Staff balanced the need for power,

⁶⁹ See EA at 137.

⁷⁰ See EA at 123. Staff concluded that the proposed lake level management regime provides multiple benefits and should be maintained.

⁷¹ See EA at 132-136 and Appendix D, Comments on the Draft Environmental Assessment for the Warrior River Hydroelectric Project.

flood control, navigation and commerce, water quality, aquatic resources, and recreation. Staff concluded that the project currently provides considerable benefits to recreation around the lake, and that these benefits would continue under the staff-recommended project operation. Implementing the operation recommended by the Lake Association would be excessively costly and provide speculative benefits which may never be realized. Finally, in the EA staff concluded that the costs of the Lake Association alternative outweigh the benefits, and is not in the overall public interest.

68. The Lake Association filed comments on the EA to support their recommendation for more stable water levels in Smith Lake.⁷² The Lake Association's comments restate prior arguments which have primarily been addressed in the EA. I have reviewed this issue and support staff's findings regarding water level management as presented in the EA. I am requiring in Article 402 that the Smith development be operated as recommended by staff in the EA because it provides for the comprehensive use of multiple competing resources within the Warrior River and downstream river basins.

H. Smith Development Operations

69. The current license requires specific operating measures for flood control and navigation, which are described in the Corp's March 1965 Reservoir Regulation Manual for the Lewis M. Smith Reservoir. These measures will continue to provide benefits to flood control and navigation. Therefore, I am requiring these measures in Articles 403 and 404.

I. Drought Management Plan

70. Inflows to the Warrior Project are generally adequate to meet existing flow needs and maintain lake levels that approximate those contained in the guide curve during wet and normal water years. However, during extreme drought years, as experienced in 2006 and 2007, inflows to the project are inadequate to maintain downstream flow needs and maintain reservoir levels as specified in the guide curve. In the EA, staff recommended that Alabama Power develop a drought management plan for the Warrior Project, which addresses competing water

⁷² The Lake Association commented on the final EA by letter filed June 8, 2009. Marvin Feldman, representing the Lake Association, commented on the final EA by letters filed April 2, 2009 and April 27, 2009.

resource needs for the Smith and Bankhead lakes.⁷³ Article 405 requires Alabama Power to file a drought management plan within 6 months of license issuance.

J. Bankhead Development Operation

71. The current license requires specific operating measures for flood control and navigation, which are described in the U.S. Army Corps of Engineers August 1975 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix E, for the John Hollis Bankhead Reservoir. These measures will continue to provide benefits to flood control and navigation. Therefore, I am requiring these measures in Article 406. Alabama Power's current license, and the Corp's manual, permits operation of the Bankhead powerhouse to maintain elevations between 252 feet and 255 feet msl in Bankhead Lake. In the EA, staff recommended that the lower limit of the drawdown be raised from 252 feet to 253.7 feet msl.⁷⁴ Alabama Power requests that maintaining the reservoir elevation at 253.7 feet msl should remain voluntary, and not converted to a mandatory license requirement. In the EA, staff found that the higher minimum elevation of 253.7 feet msl has been effectively implemented since 1975 and would not conflict with the 252 feet elevation stipulated in the Corp's reservoir regulation manual. Consequently, Article 406 requires that the Bankhead powerhouse be operated to maintain elevations between 253.7 and 255 feet msl. Should a lower minimum elevation (i.e., as low as 252 feet msl) be needed for unusual circumstances, Alabama Power may request a waiver of the requirement on a case by case basis.

K. Lake Levels to Enhance Black Bass Spawning

72. Alabama Power proposes to voluntarily hold constant, or increase, Smith Lake water levels for a 14-day period during the spring to enhance black bass spawning in Smith Lake. In the EA, staff recommended that to ensure more certainty for Alabama Power's continuation of this effort over the term of any new license, the black bass program should be included in the license.⁷⁵ As part of the program, staff recommended that Alabama Power consult with the Alabama DCNR on setting the date and duration for the measure. In addition, upon Commission approval, staff recommended that Alabama Power be allowed to modify or halt these enhancement activities if adverse hydrological conditions

⁷³ See EA at 125.

⁷⁴ See EA at 125 and 201.

⁷⁵ See EA at 127 and 201.

occur, or if other specific maintenance or operational conditions arise that would prevent such activities from occurring. This measure will enhance fish reproduction and support the recreational fishery in Smith Lake. Therefore, I am requiring the measure in Article 411.

L. Project Operations and Flow Monitoring Plan

73. In the EA, staff recommended that Alabama Power develop and implement a project operations and flow monitoring plan, which would include, at a minimum, the measures recommended by staff. Such a plan will establish a framework to periodically confirm that the project is operated in compliance with a new license, and provide important data needed for the licensee and the resource agencies to evaluate what effects, if any, the required water levels and flows have on the resources. Therefore, I am requiring that Alabama Power develop and implement a plan to monitor compliance with the lake level guide curve for Smith Lake, lake elevations, and downstream flows (Article 409).

M. Recreation

74. At the Smith development, Alabama Power proposes to continue to operate and maintain three project recreation facilities, including: (1) a boat launch area located at Smith Lake; (2) the Smith dam tailrace area; and (3) the Smith Lake Visitor Center. Alabama Power proposes to improve the boat launch area by adding a boat launch, a courtesy dock, and expanding the existing parking lot. Further, Alabama Power proposes to evaluate the existing signage at the project recreation sites for accuracy of information and revise the signs accordingly. In the EA,⁷⁶ staff concluded that the proposed measures would improve the project's recreation resources. Article 415 requires that Alabama Power undertake these measures.

N. Public Education and Outreach Program Plan

75. Alabama Power proposes to implement a Public Education and Outreach Program that addresses both the Warrior Project and Coosa River Project No. 2146. The program would include information about: (1) project operation; (2) the value of wetlands; (3) shoreline control measures; and (4) public safety. In the EA,⁷⁷ staff recommended that a separate Public Education and Outreach Program for the Warrior Project should be developed because the Coosa Project is a

⁷⁶ See EA at 129.

⁷⁷ *Id.*

separate proceeding. Article 416 requires that Alabama Power develop and implement such a plan for the Warrior Project.

ADMINISTRATIVE PROVISIONS

A. Annual Charges

76. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of funds for administration of the FPA, for the use and occupancy of U.S. lands, and for use of surplus water from a federal dam.

B. Exhibit F and G Drawings

77. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of Exhibit F drawings. APC filed Exhibit G drawings consisting of one sheet for the Bankhead dam development and 17 sheets for the Smith dam development. Exhibit G drawings must be prepared and stamped by a registered land surveyor. The Exhibit G drawings filed with the application have not been stamped by a registered land surveyor, therefore I am not approving the project boundary drawings. Article 203 requires Alabama Power to file revised Exhibit G drawings in electronic format.

C. Amortization Reserve

78. The Commission requires that for new major licenses, licensees must set up and maintain an amortization reserve account upon license issuance. Article 204 requires the establishment of the account.

D. Headwater Benefits

79. Some projects directly benefit from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 205 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

E. Use and Occupancy of Project Lands and Waters

80. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 422 allows the licensee to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting and some boat dock construction. Such uses must be consistent with the

purposes of protecting and enhancing the scenic, recreational, and environmental values of the project.

F. Review of Final Plans and Specifications

81. Article 301 requires the licensee to provide the Commission's Division of Dam Safety and Inspection Atlanta Regional Office (D2SI-ARO) with final contract drawings and specifications—together with a supporting design report consistent with the Commission's engineering guidelines.

82. Article 302 requires the licensee to provide the Commission's D2SI-ARO with cofferdam and deep excavation construction drawings.

83. Where new construction or modifications to the project are involved, the Commission requires licensees to file revised drawings of project features as-built. Article 303 provides for the filing of these drawings.

84. Article 304 reserves the Commission's authority to require alterations of the project structures and operations for flood control purposes.

G. Consultation on Resource Plans

85. In Appendix A there is one water quality certification condition that requires the licensee to file a plan with the Commission after the plan has been approved by the Alabama DEM. However, the condition does not provide for approval by the Corps. Therefore, Article 401(a) requires the licensee to submit the plan to the Corps and Commission for approval.

STATE AND FEDERAL COMPREHENSIVE PLANS

86. Section 10(a)(2)(A) of the FPA⁷⁸ requires the Commission to consider the extent to which a project is consistent with federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project.⁷⁹ Under section 10(a)(2)(A), federal and state agencies filed 14 comprehensive plans that address various resources in Alabama. Of these, staff

⁷⁸ 16 U.S.C. § 803(a)(2)(A) (2006).

⁷⁹ Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2009).

identified and reviewed seven comprehensive plans that are relevant to this project.⁸⁰ No conflicts were found.

APPLICANT'S PLANS AND CAPABILITIES

87. In accordance with sections 10(a)(2)(C) and 15(a) of the FPA,⁸¹ Commission staff evaluated Alabama Power's record as a licensee for these areas: (a) conservation efforts; (b) compliance history and ability to comply with the new license; (c) safe management, operation, and maintenance of the project; (d) ability to provide efficient and reliable electric service; (e) need for power; (f) transmission services; (g) cost effectiveness of plans; and (h) actions affecting the public. I accept the staff's findings in each of the following areas.

A. Conservation Efforts

88. Section 10(a)(2)(C) of the FPA requires the Commission to consider the extent of any electricity consumption efficiency improvement programs for license applicants primarily engaged in the generation or sale of electric power, like Alabama Power.

89. Alabama Power has provided conservation services for its electricity customers since 1979. Alabama Power has several programs to promote conservation and energy efficiency for residential, commercial, industrial, and agricultural customers. Alabama Power: (a) provides the public with seasonal energy saving tips through multi-news media including print, television, and radio; (b) sponsors conservation oriented events including conservation/recreation-themed programs, workshops and conferences; and (c) maintains the Energy Tips website which is a comprehensive online resource designed to provide customers with home energy information using easy to understand terms and illustrations. These programs show that Alabama Power is making an effort to conserve electricity and has made a satisfactory good faith effort to comply with section 10(a)(2)(C) of the FPA.

B. Compliance History and Ability to Comply with the New License

90. Based on a review of Alabama Power's compliance with the terms and conditions of the current license, staff finds that Alabama Power's overall record

⁸⁰ The list of applicable comprehensive plans can be found in section 5.4 of the EA.

⁸¹ 16 U.S.C. §§ 803(a)(2)(C) and 808(a) (2006).

of making timely filings and compliance with its license is satisfactory. Therefore, staff concludes that Alabama Power can satisfy the conditions of a new license.

C. Safe Management, Operation, and Maintenance of the Project

91. Staff reviewed Alabama Power's management, operation, and maintenance of the project pursuant to the requirements of 18 C.F.R. Part 12 and the Commission's Engineering Guidelines and periodic Independent Consultant's Safety Inspection Reports. Staff concludes that the dams and other project works are safe, and that there is no reason to believe that Alabama Power cannot continue to safely manage, operate, and maintain these facilities under a new license.

D. Ability to Provide Efficient and Reliable Electric Service

92. Staff reviewed Alabama Power's plans and its ability to operate and maintain the project in a manner most likely to provide efficient and reliable electric service. Staff's review indicates that Alabama Power has devices that monitor structural movement or stress, seepage, uplift, and equipment failure at the Warrior Project. In addition, Alabama Power regularly inspects the project's turbine-generator units to ensure they continue to perform in an optimal manner, schedules maintenance to minimize effects on energy production, and since the project has been in operation, has undertaken several initiatives to ensure the project is able to operate reliably into the future. Staff concludes that Alabama Power is capable of operating the project to provide efficient and reliable electric service in the future.

E. Need for Power

93. The Warrior Project has an installed capacity of 211.485 MW that generates an average of 430,968 MWh per year,⁸² and is located in the southern sub-region of Southeastern Electric Reliability Council (SERC), which is one of eight regional reliability councils of the North American Electric Reliability Council. SERC is a summer peaking region, and the peak summer energy demand for the SERC region is projected to grow at an average annual rate of 1.7 percent over the planning period from 2007 through 2016. About 39 percent of the energy utilized in the SERC region is generated from coal, 26 percent generated from nuclear power, and 5 percent generated from hydropower.

⁸² Based on actual generation averaged for a 15-year period of record (years 1992-2007).

94. The southern sub-region of SERC includes Georgia, Alabama, southeastern Mississippi, and the panhandle of Florida. The southern sub-region is serviced by Southern Company, the largest generator of electricity in the United States. Alabama Power is the second largest subsidiary of Southern Company, providing 30 percent of the power needs for the Southern Company's residential, commercial, and industrial customers. Of this 30 percent, 7.2 percent of the power is derived from Alabama Power's 14 hydroelectric facilities, including the Smith and Bankhead developments. These facilities provide a significant source of reliable, dependable, and reasonably priced electricity for Alabama Power's customers.

95. Power from the Warrior Project will continue to contribute to the region's diversified generation mix. Power from the Warrior Project can continue to meet Alabama Power's customers' growing needs as well as help meet part of the regional need for power. The project may displace fossil-fueled electric power generation that the regional utilities currently use, and thereby may conserve nonrenewable fossil fuels and reduce the emission of noxious byproducts caused during the combustion of fossil fuels.

F. Transmission Services

96. The Smith development delivers power to a substation located at the base of the project dam. This substation is connected to Alabama Power's transmission system through three high voltage lines which are not part of the license: the 161-kilovolt (kV) Haleyville line; 161-kV Gorgas line; and 115-kV Boyles line. The Bankhead development delivers power to a substation located at the base of the project dam. This substation is connected to Alabama Power's transmission system through one 115-kV line, which is not part of the license, connecting to the Tuscaloosa substation. Alabama Power proposes no changes that would affect its own or other transmission services in the region.

G. Cost Effectiveness of Plans

97. Alabama Power proposes several operational and environmental enhancements at the project, including the following: (a) installing flow valves to release a 50-cfs minimum flow to the Smith tailrace; and (b) designing, installing, and operating a turbine aeration system at the Smith development. Based on Alabama Power's record as an existing licensee, staff concludes that these proposals are likely to be carried out in a cost-effective manner.

H. Actions Affecting the Public

98. During the current license term, Alabama Power provided facilities to enhance the public use of project lands and waters, and operated the project with

consideration to protecting public use of Smith Lake, as well as protecting downstream communities by providing flood control storage. During this relicensing process, the public was invited to participate in meetings and provide comments at each phase of the process. In addition to being responsive to public input that benefits the community, Alabama Power uses the project to help meet the power needs of the region and pays taxes that contribute to the cost of public services provided by local governments.

PROJECT ECONOMICS

99. In determining whether to issue a new license for an existing hydroelectric project, the Commission considers a number of public interest factors, including the economic benefits of project power. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in *Mead Corp.*,⁸³ the Commission uses current costs to compare the costs of the project and likely alternative power with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.

100. In applying this analysis to the Warrior Project, staff considered Alabama Power's proposal and the project as licensed herein. As proposed by Alabama Power, the levelized annual cost of operating the Warrior Project is \$8,458,310, or \$19.79/MWh. The proposed project would generate an estimated average of 427,335 MWh of energy annually. When multiplying the estimate of average generation by the alternative power cost of \$120/MWh,⁸⁴ staff got a total value of

⁸³ *Mead Corp.*, 72 FERC ¶ 61,027 (1995).

⁸⁴ For the Warrior Project, Alabama Power estimated that the cost to provide the same amount of power and dependable capacity from a mixture of generation resources available to Alabama Power is \$120/MWh. This includes a power value, as well as value for dependable capacity. Alabama Power determined the most likely source of alternative power is a gas-fired combined-cycle facility at a construction cost as provided by the Department of Energy, Energy Information Administration. Since a combined cycle facility has a 20-year lifespan, one and one-half life cycles of combined cycle capacity was considered equivalent to hydropower capacity over a 30-year period. Staff recognizes that Alabama Power's estimate for alternative power is higher than the average retail cost of power in the Southeastern Region (i.e. about \$70/MWh). However the

(continued)

the project's power of \$51,280,200 in 2009 dollars. To determine whether the proposed project is currently economically beneficial, staff subtracts the project's cost from the value of the project's power.⁸⁵ Therefore, in the first year of operation, the project would have a net annual benefit of \$42,821,890. In other words, the project would produce energy at a cost that is \$42,821,890 less than the likely alternative cost of power.

101. As licensed herein with mandatory conditions and staff measures, the levelized annual cost of operating the project would be about \$8,312,913, or \$19.45/MWh. Using the same alternative power cost and annual generation in Alabama Power's proposal, the project would have a net annual benefit of \$42,967,287. In other words, the project would produce energy at a cost that is \$42,967,287 less than the likely alternative cost of power.

102. In considering public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary service benefits). These benefits include their ability to help maintain the stability of a power system, such as by quickly adjusting the power output to respond to rapid changes in system load; and to respond rapidly to a major utility system or regional blackout by providing a source of power to help restart fossil-fueled base generating stations and put them back online.

COMPREHENSIVE DEVELOPMENT

103. Sections 4(e) and 10(a)(1) of the FPA⁸⁶ require the Commission to give equal consideration to power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be, in the Commission's judgment, best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to relicense this project, and the terms and conditions included herein, reflects such consideration.

Warrior Project is unique in that it provides a high level of dependable capacity which justifies a higher replacement cost for energy.

⁸⁵Details of staff's economic analysis for the project, as licensed herein, and for various alternatives are included in the EA at 116-117.

⁸⁶ 16 U.S.C. §§ 797(e) and 803(a)(1) (2006).

104. The EA for this project contains background information, analysis of effects, and support for related license articles. I conclude, based on the record of this proceeding, including the EA and comments thereon, that relicensing the Warrior Project as described in this order would not constitute a major federal action significantly affecting the quality of the human environment. The project will be safe if operated and maintained in accordance with the requirements of this license.

105. Based on my independent review and evaluation of the project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, as documented in the EA, I have selected the Warrior Project, as licensed herein, and find that it is best adapted to a comprehensive plan for improving or developing the Black Warrior River and Sipsey Fork.

106. I have selected this alternative because: (1) issuance of a new license will serve to maintain a beneficial, dependable, and an inexpensive source of electric energy; (2) the required environmental measures will protect and enhance fish and wildlife, water quality, recreation resources, and historic properties; and (3) the 211.485 MW of electric capacity available from this renewable resource may offset the use of fossil-fueled steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

LICENSE TERM

107. Section 15(e) of the FPA⁸⁷ provides that any new license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years. The Commission's policy is to establish 30-year terms for projects with little or no redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures.⁸⁸

108. This license authorizes a minor amount of construction, and environmental measures including: (1) installing flow valves and releasing a 50-cfs minimum flow to the Smith tailrace; (2) designing and installing a turbine aeration system at the Smith dam; (3) placing habitat enhancement structures in the Smith development tailrace; (4) implementing a recreation and shoreline management plan; and, (5) implementing project-related measures required by the Forest

⁸⁷ 16 U.S.C. § 808(e) (2006).

⁸⁸ See *Consumers Power Company*, 68 FERC ¶ 61,077 at 61,383-84 (1994).

Service, pursuant to section 4(e) of the FPA. Consequently, a 30-year license for the Warrior Project is appropriate.

The Director orders:

(A) This license is issued to Alabama Power Company (licensee), for a period of 30 years, effective the first day of the month in which this order is issued, to operate and maintain the Warrior River Hydroelectric Project. This license is subject to the terms and conditions of the Federal Power Act (FPA), which are incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in these lands, enclosed within the project boundary shown on Exhibit G filed on July 28, 2005, to the extent that the Exhibit shows the general project area, and as described in the project boundary discussion in this order.

(2) Project works for the Smith development and Bankhead development which include:

The Smith development consisting of: (1) a total of 2,200 feet of water retaining structures, which includes a 300-foot-high earth and rock fill dam, an uncontrolled spillway with fixed crest elevation 522 feet msl, and a powerhouse consisting of (a) a 95-foot-long uncontrolled spillway, (b) a 350-foot-wide channel that originates at the spillway and discharges into Mill Creek about 3,000 feet downstream of the spillway, and (c) a concrete intake located 120 feet upstream of the dam which provides flows to two 23-foot-diameter, 630-foot-long power tunnels; (2) a 35-mile-long, 21,200-acre reservoir at normal pool elevation 510 feet msl, with a capacity of 1,390,000 acre-feet (acre-ft) at normal pool elevation 510 feet msl, and 1,670,600 acre-feet at spillway crest elevation 522 feet msl; (3) a 193-foot-long concrete power house, two generating units with a total rated capacity of 157.5 MW and total hydraulic capacity of approximately 11,400 cfs; (4) trashracks located at the turbine intakes with 6-inch open bar spacing; (5) a substation; and (6) appurtenant facilities.

The Bankhead development consisting of: (1) a 54-foot-wide by 100-foot-long gated intake; (2) a 135-foot-long, 77-foot-wide powerhouse, integral with the dam; (3) one 71,400 horse power vertical propeller turbine and generating unit, rated at 53.985-MW and having a maximum hydraulic capacity of approximately 10,388 cfs; (4) trashracks located at the turbine intakes with 6-inch open bar spacing; (5) an 8-foot-wide gated sluice for discharging trash; (6) a 73-foot-long

concrete non-overflow section between the powerhouse and spillway; (7) penstocks; (8) a tailrace; (9) a substation; and (10) appurtenant facilities.

The project works generally described above are more specifically shown and described by those approved portions of Exhibit F shown below:

Exhibit F: The following approved Exhibit F drawings filed July 28, 2005:

<u>Exhibit F-</u>	<u>FERC Drawing No. 2165-</u>	<u>Description</u>
1	1001	Lewis Smith Dam-General Layout
2	1002	Lewis Smith Dam-Diversion and Power Tunnels
3	1003	Lewis Smith Dam-Intake
4	1004	Lewis Smith Dam-Powerhouse
5	1005	Lewis Smith Dam-Powerhouse Sections
6	1006	John Hollis Bankhead Dam-General Layout
7	1007	John Hollis Bankhead Dam-Powerhouse
8	1008	John Hollis Bankhead Dam-Powerhouse Plans

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project, all portable property that may be employed in connection with the project, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibit F described above are approved and made part of this license. The Exhibit G drawings filed as part of the application for license do not conform to Commission regulations and are not approved.

(D) This license is subject to the conditions submitted by the Alabama Department of Environmental Management under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1431(a)(1) (2006), as those conditions are set forth in Appendix A to this order.

(E) This license is subject to the conditions submitted by the U.S. Department of Agriculture, U.S. Forest Service, under section 4(e) of the FPA, as those conditions are set forth in Appendix B to this order.

(F) This license is also subject to the articles set forth in Form L-5 (Oct.

1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters and Lands of the United States," (*see* 54 F.P.C. 1799 *et seq.*) attached to this license, and the following additional articles:

Article 201. *Administrative Annual Charges.* The licensee shall pay the United States annual charges, effective the first day of the month in which the license is issued, and as determined in accordance with provisions of the Commission's regulations in effect from time to time, for the purposes of:

(1) reimbursing the United States for the cost of administration of Part I of the Federal Power Act. The authorized installed capacity for that purpose is 211.485 megawatts;

(2) recompensing the United States for the use, occupancy, and enjoyment of 2,691.44 acres of federal lands; and

(3) recompensing the United States for the utilization of surplus water from a government dam.

Article 202. *Exhibit F Drawings.* Within 45 days of license issuance the licensee shall file the approved exhibit drawings in aperture card and electronic file formats.

(a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-2165-1001 through P-2165-1008) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards along with form FERC-587 shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections, Atlanta Regional Office.

(b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections, Atlanta Regional Office. Exhibit F drawings must be identified as (CEII) material under 18 CFR §388.113(c). Each drawing must be a

separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension in the following format [P-2165-1001, D-1, Description, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4
RESOLUTION – 300 dpi desired, (200 dpi min)
DRAWING SIZE FORMAT – 24” X 36” (min), 28” X 40” (max)
FILE SIZE – less than 1 MB desired

Article 203. *Revised Exhibit G Drawings.* Within 90 days of license issuance, the licensee shall file, for Commission approval, revised Exhibit G drawings enclosing within the project boundary all principal project works and lands necessary for construction, operation, and maintenance of the project. The Exhibit G drawings must comply with 18 C.F.R. sections 4.39 and 4.41 of the Commission’s regulations.

Article 204. *Amortization Reserve.* Pursuant to section 10(d) of the Federal Power Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. The licensee shall set aside in a project amortization reserve account at the end of each fiscal year one half of the project surplus earnings, if any, in excess of the specified rate of return per annum on the net investment. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year, the licensee shall deduct the amount of that deficiency from the amount of any surplus earnings subsequently accumulated, until absorbed. The licensee shall set aside one-half of the remaining surplus earnings, if any, cumulatively computed, in the project amortization reserve account. The licensee shall maintain the amounts established in the project amortization reserve account until further order of the Commission.

The specified reasonable rate of return used in computing amortization reserves shall be calculated annually based on current capital ratios developed from an average of 13 monthly balances of amounts properly included in the licensee’s long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rate for such ratios shall be the weighted average cost of long-term debt and preferred stock for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

Article 205. Headwater Benefits. If the licensee's project was directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license. The benefits will be assessed in accordance with Part 11, Subpart B, of the Commission's regulations.

Article 301. Contract Plans and Specifications. At least 60 days prior to the start of any construction activities, the licensee shall submit one copy of its plans and specifications and its supporting design documents to the Commission's Division of Dam Safety and Inspections (D2SI) - Atlanta Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI). The licensee may not begin construction until the Atlanta Regional Engineer has approved in writing the plans and specifications and determined that all preconstruction requirements have been satisfied. The submittal must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan.

Article 302. Cofferdam and Deep Excavation Construction Drawings. Before starting construction the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations and shall make sure construction of cofferdams and deep excavations are consistent with approved designs. At least 30 days before starting construction of cofferdams, the licensee shall submit one copy to the Commission's Division of Dam Safety and Inspections (D2SI), Atlanta Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, D2SI), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 303. As-built Drawings. Within 90 days of completion of all construction activities authorized by this license, the licensee shall file, for Commission approval, revised Exhibits A, F, and G, as applicable, describing and showing those project facilities as-built. A courtesy copy shall be filed with the Commission's Division of Dam Safety and Inspections (D2SI) - Atlanta Regional Engineer, the Director D2SI, and the Director, Division of Hydropower Administration and Compliance.

Article 304. Flood Control. The Commission reserves the authority to order, upon its own motion or upon the recommendation of the U.S. Army Corps of Engineers, alterations of project structures and operations for flood control purposes, after notice and opportunity for a hearing.

Article 305. No Claim. The licensee shall have no claim under this license against the United States arising from the effect of any changes made in the operation or reservoir levels of the U.S. Army Corps of Engineers' project.

Article 401. Commission Approval and Reporting.

(a) Requirement to File Plans for Commission Approval

One condition of this license found in the Alabama Department of Environmental Management (Alabama DEM) water quality certification, attached to this order as Appendix A, requires the licensee to develop a plan without reference to prior Commission approval. The plan, as identified below, shall also be submitted to the U.S. Army Corps of Engineers and the Commission for approval.

Alabama DEM Condition Number	Plan Name	Commission Due Date
7.	Measures to assure compliance with dissolved oxygen standards	Within 6 months from the end of the 3-year monitoring period.

The licensee shall submit to the Commission documentation of any consultation required by the condition, copies of comments and recommendations by consulted entities made in connection with the plan, and a description of how the plan accommodates the comments and recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make changes to any plan or recommendation submitted. Upon Commission approval the plan becomes a requirement of the license, and the license shall implement the plan including any changes required by the Commission.

(b) Requirement to File Reports and Notifications with the Commission

The licensee shall file with the Commission the following reports or notifications required by the water quality certification according to the schedule set forth below.

Certification Condition Number	Report Name	Commission Due Date
6.	Dissolved oxygen and temperature monitoring report	Within 90 days following the end of the annual monitoring period.

Article 402. Smith Lake Level Management. Upon issuance of this license, the licensee shall implement the lake level management provisions of this article. The purpose of this article is to protect the ecological and recreational values of Smith Lake and continue to provide for downstream navigation and flood control.

