

132 FERC ¶ 62,074
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Alabama Power Company

Project No. 2165-031

ORDER APPROVING SMITH DAM FLOW RELEASE PLAN

(Issued July 28, 2010)

1. On June 29, 2010, Alabama Power Company (licensee) filed a Smith Dam Flow Release Plan (Plan) pursuant to Article 408 of the license for the Warrior River Project No. 2165.¹ The Warrior River Project is located on the Black Warrior River and the Sipsey Fork, a headwater tributary to the Black Warrior River, in Cullman, Walker, Winston, and Tuscaloosa Counties, Alabama.

Background

2. Article 408 of the license requires the licensee to file the Plan within 90 days of license issuance. This Plan must include a final plan and installation schedule for two penstock release valves to provide the 50 cfs minimum flow at the Smith dam as required in license Article 407. Article 408 also requires the licensee to consult with the U.S. Fish and Wildlife Service (FWS), the Alabama Department of Environmental Management (Alabama DEM), and the Alabama Department of Conservation and Natural Resources (Alabama DCNR) when preparing the plan and schedule.

Licensee's Plan

3. The licensee states that it anticipated a minimum flow requirement prior to the issuance of a new license and in 2009, designed, constructed, and installed the major equipment necessary to provide a minimum flow release. However, the licensee states additional installation as well as tuning and evaluation still need to be completed. The flow release valves, which have a calculated capacity of 25 cfs each, tap into the two existing penstocks, pass the water through an eductor, to entrain atmospheric air and increase dissolved oxygen content, and then release the water into the existing penstock drains which convey the minimum flow into the development's draft tubes.

4. Testing will be done using an Acoustic Doppler Current Profiler (ADCP) to verify the amount of flow provided by the penstock release valves. The Plan also states that if the ADCP results are inconclusive, dye testing will be investigated. Additionally, the

¹ 130 FERC ¶ 62,271 Order Issuing New License, (2010).

licensee intends to perform the flow testing while the reservoir is at the annual low pool in order to incorporate effects of head on the flow release valves and ensure the devices would release the required flow throughout the year. The licensee states the minimum flow release system will include a programmable logic controller and automated valves to release minimum flows when the tailrace reaches a level of 256.2 feet mean sea level and the turbine-generator units are not operating. The licensee intends to have final installation and testing of the new minimum flow release equipment completed by December 31, 2010.

Agency Comments

8. The licensee submitted a draft copy of the Plan to the FWS, Alabama DEM, and Alabama DCNR. All of the agencies responded stating they concur with the licensee's plan and schedule.

Discussion and Conclusion

9. The licensee's Plan includes a description and installation schedule for the penstock release valves to provide the minimum flow as required in the project's license. The licensee also indicated that it provided the agencies opportunity to comment and the agencies agreed with the Plan. As such, the Plan complies with the requirements of Article 408 and should be approved.

The Director orders:

(A) The Smith Dam Flow Release Plan for the Warrior River Project filed by Alabama Power Company on June 29, 2010, is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR §385.713.

M. Joseph Fayyad
Engineering Team Lead
Division of Hydropower Administration
and Compliance

Document Content(s)

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