

**FEDERAL ENERGY REGULATORY COMMISSION**  
**Washington, D. C. 20426**

OFFICE OF ENERGY PROJECTS

Project No. 2146-178 and 180 –  
Alabama and Georgia  
Coosa River Project  
Alabama Power Company

**July 22, 2015**

Mr. James F. Crew  
Manager, Hydro Services  
Alabama Power Company  
600 North 18<sup>th</sup> Street 16N-8180  
Birmingham, AL 35203

Subject: Deviation of the Minimum Flow Requirements of Articles 404 and 405

Dear Mr. Crew:

Thank you for your letters filed on June 15 and July 10, 2015, in which you notified us of minimum flow deviations that occurred on June 14, 2015, and June 23 through June 30, 2015, at the Jordan Development of the Coosa River Project No. 2146. As discussed in more detail below, we will not consider these deviations that occurred at your project violations of Articles 404 and 405 of your license.

**License Requirements**

1. Article 404

Article 404 of your license<sup>1</sup> required you to file a Weiss Bypass Flow Adaptive Management Plan (AMP) which, in part, detailed the decision process including specific habitat and biological criteria for determining whether, and what degree, to adjust flows in the future.

In the Order Modifying and Approving Weiss Bypass Adaptive Management Plan,<sup>2</sup> the Commission approved the AMP which requires you, in part, to determine the initial instream flows at the Weiss Bypass as a month-specific percentage, varying 4 to 9

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<sup>1</sup> *Alabama Power Company*, 143 FERC ¶ 61,249 (2013).

<sup>2</sup> *Alabama Power Company*, 149 FERC ¶ 62,006 (2014).

percent, of flow in the Coosa River, as measured at the U.S. Geological Survey's (USGS) Mayo's Bar gage No. 02397000. You will determine the monthly percentage values based on habitat analysis, estimated impact to project generation, and best professional opinion; although, you are expected to modify the method of initial instream flow determination as data collected under the AMP becomes available. You will apply the month-specific percent adjustment to determine the update instream flows on Tuesday and Fridays. On Tuesday, you will release a percent of the average flow from the previous four days (Friday through Monday), whereas Fridays adjustments will be based on the average flow from the previous three days (Tuesday through Thursday). You anticipate that flows calculated in this manner will mimic a natural riverine flow regime under the climatic conditions in the watershed. You will release flows by adjusting the trash gate opening at the spillway structure.<sup>3</sup>

Ordering paragraph (D) of the order modifying and approving the Weiss Bypass AMP stipulates that you must notify the Commission of any suspension of minimum flows, as due to drought or flood conditions, and of any deviations from flow or dissolved oxygen requirements within 10 business days of the event. You must report the date, time, and duration of the event, as well as any data collected during the event and any comments received from the Alabama Department of Conservation and Natural Resources (Alabama DCNR) and U.S. Fish and Wildlife Service (FWS) regarding the incident. The report must also summarize any observed environmental impacts and corrective actions taken.

## 2. Article 405

Article 405 of your license, in part, requires you to provide the minimum flow releases specified in a seasonal schedule from Jordan Dam to protect the federally listed tulotoma snail and to maintain adequate flows for recreation downstream of the Jordan Development. The schedule requires you, beginning June 1 through June 15, to reduce the continuous 4,000 cubic feet per second (cfs) flow at a rate of 66.7 cfs per day, and the daily 8,000 cfs pulse flow at a rate of 133.3 cfs per day. From June 16 through June 30, you may cease release of the daily pulse flow but will continue to release the continuous base flow, reducing it at a rate of 66.7 cfs per day.

You may temporarily modify the flow, if required by operating emergencies beyond your control, for short periods upon mutual agreement between you and the U.S

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<sup>3</sup> You indicate that, as specified in the AMP, you make calculations to determine the required flow on Tuesdays and Fridays weekly. You multiply the resulting target flow by  $\pm 10$  percent to determine the range of flows targeted to be released into the Weiss Bypass. Once the range of flows is calculated, you open the trash gate to a specified setting, measured in tenths of a foot, based on the spillway rating curve and the amount of head (reservoir elevation) on that given day.