The licensee shall operate the Smith development in accordance with the operations guide curve and elevations shown in the U.S. Army Corps of Engineers (Corps) March 1965 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix A, for the Lewis M. Smith Reservoir (Manual),⁸⁹ Chart No. 8 of Appendix A of the Manual, and summarized as follows:

(a) Elevation at normal full pool level 510 feet mean sea level (msl) from April 1 to June 30, drawdown beginning on or about July 1 and continuing until the water levels reach the winter pool level of 496 feet msl by the end of November; and (b) elevation 496 feet msl from December 1 to January 31, at which time refill of the lake may begin until normal full pool level 510 feet msl is reached by the end of January.

No other restrictions are required on either the up-ramp or down-ramp of project output, except as provided in Article 403 regarding flood control. The licensee shall, to the extent possible, manage lake levels to follow the above elevations. The licensee shall continually review hydrologic conditions and adhere to the requirements of Article 403 during flood conditions, and Article 405 during drought conditions.

The lake level requirements may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement among the licensee, the Corps, U.S. Fish and Wildlife Service, Alabama Department of Environmental Management, and Alabama

⁸⁹ The manual was placed in the record on March 23, 2010, FERC Accession No. 20100324-0408.

Department of Conservation and Natural Resources. If lake levels are so modified, the licensee shall notify the Commission as soon as possible, but not later than 10 days after each such incident, and shall provide the reason for the change in lake levels.

Article 403. Flood Control Operations. Upon issuance of this license, the licensee shall operate the Smith development in accordance with the U.S. Army Corps of Engineers (Corps) March 1965 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix A, for the Lewis M. Smith Reservoir (Manual), unless otherwise directed by the Corps. The Manual includes specific rules for flood operations, as summarized in items (a) and (b) below:

- (a) During flood events, when reduction of flows are necessary at the Smith development to protect downstream river conditions, the licensee shall maintain outflows from the Smith development at no lower than 2,100 acre-feet in each 24-hour period as specified by the Manual. After passage of the flood peak downstream, the licensee shall evacuate flood storage in Smith Lake as soon as reasonable and practicable by discharging up to 21,200 acre-feet (up to the full project operating capacity) each 24-hour period when the pool is at, or above elevation 513 feet mean sea level (msl), and up to 10,000 acre-feet (up to half the project operating capacity) for each 24-hour period when the pool elevation is between 513 and 510 feet msl.
- (b) This operation is further described in licensee's Regulation Schedule for Flood Control identified in the Final License Application, filed on July 28, 2005, and shown as follows:

Regulation Schedule for Flood Control Operation at the Smith Development

Schedule ^a	Cordova Stage (Feet Gauge Datum) ^{b,c}	Pool Stage At Smith Dam (Feet msl Datum)	Operation Required ^d
A	Below 13.5	Below 510	Normal power operation.
C		At 510	Operate to prevent rise in pool by releasing daily inflow up to 1/2 of full plant volume capability. (Greater releases may be made at the licensee's option.)

Schedule ^a	Cordova Stage (Feet Gauge Datum) ^{b,c}	Pool Stage At Smith Dam (Feet msl Datum)	Operation Required ^d
D		510 to 513	Release daily volume equal to 1/2 of full plant volume capability. (Greater releases may be made at the licensee's option.)
		Above 513	Release continuously at full plant capacity.
B	Above 13.5 rising, and all stages above 16.0	Below 522	Limit release volume to 2,100 acre-ft each 24 hours, at rates up to full plant capacity, in any pattern convenient to the licensee.
		At 522	Release may equal inflow up to full plant capacity.
		Above 522	Release may be continuous at rates up to full plant capacity. ^e
EMPTYING FLOOD CONTROL STORAGE			
	16.0 to 13.5 and falling	Above 510 but less than 522	Release daily volume equal to 1/2 of full plant volume capability. ^f
	Below 13.5	Above 513	Release continuously at full plant capacity. ^g
		510 to 513	Release daily volume equal to 1/2 of full plant volume capability. (Greater releases may be made at the licensee's option.)

^a This schedule is followed for the conditions shown except when specific instructions for flood control

operations are issued by the Corps District Engineer.

^b The necessity for flood control operations is normally determined by stages at the Cordova Gage (United States Geological Service Gage Number 02453500 Mulberry Fork at Cordova, AL) at the town of Cordova, 27 miles downstream from Smith dam.

^c If the stage cannot be determined, and there is a possibility that flood conditions exist, the operation would be limited to Schedule "B".

^d Releases designated only in terms of volume may be made at any time and rate convenient to the licensee, within the limitations shown.

^e When the pool stage exceeds elevation 522 msl, this release may be in addition to the spillway discharge.

^f Project operation would revert to full flood control if this release results in a rise exceeding the 16-foot stage at Cordova.

^g If this release results in a rise exceeding a stage of 15 feet on the Cordova gauge the outflow rate would be reduced to 1/2 of full plant capacity until the Cordova stage again drops to 13.5 feet or less.

The licensee may draw the lake levels below the target winter elevation of 496 feet msl in anticipation of pending flooding conditions or for an emergency related to dam safety, protection of human life and property, or rescue activities. The licensee shall notify the Alabama Department of Conservation and Natural Resources (Alabama DCNR), Corps, and the Commission's Atlanta Regional Office within 24 hours of the commencement of any such drawdowns or emergency actions. This notification shall be followed within the subsequent 24 hours by submission to the Alabama DCNR, Corps, and Commission of a description of the need for an emergency drawdown and any related emergency actions.

Article 404. Navigation Flows. Upon issuance of this license, the licensee shall operate the Warrior River Project in a manner to assure that during periods of extreme drought, or extended drawdown, flows for navigation are provided in accordance with U.S. Army Corps of Engineers (Corps) March 1965 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix A, for the Lewis M. Smith Reservoir (Manual), or as the Commission may require. The Manual states that during periods of extreme drawdown, the Corps would specify the required flow releases from the Smith Development, not to exceed 486 acre-feet per day. This would be equivalent to a release of about 245 cubic feet per second (cfs) from the Smith development that is needed to maintain a 540 cfs inflow to Bankhead Lake.

Article 405. Drought Management Plan. Within 180 days from the date of license issuance, the licensee shall file with the Commission, for approval, a drought management plan that incorporates the drought contingency curve as described herein for the Warrior River Project. This includes implementing drought management measures on or before the time that reservoir elevations at Smith Lake reach 488 feet mean sea level (msl) in January, 488 to 506 feet msl from February through April, 506 feet msl from April through June, and 506 to 488 feet msl from June through December. The licensee shall develop the plan in

consultation with the U.S. Army Corps of Engineers (Corps), U.S. Geological Survey (USGS), U.S. Fish and Wildlife Service (FWS), Alabama Department of Environmental Management (Alabama DEM), Alabama Department of Conservation and Natural Resources (Alabama DCNR), and the Birmingham Water Works Board (Water Board).

The plan shall include, but not be limited to: (a) the lake level parameters described above for the drought contingency curve; (b) provisions to minimize the occurrence of elevations lower than 495 feet msl at Smith Lake; (c) ways of placing priority on water needs such that the licensee and entities consulted in development of the plan can cooperatively determine whether the flow obligations shall be temporarily reduced or suspended, or the reservoir operating curve shall be modified to allow drawdowns to meet downstream flow needs; and (d) appropriate consideration to hydroelectric generation; navigation; rare, threatened, or endangered species; municipal water needs; water quality; agriculture; and public recreation.

As an interim measure, until a final drought management plan is approved by the Commission, during drought conditions, when water levels in Smith Lake fall below 495 feet msl, the licensee shall inform the Commission within 15 days of the implementation of any emergency reservoir drawdown or changes in project operations. In addition, the licensee shall file a request, for Commission approval, to implement measures necessary to manage project operations during the drought.

The licensee shall consult with the Corps, USGS, FWS, Alabama DEM, Alabama DCNR, and Water Board when preparing the plan. The licensee shall include with the plan documentation of agency consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific information.

In the event a statewide drought management plan (i.e., the Alabama Drought Management Plan) is completed prior to submission of the licensee's drought management plan, the licensee shall review that plan and provide a report to the Commission documenting how the licensee's drought management plan conforms to the statewide plan, and make recommendations for revisions to the licensee's plan which may be necessary to conform to the statewide plan.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 406. Bankhead Development Operations. Upon issuance of this license, the licensee shall operate the Bankhead development (i.e., the Bankhead powerhouse) as directed by the U.S. Army Corps of Engineers (Corps) to protect aquatic resources in the Black Warrior and Tombigbee Rivers and to meet the Corps' operational requirements at the Bankhead lock and dam to provide flood control and navigation on the Black Warrior and Tombigbee Rivers. The Corps' operational requirements for the Bankhead development are further described in the U.S. Army Corps of Engineers August 1975 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix E, for the John Hollis Bankhead Reservoir.⁹⁰ Additionally, during normal operations the Bankhead powerhouse shall be operated in a manner which maintains a water surface elevation at Bankhead Lake not less than 253.7 feet mean sea level (msl) and not greater than 255 feet msl for the protection of recreation resources and municipal water supplies on Bankhead Lake.

Operation of the Bankhead development may be temporarily modified if required by operating emergencies beyond the control of the licensee, as part of the drought management plan required in Article 405, or for short periods upon mutual agreement between the Alabama Department of Environmental Management, Alabama Department of Conservation and Natural Resources, and the Corps. If project operations are so modified, the licensee shall notify the Commission as soon as possible, but not later than 24 hours after each such incident, and shall provide a reason for the change in project operations.

Article 407. Minimum Flow at Smith Dam. The licensee shall release a minimum flow of 50 cubic feet per second from the Smith dam by passing water through two automated valves that will be installed in the penstocks. The minimum flow release shall begin upon completion of installation of the release valves required in Article 408. The minimum flow shall be provided during periods of non-generation when the tailrace water elevation drops to 256.2 feet mean sea level. This minimum flow shall not be reduced as part of any flow releases determined as part of the drought management plan required in Article 405.

⁹⁰ The manual was placed in the record on March 23, 2010, FERC Accession No. 20100324-0407.

The minimum flow may be temporarily modified if required by operating emergencies beyond the control of the licensee, or for short periods upon agreement between the licensee and the Alabama Department of Conservation and Natural Resources, the U.S. Fish and Wildlife Service, and the Alabama Department of Environmental Management, or for short periods during annual turbine inspection and repair events when one or both valves would be shut and drained to allow safe inspection of the turbines. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 408. *Smith Dam Flow Release Plan.* Within 90 days from the date of license issuance, the licensee shall develop and file with the Commission for approval, a final plan and installation schedule for the two penstock release valves to provide the minimum flow required in Article 407 for the Smith development.

The licensee shall consult with the U.S. Fish and Wildlife Service, Alabama Department of Environmental Management, and the Alabama Department of Conservation and Natural Resources, when preparing the plan and schedule. The licensee shall include with the plan and schedule documentation of agency consultation, copies of comments and recommendations on the completed plan and schedule after they have been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan and schedule. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific information.

The Commission reserves the right to require changes to the plan and schedule. Upon Commission approval, the licensee shall implement the plan and schedule, including any changes required by the Commission.

Article 409. *Project Operations and Flow Monitoring Plan.* Within 120 days from the date of license issuance, the licensee shall file with the Commission, for approval, a plan to monitor compliance with: (1) Smith Lake levels as required in Article 402; (2) operations for flood control required by Article 403, (3) navigation flows as required in Article 404; (4) the drought management plan required by Article 405; (5) the minimum flow for the Smith development required by Article 407; (6) dissolved oxygen levels and dissolved oxygen enhancement measures as required in the water quality certificate contained in Appendix A; and (7) project operation at the Bankhead development as required by Article 406.

The licensee shall prepare the plan after consultation with the Alabama Department of Conservation and Natural Resources, Alabama Department of Environmental Management, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers. The licensee shall include with the plan a schedule for implementing the plan; documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 410. *Reservation of Authority to Prescribe Fishways.* Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of such fishways as may be prescribed by the Secretaries of the Interior or Commerce pursuant to section 18 of the Federal Power Act.

Article 411. *Black Bass Spawning Enhancement Program at Smith Lake.* Upon issuance of this license, the licensee shall implement a black bass spawning program for Smith Lake to enhance black bass spawning activities in the lake. The licensee shall hold constant or slightly increase the water levels in Smith Lake for a 14-day minimum period in the spring to facilitate and improve spawning conditions for black bass. The exact dates and duration of stable water levels shall be determined in consultation with the Alabama Department of Conservation and Natural Resources (Alabama DCNR). Any modifications of the black bass spawning program shall be based on site-specific information that may be provided by the Alabama DCNR to the licensee each year.

The licensee shall file a report with the Commission annually, by December 31, which provides the dates the black bass spawning enhancement program was implemented, or if not implemented, the reasons for not implementing the program with supporting documentation, including comments from the Alabama DCNR, if applicable.

Article 412. *Smith Development Fish Habitat Enhancement Plan.* Within 120 days of the issuance date of the license, the licensee shall develop, and file for approval, a plan and schedule to enhance fish habitat in Smith Lake and in project waters downstream of Smith dam. In Smith Lake the enhancements shall include,

but not be limited to: (1) introducing substrates (i.e., pea gravel, vegetation, barrels, etc.) to Smith Lake to enhance spawning and cover for fish and to provide substrate for invertebrates; (2) measures to stabilize the shoreline and banks of Smith Lake to improve water quality, control sedimentation, and provide cover for fish; and (3) providing woody debris (i.e., brush piles, etc.) in Smith Lake to provide cover for, concentrate fish, and to enhance angling opportunities in project waters. The enhancement measures downstream of Smith dam should include, but not be limited to, placing structures or making streambank modifications to provide cover and habitat beneficial to resident fish, aquatic biota, and trout upstream of the highway 69 bridge. The plan should include a provision to implement the measures downstream of Smith Dam within 60 days from the date of the first minimum flow release required in Article 407, to determine the exact locations of enhancement measures after observing the effects of the minimum flow on flow patterns in the river.

In order to evaluate the permanence and effectiveness of the implemented measures, the plan shall also include a provision for a report to the Commission to every 6 years to include, but not be limited to the following: (1) documented consultation with the Alabama Department of Conservation and Natural Resources (Alabama DCNR) and the U.S. Fish and Wildlife Service (FWS) describing placement and follow-up observations of the permanence and effectiveness of the implemented measures; (2) a detailed description of the types and composition of the materials used (i.e., natural woody vegetation, cement structures, rock-filled gabions, gravel) to construct the physical enhancement structures; (3) a description of alternative measures, devices, or techniques that will be used to replace any of the enhancement measures that are unsuccessful and the dates for installation of the replacement structures; (4) identification of the type, numbers, and locations of any enhancement structures that are replaced; and (5) a method for evaluating the enhancement structures and for determining whether a 6-year maintenance cycle is adequate to keep the enhancement structures in functional condition.

The licensee shall consult with the Alabama DCNR and the FWS in developing the plan. The licensee shall include with the plan documentation of agency consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated in the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific information. No modifications shall begin until the plan is approved by the Commission.

Article 413. Fish Stocking. The licensee shall annually stock coldwater

fish species (i.e., trout) in the tailwaters of the Smith development to enhance the recreational sport fishery in Sipsey Fork tributary of the Black Warrior River. The licensee shall consult with the Alabama Department of Conservation and Natural Resources (Alabama DCNR) to determine the exact species, number of fish, and timing for stocking. In addition, the licensee shall meet once every 6 years with the Alabama DCNR and the U.S. Fish and Wildlife Service (FWS) to review the effects of the stocking program and to determine if any changes are needed. The licensee shall, after consultation with the Alabama DCNR and FWS, file with the Commission for approval, a report that includes the results of the stocking program every six years to coincide with the requirements of Article 412 (Smith Development Fish Habitat Enhancement Plan).

The licensee shall include with the report documentation of agency consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated in the report. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the report with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on site-specific information.

If the results described in the fish stocking report indicate that changes may be necessary to protect the recreational fishery in the Smith development tailwaters, the Commission may direct the licensee to modify fish stocking efforts.

Article 414. Wildlife Management Plan. The Wildlife Management Plan filed with the Commission as Appendix I of the license application on July 28, 2005, for the Warrior River Hydroelectric Project No. 2165, is approved, excluding Section 8-Wildlife Enhancement Fund. The licensee shall implement Section 4-Shoreline Management, Section 5-Timber Management, Section 6-Bald Eagle Monitoring and Management, and Section 7-Handicapped Hunting Areas.

The licensee shall include the provisions of Section 4-Shoreline Management, (i.e. the shoreline classification system, shoreline buffers, and planting of native species), and Section 5-Timber Management (i.e. a 20-year timber cutting cycle, prescribed burning and/or herbicides to manage undergrowth, and selective cutting as the primary means of timber harvest), in the shoreline management plan required in Article 418.

In regard to Section 6-Bald Eagle Monitoring and Management, if nesting eagles are discovered on the Warrior Project, the licensee shall immediately restrict all disruptive activities (including timbering, construction, road building, etc.) within 1,500 feet of the nest during the nesting season and 750 feet during

other times of the year. The licensee shall contact the Alabama Department of Conservation and Natural Resources and the U.S. Fish and Wildlife Service within 14 days to report discovery of the nest and actions taken.

The licensee shall include the provisions of Section 7-Handicapped Hunting Areas, (i.e., construct a shooting house downstream of Smith dam designed to accommodate disabled hunters, and if needed build and maintain a road to access the shooting houses) in the project recreation plan required in Article 415.

Article 415. Project Recreation Plan. Within one year of the issuance date of the license, the licensee shall file, for Commission approval, a Warrior River Project Recreation Plan. The plan shall include, but not be limited to, the following: (1) a description of the three project recreation sites: Alabama Power boat launch area located at Smith Lake; Smith Lake Visitor Center; and Smith dam tailrace area; (2) at the Alabama Power boat launch area, provisions for an additional boat launch, a courtesy dock, and expanding the parking lot; (3) an evaluation of the existing signage at the project recreation sites for accuracy of information and a revision of the signs if needed; and (4) the Section 7-Handicapped Hunting Areas described in Article 414.

The plan shall include: (1) design drawings of the new recreation measures; (2) a description of soil erosion and sediment control measures to be used where ground-disturbing activities are proposed; (3) a discussion of how the needs of the disabled were considered in the planning and design of the recreation facilities; (4) an operations and maintenance cost for each facility; and (5) an implementation schedule.

The licensee shall prepare the plan after consultation with the Alabama Department of Conservation and Natural Resources and U.S. Fish and Wildlife Service. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the Commission notifies the licensee that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 416. Public Education and Outreach Program Plan. Within one year of the issuance date of the license, the licensee shall file, for Commission approval, a Public Education and Outreach Program Plan to enhance the public visitor experience at the Warrior River Project. The plan shall include, but not be limited to: (1) a detailed description of public education and outreach activities to be conducted at the project; (2) a discussion of how the licensee shall involve the public in the implementation of its policy for removing styrofoam from abandoned and rebuilt docks through public participation in its Lewis Smith Lake clean-up efforts; (3) the posting of a “carry-in/carry-out” informational sign, removal of certain existing trash receptacles, and installation of containers with appropriately-sized bags at key public access and recreation sites; and (4) a provision for informing the public of the licensee’s procedures for issuance of a permit and/or lease, including the application process.

The licensee shall prepare the plan after consultation with the Alabama Department of Conservation and Natural Resources, U.S. Fish and Wildlife Service, and the U.S. Forest Service. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee’s reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the Commission notifies the licensee that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 417. Erosion Repair and Monitoring Plan. Within one year of the issuance date of the license, the licensee shall file, for Commission approval, an erosion repair and monitoring plan for the Warrior River Project to minimize erosion and sedimentation in the downstream reaches of the Smith development of the Warrior Project.

The plan shall be based on actual-site geological and soil conditions, and shall include, at a minimum: (1) a detailed description of actual site conditions; (2) measures proposed to repair Site SMI 101 and Site SMI 102 to control erosion, to prevent slope instability, and to minimize the quantity of sediment resulting from the project operation or maintenance activities; (3) detailed descriptions, functional design drawings, and specific topographic locations of control

measures; (4) a provision to monitor Site SMI 104 and Site SMI 105; and (5) a specific implementation schedule and details for monitoring and maintenance of proposed control measures.

The licensee shall prepare the plan after consultation with the Alabama Department of Environmental Management, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on geological and soil conditions at the site.

The licensee shall develop the plan in coordination with the shoreline management plan required under Article 418, so that provisions for soil erosion and sediment control measures are consistent.

The Commission reserves the right to require changes to the plan. Implementation of the plan shall not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 418. Shoreline Management Plan. Within one year of the issuance date of the license, the licensee shall file for Commission approval a revised shoreline management plan (SMP) to protect the scenic quality and environmental resources of the Smith Lake development. The shoreline management plan classification maps for the Lewis Smith development, contained in the "Coosa/Warrior Relicensing Shoreline Classification Maps" filed on July 28, 2005, and consisting of an index map and map 1 through map 35, are approved.

The revised SMP, at a minimum, shall include, for project lands and waters: (1) a land use classification system that includes: (a) the above-approved maps and descriptions of the following seven use classifications shown on these maps: (i) Project Operations; (ii) Recreation; (iii) Multiple Use Lands; (iv) Sensitive Resources; (v) Natural/Undeveloped; (vi) National Forest Service Lands; and (vii) Developed National Forest Service Lands; (b) a table that identifies the acres associated with each of the above use classifications; and (c) descriptions of allowable and prohibited uses for each of the above classifications; (2) provisions for soil erosion and sedimentation control, as required under Article 417, including descriptions of bio-engineering techniques (such as willow and wetland plantings); and, (3) provisions for Section 4-Shoreline Management and Section 5-Timber

Management identified in Article 414; and (4) a provision for reviewing and updating the plan every six years.

The licensee shall prepare the revised SMP after consultation with the U.S. Fish and Wildlife Service, U.S. Corps of Engineers, Alabama Department of Conservation and Natural Resources, and U.S. Forest Service. The licensee shall include with the revised plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the revised plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons based on project-specific information.

The Commission reserves the right to require changes to the revised plan. Implementation of the revised plan shall not begin until the Commission notifies the licensee that the plan is approved. Upon Commission approval, the licensee shall implement the revised plan, including any changes required by the Commission.

Article 419. *Exotic Species and Aquatic Plant Management, and Mosquito Control Program.* The Exotic Species and Aquatic Plant Management Program, and the Mosquito Control Program, filed on August 1, 2005, as Appendix E of the shoreline management plan, are approved. The licensee shall include the aforementioned programs in the revised shoreline management plan required in Article 418.

Article 420. *Smith Development Bank Fishing Assessment.* Within one year of the issuance date of the license, the licensee shall, after consultation with the Alabama Department of Conservation and Natural Resources (Alabama DCNR) and the U.S. Fish and Wildlife Service (FWS), conduct an assessment of the informal bank fishing areas (Site 96A and Site 96B), located downstream of Smith dam, to determine whether these areas are capable of and suitable for development of more formal fishing and recreation access. The licensee shall conduct the assessment after consideration of the measures to be implemented under the Smith Development Fish Habitat Enhancement Plan required under Article 412, so that recreation enhancements shall not conflict with aquatic resources and associated habitat in the tailrace.

Within 6 months after completion of the bank fishing assessment the licensee shall, after consultation with the Alabama DCNR and FWS, file a report with the Commission that shall include a map depicting Site 96A and Site 96B in

relation to the Warrior River Project, and a discussion of the assessment including the results and recommendations. If the assessment indicates that Site 96A and/or Site 96B should be developed for enhanced bank fishing, the report shall include a description of proposed site improvements and public access facilities, and associated cost estimates. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission. The filing shall contain specific descriptions of how the agencies' comments are accommodated by the report. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to required changes to the report. Any recreation enhancement measures for Site 96A and Site 96B shall not be implemented until the licensee is notified that the report is approved. Upon Commission approval, the licensee shall implement the recreation enhancement measures for Site 96A and Site 96B, including any changes required by the Commission.

Article 421. Programmatic Agreement. The licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission and the Alabama State Historic Preservation Officer for Managing Historic Properties that may be Affected by a License Issuing to Alabama Power Company for the Continued Operation of the Warrior River Project in Alabama (FERC No. 2165-022)," executed on May 11, 2006, including but not limited to the Historic Properties Management Plan (HPMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall continue to implement the provisions of its approved HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license.

Article 422. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a

conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the impoundment shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project impoundment.

No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 water craft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an

approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(G) The licensee shall serve copies of any Commission filing required by this order on any entity specified in the order to be consulted on matters relating to that filing. Proof of service on these entities must accompany the filing with the Commission.

(H) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2006), and section 385.713 of the commission's regulations, 18 C.F.R. § 385.713 (2009). The filing of a request for rehearing does not operate as a stay of the effective date of this

license or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Jeff C. Wright
Director
Office of Energy Projects

Form L-5
(October, 1975)

**FEDERAL ENERGY REGULATORY COMMISSION
TERMS AND CONDITIONS OF LICENSE FOR CONSTRUCTED
MAJOR PROJECT AFFECTING NAVIGABLE WATERS
AND LANDS OF THE UNITED STATES**

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. In the event the project is taken over by the United States upon the termination of the license as provided in Section 14 of the Federal Power Act, or is transferred to a new licensee or to a nonpower licensee under the provisions of Section 15 of said Act, the Licensee, its successors and assigns shall be responsible for, and shall make good any defect of title to, or of right of occupancy and use in, any of such project property that is necessary or appropriate or valuable and serviceable in the maintenance and operation of the project, and shall pay and discharge, or shall assume responsibility for payment and discharge of, all liens or encumbrances upon the project or project property created by the Licensee or created or incurred after the issuance of the license: Provided, That the provisions of this article are not intended to require the Licensee, for the purpose of transferring the project to the United States or to a new licensee, to acquire any different title to, or right of occupancy and use in, any of such project property than was necessary to acquire for its own purposes as the Licensee.

Article 7. The actual legitimate original cost of the project, and of any addition thereto or betterment thereof, shall be determined by the Commission in accordance with the Federal Power Act and the Commission's Rules and Regulations thereunder.

Article 8. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return

of such records annually at such time and in such form as the Commission may prescribe.

Article 9. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 10. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 11. Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.

Article 12. The United States specifically retains and safeguards the right to use water in such amount, to be determined by the Secretary of the Army, as may be necessary for the purposes of navigation on the navigable waterway affected; and the operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Secretary of the Army may prescribe in the interest of navigation, and as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe for the other purposes hereinbefore mentioned.

Article 13. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 14. In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.

Article 15. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 16. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and

wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 17. The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.

Article 18. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 19. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 20. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die

during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 21. Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.

Article 22. Whenever the United States shall desire to construct, complete, or improve navigation facilities in connection with the project, the Licensee shall convey to the United States, free of cost, such of its lands and rights-of-way and such rights of passage through its dams or other structures, and shall permit such control of its pools, as may be required to complete and maintain such navigation facilities.

Article 23. The operation of any navigation facilities which may be constructed as a part of, or in connection with, any dam or diversion structure constituting a part of the project works shall at all times be controlled by such reasonable rules and regulations in the interest of navigation, including control of the level of the pool caused by such dam or diversion structure, as may be made from time to time by the Secretary of the Army.

Article 24. The Licensee shall furnish power free of cost to the United States for the operation and maintenance of navigation facilities in the vicinity of the project at the voltage and frequency required by such facilities and at a point adjacent thereto, whether said facilities are constructed by the Licensee or by the United States.

Article 25. The Licensee shall construct, maintain, and operate at its own expense such lights and other signals for the protection of navigation as may be directed by the Secretary of the Department in which the Coast Guard is operating.

Article 26. Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said

lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 27. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 28. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 29. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 30. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads,

roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 31. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 32. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 33. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 34. The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: Provided, That such disposal has been authorized by the Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: Provided further, That in the event of disagreement, any question of unreasonable interference

shall be determined by the Commission after notice and opportunity for hearing.

Article 35. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 36. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

Article 37. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.

APPENDIX A

Water Quality Certificate Conditions for the Warrior River Project issued by the Alabama Department of Environmental Management on July 1, 2005

RE: Water Quality Certification
FERC Project No. 2165
Warrior River Project
Lewis Smith and Bankhead Hydroelectric Developments

Dear Mr. Grogan:

Because action pertinent to water quality certification is required by Section 401(a)(1) of the Clean Water Act, 33 U.S.C. Section 1251, *et seq.*, the Alabama Department of Environmental Management (ADEM) hereby issues certification that there is reasonable assurance that the discharge resulting from the proposed activities as outlined in the licensee's July 2004 application will not violate applicable water quality standards established under Section 303 of the Clean Water Act and Title 22, Section 22-22-9(g), Code of Alabama, 1975, provided the applicant acts in accordance with the following conditions as specified.

LIMITATIONS

1. The operation of the individual developments, including the operation of the turbines, shall be managed such that no less than 4.0 mg/l of dissolved oxygen (D.O.) shall be maintained at all times at the monitoring locations prescribed herein. Management required to maintain the 4.0 mg/l dissolved oxygen criterion shall be implemented.

COMPLIANCE SCHEDULE

2. Alabama Power Company shall develop and implement measures to increase the D.O. downstream of project discharges to comply with the limitations herein through structural and/or operational modifications at the project within 18 months of a new license for the Warrior Project by the Federal Energy Regulatory Commission (FERC).

MONITORING AND REPORTING

3. The tailrace monitors used to determine compliance with paragraph 1. above shall be placed in the tailrace of Lewis Smith dam on the west bank at latitude 33° 56' 34"N and longitude 87° 06' 22"W approximately 300 feet downstream from the powerhouse and in the scroll case of the generating unit at Bankhead Dam at latitude 33° 27' 33"N and longitude 87° 21' 31"W. The monitor at Lewis Smith dam shall record dissolved oxygen and temperature at 60-minute intervals during periods of generation following one continuous hour of generation beginning on February 1 and ending on November 30 and during periods of water discharge associated with providing minimum flow, if any. The monitor at Bankhead Dam shall record dissolved oxygen and temperature at 60-minute intervals during periods of generation following one continuous hour of generation beginning on March 1 and ending on November 30. During flood events, the monitoring may be temporarily discontinued until the tailrace elevation returns to normal. The dissolved oxygen concentration in the tailrace at Bankhead Dam shall be determined as follows:

Tailrace D.O., mg/l = Incoming D.O., mg/l + D.O. added by aeration, mg/l + D.O. added by spillway gates, mg/l

Incoming D.O. shall be recorded by the monitor in the scroll case. The D.O. added by aeration shall be that determined from the turbine aeration system performance tests and the D.O. added by the spillway gates shall be that determined from the spillway gate performance tests.

4. The monitoring program shall begin within 18 months following the effective date of issuance of a new license for the Warrior Project if the effective date is within the prescribed monitoring period. If the effective date of the license is not within the prescribed monitoring period, monitoring shall begin the following February 1 at Lewis Smith Dam and the following March 1 at Bankhead Dam. The monitoring program shall continue for a period of three years.
5. The monitoring equipment shall receive adequate and frequent maintenance and calibration to assure proper operation. The dissolved oxygen monitoring equipment will be calibrated at an acceptable frequency using the manufacture's recommendations, the Winkler Method, Method 360.2 of EPA's Method for Chemical Analysis of Water and Wastes, latest edition, or other equivalent methods.

6. Dissolved oxygen and temperature monitoring reports shall be submitted with appropriate certifications to the ADEM within 90 days following the end of the annual monitoring period. Following the final year of monitoring, the complete set of data shall be submitted to ADEM for review and comment prior to submittal to the FERC. In addition to dissolved oxygen and temperature data, the monitoring reports shall specify whether turbines were in operation at the time of the dissolved oxygen and temperature measurements and the discharge rate of water flow passing through each turbine at the time of the measurements. Monitoring reports shall be submitted in an electronic form compatible with the MicrosoftTM Excel and Word software.
7. An assessment of the effects of the operation of the Warrior River Project on the State of Alabama's water quality standards shall be conducted using the results of the monitoring as described in the previous paragraphs. If the monitoring results do not indicate substantial compliance with the State of Alabama water quality standards (maintenance of a D.O. concentration of 4.0 mg/l or greater), Alabama Power Company shall develop and implement measures to ensure compliance with the 4.0 mg/l D.O. criterion through structural and/or operational modifications at the project as prescribed in paragraph 2. The assessment shall be filed with ADEM within 6 months following the end of the three year monitoring period. As a part of the assessment Alabama Power Company shall furnish, at the Department's request, other data and information that may be available but not expressly required in this monitoring plan.

The Department also certifies that there are no applicable effluent limitations nor other limitations imposed under Sections 301(b) or 302 or other standards imposed under Sections 306 or 307 of the Clean Water Act. This certification does not, however, exempt Alabama Power Company from requirements imposed under the National Pollutant Discharge Elimination System for other discharges at these facilities regulated by the Department.

Should you have any questions, please contact me at (334) 271-7823 or Mr. Lynn Sisk, Chief, Water Quality Branch at (334) 271-7826.

Sincerely,
James McIndoe, Chief
Water Division

APPENDIX B
SECTION 4(e) CONDITIONS

Conditions filed by the U.S. Forest Service on May 4, 2007, pursuant to section 4(e) of the Federal Power Act, for the Warrior River Project.

Part II - Alabama Power Commitments to Resource Mitigation

Section 2.1 Amount of Contributions. Alabama Power will provide contributions to the Forest Service during the term of the new license for the Project in the amount of seven million five hundred seventy-seven thousand dollars (\$7,577,000) (net present value) to be used by the Forest Service to meet Bankhead National Forest Plan objectives for recreational, ecological and cultural resource needs and to mitigate for ongoing project impacts to the Bankhead National Forest. These contributions are comprised of a combination of cash contributions and the value of services to be provided by Alabama Power, and will be paid or provided for the purposes and commensurate with the annual value amounts and guidelines as identified in this Agreement, and the attached Exhibits A and B, respectively.

Section 2.2 Use of Cash Contributions in Subsequent Years. If in any year the Forest Service does not expend all funds contributed by Alabama Power for that year, the remaining unexpended balance may be used by the Forest Service in subsequent years for the purposes for which the contributions have been made and scheduled as designated in the attached Exhibits A and B.

Section 2.3 Annual Reports to Alabama Power and Forest Service. No later than February 15 of each year during the term of this Agreement, the Forest Service shall submit to Alabama Power a report describing generally how the cash contributions provided to the Forest Service under this Agreement have been spent in the preceding year. The level of detail of these reports shall be such as is necessary to assure Alabama Power that the contributions generally have been applied to meet the various purposes identified in the attached Exhibits A and B. No later than February 15 of each year during the term of this Agreement, Alabama Power shall submit to the Forest Service a report describing generally how Alabama Power has performed the services requested by the Forest Service under this Agreement. The level of detail of the report shall be such as is necessary to assure the Forest Service that Alabama Power has fulfilled its responsibilities as detailed in the attached Exhibits A and B.

Section 2.4 Term of New License. Alabama Power anticipates receiving a new license from FERC with a term of fifty (50) years, and, for this reason, the attached Exhibits A and B contain a schedule reflecting contribution amounts and purposes for each year of this fifty (50) year term. In the event FERC issues a new license for the Project with a term of less than fifty (50) years, Alabama Power will provide annual contributions to the Forest Service in the amounts and for the purposes identified in the attached Exhibits A and B for each year of the new license term, and, at the expiration or termination of the new license for the Project, Alabama Power shall have no further obligation to provide contributions to the Forest Service under this Agreement.

Section 2.5 Method of Delivery of Cash Contribution. In each calendar year during the term of this Agreement, Alabama Power shall submit to the Forest Service one (1) payment representing the total cash contribution to be paid for that particular year as

specified in the attached Exhibit A, as may be adjusted in accordance with Section 2.8. The payment will be in the form of a single check made payable to "U.S. Forest Service - National Forests in Alabama," and shall be transmitted to the Forest Service no later than October 1 of each year by first-class mail to the address identified in Section 1.17.

Section 2.6 Method of Valuation and Delivery of Alabama Power Services.

(a) The services to be provided by Alabama Power under Section 2.1 (other than the Cultural Resources Services described in Section 2.7) shall be valued on an "at cost" basis, which shall include, but not be limited to, Alabama Power's cost of direct labor, assigned labor overheads, supplies, laboratory analyses, data analyses and reporting, travel, consultants, and other costs related to the services provided. The value of services may be adjusted annually based on changes in labor, material and other costs. The value of the services to be provided by Alabama Power shall be escalated annually, beginning in January 2008, using the data from the Consumer Price Index for All Urban Consumers as developed by the U.S. Department of Labor, Bureau of Labor Statistics, and developing linear curve fits using 30 years of data as a base.

(b) No later than September 30 of each year during the term of this Agreement, the Forest Service shall provide to Alabama Power a detailed written description of the specific services it desires Alabama Power to provide in the subsequent calendar year for the purposes and in the amounts description in the attached Exhibits A and B. In the written description, the Forest Service may request a reapportionment of the value of services for that particular year to be delivered by Alabama Power for the different Ecological subject areas specified in Exhibits A and B. In addition, the Forest Service may request that several years' worth of services value identified in Exhibits A and B be aggregated and/or reapportioned for delivery in a subsequent year, Alabama Power will endeavor in good faith to accommodate such requests for reapportionment or aggregation of the value of services to be provided.

Section 2.7 Valuation and Method of Delivery of Cultural Resources Service.

(a) The Cultural Resources services will be provided to the Forest Service in the form of study reports on cultural resources, which Alabama Power will prepare in compliance with Section 106 of the National Historic Preservation Act of 1966. The Forest Service may use these study reports to manage cultural resources within the Bankhead Forest or for any other purpose not inconsistent with this Agreement. However, because these study reports may contain sensitive information with respect to the location of archeological, tribal, historical or other cultured materials, the Forest Service shall treat these reports as confidential, and shall not provide or distribute these study reports or any information contained therein to any person, agency, or other entity without first obtaining the express written consent of Alabama Power after consultation with FERC.

(b) The value of the Cultural Resources services identified in the attached Exhibit A is an estimate of the cost of studies to be performed by Alabama Power in compliance with Section 106 of the National Historic Preservation Act of 1966. In the event that the actual cost of the study reports in a year is less than the amount estimated in the attached Exhibit A, the difference in value shall not be carried forward for use in subsequent years. Similarly, in the event that the annual cost of the study reports in a year is greater than the amount

estimated in the attached Exhibit A, the difference shall not be deducted from the value of Cultural Resource services to be provided in subsequent years.

Section 2.8 Escalation of Contribution Value. The value of the contributions and services to be provided by Alabama Power shall be escalated annually, beginning in January 2008, using the data from the Consumers Price Index for All Urban Consumers as developed by the U.S. Department of Labor, Bureau of Labor Statistics, and developing linear curve fits using 30 years of data as a base.

Section 2.9 No Direction by Alabama Power of Expenditures. Alabama Power shall have no responsibility or authority to direct, review or approve the manner or method in which the Forest Service expends the cash contributions or utilizes the services provided by Alabama Power hereunder, other than to receive and review the annual reports submitted by the Forest Service under Section 2.3 herein.

Section 2.10 Annual Meeting. After the Forest Service provides to Alabama Power the written description of the specific services it desires Alabama Power to provide in a subsequent calendar year as provided for in Section 2.6 (b), but before December 31 of each year, the parties shall meet at a mutually convenient time and location to discuss the requested services, the reports provided to each other under Section 2.3, and any other appropriate matter that may be related to this Agreement or the Project.

Section 4(e) Conditions, Exhibit A

This Exhibit A may also be found as an Excel file attachment to the Settlement between the U.S. Forest Service and Alabama Power filed with the Commission on May 4, 2007, FERC Accession No. 20070504-5069.

Settlement Agreement with U.S. Forest Service for Smith Project

EXHIBIT A
 APC Resources - Superscript ^R
 APC Funding - Superscript ^F

YEAR	1**	2	3	4	5	6	7	8	9	10	11	12	13
RECREATION													
One time costs (facilities, repairs, etc)	300,000 ^F	300,000 ^F	300,000 ^F	300,000 ^F	300,000 ^F								
O&M	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F
Total RECREATION	348,000	348,000	348,000	348,000	348,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*													
	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R	125,000 ^R		
* Level of services will vary each year based on requirements and field work													
ECOLOGICAL													
One time costs (culverts, fmts, etc)	165,000 ^F												
Data Collection/Studies						60,000 ^R					60,000 ^R		
Data Collection/Studies	50,000 ^F	50,000 ^F	50,000 ^F	50,000 ^F	50,000 ^F	25,000 ^F	25,000 ^F	25,000 ^F	25,000 ^F	25,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F
Public Education	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Water Quality Sampling	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Shoreline Management	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R
Encroachment Processing	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Clean-up of Informal Rec Sites	6,000 ^F						6,000 ^F						6,000 ^F
Total ECOLOGICAL	246,000	75,000	75,000	75,000	75,000	110,000	56,000	50,000	50,000	50,000	95,000	30,000	36,000
Total APC Resources	150,000^R	150,000^R	150,000^R	150,000^R	150,000^R	210,000^R	150,000^R	150,000^R	150,000^R	150,000^R	85,000^R	20,000^R	20,000^R
Total APC Funding	569,000^F	398,000^F	398,000^F	398,000^F	398,000^F	73,000^F	79,000^F	73,000^F	73,000^F	73,000^F	58,000^F	58,000^F	64,000^F
YEARLY TOTAL	\$719,000	\$548,000	\$548,000	\$548,000	\$548,000	\$283,000	\$229,000	\$223,000	\$223,000	\$223,000	\$143,000	\$78,000	\$84,000

Totals for 50-yr License Period	
Total APC Funding	4,952,000 ^F
Total APC Resources	2,625,000 ^R
Total	\$7,577,000
Assumptions:	Based on Consumer Price Index (CPI) Net Present Value

** It is anticipated that Year 1 will be 2008, but Year 1 could be a subsequent year if the Effective Date of the Settlement Agreement occurs beyond 2008.

Settlement Agreement with U.S. Forest Service for Smith Project

EXHIBIT A, continued

APC Resources - Superscript ^R

APC Funding - Superscript ^F

YEAR	14	15	16	17	18	19	20	21	22	23	24	25	26
RECREATION													
One time costs (facilities, repairs, etc)													
O&M	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*													
* Level of services will vary each year based on requirements and field work													
ECOLOGICAL													
One time costs (culverts, fmts, etc)			60,000 ^R					60,000 ^R					60,000 ^R
Data Collection/Studies			10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F
Public Education													
Water Quality Sampling	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Shoreline Management	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R
Encroachment Processing	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Clean-up of Informal Rec Sites						6,000 ^F						6,000 ^F	
Total ECOLOGICAL	30,000	30,000	90,000	30,000	30,000	36,000	30,000	90,000	30,000	30,000	30,000	36,000	90,000
Total APC Resources	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R
Total APC Funding	58,000^F	58,000^F	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F	58,000^F	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F
YEARLY TOTAL	\$78,000	\$78,000	\$138,000	\$78,000	\$78,000	\$84,000	\$78,000	\$138,000	\$78,000	\$78,000	\$78,000	\$84,000	\$138,000

Settlement Agreement with U.S. Forest Service for Smith Project
 EXHIBIT A, continued
 APC Resources - Superscript ^R
 APC Funding - Superscript ^F

YEAR	27	28	29	30	31	32	33	34	35	36	37	38	39
RECREATION													
One time costs(facilities, repairs, etc)													
O&M	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*													
* Level of services will vary each year based on requirements and field work													
ECOLOGICAL													
One time costs (culverts, frmts, etc)													
Data Collection/Studies													
Data Collection/Studies	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F
Public Education													
Water Quality Sampling	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Shoreline Management	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R
Encroachment Processing	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R
Clean-up of Informal Rec Sites					6,000 ^F						6,000 ^F		
Total ECOLOGICAL	30,000	30,000	30,000	30,000	36,000	30,000	30,000	30,000	30,000	30,000	36,000	30,000	30,000
Total APC Resources	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R
Total APC Funding	58,000^F	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F	58,000^F	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F	58,000^F
YEARLY TOTAL	\$78,000	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000

Settlement Agreement with U.S. Forest Service for Smith Project

EXHIBIT A, continued

APC Resources - Superscript ^R

APC Funding - Superscript ^F

YEAR	40	41	42	43	44	45	46	47	48	49	50	51	Totals
RECREATION													
One time costs(facilities, repairs, etc)													1,500,000 ^F
O&M	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	48,000 ^F	2,448,000 ^F
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	3,948,000
CULTURAL RESOURCES*													1,250,000 ^R
* Level of services will vary each year based on requirements and field work													
ECOLOGICAL													
One time costs (culverts, fmts, etc)													165,000 ^F
Data Collection/Studies													300,000 ^R
Data Collection/Studies	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	10,000 ^F	785,000 ^F
Public Education													55,000 ^R
Water Quality Sampling	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	255,000 ^R
Shoreline Management	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	10,000 ^R	510,000 ^R
Encroachment Processing	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	5,000 ^R	255,000 ^R
Clean-up of Informal Rec Sites				6,000 ^F							6,000 ^F		54,000 ^F
Total ECOLOGICAL	30,000	30,000	30,000	36,000	30,000	30,000	30,000	30,000	30,000	30,000	36,000	30,000	2,379,000
Total APC Resources	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	20,000^R	2,625,000^R
Total APC Funding	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F	58,000^F	58,000^F	58,000^F	58,000^F	64,000^F	58,000^F	58,000^F	4,952,000^F
YEARLY TOTAL	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000	\$7,577,000

Section 4(e) Conditions, Exhibit B

EXPLANATORY STATEMENT CONCERNING HOW THE FOREST SERVICE INTENDS TO UTILIZE THE FUNDING AND SERVICES PROVIDED BY ALABAMA POWER COMPANY UNDER THE “AGREEMENT BETWEEN ALABAMA POWER COMPANY AND THE UNITED STATES FOREST SERVICE REGARDING RELICENSING ISSUES RELATED TO THE WARRIOR RIVER PROJECT”

Through extensive research, data and information collection, site inspections and discussions with Alabama Power Company (Alabama Power) in the context of the FERC relicensing process for the Warrior River Project (FERC No. 2165), the United States Department of Agriculture, Forest Service (FS) has determined the appropriate scope and amount of measures that are necessary for the adequate protection and utilization of the Bankhead National Forest as related to the Lewis Smith development, and that these measures, if implemented, will fully address the development's effects on the recreational, ecological and cultural resources of the Bankhead National Forest. These measures will also satisfy the Forest Service's authority under Section 4(e) and other relevant provisions of the Federal Power Act, as well as other applicable federal law. To address and resolve certain issues concerning the scope and amount of these measures, Alabama Power and the FS entered into the “Agreement between Alabama Power Company and the United States Forest Service Regarding Relicensing Issues Related to the Warrior River Project” (Agreement) to which this Exhibit B is attached.

The purpose of this Exhibit B is to 1) provide additional explanation and detail with respect to the measures identified in the Agreement and its attached Exhibit A, and 2) describe in further detail how the FS intends to utilize the funding and services provided by Alabama Power under the Agreement and its attached Exhibit A. Through the Agreement, Alabama Power committed to provide the FS with \$4,952,000.00 in resource protection funding during the term of the new Warrior River license. (Both of the above values are based on a fifty year license term. If FERC elects a shorter license term, both values will be somewhat less.) In addition, Alabama Power committed to provide the FS with services valued at \$2,625,000.00 to assist the FS with projects and studies during the term of the new Warrior River license. Nothing in this Exhibit B shall be construed to expand, broaden, or increase either party's rights or obligations under the Agreement. Instead, this Exhibit B is

intended merely to explain some of the activities, tasks, projects and improvements for which Alabama Power's contributions specified in Exhibit A are intended. To the extent that anything in this Exhibit B is found to be inconsistent with any provision of the Agreement or its attached Exhibit A, the language in the Agreement and its attached Exhibit A shall control in the interpretation of the parties' rights and responsibilities.

Ecological Resources

- **Utilize Funding to continue the Multi-year studies of the Federally listed Flattened Musk Turtle:**

For over two years, and in partnership, Alabama Power and the FS have been funding this study. However, several more years of data collection are required. This study, and its findings, will have implications for several other associated aquatic species. The primary goal of this on-going study is to assess how current operations of the Lake Lewis Smith Project may be directly, or indirectly, affecting Flattened Musk Turtle (FMT) populations. The secondary goal is to provide the basis and direction for protection measures required to improve species viability.

- **Utilize Funding for Ecological Connectivity:**

Pursuant to the schedule in Exhibit A, during year one of the new license term, utilize funding for the replacement of selected culverts to improve aquatic species passage due to the effects resulting from project operations.

- **Utilize Funding for Surveying & Monitoring Activities:**

Due to the presence of sensitive species; increases in project (lake) use, and private development of the lake shoreline, the FS has a need for lake access in order to conduct ecological monitoring, survey, and real estate management activities along the lake shoreline, and its primary tributaries.

- **Utilize Resources for Data Collection and Survey – Long Term Monitoring of Plant and Animal Species and their Habitats in the Sipsey and Brushy Watersheds:**

Pursuant to the schedule in Exhibit A, utilize resources to assist in performing a complete floristic survey, inventory, and risk assessment based upon findings and habitat suitability. Using a qualified biologist, conduct long-term monitoring for the license term for all federally listed, and FS listed plant

species populations and aquatic plant communities. Areas of concern are plant species associated with streamside and cliff line habitats. The survey and monitoring work must include species, their distributions, and viability trends. Survey, inventory, map, and evaluate existing conditions of rare plant communities within the lower and upper pool area. Areas of concern are canyons, seeps, springs, glades, rock houses, and barrens. On a five-year cycle, monitoring and survey findings will be developed. Based upon findings, prepare mitigation, and recovery measures, if necessary. Any T & E recovery activities must be performed in coordination with the U.S. Fish & Wildlife Service, Alabama Natural Heritage Program, and the FS. Monitor project operation impacts on lake rare communities throughout the license term.

- **Utilize Funding to Perform a Systematic Inventory of NF Stream fish during high and low water conditions:**

Perform a six-year, alternating seasonal study (summer and winter), documenting findings of species, habitat conditions, and lake levels encountered during the study period.

- **Utilize Funding to Perform a Bald Eagle Survey on NF Shoreline:**

Annually, throughout the license term, survey and map nest locations monthly from January to June, documenting existing and new nest locations. Develop a risk assessment, due to human use, for all FS lands along the lake with nest developments.

- **Utilize Resources for Assistance with increased Public Education in the form of Brochures, Maps, Signs, Recreation Publications, Pollution Prevention, and Shoreline Management Information:**

Natural resource education and public involvement are cornerstones of the FS mission and are important to Alabama Power. The FS promotes educational activities as a means of public involvement in the management of public lands surrounding Lake Lewis Smith. Benefits include increased public awareness, recreational use knowledge, and civic involvement. Goals of the educational program are to produce high quality products that are readily accessible and used by residents, visitors, and developers along the lake and that address natural resource issues affecting federal lands. An effective public education program will increase public knowledge in the areas of shoreline management, T & E species habitat, Sipsey Wild and Scenic River Corridor rules, and non-native invasive species, along with many other recreational and ecological issues.

- **Water Quality Monitoring & Survey – Utilize Resources to Assist with Inventory of Point Source Discharges Upstream and characterize the affects to Federal lands and waters:**

Pursuant to Exhibit A and beginning in year two of the license, inventory discharges upstream and within the project boundary. Throughout the license term monitor and characterize the water quality and stream flow (discharge) regimes in upstream tributaries of the impoundment area. Characterize the water temperature, dissolved oxygen, specific conductivity, PH, turbidity, bicarbonate ion, and discharge volume (flow) regimes upstream of the impoundment in the affected tributaries. Characterize and establish a baseline of NF stream bank and channel morphology as it relates to long-term stability (years 1-5). Determine the zone of upstream influence created by the projects backwater effects (year 1).

- **Utilize funding to monitor the Sipsey Wild and Scenic River Corridor for water flows and quality pursuant to Wild and Scenic River Designation.**

If water quality levels fall below minimum State standards initiate corrective plans in consultation with the appropriate State agencies.

- **Utilize Resources to Perform a Review of the NF Shoreline:**

Throughout the license term pursuant to Exhibit A, utilize resources to assist with a review of the National Forest shoreline. The report should describe the existing condition of the NF shoreline, map, and identify any sensitive species discovered, the habitat conditions found, and provide notice to the agency if resource damage indicates management efforts are indicated.

- **Utilize resources to assist with Encroachment Identification and Trespass Notice on Federal Lands adjacent to and under Lake Lewis Smith:**

Pursuant to Exhibit A, utilize resources to assist in identifying unauthorized access points and uses of federal land on and under Lake Lewis Smith. On a five-year cycle during the license term, develop a GIS layer that provides current information on National Forest System lands within the current project boundary. Utilize resources necessary to decommission/close unauthorized access points, remove garbage, and rehabilitate areas where dispersed recreation has been determined to be causing resource damage.

The funding and resource assistance for all Projects, Study Requests, and Surveys will be scheduled and agreed to Pursuant to the Annual Meeting Requirement detailed at Section 2.10 of the Agreement.

Developed Recreation Resources

- **Utilize funding for Improvements, and Annual Operations & Maintenance of the Clear Creek, Corinth, and Houston Recreation Areas:**

The recreational resource enhancements will serve to mitigate current project effects on the management of lands under FS administration. Current uses at the developed facilities include – fishing, boating, camping, hiking, and picnicking. Public demand and use of the facilities is expected to continue throughout the new license term. In addition, the facilities lack full compliance with the requirements of the Americans with Disabilities Act (ADA). Repairs and renovation will occur with emphasis on ensuring ADA compliance. Through assistance from Alabama Power, the Forest Service will perform the following:

- Repair/repave the 1.6 mile paved bicycle/walking trail and supporting structures (bridges, culverts, bulwark) at Clear Creek. Three times during the life of the license.
- Repair the current and future shoreline erosion and stabilize shoreline with riprap/gabions, bulwark, etc. where needed. Ongoing during the life of the license.
- Repair and replace facility information and safety signs at all facilities. Four times during the life of the license.
- Repair the drainage system for the outdoor beach shower at Corinth.
- Paint stripes on all roads and parking lots in all the recreation areas. Three times during the life of the license.
- Replace grills, lantern holders, and picnic tables at all recreation areas. Twice during the life of the license.
- Repair campground pads and day-use pads. Four times during the life of the license.
- Maintain and replace buoys and depth markers at all three swimming areas.
- Install two new gates at Houston and one new gate at Corinth. Twice during the life of the license.
- Replace and repair all access gates. Three times during the life of the license.
- Maintain, repair, and replace sewer lift stations and pumps at Clear

Creek, Corinth, and Houston. Once, with annual maintenance thereafter during the license term.

- Replace all water hydrants at campsites with ADA compliant frost proof hydrants. Twice during the life of the license.
- Replace and repair sewer lines and fill lines in all areas. Ongoing maintenance during the life of the license.
- Replace all water fountains in all areas. Twice during the life of the license.
- Road and parking lot repaving. Three times during the life of the license.
- Major repair or replacement of all boat ramps. Once during the life of the license.
- Replace all trashcans in recreation areas. As needed during the license term.
- Periodic painting and cleaning of all 33 existing and future facilities in the three recreation areas. Six to ten times (or as needed) during the life of the license.
- Replace roofs on all facilities. Two times during the license term.
- Major renovation of all 33 existing facilities (includes entrances, picnic shelters, and bath/ shower houses in the three recreation areas, ensuring ADA compliance. Once during the license term.
- Major repair or replacement of all water systems in the three recreation areas. One time during the life of the license.
- Develop adjusting, accessible courtesy piers at all 3 boat ramps, making them ADA accessible for boaters and anglers. Once during the license term.
- Install Sweet Smelling Toilets at each of the day-use boat ramps at Houston and Clear Creek.
- Move the retaining walls further back, at a higher lake level and extend the sand beach to the new locations at all three beaches.
- Replace the current 30-amp electrical service at Clear Creek with 50-amp service.
- Make major repairs/replacement of electrical service at all areas. One time during the life of the license.
- Develop four fishing access platforms (three at Clear Creek and one at Corinth) with paved trail and parking that will provide seasonal ADA wheelchair access
- Develop a hardened, barrier-free trail in Corinth Day-Use Area.
- Construct extension to the Clear Creek day-use boat ramp to provide launching at lowest lake levels.