Army Corps of Engineers (Corps), Alabama DCNR, the Alabama Department of Environmental Management (Alabama DEM), and the FWS, and as necessary for flood control as provided in Article 402 or drought management as provided in Article 403. If the flows are so modified, you must notify the Commission as soon as possible, but not later than 48 hours after each such incident, and provide reason for the change in project operation.

### **June 14, 2015 Deviation**

In your June 15, 2015 letter, you state that on June 14, 2015, at 5:07 a.m., a breaker on the transmission system connecting to the Jordan Development faulted, resulting in the loss of the No. 2 Bus at the Jordan Dam transmission station. This caused Unit 4 to trip offline. Before Unit 4 tripped offline, you recorded a flow of 3,178 cfs at 5:17 a.m. With Unit 4 off-line, your operators loaded Unit 2 and reestablished the required minimum flow at 5:19 a.m. The deviation lasted a total of two minutes and once restored, you recorded a flow of 3,521 cfs. You observed no adverse environmental impacts as a result of this deviation. You notified the Corps, the Alabama DCNR, the Alabama DEM, and the FWS of this deviation on June 15, 2015.

### **June 23 through June 30, 2015 Deviation**

On June 23, 2015, you calculated a target flow for Tuesday, June 23 to Friday, June 26, 2015, of 101 cfs with a 10 percent daily target range of 91 cfs to 111 cfs. On June 26, 2015, you calculated a target flow for Friday, June 26 through Tuesday, June 30, 2015, of 99 cfs with a 10 percent daily range of 89 cfs to 109 cfs. You indicate that, due to physical design and resulting limitations of the trash gate and associated mechanism, you could not pinpoint a flow release within the target range. You retained the gate setting at 0.3 foot which resulted in a flow of approximately 120 cfs and this flow was outside the target flow range. On June 30, 2015, you calculated a target flow for Tuesday, June 30, 2015, of 120 cfs with a 10 percent range of 108 cfs to 132 cfs, bringing the flow released for the trash gate back into the target range as specified by the AMP. You indicate that you deviated approximately 9 percent higher than the target flow range for seven days.

Your letter further states that you attached the water quality data from the monitors located at the Weiss Bypass spillway, the “Sod Farm” and the “Catfish Farm,” collected as part of the Weiss Bypass AMP, as required by the order modifying and approving the Weiss Bypass AMP. You observed no adverse environmental impact during the seven day deviation and you contacted the resource agencies on July 10, 2015.

### **Review**

Based on our review of the available information, we will not consider the

deviations that occurred at your project on June 14, 2015, and on June 23 through June 30, 2015, violations of Articles 404 and 405 of your license. Unit 4 tripping offline due to a breaker on the transmission system faulting caused the deviation that occurred on June 14, 2015. You quickly brought Unit 2 on line and reestablished the required minimum flow. The deviation lasted a total of two minutes. You notified the appropriate resource agencies, and you did not observe any adverse environmental impacts.

The physical limits of the trash gate, particularly during low flow periods when the target flow calculations result in a small gate opening, caused you to set the gate setting at 0.3 foot, which resulted in a flow outside the target flow range for June 23 through June 30, 2015. Although you believe that these type of instances fall within the Weiss Bypass AMP, you are working with the Weiss Bypass Technical Team on ways to minimize these possible deviations during low flow periods. As required by the order modifying and approving the Weiss Bypass AMP, you included the water quality data. You notified the appropriate resource agencies, and you did not observe any adverse environmental impacts.

Thank you for your cooperation. If you have any questions concerning this letter, please contact Raymond James at (202) 502-8588, or by e-mail at [raymond.james@ferc.gov](mailto:raymond.james@ferc.gov).

Sincerely,

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and Compliance

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