- Construct a group tent camping area at the Corinth Recreation Area.
- Maintain all developed recreational sites to meet FS recreation standards, including ADA accessibility. Ongoing throughout the license term.
- Expanded education and interpretation opportunities.
- Replace appropriate beach sand and remove debris from all FS shoreline annually.
- Provide for facility cleaning at the three developed sites to include garbage pickup and mowing in accordance with FS standards.
- Administrative cost and fleet for FS personnel and Campground Hosts that service the three recreation areas.
- Hazard tree removal at the three recreation areas. Ongoing throughout the license term.
- Maintain hiking trails at Clear Creek, Corinth and Houston recreation areas. Ongoing during the life of the license.
- Continue to process public lake access requests across federal land for road and utility easements. Ongoing during the license term

Cultural Resources

- **Investigation, Survey, and Protection of Cultural Resources identified on Federal lands:**

In conjunction with the Federal Energy Regulatory Commission (FERC) relicensing of Alabama Power's Warrior River Hydroelectric Project – FERC No. 2165 (Project), Alabama Power has prepared a Historic Properties Management Plan (HPMP) to specify how Historic Properties will be managed within the Area of Potential Effect (APE). FERC determined that issuing a new license for the Project may affect properties included in or eligible for inclusion in the National Register of Historic Places (NRHP). These properties are referred to as "Historic Properties."

As part of the Warrior relicensing process, FERC consulted with various parties in the development of a Programmatic Agreement (PA) in order to satisfy regulatory requirements pertaining to Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C 407F) (NHPA). This consultation was required based on the fact that the federal relicensing of the Project constituted an undertaking (i.e., issuance of a new operating license for the Warrior Project) that may affect Historic Properties. Section 106 affords the opportunity for the Advisory Council on Historic Preservation (Council) a reasonable opportunity to comment on this undertaking and its effect on Historic Properties, and is implemented through the Council's regulations entitled "Protection of Historic Properties" (36 CFF Part 800).

Since it is not possible for FERC to determine all of the effects on Historic Properties for the Project over the course of the license, the PA required Alabama Power to develop and implement an HPMP. By the establishment of this HPMP, FERC meets the respective requirements of Section 106 for the federal undertaking.

During the development of the PA and subsequent HPMP, the Council and the Alabama State Historic Preservation Officer (SHPO) were consulted pursuant to 36 CFR Section 800.14(b) along with the FS and the Bureau of Indian Affairs. In addition, 14 federal recognized tribes were identified as having a potential historic affiliation with lands within the Project APE and were invited to participate in the consultation process. Four of these tribes expressed an interest in participating in this process, and the remaining ten tribes asked to be kept informed during the consultation.

The final HPMP will be implemented to achieve the following goals:

1. To identify the location of the highest probability areas where Historic Properties within the Project APE may exist;
2. To conduct a field reconnaissance survey (Phase I) of these areas to determine the presence of Historic Properties;
3. To take into account the effect of the action on Historic Properties;
4. To consider the effects on Historic Properties in the planning stages of all proposed Project developments;
5. To ensure that conflicts among development, land management needs and Historic Properties are resolved within the context of the Council's Regulations for the Protection of Historic Properties (36 CFR Part 800); and,
6. To provide guidance and technical assistance to Alabama Power personnel when dealing with maintenance and repair activities that have the potential to affect any Historic Properties.

The Cultural resources services will be provided annually to the FS in the form of study reports on cultural resources generated through the implementation of the HPMP (if activities occurred on FS lands), which Alabama Power will prepare in compliance with Section 106 of the National Historic Preservation Act of 1966. The FS may use these study reports to manage cultural resources within the Bankhead Forest or for any other purpose not inconsistent with this Agreement.

However, because these study reports may contain sensitive information with respect to the location of archeological, tribal, historical or other cultural materials,

the FS shall treat these reports as confidential, and shall not provide or distribute these study reports or any information contained therein to any person, agency, or other entity without first obtaining the express written consent of Alabama Power after consultation with FERC.

The USFS will be the initial contact for matters pertaining to USFS land. In addition, Alabama Power will contact the SHPO and consulting tribes to inform them of any matters relating to USFS lands. The main responsibility of the USFS will be to review and provide comments pertaining to materials developed by Alabama Power or others pertaining to surveys conducted on USFS lands. The results of the surveys will indicate if any additional measures will need to be taken by Alabama Power and the USFS to protect any discovered Historic Properties. The SHPO and consulting tribes will also be consulted in regards to additional measures that will need to be taken. Prior to conducting any surveys on USFS lands, an ARPA permit will be procured by Alabama Power or its contractors.

The guidelines for the management of the Bankhead National Forest are detailed within the National Forests in Alabama, Revised Land and Resource Management Plan of 2004 (RLRMP), and apply to all FS lands within the Warrior River Project. The identified studies and tasks detailed within this Exhibit were developed by the Forest Service using this direction and meet the requirements found necessary for the protection of those federal lands within the project area which, encompass some 2,691.44 acres of land belonging to the United States of America.

Document Content(s)

P-2165-022WarríoOrderFinal33110.DOC.....1-90

141 FERC ¶ 61,127
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony T. Clark.

Alabama Power Company

Project No. 2165-030

ORDER DENYING REHEARING AND CLARIFYING LICENSE

(Issued November 15, 2012)

1. On March 31, 2010, the Director of the Office of Energy Projects (OEP) issued a new license to Alabama Power Company (Alabama Power)¹ under sections 4(e) and 15 of the Federal Power Act (FPA)² for the continued operation and maintenance of the 211.485-megawatt (MW) Warrior River Hydroelectric Project No. 2165, located on the Black Warrior River and on the Sipsey Fork of the Black Warrior River, in Cullman, Walker, Winston, and Tuscaloosa Counties, Alabama. The Smith Lake Improvement Stakeholders Association (Lake Association) filed a timely request for rehearing of the order.³ For the reasons discussed below, we deny rehearing, but clarify Article 404.⁴

¹ *Alabama Power Company*, 130 FERC ¶ 62,271 (2010) (License Order).

² 16 U.S.C. §§ 797(e) and 808 (2006).

³ The Lake Association describes itself as a local organization of property owners that are affected by the project. The Lake Association attached to its rehearing request ten exhibits (designated Exhibits 1.0 through 1.3, Exhibits 2.0 through 2.2, and Exhibits 3 through 5). With the exception of Exhibit 1, dated April 30, 2010, all of the exhibits were previously filed by the Lake Association and considered by Commission staff during the relicensing proceeding.

⁴ The Lake Association's rehearing request includes (for informational purposes) petitions for reconsideration or rehearing that it submitted to the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the U.S. Army Corps of Engineers. Those filings

(continued...)

Background

2. The Commission issued an original 50-year license for construction and operation of the Warrior River Project in 1957, with a term expiring August 31, 2007.⁵
3. The project consists of two hydroelectric developments: the Lewis Smith (Smith) development located on the Sipsey Fork of the Black Warrior River at River Mile (RM) 444, and the John Hollis Bankhead (Bankhead) development located 78.5 miles downstream (at RM 365.5) on the U.S. Army Corps of Engineers' (Corps) Bankhead Lock and Dam No. 17 on the Black Warrior River.⁶
4. The 157.5-MW Smith development consists of Smith Dam and Smith Lake, an intake structure, a powerhouse built into the dam and containing two generating units, and an emergency spillway. Smith Lake is a 21,200 acre reservoir and has 500 miles of shoreline.⁷ Alabama Power's operation of this development is described below.
5. The 53.985-MW Bankhead development uses the Corps' lock and dam, which impounds a 78-mile-long reservoir with a surface area of 9,200 acres at a normal surface elevation of 255 feet mean sea level (msl).⁸ Along the Bankhead reservoir's shoreline, there are several municipal and industrial water withdrawals, as well as Alabama Power's

set forth issues and arguments pertaining to those agencies' statutory authorities and the conditions they submitted pursuant to those authorities and are not directed to the Commission.

⁵ 18 FPC 327 (1957).

⁶ The Smith development is partly within the Sipsey Fork Wild and Scenic River designated area and occupies 2,691.44 acres of federal lands within the Bankhead National Forest, administered by the U. S. Forest Service. The Bankhead development occupies 18.7 acres of federal lands administered by the Bureau of Land Management.

⁷ Smith Lake is dendritic, consisting of several branches and many subbranches, and extends 35 miles upstream from the Smith dam.

⁸ The headwaters of the Bankhead reservoir are a short distance downstream of the Smith development's dam and tailrace.

1,021-MW Gorgas Steam Plant, which is located at RM 399.⁹ Alabama Power's hydroelectric facilities at the Bankhead development consist of a gated spillway, a powerhouse with one generating unit, and power tunnels, all of which are integral with the Corps' dam. Alabama Power's prior license required that Alabama Power operate the Bankhead reservoir so that fluctuations for power generation would be between elevation 255 and 252 feet msl.¹⁰

6. Alabama Power has operated the Warrior Project mainly for power generation to meet peak power demands, navigation, and flood control. As a peaking facility, water for generation is released from Smith dam five days per week for five to six hours per day, with seasonal variation in storage and generation. The Smith Lake power pool lies between elevations 488 (the bottom of the power pool) and 510 feet msl (top of the power pool) and provides about 394,300 acre-feet of power storage.

7. Storage space between elevations 510 and 522 feet msl is for flood control. The prior license established detailed operational requirements and release rates for flood control when reservoir elevations were above 510 feet msl (the top of the power pool). When reservoir elevations were below 510, Alabama Power operated the project to avoid raising the reservoir above 510 feet msl, to preserve the flood storage space. In addition, the prior license required Alabama Power to cooperate with the Corps in preparing an operating manual to prescribe the procedures for implementing the operational requirements during a flood event.¹¹ The result was a reservoir regulation manual, issued by the Corps in March 1965 (1965 Manual).¹²

⁹ Typically, from May through October, cold water releases from Smith dam are used by the Gorgas Steam Plant for once-through cooling. The Gorgas Steam Plant may divert up to 1,513 cubic feet per second of river flows for cooling, returning nearly all this flow to the river for downstream water users.

¹⁰ Article 32 of the license, 18 FPC at 331.

¹¹ Article 33(iv) of the license, 18 FPC at 332.

¹² *Black Warrior-Tombigbee River Basin Reservoir Regulation Manual*, "Appendix A, Lewis M. Smith Reservoir (Alabama Power Company), March 1965," (1965 Manual). In 1975, a similar appendix to the basin manual was issued for the Bankhead development. "Appendix E, John Hollis Bankhead Reservoir, August 1975" (1975 Manual). The Corps filed these manuals on March 23, 2010.

8. The 1965 Manual (1) defines the occurrence or threatened occurrence of damaging flood conditions at downstream stations and when such conditions may be alleviated by operation of the Lewis Smith Dam and power plant in the interest of flood control, (2) describes conditions for the release of flood waters between 510 and 522 feet msl, and (3) describes conditions for releases for navigation. The manual also describes normal power operation:¹³

33. *Operation for Power.* Alabama Power Company will operate the plant to help meet load demands on its system in the State of Alabama. It will normally be operated as a peaking plant, with approximate seasonal variation in storage and generation as shown by the guide curves and rules for power operation, chart 8. Power operations will normally be scheduled by the Company on the basis of system demands and availability. Scheduling shall be such as to keep the pool at or below elevation 510 at all times when flooding is not occurring. Generation may be restricted during periods of downstream flooding, and will be increased for the emptying of flood control storage, within the limitations provided in Article 33 of the [project] License and as described under the plan of operation for flood control. . . .

9. The chart referred to in the above-quoted text (Chart 8: Guide Curves and Rules of Project Operation) “shows guide curves for power operation which indicate the *probable range* of drawdown [emphasis added].”¹⁴ Unlike many cases involving guide curves, where the licensee would be required to operate within the band established by the curves, there was no requirement in the prior license to operate within the guide curves. The only operating requirements were for flood control and navigation. First, Alabama

¹³ 1965 Manual at A-14, Paragraph 33.

¹⁴ 1965 Manual at A-11, Paragraph 30. Chart 8, attached to this order as Appendix A, shows the upper lake elevation guide curve is highest at 510 feet msl (generally from April through June), then it decreases in a linear fashion to a low of 496 feet msl (generally for December and January). Beginning in February, elevations increase linearly to 510 feet msl in April. The lower curve’s highest elevation is 506 feet msl (generally for April and May), and from there it decreases linearly to a low of 488 feet msl (generally for December and January). In January, it rises linearly, reaching elevation 506 in April.

The relicense order referred to the upper guide curve as a flood control guide curve and the lower one as a drought contingency guide curve.

Power had to follow specific operating procedures to release water from Smith reservoir for flood control if lake elevations rose above 510 feet msl.¹⁵ Second, during periods of drought or when reservoir levels dropped below the lower guide curve, Alabama Power had to generate on a schedule that, at a minimum, released from Smith reservoir water sufficient to maintain its pro-rata share of the inflow requirements at Bankhead reservoir to maintain the downstream navigation channel, i.e., 245 cubic feet per second (cfs).¹⁶ So long as Alabama Power met these two sets of requirements, it could operate the Smith development to “best suit system requirements to obtain maximum energy generation from water available”¹⁷ and did not have to maintain specified lake elevations.

10. As a practical matter, Alabama Power often operated the project such that the Smith reservoir elevations fell outside (often below) the guide curves for several months of the year. On average,¹⁸ during April and May, Smith Lake elevations were near the upper guide curve target elevation of 510 feet msl. In June, the lake level would begin decreasing gradually to approximately 505 feet msl around August 1 and 501 feet by September 1. Lake levels continued to drop in the fall months until they reached a winter pool elevation of 497 to 498 feet msl in December and January. Around the beginning of December, the lake began to refill, reaching full pool (i.e., 510 feet msl) around April 1. Thus, while lake elevations changed little on a daily basis, on a seasonal basis the changes were large.¹⁹

Relicense Proceeding

11. In July 2005, Alabama Power filed its relicense application, proposing to continue to operate the project as a peaking facility as it had under its then-current license, using the existing guide curves.

¹⁵ See *id.*, Chart 8, Operating Instructions (2) and (3), and Article 33 of the license, 18 FPC at 331-332.

¹⁶ See 1965 Manual, Chart 8, Operating Instruction (1), and P 45 at A-17.

¹⁷ See 1965 Manual, Chart 8, Operating Instructions (4) and (5).

¹⁸ Based on average elevations from 1962 to 2007. See Alabama Power’s October 3, 2008 additional information filing.

¹⁹ During periods of drought or flooding, seasonal changes in lake elevations of up to 22 feet can occur.

12. The Lake Association intervened in the proceeding and objected to the licensee's proposal to continue operation as it had in the past. It argued that low lake levels were a detriment to private and public recreation at the lake, specifically boating, and hindered the fullest residential and commercial economic development of the Smith Lake shoreline.

13. The Lake Association proposed that Smith Lake elevations be kept higher and more stable throughout the year by requiring that the licensee maintain a higher lake elevation during the recreation season (Memorial Day through Labor Day), using a guide curve proposed by the Lake Association. Specifically, the Lake Association recommended that the Smith Lake elevation remain between 505 feet and 510 feet msl from Memorial Day to Labor Day, and that the lake level elevation not drop below 502 feet msl during the rest of the year.

14. Commission staff issued a draft environmental assessment (EA) in March 2008 and a final EA in March 2009.²⁰ The EA included an analysis of the Lake Association's recommendations for water levels in Smith Lake. It analyzed the costs to the licensee from peak generation losses and concluded that these costs outweighed the potential benefits of the Lake Association's proposal.²¹ The EA also pointed out information submitted by the Lake Association demonstrating that the project already provides considerable benefits to recreation and property values around the lake and along the associated tributaries.²²

15. On March 31, 2010, under delegated authority, OEP issued a new 30-year license to Alabama Power, effective March 1, 2010. The License Order declined to adopt the Lake Association's proposal and instead authorizes Alabama Power to continue operating the Smith Lake development as a peaking project and regulating lake levels based on the existing guide curves. In addition, Alabama Power must (1) release minimum flows downstream of Smith dam to maintain water quality and the downstream cold water trout fishery;²³ and (2) implement measures for drought management, fish habitat

²⁰ Unless otherwise noted, all references in this order to the EA are to the final EA.

²¹ EA at 136.

²² EA at 135.

²³ The Alabama Department of Conservation and Natural Resources (Alabama DCNR) stocks about 3,500 rainbow trout in the project tailrace every 60 days throughout the year with additional stocking in the spring. Additionally, striped bass benefit from cold water flows downstream of the project.

enhancement, wildlife management, public recreation, erosion, and shoreline management.

16. On April 30, 2010, as discussed below, the Lake Association filed a request for rehearing, alleging that the License Order contained a number of errors and that OEP lacked authority to issue the license because the proceeding was contested.

Discussion

A. Comprehensive Development and Substantial Evidence

17. On rehearing, the Lake Association argues that the Warrior River license is not best adapted to a comprehensive plan of development, as required by section 10(a)(1) of the FPA. The Lake Association further argues that the License Order's comprehensive development findings are arbitrary and capricious because they are not supported by substantial evidence, as required by section 313(b) of the FPA.²⁴

1. Comprehensive Plan

18. The Lake Association claims that the license order does not contain or constitute a "comprehensive plan," within the meaning of FPA section 10(a)(1) because it fails to specify desirable future conditions for the beneficial uses during the term of the new license.

19. As we explained in *Appalachian Power* where the identical argument was made,²⁵ section 10(a)(1) of the FPA²⁶ requires that projects licensed by the Commission be best adapted to "a comprehensive plan for improving or developing a waterway," taking into account all beneficial uses of the waterway (e.g., waterpower development; protection, mitigation, and enhancement of fish and wildlife; irrigation; flood control; water supply; and recreation).

20. Section 10(a)(1) does not require the Commission to prepare a single comprehensive plan against which an application is measured. Nor does it require that the License Order itself constitute a comprehensive plan. Rather, it requires the

²⁴ 16 U.S.C. § 313(b) (2006). The Lake Association also cites to sections 556, 557, and 702 of the Administrative Procedure Act, 5 U.S.C. §§ 555, 557, and 706 (2006).

²⁵ *Appalachian Power*, 132 FERC ¶ 61,236, at PP 14-16 (2010).

²⁶ 16 U.S.C. § 803(a)(1) (2006).

Commission to develop a record in the proceeding on all aspects of the beneficial public uses relating to the comprehensive development of the waterway or waterways involved,²⁷ and that is what the Commission did in the Warrior River relicensing proceeding.

21. An extensive record was developed, which contains information and analyses on relevant issues and resources, including: archaeological and historic resources, erosion, recreation, socioeconomics, aquatic vegetation, fishery resources (including fish spawning and rearing, as well as fish entrainment), lake levels, drought and flood management, non-project water withdrawals, water quality, and federally listed species. Commission staff's draft and final EA reflect a thorough evaluation of the record as to the potential environmental effects on these resources of relicensing the project under various alternatives. Moreover, the license establishes a comprehensive set of operational and environmental measures that, together with the reservations of the Commission's authority to require changes to the project if future circumstances warrant, ensures that the project will be operated throughout the term of its license in a manner that appropriately balances developmental and non-developmental interests. For the above reasons, we deny rehearing on this issue.

2. Post-Licensing Studies and Sufficiency of Record

22. Next, the Lake Association alleges that the License Order does not comply with section 10(a)(1) of the FPA because it fails to make actual findings for each resource area as to what future conditions will be over the next 30 years and instead improperly relies on post-licensing studies to monitor the licensee's compliance with various operating protocols.²⁸ Citing *Confederated Tribes and Bands of Yakima Indian Nations v. FERC*²⁹

²⁷ See *LaFlamme v. FERC*, 945 F.2d 1124, 1128 (9th. Cir. 1991) (affirming the Commission's determination that it had satisfied the FPA's requirements by considering the "comprehensive picture of the water system of which the project is a part, based in the record developed in each particular proceeding"). See also *City of Fort Smith, Arkansas*, 44 FERC ¶ 61,160, at 61,510 (1988), *aff'd*, *National Wildlife Federation v. FERC*, 912 F.2d 1471 (D.C. Cir. 1990), where the Commission stated that section 10(a)(1) does not require it:

to undertake a study of all actual and potential uses of a waterway so as to develop an immutable master plan. Rather, comprehensive development is a concept that evolves over time, reflecting different eras' technical options, economic realities, and resource use priorities.

²⁸ In particular, the Lake Association contends that the Commission must make specific findings for the next 30 years regarding: (1) water quality; (2) shoreline erosion;

(continued...)

in support of its position, it contends that section 10(a)(1), by requiring that the Commission explore all issues relevant to the public interest prior to relicensing, compels the Commission to forecast how the new license will impact specific project resources over the next 30 years.³⁰ It acknowledges that post-licensing monitoring and adaptive management are appropriate tools, but argues that they can be used only “as a means to assure license conditions are meeting previously established measureable objectives.”³¹

23. We deny rehearing on this issue. We addressed the identical argument in *Appalachian Power*.³² There, we explained that *Yakima* does not require the Commission to have perfect information before it acts.³³ The test is whether, given uncertainty, the Commission’s action meets the standard for judicial review, which requires that the Commission’s decision be supported by substantial evidence.³⁴ As the court found in *United States Department of the Interior v. FERC*:³⁵

Yakima at most imposes on the Commission the duty to consider and study the environmental issue before granting a license. *Yakima* does not require any heightened degree of certainty for environmental facts, nor does it imply that all environmental concerns must be definitively resolved before a license is issued. Read this way, *Yakima* simply endorses the unstartling principles that an agency must establish a record to support its decisions and that a reviewing court, without substituting its own judgment, must be certain that the agency has considered all factors required by the statute.

(3) fisheries; (4) threatened and endangered species and their habitat; (5) recreation; and (6) socioeconomics.

²⁹ 746 F.2d 466 (9th Cir. 1984) (*Yakima*).

³⁰ Request for rehearing at 21.

³¹ Request for rehearing at 20.

³² *Appalachian Power*, 132 FERC ¶ 61,236, at PP 17-19 (2010).

³³ See, e.g., *Idaho Power Co.*, 108 FERC ¶ 61,129, at P 41 (2004), *reh’g denied*, 110 FERC ¶ 61,242 (2005), *aff’d Idaho Rivers United v. FERC*, 189 Fed. Appx. 629, 2006 U.S. App. Lexis 17566 (9th Cir. 2006).

³⁴ *Id.*

³⁵ 952 F.2d 538, 546 (D.C. Cir. 1992).

24. While the draft and final EAs included a cumulative effects analysis on water quality, fisheries, aquatic, and recreation resources, it is not possible, as the Lake Association argues we must do, to precisely identify and quantify how the new license will impact specific project resources over the next 30 years. Nevertheless, the license does contain measures – many of them specific – for dealing with project effects and implementing project purposes. In addition, the consultation procedures included in the management plans required by this license allow for adjustments to adapt to unforeseen conditions or new technology. Moreover, because our obligation under section 10(a)(1) of the FPA continues throughout the term of the license,³⁶ we reserve in our licenses the authority to reopen the license if conditions to address resources issues that may arise through the term of the license.³⁷

25. The Lake Association alleges that the License Order does not comply with section 10(a)(1) of the FPA because in many instances staff relied on the filings of others and did not conduct its own independent investigation to verify the accuracy of those filings, fill in gaps in the record, or resolve inconsistencies between information submitted by the Lake Association and the licensee. For example, the Lake Association contends that “a difference in generation of 27 percent does not correspond to a decrease in revenue of 27 percent,” and “OEP staff did not respond to this evidence.”³⁸ It also alleges that Commission staff erred by failing to undertake its own analysis or request additional evidence from Alabama Power to resolve inconsistencies between the Lake Association’s modeling results and Alabama Power’s modeling, and it argues that Commission staff was required to investigate and identify all the water uses in the basin (to be reasonably certain that downstream water needs could be met), or to require that Alabama Power provide transparent water balance modeling to determine the effect of project operations and other factors on lake levels and to achieve the best balance between competing water uses.³⁹ In the Lake Association’s view, staff resolved any uncertainties presented by information gaps in favor of Alabama Power and its proposal to continue existing operations.

³⁶ See, e.g., *S.D. Warren Co.*, 68 FERC ¶ 61,213, at 62,022 (1994).

³⁷ See *California v. FPC*, 345 F.2d 917, 925 (9th Cir. 1965). See also *Portland General Electric Co. v. FPC*, 328 F.2d 165, 175 (9th Cir. 1964).

³⁸ Request for rehearing at 23.

³⁹ Request for rehearing at 23-24.

26. We disagree. In conducting its analysis, staff considered all the information in the record of the proceeding. It is not, however, required or expected to resolve all inconsistencies between information that is submitted. With respect to the correlation between peak generation losses and resulting revenue losses, the EA, appropriately, does *not* claim there is direct correlation between the percent of generation losses and the percent of revenue losses. Using such an assumption would oversimplify how revenue losses should be calculated.⁴⁰ In any event, Commission staff did not need to calculate a precise dollar value for revenue losses to support its conclusion that the Lake Association's request for more stable lake elevations was not in the overall public interest. Its determination was based primarily on the reduction in generation and dependable capacity at the project's two developments, not the dollar value of those losses.

27. We do not agree that Commission staff erred by failing to undertake its own analysis or request additional evidence from Alabama Power to resolve inconsistencies between the Lake Association's modeling results and Alabama Power's modeling. As the Lake Association itself recognizes, (1) the differences in peak generation are likely due to significant differences in modeling assumptions, and (2) if similar assumptions were used, there would be a much better match between Alabama Power's and the Lake Association's results.⁴¹ Nor is staff required under section 10(a)(1) to develop, or direct the license applicant to develop, a water balance model in order to determine if the project is best adapted to a comprehensive plan for improving or developing the waterway. As we have explained above, we do not have to have perfect information before we act. The test is whether the Commission's action is supported by substantial evidence. Contrary to the Lake Association's assertions, we believe that the record supports staff's decisions in the license order.⁴²

⁴⁰ The difference in revenue loss would be the difference in the value of peak generation versus non-peak generation. In addition, generation would be reduced at the project's two developments, Smith and Bankhead, further complicating how dollar losses could be calculated.

⁴¹ Request for rehearing, Exhibit 1.1 at 22-23. Some of these differences are described in n.88, *infra*.

⁴² For these same reasons, we disagree with the Lake Association's assertions that Commission staff erred when, for example, it did not investigate: (1) whether all the water in the river basin had been properly accounted for; (2) how Alabama Power's

3. Specific Resource Issues

28. The Lake Association argues that the new license will not protect specific resources: water quality, downstream erosion, fisheries, threatened and endangered species, recreation, and socioeconomics. The Lake Association contends that treatment of these issues and the conditions in the license that relate to these issues do not comply with the comprehensive development standard of section 10(a)(1) of the FPA and that the record developed in the relicensing proceeding is insufficient to support a finding that the project, as licensed, is best adapted to the comprehensive development of the waterway. It alleges that the license requirements that address these issues are arbitrary and capricious because they are not supported by substantial evidence.⁴³ The Lake Association contends that in adopting these license conditions, the License Order erred in failing to rebut each piece of evidence it submitted in support of what it argues would be other, more comprehensive measures. The Lake Association claims that the License Order is deficient because it “does not make specific findings and rule on specific objections,”⁴⁴ and relies on incomplete or disputed evidence without adequate explanation.

29. As we explained in *Appalachian Power*,⁴⁵ the FPA recognizes the numerous beneficial public uses of the waterways and gives the Commission broad guidelines to apply in its hydroelectric licensing decisions. In deciding under what conditions to issue a license, our task is to fashion license conditions that will achieve what is in our judgment an optimal balance between and among the various developmental and

proposal and reasonable alternatives would affect rates (and consult with the state public service commission on this issue); and (3) whether the Smith development could be retrofitted to improve efficiency and dependable capacity at alternative lake levels.

⁴³ As a corollary argument, the Lake Association contends that staff did not adequately define the purposes of the proposed relicensing action and that the License Order did not state a purpose for issuing the new license. The Lake Association argues that staff failed to consider any alternatives for the non-power purposes of flood control, water quality, and navigation. We address these arguments regarding alternatives in our discussion later in this order regarding the range of alternatives that must be addressed in the EA.

⁴⁴ Request for rehearing at 42.

⁴⁵ *Appalachian Power*, 132 FERC ¶ 61,236, at P 23 (2010).

environmental public interest uses of the affected waterway.⁴⁶ As explained above, the FPA does not require that the Commission have perfect information before taking a licensing action or that all environmental concerns be definitively resolved before issuing a license.⁴⁷

30. As noted above, an extensive record was developed for this relicensing proceeding, including studies, analyses, and information on the resources potentially affected by the project. Commission staff's draft and final EAs reflect a thorough evaluation of the record as to the potential environmental effects on these resources of relicensing the project under various alternatives. There can be no doubt that OEP had enough information to proceed and that its decisions were supported by substantial evidence. The License Order considered all the germane factors, and the License Order and the EAs provided a reasoned explanation, supported by substantial evidence, of the order's decisions. In addition, the EA and order addressed the issues raised by the Lake Association. Contrary to the Lake Association's argument, there is no requirement that the Commission discuss in detail each piece of evidence in the record.

a. Water Quality

31. The Lake Association contends that the EA did not provide adequate information to determine whether the new license will mitigate project impacts to DO over the term of the license.

32. We disagree. The EA (at 35) found that DO levels in Smith Lake tailwaters often fail to meet state standards during the summer and early fall months as a result of turbine operations discharging water withdrawn from the deeper, anoxic waters near the dam. As a result, the EA (at 127) recommended, and the license requires, adoption of Alabama Power's proposal to design and install an aeration system in the turbines at the Smith development in order to meet the state standard of 4.0 milligrams per liter (mg/L) for DO during generation. Alabama Power must also develop a plan to monitor DO levels for at least three years after the aeration system is installed to ensure that state standards are being met.

⁴⁶ Section 4(e) of the FPA, 16 U.S.C. § 797(e) (2006), provides that in issuing licenses, the Commission shall give equal consideration to the power and development purposes for which licenses are issued, as well as to energy conservation, fish and wildlife, recreation, and other environmental resources. However, equal consideration does not mean equal treatment. *See State of California v. FERC*, 966 F.2d 1541, 1550 (9th Cir. 1992).

⁴⁷ *See, e.g., Idaho Power Company*, 108 FERC ¶ 61,129, at P 41 (2004).

33. The Lake Association alleges that Commission staff did not gather specific information on, and perform an analysis of, the type of aeration devices that would be used in the turbines. Commission staff responded to this argument in the EA, explaining that turbine aeration devices are commonly employed at other hydropower projects licensed by the Commission, and they have been shown to improve DO levels in the receiving waters.⁴⁸ Alabama Power's preliminary testing of turbine aeration through the use of penstock drainage valves at the Smith development commonly showed DO levels well above 5.0 mg/l during tests conducted in July 2003.⁴⁹ Moreover, Alabama Power completed installation of the turbine aeration system at the Smith development in September 2011 and began monitoring on October 1, 2011. Monitoring for October and November 2011 showed that required DO levels were being met.⁵⁰ In addition, if monitoring shows that the turbine aeration system does not bring DO levels up to the state standard, then the licensee must develop structural or operational modifications to the project, which would have to be filed with the Commission for approval.

34. The Lake Association next takes exception to what it says is the requirement of the water quality certification issued for the project by the State of Alabama to monitor and maintain state DO standards only when the project is generating. The Lake Association is mistaken. In fact, condition 1 of the certification requires: "the operation of the individual developments, *including* the operation of the turbines, shall be managed such that no less than 4.0 mg/l [milligrams per liter] of [DO] *shall be maintained at all times* at the [specified] monitoring locations." (Emphasis added.) Moreover, to ensure this requirement is met, condition 3 of the certification requires Alabama Power to monitor DO concentrations from March through November for three years during periods of generation, as well as during periods when the project is not generating but is making the required 50-cfs minimum flow release.⁵¹ As explained in the EA, monitoring DO during

⁴⁸ EA at 193.

⁴⁹ EA at 47. Preliminary testing showed DO concentrations ranging from 8 to 9 mg/L in water released from the valve.

⁵⁰ See Alabama Power's February 27, 2012 Filing at 6.

⁵¹ Following cessation of generation, Alabama Power begins minimum flow releases when the tailwater elevation recedes to elevation 256.2 msl (about 10 hours following the cessation of generation). See license Article 407, License Order, 130 FERC ¶ 62,271 at 64,713 (2010); EA at 59. Alabama Power has requested, and been granted, an extension until December 2012 to begin the 50-cfs minimum flow releases.

periods of generation and during minimum flow releases will adequately characterize the generation and non-generation discharges from the Smith development and enable the Commission to determine the effectiveness of turbine aeration and the minimum flow discharge at maintaining 4.0 mg/l DO in the Smith tailrace and whether additional operational or structural measures are needed.⁵²

35. For the above reasons, we deny rehearing on this issue.

b. Erosion

36. Alabama Power's proposed operation of Smith Lake will continue to cause some shoreline erosion and turbidity downstream of Smith Dam. Flows in the Smith development tailrace can increase from near zero to 10,000 cfs when the generating units come on line, creating a rapid change in water levels of up to 10 feet in a relatively short period of time. Flow changes of this magnitude have the potential to erode streambanks.⁵³ To mitigate these impacts, Article 417 of the license requires Alabama Power to implement erosion and sediment control measures downstream of Smith Dam, which include repairing two erosion sites and monitoring two other sites.

37. On rehearing, the Lake Association argues that Commission staff erred in not considering in detail the Lake Association's alternative, or other alternatives, for mitigating project impacts on erosion and in not explaining how staff determined the erosion potential of the Lake Association's alternative.

38. We disagree. As Commission staff explained, the EA "did not review alternatives for erosion control, such as more stable water levels, because even under the Lake Association's operation proposal, Smith Lake would continue to exhibit large changes in water levels on a regular basis."⁵⁴ The same would be true for the Smith development

Alabama Power Co., 138 FERC ¶ 62,165 (2012). On November 1, 2012, Alabama Power requested a further extension, until June 2013, to begin minimum flow releases. That request is pending.

⁵² At the end of the monitoring period, Alabama Power must provide a final assessment of the project's effectiveness in maintaining the state's water quality standard for DO, and if the monitoring indicates that the standard is not being met, Alabama Power must implement structural or operational measures, if necessary, to ensure the DO requirement is being met.

⁵³ EA at 59.

⁵⁴ EA at 191.

tailrace. Moreover, staff is not required to search for alternatives that would fully mitigate for any project-related erosion impacts. Consideration of alternatives need not be exhaustive and need only provide sufficient information to permit a reasoned choice of alternatives.⁵⁵ Commission staff's consideration of erosion impacts in the EA was sufficient, and the erosion measures required by Article 417 will adequately mitigate for project impacts.

c. Fisheries

39. The Lake Association contends that the License Order erred because it did not make an explicit finding under section 10(a)(1) of the FPA⁵⁶ as to the precise impacts of the new license on fisheries and, although the license requires measures that will partially mitigate impacts to fisheries, it does not quantify the expected level of enhancement. The Lake Association also alleges that, given that the EA demonstrates ongoing, unmitigated impacts to fisheries under the new license, the License Order does not have a sufficient basis to determine that the project meets the public interest/comprehensive development standard of section 10(a)(1).

40. The Commission is not required, nor would it be possible, to precisely quantify the impacts to fisheries of the Warrior Project license and its required enhancement measures. As explained above, the FPA does not require the Commission to have perfect information before taking a licensing action, or finding all environmental concerns to be definitively resolved before issuing a license. Rather, our license articles often include requirements for periodic review and adjustment of the measures, if warranted,⁵⁷ and our

⁵⁵ See section 102(2)(C)(iii) of the National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C)(iii) (2006); and *North Carolina v. FPC*, 533 F.2d 702, 707 (D.C. Cir. 1976) (citing *NRDC v. Morton*, 458 F.2d 827 (D.C. Cir. 1972)).

⁵⁶ 16 U.S.C. § 803(a)(1) (2006). That section requires that any project for which the Commission issues a license shall be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce; for the improvement and utilization of waterpower development; for the adequate protection, mitigation, and enhancement of fish and wildlife; and for other beneficial public uses, including irrigation, flood control, water supply, recreation, and other purposes.

⁵⁷ Articles 412 (Fish Habitat Enhancement Plan) and 413 (Fish Stocking) require the license, in consultation with relevant agencies, to evaluate the effectiveness of the required measures every six years and to modify them, if warranted. See License Order, 130 FERC at 64,714-15.

standard license articles give us the means to ensure that the project continues to meet the public interest/comprehensive development standard of section 10(a)(1) through the license term.

41. The Lake Association also contends that staff erred in failing to consider alternatives for fish passage. We disagree. As explained in the EA, there is no immediate need for fish passage at the project, because there are no anadromous or catadromous fish species present in the project waters.⁵⁸ As for the non-migrating species present at the project, there is no evidence to indicate that a lack of fish passage is having an adverse effect or that providing such facilities would result in any significant enhancement of an otherwise healthy fish community. The license includes sufficient measures to protect fish, including providing a minimum flow of 50 cfs, and maintaining DO concentrations and water temperatures within acceptable limits. If in the future, the U.S. Department of the Interior prescribes fishways pursuant to section 18 of the FPA,⁵⁹ Article 410 reserves the Commission's authority to require such facilities. In addition, standard Article 15 of the license reserves the Commission's authority to require such facilities on its own motion.⁶⁰

42. The Lake Association further contends that staff erred in not considering measures (such as ramping rates) to mitigate fishery impacts. In the EA, staff did consider ramping rates to mitigate project impacts to fisheries, but did not discuss them at length, because the fishery resource is a put-and-take trout fishery and such a significant change to project operations would involve reductions of fairly large amounts of water over extended periods of time, which would have a very high cost in lost generation revenues.⁶¹ As we have explained, staff is not required to evaluate in great detail every alternative to a measure, but only those that it considers to be reasonable. Staff gave appropriate consideration to ramping rates.

43. For the above reasons, we deny rehearing on this issue.

⁵⁸ EA at 128.

⁵⁹ 16 U.S.C. § 811 (2006).

⁶⁰ License Order, 130 FERC at 64,721. Standard Article 15 gives the Commission the authority, after notice and opportunity for hearing, to require the licensee to implement reasonable modifications to project facilities or operations for the conservation and development of fish and wildlife resources.

⁶¹ EA at 58-60, and 195.

d. Threatened and Endangered Species

44. Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)⁶² requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat.

45. In the relicensing proceeding, Commission staff identified 13 threatened, endangered, or candidate species (a bird, two plants, an amphibian (flattened musk turtle), a reptile, a fish, and seven mussels) as occurring, or having the potential to occur, within the project boundary. In addition, FWS has designated 91 miles of Sipsey Fork and its tributaries as critical habitat (Sipsey Fork Unit 10) for five of the listed mussel species.⁶³ A portion of the Sipsey Fork Unit 10 is located within the project boundary near the upstream limits of Smith Lake.

46. In the March 2008 draft EA, Commission staff examined the potential effects of the Warrior Project, as proposed by Alabama Power with staff's additional recommended measures, on these species and concluded that relicensing the Warrior River Project, with staff's recommended measures, would not be likely to adversely affect any listed species or their critical habitat. On April 11, 2008, the FWS concurred with staff's finding and stated that the flattened musk turtle is the only listed species known to occur within the project boundary. With respect to the designated critical habitat for listed mussels, the FWS concluded that the project areas included in this designation "are currently unoccupied by any of the ... 5 mussel species."

47. By its filing of July 24, 2008, the FWS requested that the Commission re-evaluate any new information regarding the presence of threatened and endangered species or critical habitat within the project boundaries. Specifically, FWS asked Commission staff to consider a newly identified location for the listed Alabama streak-sorus fern and to re-examine the Sipsey Fork Unit 10 critical habitat for listed mussels.

⁶² 16 U.S.C. § 1536(a)(2) (2006).

⁶³ These species are the dark pigtoe, orange-nacre mucket, Alabama moccasinshell, triangular kidneyshell, and ovate clubshell.

48. In March 2009, staff issued the final EA. The EA determined that the Alabama streak-sorus fern⁶⁴ and the flattened musk turtle⁶⁵ are currently found in the project area. In addition, staff found that, within the Sipsey Fork Critical Habitat Unit 10, four of the listed mussel species are currently found in portions of the designated critical habitat.⁶⁶ The EA examined the effects of the Warrior Project on these species and concluded that relicensing the Warrior Project with staff's recommended measures would not be likely to adversely affect any of the listed species or any designated critical habitat.⁶⁷

49. On April 21, 2009, the FWS filed a letter concurring with staff's determination. FWS stated that the Alabama streak-sorus fern and the flattened musk turtle are the only species known to occur within the project boundaries. The fern is found at several locations in Upper Sipsey Creek below elevation 522 feet msl (the reservoir's upper limit). The turtle is found in a portion of Brushy Creek and Sipsey Fork in low to moderate numbers, and the population appears "healthy and stable." As to listed mussels and their critical habitat, FWS concluded that the project areas included in this designation are currently unoccupied by any of the listed mussels.

50. On April 24, 2009, the Lake Association and American Rivers sent a letter to FWS, asking that it deny the Commission's request for concurrence with the Commission's preliminary determination that relicensing the Warrior Project would not be likely to adversely affect the flattened musk turtle.⁶⁸

⁶⁴ This species is a small evergreen fern that grows only on exposed rock surfaces and in crevices of Pottsville sandstone along a 4.25-mile reach of the Sipsey Fork upstream of the project, generally 6 feet above the ordinary high water mark.

⁶⁵ The flattened musk turtle is found in Smith Lake (the Sipsey Fork, Brushy Creek, Ryan Creek, and Rocky Creek arms) and upstream of Smith Lake within the Bankhead National Forest. Although recruitment is slightly lower in the Smith Lake population than in free flowing upstream reaches of the Sipsey Fork, the Smith Lake population was found to be readily using numerous locations in the Brushy Creek and Sipsey Fork branches of Smith Lake with suitable habitat (i.e., submerged rocky shelves and crevices) and to be in good to excellent condition. EA at 75-77.

⁶⁶ The four listed mussel species are the dark pigtoe, orange-nacre mucket, Alabama moccasinshell, and triangular kidneyshell. No extant populations of ovate clubshell are known to occur in the basin.

⁶⁷ EA at 69-81.

⁶⁸ The letter was filed with the Commission on April 29, 2009.

51. On October 8, 2009, the FWS reconfirmed its concurrence, stating that it would “continue to concur with FERC’s determination that the flattened musk turtle and Alabama streak-sorus fern will not be adversely affected by the proposed operation of the project, and that the proposed operation will not affect critical habitat for the mussels within the boundaries of the project.”⁶⁹

52. On rehearing, the Lake Association argues that the Commission erred in finding that relicensing the project is not likely to adversely affect the listed species.⁷⁰ The Lake Association contends that the EA demonstrates that the Warrior Project, as licensed, will not protect threatened or endangered species or designated critical habitat and that we should have entered into formal consultation with FWS. It asserts that the analysis in the EA was flawed. Rather than finding, as the EA did, that the measures in the license would continue, or marginally enhance, baseline conditions for the species (i.e., marginal benefit), the Lake Association asserts that we must address whether the measures would contribute to the recovery of the species.⁷¹

53. We disagree. ESA and its implementing regulations require that we evaluate the potential environmental impacts of the proposed action on listed species. If we find that the proposed action is likely to adversely affect a listed species (i.e., jeopardize the continued existence of a listed species or result in the destruction or adverse modification of the species’ critical habitat), then we must engage in formal consultation, and consider the factors proffered by the Association. If on the other hand we find, as we did here, that the proposed action is not likely to adversely affect the listed species, and if, as it did

⁶⁹ See October 16, 2009 filing from the FWS. The letter further explained that FWS had complied with the requirements of ESA by using the best scientific information available.

⁷⁰ The Lake Association states that it “incorporate[s] by reference” the arguments made to the FWS in the Lake Association’s request for reconsideration. However, those arguments, which the Lake Association provided in Part II of its request for rehearing, set forth issues and arguments pertaining to the FWS’ statutory authorities and are not directed to the Commission.

⁷¹ The Lake Association also contends that the EA failed to address project impacts on listed species downstream of Smith Dam. There is, however, no evidence that any listed species are present downstream of the Smith dam. The preferred habitat for the mussels is relatively shallow, flowing water over clean substrate, so they would be expected to primarily inhabit areas upstream (not downstream) of the reservoir. EA at 78.

here, FWS concurs with this finding, then no further action is necessary.⁷² Contrary to the Lake Association's arguments, there is no requirement in the statute or the implementing regulations to undertake formal consultation under the circumstances in this case. We therefore deny rehearing on this issue.⁷³

e. **Recreation**

54. The Lake Association contends that Commission staff did not analyze the significance of the project's continuing impacts on recreation (e.g., low lake levels that result in reduced boating access, stranded boat launches, dry swimming areas, and exposure of sandbars and other navigational hazards) and did not analyze alternative flow schedules and guide curves (the Lake Association's in particular) that might better mitigate the project's existing impacts on recreation.

55. We disagree. As explained in the EA,⁷⁴ Smith Lake and adjacent lands have 34 recreation facilities that provide boating, fishing, swimming, hiking, camping, and day-use areas.⁷⁵ Boat ramps are the most heavily used of these facilities at 80 percent capacity. There are 45 boat ramps on the lake and its nearby tributaries, two of which are operated by Alabama Power under its license. Thirteen of these boat ramps are usable at the winter pool elevation (December to February) of 496 feet msl. Because lake level

⁷² See joint regulations implementing the provisions of ESA, 50 C.F.R. § 402.13(a) (2011).

⁷³ The Lake Association also argues that the License Order erred in not responding to the Lake Association's evidence that its alternative (i.e., higher, more stable lake levels) "may better protect listed mussels than conditions under the new license." Request for rehearing at 33. However, as we have explained, the fact that there is substantial evidence to support a particular decision does not mean that other evidence in the record, which could support a different conclusion, is not valid or must be refuted. Contrary to the Lake Association's argument, there is no requirement that the Commission discuss in detail each piece of evidence in the record. We note, moreover, that the evidence the Lake Association presents on this issue is from its consultant, who admits that he is "not qualified to address whether the elevation changes are important to the mussels, especially since elevations rise significantly early in the spring... ." *Id.* at 33-34.

⁷⁴ EA at 82-85.

⁷⁵ Only one of these facilities, a boat launch with two boat ramps, is operated by Alabama Power under its license.

management will remain essentially unchanged under the new license, the project would not result in an adverse impact to recreation when compared to baseline conditions (i.e., operations under the prior license).⁷⁶ In fact, Alabama Power's new license will enhance public recreation because Alabama Power will install an additional boat ramp, which will provide additional low water boating access to the lake.⁷⁷

56. The Lake Association argues that, while the EA recognized that only one third of the boat ramps (i.e., 13 of 45) are usable at a winter lake elevation of 496 feet msl, the EA erred by failing to recognize this reduction of boating opportunities as significant. The EA further erred by failing to identify the lake level at which a majority of the boat ramps become unusable, to respond specifically to the Lake Association's study that recreation use falls by 5 percent for each 1 foot drop in lake levels, and to deny or otherwise respond to Lake Association evidence on the impacts to recreation at lake levels of 495 feet msl.⁷⁸ Without this analysis, the Lake Association argues, the EA lacks adequate information on which to fashion license conditions that meet the FPA's comprehensive development standard.

57. We disagree. The Commission is not required to perform the detailed analyses that the Lake Association argues must be done, and we see no purpose that would be served with this additional information. While it is true that low lake levels can strand many of the privately owned boat docks around the reservoir, as explained above there are a number of boat ramps available to the public that provide access to the lake at all water levels. Moreover, as we have explained elsewhere in this order, the Commission is not required to have perfect information before taking a licensing action or finding all environmental concerns to be definitively resolved before issuing a license. In deciding whether, or under what conditions to issue a license, the Commission must provide a

⁷⁶ See discussion of baseline in Section C. "Compliance with the National Environmental Policy Act (NEPA)," *infra*.

⁷⁷ EA at 95. In addition to the new boat ramp required by this license, there are plans by other entities, which are not requirements of this license, to install a boat launch at a Forest Service site to provide low water access and to reposition an existing boat ramp at a Winston County launch site so that it would provide lake access at all water levels. EA at 94-95.

⁷⁸ The Lake Association uses 2007 lake levels to illustrate its arguments. However, 2006 and 2007 were extreme drought years in which inflows to the project were inadequate to maintain downstream flow needs and maintain reservoir levels as specified in the guide curve, and thus are not representative flow years.

reasoned explanation, supported by substantial evidence, of the decisions in its order. Contrary to the Lake Association's argument, there is no requirement that the Commission discuss in detail each piece of evidence in the record.

58. Contrary to the Lake Association's allegations, the EA considered the Lake Association's proposal to maintain higher, more stable lake levels.⁷⁹ The EA described information submitted by the Lake Association regarding the recreational benefits of implementing the Lake Association's proposal.⁸⁰ The License Order explained that staff's analysis in the EA had considered the developmental and non-developmental uses of the Black Warrior River and the multi-purposes served by the Warrior Project and balanced the need for power, flood control, navigation and commerce, water quality, aquatic resources, and recreation.⁸¹ The EA and License Order concluded that the project currently provides considerable benefits to recreation around the lake, and that these benefits would continue under the new license.⁸² Implementing the operation recommended by the Lake Association could increase private and commercial development around the lake and lengthen the recreation boating season, but this would be costly in terms of lost peak generation.

59. Although adherence to the Lake Association's proposed guide curve would have little or no effect on *total* annual generation, the *timing* of generation would change significantly. Less generation would occur in the peak season months (June through September) when energy is most needed and valued highest. Greater generation would

⁷⁹ As explained above (at P 13), the Lake Association recommended that Smith Lake elevations remain between 505 and 510 feet msl from Memorial Day to Labor Day, and that the lake level elevation not drop below 502 feet during the rest of the year.

⁸⁰ See "Economic Analysis of Non-Power Values of Smith Lake," filed by the Lake Association February 11, 2008. These benefits included: (1) an increase in recreation use by extending the recreation season September through December; (2) a year-round operational season for marina owners and local businesses; (3) double the annual visitation days at Smith Lake; (4) an increase in local property values from \$342 to \$547 million; (5) an increase in the property tax base and property tax revenues by \$1.8 million; (6) an increase in annual local expenditures by \$34 million; and (7) benefits to marina owners and local businesses by extending the recreation season. The EA concluded, correctly, that such quantitative information is speculative.

⁸¹ EA at 136.

⁸² EA at 120; License Order, 130 FERC ¶ 62,271 at P 67.

occur in the non-peak season (October through May) when energy has less value.⁸³ By the Lake Association's own calculations, the Smith development would lose 13 percent of its peak generation, an estimate that we think is low.⁸⁴ Alabama Power, on the other hand, estimates its peak generation losses at 27 percent (a loss of 18,619 megawatt hours (MWh) for the 4-month period).⁸⁵ Neither of these calculations addresses additional peak generation losses that would occur at the project's downstream Bankhead development under the Lake Association's proposal.⁸⁶

⁸³ EA at 133.

⁸⁴ EA at 135. The Lake Association estimates peak generation losses by comparing generation under its model to project operation that assumes Alabama Power would operate with strict adherence to the guide curves. However, although lake levels have generally followed the operating curves, considerable variations have occurred due to the combination of inflows, both seasonally and annually, and water use demands associated with providing downstream flows and power generation. These variations are particularly evident during drought years, as has been experienced in the southeast during the last few years of operation.

The Lake Association acknowledges that the differences in peak generation are likely due to significant differences in modeling assumptions, and that if similar assumptions were used there would be a much better match between Alabama Power's and the Lake Association's results. In addition to the difference described above, the entities used different simulation periods for the two models. The Lake Association modeled 1940 through 2007, while Alabama Power modeled 1929 through 2008. *See* request for rehearing, Exhibit 1.1 at 22-23.

⁸⁵ EA at 135.

⁸⁶ The Lake Association did not provide an estimate of generation losses for the Bankhead development. Alabama Power estimated that generation at the Bankhead development during the peak period (June through September) would be reduced by 11 percent (a 4,249 MWh loss for the 4-month period) under the Lake Association's proposal. When combined with the estimated 18,619 MWh loss from the Smith development, generation from the Smith and Bankhead developments during the 4-month peak period would be reduced by 22,868 MWh, for an average loss of approximately 22 percent for both developments. *See* Alabama Power's October 3, 2008 additional information filing.

60. In sum, the reduction in peak generation at the project's two developments likely would be greater than the Lake Association's estimate of 13 percent. In addition, although not quantified, there would be reduction in the dependable capacity at the projects' two developments. Alabama Power would need to replace lost generation and lost capacity to avoid regional reductions in dependable capacity. Finally, the peak generation and dependable capacity losses would be from a renewable source, which is an increasingly valuable component in the region's energy mix.

61. For these reasons, the License Order correctly concluded that the costs of the Lake Association alternative outweigh the potential benefits of a longer recreation boating season on Smith Lake and that the Lake Association's proposal therefore was not in the overall public interest.⁸⁷

62. For the above reasons, we deny rehearing on this issue.⁸⁸

f. Socioeconomics

63. On rehearing, the Lake Association contends that the EA and the new license did not make a specific finding regarding the impact of project operations on socioeconomics in the region. It objects to Commission staff's finding in the EA that Alabama Power's continued operation under the new license will not have a significant adverse impact on socioeconomics. The Lake Association contends that existing lake level operations "adversely affect recreation, which in turn reduces tourism and property values, and thereby adversely affect [Winston] County's economy," and argues that the EA largely ignored evidence that the Lake Association's consultant submitted regarding the potential

⁸⁷ The EA and License Order also concluded that aquatic, terrestrial, and developmental resources within the project reservoir and downstream of the project would be adequately protected under the new license. EA at 123; License Order, 130 FERC ¶ 62,271 at P 66.

⁸⁸ In the EA's analysis of recreation at the project, Commission staff estimated the current amount of recreational use. Based on available survey information, staff calculated recreation use within the Smith development to be 243,428 recreation trips in 2000; 250,577 in 2005; and 260,523 in 2010. See EA, Table 3-5 at 84. The Lake Association contends that in light of information that Alabama Power provided, indicating annual daytime visitation of 490,232 and annual nighttime visitation of 88,242 in 2008, staff underestimated current recreation use by half. We take note of this omission of 2008 data, which Alabama Power did not file until March 25, 2009, after the March 2, 2009 issuance of the final EA. However, the updated information does not change our overall findings and conclusions regarding recreation.

economic benefits to property values and commercial and residential development along Smith Lake that would result from improved recreation under the Lake Association's alternative operating regime.⁸⁹

64. We deny rehearing on this issue. The EA discussed the socioeconomic impacts of Alabama Power's proposed operating regime and the Lake Association's alternative. Contrary to the Lake Association's contention that the EA ignored evidence it presented, the EA described information submitted by the Lake Association regarding the socioeconomic benefits of the Lake Association alternative for lake levels.⁹⁰ The EA also acknowledged the potential effects of maintaining current operations, noting that draw downs of Smith Lake result in reduced recreational opportunities and benefits. However, the EA also recognized that recreational use of the lakes would be maintained by continued operation of the project reservoirs under the existing guide curve.⁹¹

65. As explained above, the Commission is not required, nor would it be possible, to precisely quantify the project's impacts on socioeconomics. Nor must we have perfect information before taking a licensing action or finding all environmental concerns to be definitively resolved before issuing a license. In addition, as explained in more detail below, in considering whether a proposed action could result in significant adverse impacts (and thus would require preparation of an Environmental Impact Statement under the National Environmental Policy Act), we measure the potential environmental impacts of the proposed action as compared to baseline conditions, which in this case would be the project as currently licensed.

⁸⁹ Request for rehearing at 36-37.

⁹⁰ EA at 109-113 and 132-35. The EA cited the Lake Association's data that recreational use and associated expenditures resulted in an average loss of \$34 million to the local economy between 1999 and 2007 due to the current Smith Lake level fluctuations as compared to lake levels under the Lake Association's proposal. The EA also noted that, according to the Lake Association's consultant: 8,800 properties are located on the Smith Lake shoreline primarily because of the value of Smith Lake; additional lakefront developments are under construction at Smith Lake; and between 1995 and 2007, aggregate shoreline property values increased 169 percent, and private development around Smith Lake more than doubled (increased by 115 percent).

⁹¹ EA at 124.

g. Bankhead National Forest

66. The project occupies almost 2,700 acres of the Bankhead National Forest. Section 4(e) of the FPA⁹² provides that the Commission may issue a license for a project located within any reservation⁹³ (i.e., the Bankhead National Forest), only if it finds that the license will not interfere or be inconsistent with the purposes for which such reservation was created or acquired. FPA section 4(e) also requires that the Commission include in licenses for projects located within a federal reservation any conditions that the Secretary of the department under whose supervision the reservation falls deems necessary for the adequate protection and utilization of such reservation.

67. In the License Order, Commission staff reviewed relevant documents and concluded that “[t]here is no evidence in this proceeding to indicate that relicensing the Warrior Project would interfere with the purposes of the Bankhead National Forest.”⁹⁴ The Forest Service submitted conditions under section 4(e) for inclusion in the license, for the protection and utilization of the Bankhead National Forest.⁹⁵

68. On rehearing, the Lake Association contends that the project will interfere with the purposes for which the Bankhead National Forest was established. It contends that the forest was created to protect watersheds of navigable streams and to conserve the

⁹² 16 U.S.C. § 797(e) (2006).

⁹³ Section 3(2) of the FPA defines reservations as including national forests, 16 U.S.C. § 794(2) (2006).

⁹⁴ License Order, 130 FERC ¶ 62,271 at P 29.

⁹⁵ See Forest Service filings of March 10, 2005, May 4, 2007, and July 3, 2007. The conditions require Alabama Power to provide \$4,952,000 in funds to the Forest Service, as well as additional services valued at \$2,625,000. The funds would be distributed over the term of the license, and would be used for the following: (1) data collections and studies associated with conducting resource surveys, fish inventories, and ecological monitoring of Forest Service lands and the Sipsey River National Wild and Scenic River Corridor; (2) public education; (3) shoreline management activities; (4) clean-up of informal recreation sites; (5) annual study reports on cultural resources and for the Forest Service to manage cultural resources; (6) encroachment processing; (7) the upgrade and improvement of recreation resources at the existing Houston, Corinth, and Clear Creek Recreation Areas; and (8) the modification of culverts at road crossings in the Bankhead National Forest.

navigability of navigable rivers⁹⁶ and argues that the new license will interfere with these purposes because it could potentially have adverse impacts on several resources, including water quality and erosion.

69. We deny rehearing on this issue. The Organic Administration Act of 1897 provides that all national forests are established and administered only for water flows and timber production.⁹⁷ The Lake Association has presented no evidence that the Warrior Project will interfere with these purposes. Moreover, the Forest Service has provided conditions that it deems necessary for the adequate protection and utilization of the reservation.⁹⁸

h. Navigation

70. Smith Lake provides navigation flows for the Black Warrior and Tombigbee rivers. The Black Warrior-Tombigbee Waterway is one of the busiest commercial

⁹⁶ The Bankhead National Forest was originally created as the Alabama National Forest by Presidential Proclamation on January 15, 1918 (*see* Proclamation 1423, 40 Stat. 1740), and subsequently renamed the Black Warrior River National Forest by presidential proclamation on June 19, 1936 (*see* Proclamation 2178, 49 Stat. 3526), before being named the William B. Bankhead National Forest by Act of Congress on June 6, 1942 (56 Stat. 327). The Lake Association cites to the 1918 Presidential Proclamation as establishing the purposes for which the forest was created.

⁹⁷ 16 U.S.C. § 475 (2006). The Multiple Use Sustained Yield Act of 1960 (1960 Act), 16 U.S.C. § 528 *et seq.* (2006), broadened the purposes for which national forests had previously been administered to include outdoor recreation, range, timber, watershed, and wildlife and fish purposes. Section 528 of the 1960 Act provides, however, that these purposes are “to be supplemental to, but not in derogation of, the purposes for which the national forests were established as set forth in [the Organic Administration Act].” Under FPA section 4(4), the Commission, in determining whether a project would interfere or be inconsistent with “the purposes for which such reservation was created or acquired” considers only the purposes articulated in the Organic Administration Act. *See United States v. State of New Mexico*, 438 U.S. 696 (1978) (holding that the 1960 Act did not give rise to any reserved rights not previously authorized in the Organic Administration Act).

⁹⁸ As to the allegations that the project potentially could have adverse impacts on several resources, including water quality and erosion, we have addressed these arguments above.

waterways in the nation with over 21 million tons of commodities shipped annually.⁹⁹ Under the 1965 Manual, which includes the project's guide curves, Alabama Power must "discharge from Smith Reservoir water sufficient to maintain its pro rata share of inflow requirements to Bankhead Reservoir."¹⁰⁰ The manual further estimates that the pro-rata share to be released at the Smith development to maintain a total of 540 cfs inflow to Bankhead Lake would be no more than 245 cfs.¹⁰¹

71. The Lake Association argues that the License Order erred in not requiring a specific navigation flow and the record of the relicensing proceeding is inadequate to support a finding that the new license will protect downstream navigation under normal or low flow conditions.¹⁰²

72. We disagree. The requirements of the new license give the Corps and the Commission ample authority to ensure that downstream navigation will be protected. Standard Article 12 provides:

The United States specifically retains and safeguards the right to use water in such amount, to be determined by the Secretary of the Army, as may be necessary for the purposes of navigation on the navigable waterway affected; and the operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Secretary of the Army may prescribe in the interest of navigation, ... and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Secretary of the Army may prescribe in the interest of navigation, or as the Commission may prescribe for the other purposes hereinbefore mentioned.

⁹⁹ See April 7, 2008 comments from the Corps, filed April 8, 2008.

¹⁰⁰ 1965 Manual, Chart 8, Operating Instruction (1).

¹⁰¹ 1965 Manual at A-17, P 45.

¹⁰² In support, the Lake Association points to comments on the draft EA submitted by the Corps in which the Corps expressed concerns regarding the draft EA's analysis of the effect of the relicensing proposal on flows for navigation. However, the final EA explained that, "with regard to low flow operations, staff is not recommending new project operations: rather, the project would operate much like it has in the past." EA at 197. The Corps did not file additional comments on this issue.

73. In addition, Article 404 of the license requires the licensee to:

operate the Warrior River Project in a manner to assure that during periods of extreme drought, or extended drawdown, flows for navigation are provided in accordance with U.S. Army Corps of Engineers (Corps) March 1965 Black Warrior-Tombigbee River Basin Reservoir Regulation Manual, Appendix A, for the Lewis M. Smith Reservoir (Manual), or as the Commission may require. The Manual states that during periods of extreme drawdown, the Corps would specify the required flow releases from the Smith Development, not to exceed 486 acre-feet per day. This would be equivalent to a release of about 245 cubic feet per second (cfs) from the Smith development that is needed to maintain a 540 cfs inflow to Bankhead Lake.

Under this article, Alabama Power must operate the Warrior Project so that it is able to release navigation flows as requested by the Corps, even during drought years. The article refers only to periods of extreme drought or extended drawdown because historically that is when there has been a problem.¹⁰³

However, as explained above, Alabama Power must meet the Corps' navigation flow requirements throughout the year, under all flow conditions.¹⁰⁴ Therefore, we will amend Article 404 to clarify that the obligation to release flows for navigation applies under all flow conditions. For the above reasons, we deny rehearing on this issue, but we will clarify Article 404 as noted.

¹⁰³ See 1965 Manual at A-17, P 45, explaining:

It is not anticipated that special releases will frequently be required for [navigation]. Normal power release, combined with other inflow to Bankhead Lake, will usually be sufficient for navigation purposes. However, additional flow may be required during periods of extreme drought, after floods (if shoaling occurs in the upper reaches of Bankhead Lake), and during any extended drawdown of Bankhead Lake. Amounts required during such periods will be specified by the District Engineer, Corps of Engineers. Such amounts, however, will not exceed 486 acre-feet [245 cfs] per day.

¹⁰⁴ Under its prior license, during recent extreme drought years, Alabama Power was not at all times able to release adequate flows for navigation. It obtained variances from the Corps during these times. See License Order, 130 FERC ¶ 62,271 at P 19.

B. Compliance with the National Environmental Policy Act (NEPA)**1. Need for an Environmental Impact Statement**

74. The Lake Association contends that relicensing the Warrior Project will significantly affect the quality of the human environment and that therefore, under the requirements of NEPA,¹⁰⁵ the Commission should have prepared an Environmental Impact Statement (EIS) rather than an EA to support issuance of the Warrior license. Specifically, the Lake Association alleges that the EA lacks substantial evidence for its finding that the proposed action would not have a significant impact on the environment.¹⁰⁶ The Lake Association contends that the finding of no significant impact is inconsistent with what it alleges are findings in the EA that the project may have “ongoing, significant impacts” on water quality, erosion, fisheries, threatened and endangered species, recreation, and socioeconomics.

75. We disagree. The test for determining the need for an EIS is whether the action would have a significant impact on the human environment.¹⁰⁷ In relicensing proceedings, the Commission uses existing environmental conditions (i.e., continued project operation under the existing license) as a baseline against which to evaluate the environmental impacts of an applicant’s proposal and other reasonable alternatives.¹⁰⁸

¹⁰⁵ 42 U.S.C. §§ 4321-4370(f) (2006).

¹⁰⁶ The Lake Association also argues (request for rehearing at 45) that the EA is flawed because its finding of no significant impact is based on a “conclusory” statement that “[c]ontinuing to operate the Warrior Project, with [staff’s] recommended measures, would enhance water quality, protect federally-listed species and designated critical habitat, improve the recreation resources, and protect historic properties in the project’s [area of potential effect].” EA at 149. This argument is incorrect. An EA’s finding of no significant impact “need not repeat any of the discussion in the assessment, but may incorporate it by reference.” See section 1508.13 of the Council on Environmental Quality’s regulations implementing NEPA, 40 C.F.R. § 1508.13 (2011).

¹⁰⁷ 42 U.S.C. § 4332(2)(c) (2006).

¹⁰⁸ See *Eugene Water & Electric Board*, 81 FERC ¶ 61,270, at 62,326-27 (1997), *aff’d sub nom. American Rivers v. FERC*, 201 F.3d 1186, 1195 (9th Cir. 1999).

76. The EA adequately set forth the basis for why an EIS was not required. It examined the potential impacts of relicensing the project on various resources,¹⁰⁹ including water quality, fisheries and aquatic resources, downstream erosion, flow fluctuations, terrestrial resources, threatened and endangered species, recreation and land use, cultural resources, and socioeconomics. Although the EA identified potential ongoing impacts to some target resources, it identified no impacts as significant. Indeed, as the Lake Association itself recognizes, the EA analyzed the effects of the project on various resources and concluded that the new license “will improve the baseline condition of various beneficial uses in the near term.”¹¹⁰ We agree with the analysis and findings in the EA that the anticipated impacts of the project, taken as a whole, are not of sufficient magnitude to significantly affect the human environment. We therefore deny rehearing on this issue.

2. Adequacy of EA

77. The Lake Association next argues that the Commission violated NEPA because the EA did not comply with the requirements of the statute and the Council on Environmental Quality’s (CEQ) regulations that implement NEPA (CEQ regulations). First, the Lake Association contends that the EA did not adequately define the purpose of the proposed action, as required by section 1502.13 of the CEQ regulations, 40 C.F.R. § 1502.13 (2011), and this failure prevented a proper consideration of action alternatives for the non-power purposes of flood control, water quality, and navigation.

78. We disagree. The regulations to which the Lake Association cites establish the requirements for an EIS, not an EA. In contrast to the detail required for an EIS, an EA must include “a brief discussion of the need for the proposal.”¹¹¹ The EA for the Warrior Project met, and indeed exceeded, this requirement. Moreover, the EA properly described the purpose of the proposed action. The EA (at section 1.2) stated that the purpose of the action is to consider whether, and if so under what conditions, to issue a new license for the Warrior Project, and described the factors that the Commission must consider in making this determination (power and developmental purposes; energy conservation; protection, mitigation, and enhancement of fish and wildlife resources; recreation, and other aspects of environmental quality). This section identified water level fluctuations, water quality, and recreation as important issues in the proceeding.

¹⁰⁹ See EA at 31-115.

¹¹⁰ See, e.g., request for rehearing at 14.

¹¹¹ 40 C.F.R. § 1508.9(b) (2011).

79. Next, citing to NEPA section 102(2)(C)(iii) and section 1502.14 of the CEQ regulations,¹¹² the Lake Association argues that the EA failed to consider reasonable alternatives to the applicant's proposal for protection, mitigation, and enhancement of environmental quality, as required by those authorities. It alleges that the EA was deficient in failing to provide a level of analysis of the Lake Association's alternative proposal for higher, more stable lake levels that was comparable to the analysis of the applicant's proposal, and in failing to identify and evaluate any other alternatives to existing lake level and flow management.¹¹³ It also contends that the EA failed to adequately consider alternatives not within the Commission's jurisdiction, arguing that the EA should have considered "an alternative whereby [Alabama Power] would construct cooling towers at the Gorgas Plant."¹¹⁴

80. We deny rehearing on this issue. As we explained in *Appalachian Power*,¹¹⁵ section 102(2)(E) of NEPA¹¹⁶ requires action agencies to take a "hard look" at the potential environmental consequences of their proposed action.¹¹⁷ However, in carrying out their NEPA responsibilities, federal agencies are governed by a rule of reason.¹¹⁸ The

¹¹² 42 U.S.C. § 4332(2)(C)(iii) (2006) and 40 C.F.R. § 1502.14 (2011), respectively. As with the preceding argument, the Lake Association, by citing to statutory and regulatory requirements for, and case law relating to, an EIS, attempts to judge our EA by those standards, rather than the less stringent standards for an EA.

¹¹³ The Lake Association alleges that the EA was deficient because it failed to consider any alternatives to (1) the project's existing rule curve (i.e., mode of operation), (2) a 50-cfs minimum flow from the Smith development, (3) "baseline operation of Bankhead or other [unnamed] Army Corps developments downstream for flood control and navigation," or (4) "baseline coordination of Smith Dam and Gorgas Plant." Request for rehearing at 50-51.

¹¹⁴ Request for rehearing at 55.

¹¹⁵ *Appalachian Power*, 132 FERC ¶ 61,236, at PP 78-82 (2010) (addressing identical argument).

¹¹⁶ 42 U.S.C. § 4332(2)(E) (2006).

¹¹⁷ *Committee for Auto Responsibility v. Solomon*, 603 F.2d 992, 1002 (D.C. Cir. 1979), *cert. denied*, 445 U.S. 915 (1980).

¹¹⁸ *Natural Resources Defense Council v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972).

range of alternatives that must be considered is a matter within an agency's discretion.¹¹⁹ The discussion of alternatives need not be exhaustive and need only provide sufficient information to permit a reasoned choice of alternatives, i.e., "reasonable" alternatives.¹²⁰ There is no requirement to examine each proposed mitigation or enhancement measure (or groups of such measures submitted by an entity) as a separate alternative or alternatives.¹²¹

81. While an EIS must provide a "detailed statement" on the environmental impact of the proposed action and alternatives to the proposed action,¹²² an EA, in contrast, must provide only "brief discussions" of these matters.¹²³ In *Richard Balagur*, the Commission explained:¹²⁴

[A] discussion of environmental alternatives need not be exhaustive and need provide sufficient information to permit a reasoned choice of alternatives. Further, the range of alternatives that must reasonably be considered decreases as the environmental impact of the proposed action becomes less substantial. Thus, an agency's finding of no significant impact, if otherwise valid, permits the agency to consider a narrower range of alternatives than it might be obliged to assess before undertaking an action that would significantly affect the environment. [Footnotes omitted.]

¹¹⁹ *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 551-52 (1976).

¹²⁰ See section 102(2)(C)(iii) of NEPA, 42 U.S.C. § 4332(2)(C)(iii) (2006); and *North Carolina v. FPC*, 533 F.2d 702, 707 (D.C. Cir. 1976) (citing *NRDC v. Morton*, 458 F.2d 827 (D.C. Cir. 1972)).

¹²¹ *Idaho Power Co.*, 110 FERC ¶ 61,242, at PP 80-85 (2005).

¹²² Section 102(C)(i) and (iii) of NEPA, 42 U.S.C. § 4332(2)(C)(i) and (iii) (2006).

¹²³ Section 1508.9(b) of the CEQ regulations, 40 C.F.R. § 1508.9(b) (2011). CEQ typically recommends that EAs be 10-15 pages long. See *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 55 *Fed. Reg.* 18,026 at 18,027 (March 23, 1981) (Question 36a).

¹²⁴ *Richard Balagur*, 57 FERC ¶ 61,315, at 62,018 (1991), *aff'd sub nom. Friends of the Ompompanoosuc v. FERC*, 968 F.2d 1549, 1556-57 (2nd Cir. 1992).

82. The EA considered three alternatives: (1) Alabama Power's proposal, which included measures for erosion and sedimentation, water quality, drought management, fishery enhancement, recreation enhancement, and plans to manage wildlife habitat, aquatic vegetation, shoreline development, and historic properties; (2) a staff alternative that included most, but not all, of Alabama Power's proposed measures and additional staff-recommended measures; and (3) no action, i.e., continued project operation under the conditions of the then-current license.

83. The EA also discussed the Lake Association's recommendations, comments, and proposed alternative mitigation measures as they applied to the particular resources at issue. To the extent the EA did not specifically adopt into the staff alternative certain measures that the Lake Association and others recommended, it discussed the reasons for not adopting those recommendations.¹²⁵ We conclude that the analytical approach taken in the EA, which is the same approach that the Commission has employed for decades, considered a sufficient range of reasonable alternatives and enabled Commission staff to make an informed decision in relicensing the Warrior Project.¹²⁶ Moreover, with respect to the allegation that the EA should have more fully considered modifications to the downstream Gorgas plant as a reasonable alternative to Alabama Power's proposal, how the Gorgas steam plant operates is not a discrete alternative to the proposed action, but rather is just one element of the existing environment that has the potential to be directly

¹²⁵ See, e.g., discussion of why EA did not recommend adopting the Lake Association's proposed operating curve to reduce water level fluctuations and maintain higher lake elevations through the summer months (EA at 132-36); and responses to Lake Association concerns regarding erosion at the project (EA at 191), habitat fragmentation caused by the project and project effects on threatened and endangered species (EA at 191), effect of low lake levels in 2007 on recreational boating (EA at 192), effect of conversion of downstream fishery to a coldwater fishery caused by construction of the project (EA at 194), and the Lake Association's contention that the EA should have evaluated an operational alternative that would have resulted in maintenance of DO levels higher than state standards (EA at 194).

¹²⁶ Indeed, as a practical matter, Commission staff's draft and final EAs reflected the extensive and detailed analysis of potential environmental impacts that one would expect to find in an EIS, and as a result, there is little if any difference between the analyses conducted in an EIS and the analyses conducted in the EAs for the Warrior Project.

or indirectly affected by the proposed action. As such, the EA's consideration of potential project effects to Gorgas was more than adequate.¹²⁷

84. The Lake Association argues that the EA's analysis of the new license's direct, indirect, and cumulative impacts on the environment was inadequate because it failed to forecast trends and end conditions over the next 30 years. However, NEPA does not require such precision.¹²⁸ As explained above, the adequacy of an EA (or an EIS) is determined by a "rule of reason," which requires only a "reasonably thorough discussion of the significant aspects of the probable environmental consequences."¹²⁹ We believe that standard has been met.¹³⁰

85. In sum, in this order the Commission has reviewed the issues raised by the Lake Association in this proceeding. For the reasons detailed above, the Commission denies rehearing and ratifies OEP's actions in this docket, and affirms the issuance of the new license to Alabama Power. The Commission also finds that the Lake Association's interests have not been infringed upon or harmed. Accordingly, the Lake Association's argument that the proceeding was contested and therefore OEP lacked authority to issue the license is moot.

The Commission orders:

(A) The request for rehearing filed April 30, 2010, by the Smith Lake Improvement Stakeholders Association, is denied.

¹²⁷ See EA at 15-16 (explaining that project operations result in a "secondary benefit" to the Gorgas plant), 40-41 (describing Gorgas plant operations), 132-36 (describing effects of Lake Association alternatives for higher, more stable lake levels on generation, project resources, and non-project water uses, e.g., municipal water withdrawals and Gorgas plant operations).

¹²⁸ *Idaho Power Co.*, 110 FERC ¶ 61,242, at PP 89-95 (2005).

¹²⁹ *Columbia Land Basin Protection Ass'n v. Schlesinger*, 643 F.2d 585, 592 (9th Cir. 1981), quoting *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974).

¹³⁰ Concerning speculative and unknown information, "NEPA does not require a 'crystal ball' inquiry An EIS is required to furnish only such information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well nigh impossible." *Natural Resources Defense Council v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

Project No. 2165-030

- 37 -

(B) The first sentence of Article 404 of the license for the Warrior Project, issued March 31, 2010, is revised by deleting the phrase “during periods of extreme drought, or extended drawdown.”

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Document Content(s)

P-2165-030.DOC.....1-37

142 FERC ¶ 61,039
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Alabama Power Company

Project No. 2165-049

NOTICE REJECTING REQUEST FOR REHEARING

(January 16, 2013)

On March 31, 2010, the Commission issued a new license to Alabama Power Company (Alabama Power) for the continued operation and maintenance of the Warrior River Hydroelectric Project No. 2165, located on the Black Warrior River and on the Sipsey Fork of the Black Warrior River, in Cullman, Walker, Winston, and Tuscaloosa Counties, Alabama.¹ The Smith Lake Improvement and Stakeholders Association (Lake Association) filed a timely request for rehearing of the order, and on November 15, 2012, the Commission issued an order denying rehearing and providing clarification of the March 31 Order.² On December 17, 2012, the Lake Association filed a timely request for rehearing of the November 15 Order.

Rehearing of an order on rehearing lies when the later order modifies the result reached in the original order in a manner that gives rise to a wholly new objection.³ The November 15 Order does not modify the result of the March 31 Order. Further, the arguments Lake Association makes in its rehearing request were considered and denied in the November 15 Order. Therefore, the request for rehearing by the Lake Association is rejected.

¹ *Alabama Power Co.*, 130 FERC ¶ 62,271 (2010) (March 31 Order).

² *Alabama Power Co.*, 141 FERC ¶ 61,127 (2012) (November 15 Order).

³ *See, e.g., Union Electric Company d/b/a AmerenUE*, 114 FERC ¶ 61,230, at 61,745-46 (2006); *Duke Power*, 114 FERC ¶ 61,148, at P 1 (2006); *Gustavus Electric Co.*, 111 FERC ¶ 61,424, at P 3 (2005); *Symbiotic, L.L.C.*, 99 FERC ¶ 61,064, at 61,300 (2002); and *PacifiCorp*, 99 FERC ¶ 61,015, at 61,052 (2002). *See also Southern Natural Gas Co. v. FERC*, 877 F.2d 1066, 1073 (D.C. Cir. 1999) (citing *Tennessee Gas Pipeline v. FERC*, 871 F.2d 1109-10 (D.C. Cir. 1988)).

This notice constitutes final agency action. Requests for rehearing by the Commission of this rejection must be filed within 30 days of the date of issuance of this notice pursuant to section 313(a) of the Federal Power Act, 16 U.S.C. 825*l* (2006), and section 385.713 of the Commission's regulations, 18 CFR § 385.713 (2012).

Kimberly D. Bose,
Secretary.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:
2008-I-0454

Mark Pawlowski, Chief Hydro East Branch 2
Federal Energy Regulatory Commission
16375 US Highway 29
Washington, D.C. 20426

Dear Mr. Pawlowski:

We have completed our review of your March 11, 2008, letter describing the effects of relicensing the Warrior River Project (Federal Energy Regulatory Commission (FERC) No. 2165-022) located on the Black Warrior River, in Cullman, Walker, Winston, and Tuscaloosa Counties, Alabama, on federally listed and threatened species and their critical habitats. We understand that the FERC assessment is based, in part, on the Biological Assessment (BA), filed by the Alabama Power Company on March 22, 2007. Our comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C 661 et seq.), Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA), the Federal Power Act (41 Stat. 1063, as amended; 16 U.S.C. 791-828c et seq.), and the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended; 16 U.S.C. 668-668d).

According to the BA, there are 13 species that are either federally listed threatened or endangered, or are candidates for listing under the ESA which are known to occur, or have the potential to occur within the project boundary. These include the red-cockaded woodpecker (*Picoides borealis*), Kral's waterplantain (*Sagittaria secundifolia*), Alabama streak-sorus fern (*Thelypteris pilosa* var *alabamaensis*), Black Warrior waterdog (*Necturus alabamaensis*), Flattened musk turtle (*Sternotherus depressus*), Cahaba shiner (*Notropis cahabae*), Orange-nacre mucket (*Hamiota perovalis*), Fine-lined pocketbook (*H. altilis*), Alabama moccasinshell (*Medionidus acutissimus*), Coosa moccasinshell (*M. parvulus*), Dark pigtoe (*Pleurobema furvum*), Ovate clubshell (*P. perovatum*), and Triangular kidneyshell (*Ptychobranthus greenii*). However, the flattened musk turtle is the only species known to occur within the project boundaries. As indicated in the Environmental Assessment (EA), a portion of Brushy Creek and the Sipsev Fork support a stable, low to moderate population of flattened musk turtles.

On August 9, 2007, the bald eagle (*Haliaeetus leucocephalus*) was officially removed from the federal list of threatened and endangered species. However, the bald eagle is still protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (Eagle Act). Accordingly, all recommendations from the *National Bald Eagle Management*

PHONE: 251-441-5181



FAX: 251-441-6222

Mark Pawlowski

2

Guidelines should be applied when implementing the proposed project if eagles are discovered in the project area. The guidelines explain when the protective provisions of the Eagle Act are applicable and provide information and recommendations on how to avoid adversely affecting bald eagles, especially during the nesting season. A copy of the document may be downloaded from the Service's website at:

<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>. In addition, step-by-step guidance to help you determine if your project is likely to disturb nesting bald eagles (a potential violation of the Eagle Act) can be found at the following website: <http://www.fws.gov/southeast/es/baldeagle/index.html>.

The Fish and Wildlife Service (Service) has also designated a portion of the Sipsey Fork as critical habitat (CH) for five freshwater mussel species. These include the Orange-nacre mucket (*Hamiota perovalis*), Alabama moccasinshell (*Medionidus acutissimus*), Dark pigtoe (*Pleurobema furvum*), Ovate clubshell (*P. perovatum*), and Triangular kidneyshell (*Ptychobranchnus greenii*). According to our records, the areas included in this designation are currently unoccupied by any of the previously mentioned 5 mussel species.

Based upon FERC's assessment provided in the EA, we concur with all of the species determinations listed in Table 1-1, which concluded that the continued operation of the Smith Project, in the current mode, is not likely to adversely affect any listed species or designated critical habitat. Therefore, no further endangered species consultation is required unless: 1) the identified action is subsequently modified in a manner that causes an effect on a listed species or on proposed or designated critical habitat; 2) new information reveals the identified action may affect federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or a critical habitat is designated under the ESA that may be affected by the identified action.

We appreciate the opportunity to comment on this EA. If there are any questions, please contact Jeff Powell of my staff at 251-441-5858.

Sincerely,



William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Document Content(s)

4-11-2008 FWS Section 7 Warrior Project.PDF.....1-2



United States
Department of
Agriculture

Forest
Service

Southern Region

1720 Peachtree Road NW
Atlanta, Georgia 30309

File Code: 2770

Date: June 29, 2007

2007 JUL 10 P 2:51

FILED
OFFICE OF THE
SECRETARY

Ms. Kimberly Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

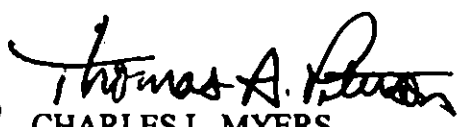
Dear Ms. Bose:

The U. S. Forest Service withdraws the preliminary 4(e) conditions filed on March 10, 2005, and substitutes the conditions found in the "*Agreement Between Alabama Power Company and the United States Forest Service Regarding Re-licensing Issues Related to the Warrior River Project*," executed on February 2, 2006, and previously filed with the Federal Energy Regulatory Commission (FERC). This settlement agreement constitutes the Forest Service's final section 4(e) license conditions for the Warrior River Project.

The May 4, 2007, filing that contained Exhibits A & B just summarized the conditions found in the previously filed agreement. Appendix A contains all the financial obligations agreed to in the Settlement Documents and is also part of the 4(e) conditions submitted by the Forest Service. The documents previously submitted on May 4 contain the executed settlement agreement and constitute the Forest Service's final 4(e) conditions for the Warrior River Project, FERC # P-2165-022.

You may contact Jim Twaroski, of the Lands, Minerals and Uses staff, at 404/347-2871 if there is a need to discuss this matter further.

Sincerely,


for CHARLES L. MYERS
Regional Forester

cc: Jim Twaroski, LMU
Miera Crawford, NFs in Alabama
Darryl Harley, NFs in Alabama





United States
Department of
Agriculture

Forest
Service

Southern Region

1720 Peachtree Road NW
Atlanta, Georgia 30309

ORIGINAL

File Code: 2770

Date: May 4, 2007

Ms. Kimberly Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

P-2165-022

2007 MAY 15 P 2:08

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OFFICE OF THE
SECRETARY

Dear Ms. Bose:

Enclosed is a copy of an executed Settlement Agreement for the Warrior River Project. This agreement reflects consensus reached by the U. S. Forest Service, Southern Region, National Forests in Alabama, and the Alabama Power Company. A signed agreement is currently on file in your office. The agreement satisfactorily resolves land management issues detailed within our March 10, 2005, Federal Energy Regulatory Commission (FERC) filing, and contained our Preliminary 4(e) license conditions.

Pursuant to Section 10 (a) (1) of the Federal Power Act, we request the Settlement Agreement be incorporated into the new FERC license as a license article and issued to the Alabama Power Company. FERC inclusion of this agreement, without material modification, will eliminate the need for the Forest Service to file duplicative 4(e) license conditions and or a motion to intervene. We believe inclusion of the agreement, as a license article, will assist the Forest Service and FERC in the administration of this project under the Federal Power Act. As such, it is our request this letter and the enclosed Settlement Agreement supplant our March 10, 2005, preliminary 4(e) filing.

The agreement, if adopted, will fulfill our responsibilities for management and protection of Federal lands pursuant to the Organic Administration Act of 1897 (30 Stat. 11), the Multiple-Use Sustained Yield Act of 1960 (74 Stat. 215), the National Forest Management Act of 1976 (90 Stat. 2949), and the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271).

The Settlement Agreement adequately addresses current project impacts occurring on lands managed by the Forest Service and provides an acceptable mechanism whereby future identified, operational issues affecting Forest Service lands are to be addressed. As such, I have determined the Settlement Agreement is in the public interest, and the project, Lake Lewis Smith, P-2165, as currently operated, will not unreasonably interfere with, or be inconsistent with the original establishment, or current management plan of the William B. Bankhead Ranger District, National Forests in Alabama.

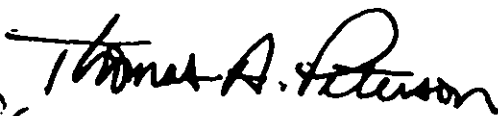


Ms. Kimberly Bose

2

I hereby attest the enclosed Settlement Agreement, which includes exhibits A and B, is a true copy of the original executed instrument currently on file with the Forest Service, National Forests in Alabama.

Sincerely,

for 

CHARLES L. MYERS
Regional Forester

Enclosures (3)

cc: WO Lands
NFs in Alabama

600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291

Tel 205.257.1000



March 3, 2006

VIA ELECTRONIC FILING

Ms. Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, DC 20426

FILED
OFFICE OF THE
SECRETARY
2007 MAY 15 P 2:08

Re: Agreement with U.S. Forest for the Warrior River Project (FERC No. 2165-022)

Dear Ms. Salas,

On July 28, 2005, Alabama Power Company (Alabama Power) filed an application for a new license and applicant prepared environmental assessment for the Warrior River Project (FERC No. 2165). Included in this application was a draft of an agreement between Alabama Power and the United States Forest Service regarding relicensing issues related the Warrior River Project. In the cover letter accompanying the license application, Alabama Power noted that once the draft agreement was finalized, it would file with the Commission a fully executed copy as a supplement to the application. Recently, the agreement and its exhibits were finalized by the parties, and Alabama Power therefore is submitting the enclosed copy of the final executed agreement as a supplement to the Warrior River Project application.

If you have any questions regarding this filing, please contact me at 205-257-1398 or Mr. Jim Crew at 205-257-4265.

Very Truly Yours,

R.M. Akridge
Hydro General Manager

Enclosure

Cc:

**Mr. Stephen R. Rickerson
Forest Supervisor
U. S. Forest Service**

AGREEMENT BETWEEN
ALABAMA POWER COMPANY AND THE UNITED STATES FOREST SERVICE
REGARDING RELICENSING ISSUES RELATED TO THE
WARRIOR RIVER PROJECT

This Agreement is entered into this the 18th day of August, 2005, by and between Alabama Power Company ("Alabama Power") and the United States Department of Agriculture, through the U.S. Forest Service-National Forests in Alabama-Bankhead National Forest ("Forest Service") with respect to the Warrior Hydroelectric Project (FERC No. 2165) ("Project").

Whereas, the Project consists of two developments, the Smith development and the Bankhead development, the Smith development being located in Walker, Winston, and Cullman counties in north central Alabama, on Sipsey Fork, a tributary of Mulberry Fork and a headwater stream of the Warrior River ("Warrior River"), and the Bankhead development being located downstream of the Smith development on the Warrior River in Tuscaloosa County in west central Alabama; and

Whereas, the current license for the Project was issued by the Federal Energy Regulatory Commission ("FERC") on September 1, 1957 and expires on August 31, 2007; and

Whereas, Alabama Power intends to file with FERC an application for a new license for the Project on or before August 31, 2005; and

Whereas, Alabama Power has an obligation under Section 10 (a)(1) of the Federal Power Act to provide for beneficial public uses, including recreation, with respect to the Project; and

Whereas, approximately 2691.44 acres of Project lands at the Smith development are within the Bankhead National Forest, which national forest is under the supervision of the Forest Service; and

Whereas, under the requirements of Section 4(e) of the Federal Power Act, the Forest Service has authority to submit to FERC such conditions as the Forest Service deems necessary for the adequate protection and utilization of the Bankhead National Forest, and such conditions must be included by FERC in any new license it issues for the Project; and

Whereas, the Forest Service has other license conditioning authorities and responsibilities under various provisions of the Federal Power Act with respect to the Project; and

Whereas, through extensive research, data and information collection, site inspections and discussions with Alabama Power, the Forest Service has determined the appropriate scope and amount of measures that are necessary for the adequate protection and utilization of the Bankhead National Forest as related to the Smith development and that these measures, if implemented, will satisfy its Section 4(e) authority and its other conditioning authorities and responsibilities under the Federal Power Act with regard to the Project; and

Whereas, Alabama Power is willing to assist the Forest Service in implementing these measures by providing funding and services to the Forest Service during the term of the new license for the project to address fully all of the Forest Service's issues related to the relicensing of the Project.

NOW THEREFORE, because the parties have determined to resolve recreation, ecological and cultural resource issues related to their duties and responsibilities under the Federal Power Act, and in consideration of the mutual covenants of the parties described herein, and other good and valuable consideration, Alabama Power and the Forest Service agree and covenant as follows:

Part I – General Provisions

Section 1.1 Purpose of the Agreement. The purpose of this Agreement is to resolve all pending recreation, ecological and cultural resources issues with respect to the Forest Service's Section 4(e) authority and all other Forest Service conditioning authorities and responsibilities under the Federal Power Act and other federal law to recommend terms or conditions for the Project (hereinafter collectively referred to as "the Forest Service's Conditioning Authority"). This Agreement sets forth Alabama Power's commitment to a level of funding during the term of a new license to be issued by FERC, and represents a cooperative effort between Alabama Power and the Forest Service to address the Project's effects on the recreational, ecological and cultural resources of the Bankhead National Forest. By entering into this Agreement, each party acknowledges that the Agreement reasonably, fairly, appropriately and completely resolves all present issues related to the Forest Service's Conditioning Authority for the Project.

Section 1.2 No Additional Recommended Measures or License Conditions. Because the measures provided for in this Agreement resolve all of the parties' pending issues related to the relicensing of the Project, the Forest Service hereby expresses its present intent not to propose, establish, support or communicate to FERC, any state or federal agency, any other stakeholder in the Project relicensing proceeding, or to any court (either federal or state), arbitrator, mediator or dispute resolution panel any recommended measure or mandatory license condition that expands upon, departs from, is in addition to, or is in any way inconsistent with the measures to be taken and the contributions to be made by Alabama Power described in Part II of this Agreement.

In the event the Forest Service, prior to the effective date of the new license for the Project, proposes, establishes, supports, or communicates any such additional recommended measure or mandatory license condition or otherwise exercises any additional Forest Service Conditioning Authority beyond those measures provided for in this Agreement, the parties shall meet to discuss in good faith whether the additional measure, mandatory license condition or exercise of Forest Service Conditioning Authority can be achieved consistent with the purposes and intent of this Agreement. If the parties are unable to agree that such additional measure, mandatory license condition or exercise of Forest Service Conditioning Authority is consistent with the purposes and intent of this Agreement, or is otherwise an appropriate requirement, either party may terminate this Agreement by providing written notice to the other party.

Section 1.3 Additional Measures During License Term. In the event either party obtains or develops information during the term of the new license issued by FERC for the Project indicating a need for additional measures beyond those provided for in this Agreement, the parties shall meet in good faith to discuss this new information and the need for additional measures. If the parties cannot agree on the need for additional measures, each party retains the right to utilize its authority under the Federal Power Act, or other legal authority, to secure any additional measures.

Section 1.4 Inclusion in New License of Agreement Provisions. Alabama Power will submit this Agreement as a part of its application for new license for the Project to be filed with FERC no later than August 31, 2005. It is the desire of both Alabama Power and the Forest Service that all of the provisions of Part II of this Agreement, including all exhibits hereto, be included in enforceable license articles in a new license issued to Alabama Power by FERC for the Project. To facilitate FERC's assistance in fulfilling the parties' desire in this regard, Alabama Power and the Forest Service will provide to FERC a Proposed Settlement License Article consistent with the terms and conditions of this Agreement.

Section 1.5 Effective Date. The "Effective Date" of this Agreement shall be the date that the new license for the Project issued by FERC is final and no longer subject to administrative appeal or judicial review. In no event shall the "Effective Date" be more than two (2) years after the date that FERC issues the license order for the Project.

Section 1.6 Term of Agreement. The term of this Agreement shall begin on the Effective Date, and shall continue to the expiration or termination of the new license for the Project.

Section 1.7 No Interference or Inconsistency. The Forest Service acknowledges that the operation of the Project, as proposed in its license application, by Alabama Power under a new license is consistent with this Agreement and will not interfere or be inconsistent with the purpose for which the Bankhead National Forest was created or acquired.

Section 1.8 Basis of Forest Service Decisions. The Forest Service acknowledges that in evaluating and determining the appropriate scope and amount of measures that are necessary to address the Forest Service's Conditioning Authority, the Forest Service has exercised its independent judgment and lawful discretion, and has based its determination of the necessity and adequacy of these measures on substantial evidence.

Section 1.9 Consistency with New License. It is the express desire of both Alabama Power and the Forest Service that the terms and conditions of the new license for the Project to be issued by FERC not be inconsistent with this Agreement.

Section 1.10 Non-severability of Terms. The terms of this Agreement are not severable from each other. This Agreement is made with the understanding that each term is in consideration and support of every other term, and each term is a necessary part of the entire Agreement. If any part of the Agreement is determined to be unenforceable, the parties shall discuss alternative means of ensuring the intentions of the parties can be carried forward.

Section 1.11 Entire Agreement. This Agreement constitutes the entire agreement with respect to the subject matters dealt with herein. Unless expressly contained herein, no prior representation, understanding, or communication, whether written or verbal, related to the subject matter of this Agreement, shall be considered a part of this Agreement.

Section 1.12 Communication to FERC in Support of Agreement. Within one (1) year following the filing by Alabama Power of the license application for the Project, the Forest Service shall submit written correspondence to FERC attaching this Agreement and Exhibits A and B. Exhibit B, prepared in consultation with Alabama Power, will describe in detail the various programs and projects identified in Exhibit A. This Settlement Agreement and accompanying Exhibits shall be the full and complete resolution of all present issues related to the Forest Service's Conditioning Authority.

Section 1.13 No Third Party Beneficiaries. This Agreement shall not create, and shall not be construed to create, any right or interest as a third party beneficiary in any public or private entity or any individual not a party to this Agreement, and shall not authorize any non-party to maintain a suit at law or equity pursuant to this Agreement. The duties, obligations and responsibilities of both Alabama Power and the Forest Service with respect to third parties shall remain as imposed under applicable law.

Section 1.14 Authorities Maintained. Nothing herein is intended or shall be construed to affect or limit the authority of either Alabama Power or the Forest Service to fulfill its statutory, regulatory or contractual obligations under applicable law.

Section 1.15 No Partnership Created. This Agreement does not and shall not be deemed to create a partnership or joint enterprise between Alabama Power and the Forest Service.

Section 1.16 Paragraph Titles for Convenience Only. The paragraph titles in this Agreement are intended solely for the convenience of the parties, and shall not be used to interpret either the wording of the paragraphs or the parties' intent with respect thereto.

Section 1.17 Notification or Correspondence. Any notification required by this Agreement or any correspondence from one party to the other relative to this Agreement shall be mailed to the following respective addresses:

If to Alabama Power

R. M. Akridge
General Manager, Hydro
Southern Company Services, Inc.
600 North 18th Street
Birmingham, Alabama 35203

If to the Forest Service

Steve Rickerson
Forest Supervisor
National Forests in Alabama
2946 Chestnut Street
Montgomery, AL 36107

Section 1.18 No Precedents Established. This Agreement is made upon the express understanding that it constitutes a settlement to resolve all issues related to the Forest Service's Conditioning Authority relative to the relicensing of the Project. Neither party shall be deemed to have admitted, consented or otherwise accepted any judgment, opinion or principal of the other party underlying or believed to underlie any of the specific terms or conditions of the Agreement unless expressly stated herein. Nothing in this Agreement is intended to be or shall be construed as a precedent with regard to any other proceeding, either regulatory or judicial.

Section 1.19 Environmental Review of Measures. An analysis of the impacts of implementing this Agreement shall be contained in the Applicant Prepared Environmental Assessment for the Warrior Hydroelectric Project, which will be filed with FERC as part of Alabama Power's application for new license for the Project.

Section 1.20 Conditions Subsequent to the Effectiveness of this Agreement. The withdrawal by FERC of its order issuing new license for the Project ("License Order"), the vacating of the License Order by a court of competent jurisdiction, the rejection by Alabama Power of the License Order, and any other event or circumstance that causes the License Order to become invalid shall each be considered a Condition Subsequent to the effectiveness of this Agreement. In the event a Condition Subsequent occurs, this Agreement shall automatically terminate and neither party thereafter shall have any rights or further obligations with respect to this Agreement.

Part II – Alabama Power Commitments to Resource Mitigation

Section 2.1 Amount of Contributions. Alabama Power will provide contributions to the Forest Service during the term of the new license for the Project in the amount of seven million five hundred seventy-seven thousand dollars (\$7,577,000) (net present value) to be used by the Forest Service to meet Bankhead National Forest Plan objectives for recreational, ecological and cultural resources needs and to mitigate for ongoing project impacts to the Bankhead National Forest. These contributions are comprised of a combination of cash contributions and the value of services to be provided by Alabama Power, and will be paid or provided for the purposes and commensurate with the annual value amounts and guidelines as identified in this Agreement, and the attached Exhibits A and B, respectively.

Section 2.2 Use of Cash Contributions in Subsequent Years. If in any year the Forest Service does not expend all funds contributed by Alabama Power for that year, the remaining unexpended balance may be used by the Forest Service in subsequent years for the purposes for which the contributions have been made and scheduled as designated in the attached Exhibits A and B.

Section 2.3 Annual Reports to Alabama Power and Forest Service. No later than February 15 of each year during the term of this Agreement, the Forest Service shall submit to Alabama Power a report describing generally how the cash contributions provided to the Forest Service under this Agreement have been spent in the preceding year. The level of detail of these reports shall be such as is necessary to assure Alabama Power that the contributions generally have been applied to meet the various purposes identified in the attached Exhibits A and B. No later than February 15 of each year during the term of this Agreement, Alabama Power shall submit to the Forest Service a report describing generally how Alabama Power has performed the services requested by the Forest Service under this Agreement. The level of detail of the report shall be such as is necessary to assure the Forest Service that Alabama Power has fulfilled its responsibilities as detailed in the attached Exhibits A and B.

Section 2.4 Term of New License. Alabama Power anticipates receiving a new license from FERC with a term of fifty (50) years, and, for this reason, the attached Exhibits A and B contain a schedule reflecting contribution amounts and purposes for each year of this fifty (50) year term. In the event FERC issues a new license for the Project with a term of less than fifty (50) years, Alabama Power will provide annual contributions to the Forest Service in the amounts and for the purposes identified in the attached Exhibits A and B for each year of the new license term, and, at the expiration or termination of the new license for the Project, Alabama Power shall have no further obligation to provide contributions to the Forest Service under this Agreement.

Section 2.5 Method of Delivery of Cash Contributions. In each calendar year during the term of this Agreement, Alabama Power shall submit to the Forest Service one (1) payment representing the total cash contribution to be paid for that particular year as specified in the attached Exhibit A, as may be adjusted in accordance with Section 2.8. The payment will be in the form of a single check made payable to "U.S. Forest Service – National Forests in Alabama," and shall be transmitted to the Forest Service no later than October 1 of each year by first-class mail to the address identified in Section 1.17.

Section 2.6 Method of Valuation and Delivery of Alabama Power Services.
(a) The services to be provided by Alabama Power under Section 2.1 (other than the Cultural Resources Services described in Section 2.7) shall be valued on an "at cost" basis, which shall include, but not be limited to, Alabama Power's cost of direct labor, assigned labor overheads, supplies, laboratory analyses, data analyses and reporting, travel, consultants, and other costs related to the services provided. The value of services may be adjusted annually based on changes in labor, material and other costs. The value of the services to be provided by Alabama Power shall be escalated annually, beginning in January 2008, using the data from the Consumers Price Index for All Urban Consumers as developed by the U.S. Department of Labor, Bureau of Labor Statistics, and developing linear curve fits using 30 years of data as a base.

(b) No later than September 30 of each year during the term of this Agreement, the Forest Service shall provide to Alabama Power a detailed written description of the specific services it desires Alabama Power to provide in the subsequent calendar year for the purposes and in the amounts described in the attached Exhibits A and B. In the written description, the Forest Service may request a reapportionment of the value of services for that particular year to be delivered by Alabama Power for the different Ecological subject areas specified in Exhibits A

and B. In addition, the Forest Service may request that several years' worth of services value identified in Exhibits A and B be aggregated and/or reapportioned for delivery in a subsequent year. Alabama Power will endeavor in good faith to accommodate such requests for reapportionment or aggregation of the value of services to be provided.

Section 2.7 Valuation and Method of Delivery of Cultural Resources Services.

(a) The Cultural Resources services will be provided to the Forest Service in the form of study reports on cultural resources, which Alabama Power will prepare in compliance with Section 106 of the National Historic Preservation Act of 1966. The Forest Service may use these study reports to manage cultural resources within the Bankhead Forest or for any other purpose not inconsistent with this Agreement. However, because these study reports may contain sensitive information with respect to the location of archeological, tribal, historical or other cultural materials, the Forest Service shall treat these reports as confidential, and shall not provide or distribute these study reports or any information contained therein to any person, agency, or other entity without first obtaining the express written consent of Alabama Power after consultation with FERC.

(b) The value of the Cultural Resources services identified in the attached Exhibit A is an estimate of the cost of studies to be performed by Alabama Power in compliance with Section 106 of the National Historic Preservation Act of 1966. In the event that the actual cost of the study reports in a year is less than the amount estimated in the attached Exhibit A, the difference in value shall not be carried forward for use in subsequent years. Similarly, in the event that the actual cost of the study reports in a year is greater than the amount estimated in the attached Exhibit A, the difference shall not be deducted from the value of Cultural Resources services to be provided in subsequent years.

Section 2.8 Escalation of Contribution Value. The value of the contributions and services to be provided by Alabama Power shall be escalated annually, beginning in January 2008, using the data from the Consumers Price Index for All Urban Consumers as developed by the U.S. Department of Labor, Bureau of Labor Statistics, and developing linear curve fits using 30 years of data as a base.

Section 2.9 No Direction by Alabama Power of Expenditures. Alabama Power shall have no responsibility or authority to direct, review or approve the manner or method in which the Forest Service expends the cash contributions or utilizes the services provided by Alabama Power hereunder, other than to receive and review the annual reports submitted by the Forest Service under Section 2.3 herein.

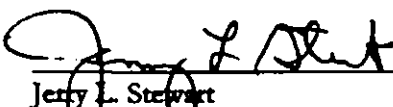
Section 2.10 Annual Meeting. After the Forest Service provides to Alabama Power the written description of the specific services it desires Alabama Power to provide in a subsequent calendar year as provided for in Section 2.6 (b), but before December 31 of each year, the parties shall meet at a mutually convenient time and location to discuss the requested services, the reports provided to each other under Section 2.3, and any other appropriate matter that may be related to this Agreement or the Project.

Part III – Enforcement of Settlement and Dispute Resolution

Section 3.1 Enforcement of Settlement Provisions. Though it is the desire of both Alabama Power and the Forest Service that all of the provisions of Part II of this Agreement be included in enforceable license articles in the new license issued by FERC for the Project, the parties recognize that FERC may not include all, or any, of the provisions of Part II of this Agreement in the new license. If FERC determines that it does not have jurisdiction to adopt or enforce some or all of the provisions of Part II of this Agreement and therefore does not include such provision or provisions in the new license, the parties nonetheless agree that they shall be bound by the entire Agreement, including the provision or provisions omitted by FERC from the new license. As to the provisions of Part II of this Agreement that FERC may include in enforceable articles in the new license, enforcement of such provisions shall be pursued in accordance with FERC's rules and regulations and in accordance with applicable procedures in the Federal Power Act.

Section 3.2 Dispute Resolution. In the event any dispute arises between Alabama Power and the Forest Service with respect to any aspect of this Agreement, Alabama Power and the Forest Service will engage in good faith discussions to resolve such dispute. If, after engaging in good faith discussions, the parties are unable to resolve a dispute that involves an obligation included in a license article in the new license, Alabama Power and the Forest Service will petition FERC to use its Office of Alternative Dispute Resolution (ADR) to help facilitate a resolution to the dispute. If, after engaging in good faith discussions, the parties are unable to resolve a dispute that does not involve an obligation included in a license article in the new license for the Project, then, at the request of either party, Alabama Power and the Forest Service shall jointly retain the services of an independent professional mediator to assist in resolving the dispute. Notwithstanding the foregoing, both Alabama Power and the Forest Service reserve their rights to seek specific performance of this Agreement in a court or federal regulatory agency of competent jurisdiction.

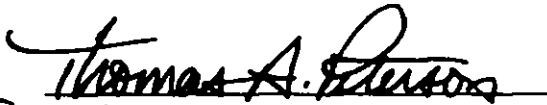
Agreed to and accepted by Alabama Power Company,



Jerry L. Stewart
Senior Vice President

Dated: 8-18-05

Agreed to and accepted by U.S. Department of Agriculture, through the U.S. Forest Service-
Southern Region,


for Charles Myers
USDA Forest Service
Southern Region, Regional Forester

Dated: 2/02/06

Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

EXHIBIT A

YEAR	1**	2	3	4	5	6	7	8	9	10	11	12	13
RECREATION													
One time costs (facilities, repairs, etc)	300,000	300,000	300,000	300,000	300,000								
O&M	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Total RECREATION	348,000	348,000	348,000	348,000	348,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*													
	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
* Level of services will vary each year based on requirements and field work													
ECOLOGICAL													
One time costs (c/verts, plots, etc)	145,000					80,000							
Data Collection/Studies	50,000	50,000	50,000	50,000	50,000	25,000	25,000	25,000	35,000	25,000	10,000	10,000	10,000
Public Education	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Erosion/Prevention Processing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Clean-up of Informal Rec Sites	5,000					5,000	5,000						6,000
Total ECOLOGICAL	245,000	75,000	75,000	75,000	75,000	110,000	90,000	90,000	90,000	90,000	95,000	90,000	90,000
Total APC Resources	150,000	180,000	180,000	180,000	180,000	210,000	180,000	180,000	180,000	180,000	185,000	180,000	180,000
Total APC Funding	505,000	385,000	395,000	385,000	385,000	73,000	78,000	73,000	73,000	73,000	73,000	98,000	64,000
YEARLY TOTAL	\$710,000	\$645,000	\$640,000	\$648,000	\$648,000	\$283,000	\$228,000	\$223,000	\$223,000	\$223,000	\$243,000	\$78,000	\$84,000

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Totals for 50-yr License Period	
Total APC Funding	\$4,932,000
Total APC Resources	\$2,825,000
Total	\$7,377,000
Assumptions:	Based on Consumer Price Index (CPI) Net Present Value

** It is anticipated that Year 1 will be 2006, but Year 1 could be a subsequent year if the Effective Date of the Settlement Agreement occurs beyond 2006.

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Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
RECREATION																
One time costs (facilities, repairs, etc)																
Costs	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*																
* Level of services will vary each year based on requirements and field work																
ECOLOGICAL																
One time costs (containers, trucks, etc)																
Data Collection/Studies	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Public Education	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Water Quality Sampling	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Shoreline Management	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Encroachment Processing	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Clean-up of Informal Race Sites	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Total ECOLOGICAL	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Total APC Resources	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000
Total APC Funding	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000
YEARLY TOTAL	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000	123,000

Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
RECREATION																	
One time costs (facilities, repairs, etc)																	
O&M	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*																	
* Level of services will vary each year based on requirements and field work																	
ECOLOGICAL																	
One time costs (culverts, fence, etc)																	
Data Collection/Studies	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Public Education																	
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Encroachment Processing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Clean-up of Informal Rec Sites		8,000					8,000										
Total ECOLOGICAL	30,000	38,000	30,000	30,000	30,000	30,000	38,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Total APC Resources	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Total APC Funding	58,000	84,000	58,000	58,000	58,000	58,000	84,000	58,000	58,000	58,000	58,000	58,000	58,000	58,000	58,000	58,000	58,000
YEARLY TOTAL	\$78,000	\$84,000	\$78,000	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000	\$78,000

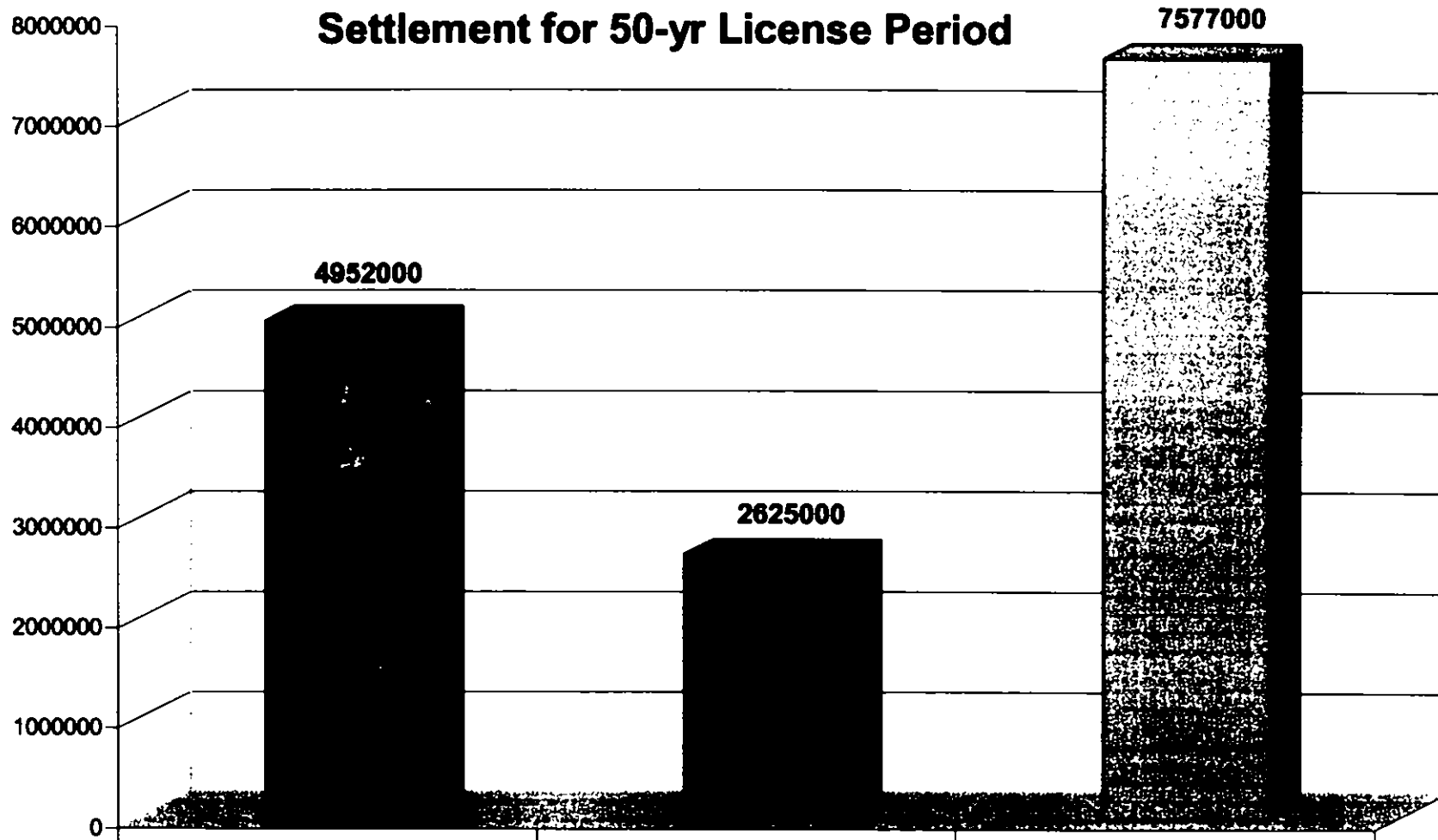
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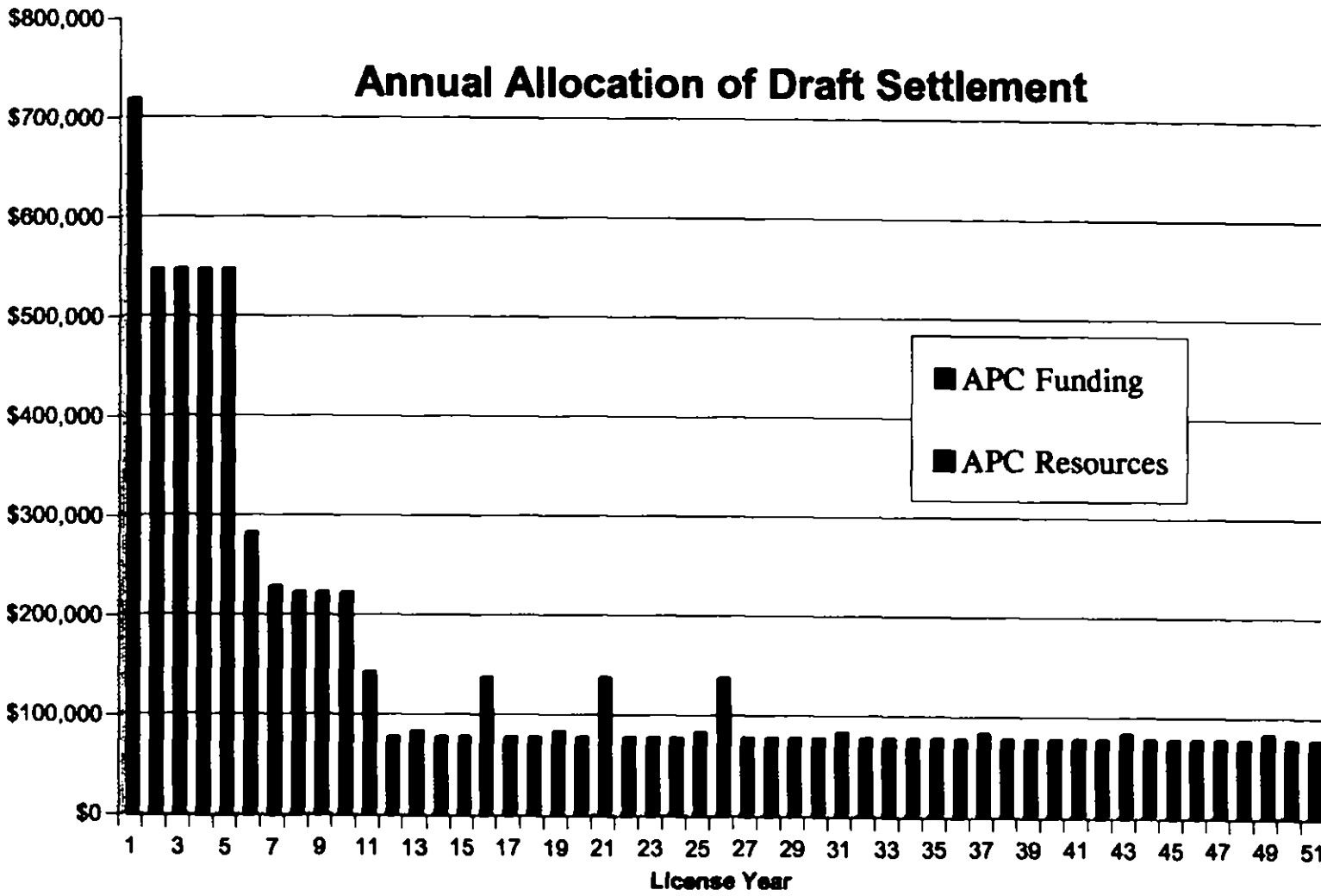
Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	47	48	49	50	51	Totals
RECREATION						
One time costs (facilities, repairs, etc)						1,500,000
O&M	48,000	48,000	48,000	48,000	48,000	2,448,000
Total RECREATION	48,000	48,000	48,000	48,000	48,000	3,948,000
CULTURAL RESOURCES*						
						1,280,000
* Level of services will vary each year based on requirements and field work.						
ECOLOGICAL						
One time costs (culverts, trails, etc)						165,000
Data Collection/Studies						300,000
Data Collection/Studies	10,000	10,000	10,000	10,000	10,000	785,000
Public Education						55,000
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	255,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	310,000
Encroachment Processing	5,000	5,000	5,000	5,000	5,000	255,000
Clean-up of Informal Rec Sites			6,000			54,000
Total ECOLOGICAL	30,000	30,000	36,000	30,000	30,000	2,378,000
Total APC Resources	20,000	20,000	20,000	20,000	20,000	2,625,000
Total APC Funding	58,000	58,000	64,000	58,000	58,000	4,932,000
YEARLY TOTAL	378,000	378,000	384,000	378,000	378,000	\$7,577,000

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Settlement Agreement with U.S. Forest Service for Smith Project
EXHIBIT A
APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RECREATION															
One time costs (facilities, repairs, etc.)	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
O&M	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
TOTAL RECREATION	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000	348,000
CULTURAL RESOURCES*	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
* Level of services will vary each year based on requirements and field work															
ECOLOGICAL															
One time costs (cutovers, limbs, etc.)	185,000														
Data Collection/Studies	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Public Education	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Enrichment Processing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Clean-up of Informal Rac Sites	8,000														
Total ECOLOGICAL	246,000	75,000	75,000	75,000	75,000	110,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Total APC Resources	150,000	150,000	150,000	150,000	150,000	210,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Total APC Funding	589,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000	398,000
YEARLY TOTAL	\$719,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000	\$648,000

Totals for 30-yr License Period	\$4,852,800
Total APC Resources	\$2,625,900
Total	\$7,478,700
Assumptions:	
Based on Consumer Price Index (CPI)	
Net Present Value	

** It is anticipated that Year 1 will be 2006, but Year 1 could be a subsequent year if the Effective Date of the Settlement Agreement occurs beyond 2006.

Draft Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
RECREATION															
One time costs (facilities, repairs, etc)															
O&M	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
CULTURAL RESOURCES*															
* Level of services will vary each year based on requirements and field work															
ECOLOGICAL															
One time costs (culverts, frpts, etc)	80,000					80,000					80,000				
Data Collection/Studies	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Public Education															
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Encroachment Processing	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Clean-up of Informal Rec Sites				5,000						5,000					
Total ECOLOGICAL	90,000	30,000	30,000	35,000	30,000	80,000	30,000	30,000	30,000	35,000	90,000	30,000	30,000	30,000	30,000
Total APC Resources	80,000	20,000	20,000	20,000	20,000	80,000	20,000	20,000	20,000	20,000	80,000	20,000	20,000	20,000	20,000
Total APC Funding	58,000	58,000	58,000	64,000	58,000	58,000	58,000	58,000	58,000	64,000	58,000	58,000	58,000	58,000	58,000
YEARLY TOTAL	\$138,000	\$78,000	\$78,000	\$84,000	\$78,000	\$138,000	\$78,000	\$78,000	\$78,000	\$84,000	\$138,000	\$78,000	\$78,000	\$78,000	\$78,000

Draft Settlement Agreement with U.S. Forest Service for Smith Project

APC Resources - Shown in Blue
APC Funding - Shown in Red

YEAR	46	47	48	49	50	51	Totals
RECREATION							
One time costs (facilities, repairs, etc)							1,500,000
O&M	48,000	48,000	48,000	48,000	48,000	48,000	2,448,000
Total RECREATION	48,000	48,000	48,000	48,000	48,000	48,000	3,948,000
CULTURAL RESOURCES*							
							1,250,000
* Level of services will vary each year based on requirements and field work							
ECOLOGICAL							
One time costs (culverts, fmb, etc)							185,000
Data Collection/Studies							300,000
Data Collection/Studies	10,000	10,000	10,000	10,000	10,000	10,000	785,000
Public Education							55,000
Water Quality Sampling	5,000	5,000	5,000	5,000	5,000	5,000	255,000
Shoreline Management	10,000	10,000	10,000	10,000	10,000	10,000	610,000
Encroachment Processing	5,000	5,000	5,000	5,000	5,000	5,000	255,000
Clean-up of Informal Rec Sites				5,000			54,000
Total ECOLOGICAL	30,000	30,000	30,000	38,000	30,000	30,000	2,370,000
Total APC Resources	20,000	20,000	20,000	20,000	20,000	20,000	2,625,000
Total APC Funding	98,000	98,000	98,000	64,000	58,000	58,000	4,952,000
YEARLY TOTAL	\$78,000	\$78,000	\$78,000	\$84,000	\$78,000	\$78,000	\$7,577,000

Exhibit B

EXPLANATORY STATEMENT CONCERNING HOW THE FOREST SERVICE INTENDS TO UTILIZE THE FUNDING AND SERVICES PROVIDED BY ALABAMA POWER COMPANY UNDER THE "AGREEMENT BETWEEN ALABAMA POWER COMPANY AND THE UNITED STATES FOREST SERVICE REGARDING RELICENSING ISSUES RELATED TO THE WARRIOR RIVER PROJECT"

Through extensive research, data and information collection, site inspections and discussions with Alabama Power Company (APC) in the context of the FERC relicensing process for the Warrior River Project (FERC No. 2165), the United States Department of Agriculture, Forest Service (FS) has determined the appropriate scope and amount of measures that are necessary for the adequate protection and utilization of the Bankhead National Forest as related to the Lewis Smith development, and that these measures, if implemented, will fully address the development's effects on the recreational, ecological and cultural resources of the Bankhead National Forest. These measures will also satisfy the Forest Service's authority under Section 4(e) and other relevant provisions of the Federal Power Act, as well as other applicable federal law. To address and resolve certain issues concerning the scope and amount of these measures, APC and the FS entered into the "Agreement between Alabama Power Company and the United States Forest Service Regarding Relicensing Issues Related to the Warrior River Project" (Agreement) to which this Exhibit B is attached.

The purpose of this Exhibit B is to 1) provide additional explanation and detail with respect to the measures identified in the Agreement and its attached Exhibit A, and 2) describe in further detail how the FS intends to utilize the funding and services provided by APC under the Agreement and its attached Exhibit A. Through the Agreement, APC committed to provide the FS with \$4,952,000.00 in resource protection funding during the term of the new Warrior River license. (Both of the above values are based on a fifty year license term. If FERC elects a shorter license term, both values will be somewhat less.) In addition, APC committed to provide the FS with services valued at \$2,625,000.00 to assist the FS with projects and studies during the term of the new Warrior River license. Nothing in this Exhibit B shall be construed to expand, broaden, or increase either party's rights or obligations under the Agreement. Instead, this Exhibit B is intended merely to explain some of the activities, tasks, projects and improvements for which APC's contributions specified in Exhibit A are intended. To the extent that anything in this Exhibit B is found to be inconsistent with any provision of the Agreement or its attached Exhibit A, the language in the Agreement and its attached Exhibit A shall control in the interpretation of the parties' rights and responsibilities.

Exhibit B

Ecological Resources

- **Utilize Funding to continue the Multi-year studies of the Federally listed Flattened Musk Turtle:**

For over two years, and in partnership, APC and the FS have been funding this study. However, several more years of data collection are required. This study, and its findings, will have implications for several other associated aquatic species. The primary goal of this on-going study is to assess how current operations of the Lake Lewis Smith Project may be directly, or indirectly, affecting Flattened Musk Turtle (FMT) populations. The secondary goal is to provide the basis and direction for protection measures required to improve species viability.

- **Utilize Funding for Ecological Connectivity:**

Pursuant to the schedule in Exhibit A, during year one of the new license term, utilize funding for the replacement of selected culverts to improve aquatic species passage due to the effects resulting from project operations.

- **Utilize Funding for Surveying & Monitoring Activities:**

Due to the presence of sensitive species; increases in project (lake) use, and private development of the lake shoreline, the FS has a need for lake access in order to conduct ecological monitoring, survey, and real estate management activities along the lake shoreline, and its primary tributaries.

- **Utilize Resources for Data Collection and Survey – Long Term Monitoring of Plant and Animal Species and their Habitats in the Sipsey and Brushy Watersheds:**

Pursuant to the schedule in Exhibit A, utilize resources to assist in performing a complete floristic survey, inventory, and risk assessment based upon findings and habitat suitability. Using a qualified biologist, conduct long-term monitoring for the license term for all federally listed, and FS listed plant species populations and aquatic plant communities. Areas of concern are plant species associated with streamside and cliff line habitats. The survey and monitoring work must include species, their distributions, and viability trends. Survey, inventory, map, and evaluate existing conditions of rare plant communities within the lower and upper pool area. Areas of concern are canyons, seeps, springs, glades, rock houses, and barrens. On a five-year cycle, monitoring and survey findings will be developed. Based upon findings, prepare mitigation, and recovery measures, if necessary. Any T & E recovery activities must be performed in coordination with the U.S. Fish & Wildlife Service, Alabama Natural Heritage Program, and the FS. Monitor project operation impacts on lake rare communities throughout the license term.

Exhibit B

- **Utilize Funding to Perform a Systematic Inventory of NF Stream fish during high and low water conditions:**

Perform a six-year, alternating seasonal study (summer and winter), documenting findings of species, habitat conditions, and lake levels encountered during the study period.

- **Utilize Funding to Perform a Bald Eagle Survey on NF Shoreline:**

Annually, throughout the license term, survey and map nest locations monthly from January to June, documenting existing and new nest locations. Develop a risk assessment, due to human use, for all FS lands along the lake with nest developments.

- **Utilize Resources for Assistance with increased Public Education in the form of Brochures, Maps, Signs, Recreation Publications, Pollution Prevention, and Shoreline Management Information:**

Natural resource education and public involvement are cornerstones of the FS mission and are important to APC. The FS promotes educational activities as a means of public involvement in the management of public lands surrounding Lake Lewis Smith. Benefits include increased public awareness, recreational use knowledge, and civic involvement. Goals of the educational program are to produce high quality products that are readily accessible and used by residents, visitors, and developers along the lake and that address natural resource issues affecting federal lands. An effective public education program will increase public knowledge in the areas of shoreline management, T & E species habitat, Sipsey Wild and Scenic River Corridor rules, and non-native invasive species, along with many other recreational and ecological issues.

- **Water Quality Monitoring & Survey – Utilize Resources to Assist with Inventory of Point Source Discharges Upstream and characterize the affects to Federal lands and waters:**

Pursuant to Exhibit A and beginning in year two of the license, inventory discharges upstream and within the project boundary. Throughout the license term monitor and characterize the water quality and stream flow (discharge) regimes in upstream tributaries of the impoundment area. Characterize the water temperature, dissolved oxygen, specific conductivity, PH, turbidity, bicarbonate ion, and discharge volume (flow) regimes upstream of the impoundment in the affected tributaries. Characterize and establish a baseline of NF stream bank and channel morphology as it relates to long-term stability (years 1-5). Determine the zone of upstream influence created by the projects backwater effects (year 1).

Exhibit B

- **Utilize funding to monitor the Sipsey Wild and Scenic River Corridor for water flows and quality pursuant to Wild and Scenic River Designation.**

If water quality levels fall below minimum State standards initiate corrective plans in consultation with the appropriate State agencies.

- **Utilize Resources to Perform a Review of the NF Shoreline:**

Throughout the license term pursuant to Exhibit A, utilize resources to assist with a review of the National Forest shoreline. The report should describe the existing condition of the NF shoreline, map, and identify any sensitive species discovered, the habitat conditions found, and provide notice to the agency if resource damage indicates management efforts are indicated.

- **Utilize resources to assist with Encroachment Identification and Trespass Notice on Federal Lands adjacent to and under Lake Lewis Smith:**

Pursuant to Exhibit A, utilize resources to assist in identifying unauthorized access points and uses of federal land on and under Lake Lewis Smith. On a five-year cycle during the license term, develop a GIS layer that provides current information on National Forest System lands within the current project boundary. Utilize resources necessary to decommission/close unauthorized access points, remove garbage, and rehabilitate areas where dispersed recreation has been determined to be causing resource damage.

The funding and resource assistance for all Projects, Study Requests, and Surveys will be scheduled and agreed to Pursuant to the Annual Meeting Requirement detailed at Section 2.10 of the Agreement.

Developed Recreation Resources

- **Utilize funding for Improvements, and Annual Operations & Maintenance of the Clear Creek, Corinth, and Houston Recreation Areas:**

The recreational resource enhancements will serve to mitigate current project effects on the management of lands under FS administration. Current uses at the developed facilities include fishing, boating, camping, hiking, and picnicking. Public demand and use of the facilities is expected to continue throughout the new license term. In addition, the facilities lack full compliance with the requirements of the Americans with Disabilities Act (ADA). Repairs and renovation will occur with emphasis on ensuring ADA compliance. Through assistance from APC, the Forest Service will perform the following:

- Repair/repave the 1.6 mile paved bicycle/walking trail and supporting structures (bridges, culverts, bulwark) at Clear Creek. *Three times during the life of the license.*

Exhibit B

- Repair the current and future shoreline erosion and stabilize shoreline with riprap gabions, bulwark, etc. where needed. *Ongoing during the life of the license.*
- Repair and replace facility information and safety signs at all facilities. *Four times during the life of the license.*
- Repair the drainage system for the outdoor beach shower at Corinth.
- Paint stripes on all roads and parking lots in all the recreation areas. *Three times during the life of the license.*
- Replace grills, lantern holders, and picnic tables at all recreation areas. *Twice during the life of the license.*
- Repair campground pads and day-use pads. *Four times during the life of the license.*
- Maintain and replace buoys and depth markers at all three swimming areas.
- Install two new gates at Houston and one new gate at Corinth. *Twice during the life of the license.*
- Replace and repair all access gates. *Three times during the life of the license.*
- Maintain, repair, and replace sewer lift stations and pumps at Clear Creek, Corinth, and Houston. *Once, with annual maintenance thereafter during the license term.*
- Replace all water hydrants at campsites with ADA compliant frost proof hydrants. *Twice during the life of the license.*
- Replace and repair sewer lines and fill lines in all areas. *Ongoing maintenance during the life of the license.*
- Replace all water fountains in all areas. *Twice during the life of the license.*
- Road and parking lot repaving. *Three times during the life of the license.*
- Major repair or replacement of all boat ramps. *Once during the life of the license.*
- Replace all trashcans in recreation areas. *As needed during the license term.*
- Periodic painting and cleaning of all 33 existing and future facilities in the three recreation areas. *Six to ten times (or as needed) during the life of the license.*
- Replace roofs on all facilities. *Two times during the license term.*
- Major renovation of all 33 existing facilities (includes entrances, picnic shelters, and bath/ shower houses in the three recreation areas, ensuring ADA compliance. *Once during the license term.*
- Major repair or replacement of all water systems in the three recreation areas. *One time during the life of the license.*
- Develop adjusting, accessible courtesy piers at all 3 boat ramps, making them ADA accessible for boaters and anglers. *Once during the license term.*
- Install SST toilets at each of the day-use boat ramps at Houston and Clear Creek.
- Move the retaining walls further back, at a higher lake level and extend the sand beach to the new locations at all three beaches.
- Replace the current 30-amp electrical service at Clear Creek with 50-amp service.

Exhibit B

- Make major repairs/replacement of electrical service at all areas. *One time during the life of the license.*
- Develop four fishing access platforms (three at Clear Creek and one at Corinth) with paved trail and parking that will provide seasonal ADA wheelchair access
- Develop a hardened, barrier-free trail in Corinth Day-Use Area.
- Construct extension to the Clear Creek day-use boat ramp to provide launching at lowest lake levels.
- Construct a group tent camping area at the Corinth Recreation Area.
- Maintain all developed recreational sites to meet FS recreation standards, including ADA accessibility. *Ongoing throughout the license term.*
- Expanded education and interpretation opportunities.
- Replace appropriate beach sand and remove debris from all FS shoreline annually.
- Provide for facility cleaning at the three developed sites to include garbage pickup and mowing in accordance with FS standards.
- Administrative cost and fleet for FS personnel and Campground Hosts that service the three recreation areas.
- Hazard tree removal at the three recreation areas. *Ongoing throughout the license term.*
- Maintain hiking trails at Clear Creek, Corinth and Houston recreation areas. *Ongoing during the life of the license.*
- Continue to process public lake access requests across federal land for road and utility easements. *Ongoing during the license term*

Cultural Resources

- **Investigation, Survey, and Protection of Cultural Resources identified on Federal lands:**

In conjunction with the Federal Energy Regulatory Commission (FERC) relicensing of APC's Warrior River Hydroelectric Project FERC No. 2165 (Project), APC has prepared a Historic Properties Management Plan (HPMP) to specify how Historic Properties will be managed within the Area of Potential Effect (APE). FERC determined that issuing a new license for the Project may affect properties included in or eligible for inclusion in the National Register of Historic Places (NRHP). These properties are referred to as "Historic Properties."

As part of the Warrior relicensing process, FERC consulted with various parties in the development of a Programmatic Agreement (PA) in order to satisfy regulatory requirements pertaining to Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C 407F) (NHPA). This consultation was required based on the fact that the federal relicensing of the Project constituted an undertaking (i.e., issuance of a new operating license for the Warrior Project) that may affect Historic Properties.

Exhibit B

Section 106 affords the opportunity for the Advisory Council on Historic Preservation (Council) a reasonable opportunity to comment on this undertaking and its effect on Historic Properties, and is implemented through the Council's regulations entitled "Protection of Historic Properties" (36 CFF Part 800).

Since it is not possible for FERC to determine all of the effects on Historic Properties for the Project over the course of the license, the PA required APC to develop and implement an HPMP. By the establishment of this HPMP, FERC meets the respective requirements of Section 106 for the federal undertaking.

During the development of the PA and subsequent HPMP, the Council and the Alabama State Historic Preservation Officer (SHPO) were consulted pursuant to 36 CFR Section 800.14(b) along with the FS and the Bureau of Indian Affairs. In addition, 14 federal recognized tribes were identified as having a potential historic affiliation with lands within the Project APE and were invited to participate in the consultation process. Four of these tribes expressed an interest in participating in this process, and the remaining ten tribes asked to be kept informed during the consultation.

The final HPMP will be implemented to achieve the following goals:

1. To identify the location of the highest probability areas where Historic Properties within the Project APE may exist;
2. To conduct a field reconnaissance survey (Phase I) of these areas to determine the presence of Historic Properties;
3. To take into account the effect of the action on Historic Properties;
4. To consider the effects on Historic Properties in the planning stages of all proposed Project developments;
5. To ensure that conflicts among development, land management needs and Historic Properties are resolved within the context of the Council's Regulations for the Protection of Historic Properties (36 CFR Part 800); and,
6. To provide guidance and technical assistance to APC personnel when dealing with maintenance and repair activities that have the potential to affect any Historic Properties.

The Cultural resources services will be provided annually to the FS in the form of study reports on cultural resources generated through the implementation of the HPMP (if activities occurred on FS lands), which APC will prepare in compliance with Section 106 of the National Historic Preservation Act of 1966. The FS may use these study reports to manage cultural resources within the Bankhead Forest or for any other purpose not inconsistent with this Agreement.

Exhibit B

However, because these study reports may contain sensitive information with respect to the location of archeological, tribal, historical or other cultural materials, the FS shall treat these reports as confidential, and shall not provide or distribute these study reports or any information contained therein to any person, agency, or other entity without first obtaining the express written consent of APC after consultation with FERC.

The USFS will be the initial contact for matters pertaining to USFS land. In addition, APC will contact the SHPO and consulting tribes to inform them of any matters relating to USFS lands. The main responsibility of the USFS will be to review and provide comments pertaining to materials developed by APC or others pertaining to surveys conducted on USFS lands. The results of the surveys will indicate if any additional measures will need to be taken by APC and the USFS to protect any discovered Historic Properties. The SHPO and consulting tribes will also be consulted in regards to additional measures that will need to be taken. Prior to conducting any surveys on USFS lands, an ARPA permit will be procured by APC or its contractors.

The guidelines for the management of the Bankhead National Forest are detailed within the National Forests in Alabama, Revised Land and Resource Management Plan of 2004 (RLRMP), and apply to all FS lands within the Warrior River Project. The identified studies and tasks detailed within this Exhibit were developed by the Forest Service using this direction and meet the requirements found necessary for the protection of those federal lands within the project area which, encompass some 2,691.44 acres of land belonging to the United States of America.

Submission Contents

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