

126 FERC ¶ 62,104  
 UNITED STATES OF AMERICA  
 FEDERAL ENERGY REGULATORY COMMISSION

Alabama Power

Project Nos. 349-158 and 2407-126

ORDER GRANTING TEMPORARY AMENDMENT TO RULE CURVE

(Issued February 11, 2009)

On December 29, 2008, Alabama Power (licensee) filed a request for a drought-based temporary variance to the rule curve for the Martin Hydroelectric Project (FERC No. 349)<sup>1</sup> and associated temporarily modified minimum flows from the Thurlow development of the Yates and Thurlow Project (FERC No. 2407).<sup>2</sup> In addition, the licensee filed a supplement to the request on February 10, 2009. The projects are located on the Tallapoosa River in the counties of Coosa, Elmore and Tallapoosa, Alabama.

LICENSE REQUIREMENTS

Article 44 of the project license requires the licensee to maintain the Martin Reservoir at or below the elevations specified by the project's operating rule curve as described in Exhibit H, filed on November 16, 1978. Beginning in January, the curve is at elevation 480 and remains constant to February 17.<sup>3</sup> On this date, the curve begins rising until it reaches 490 on April 28. The curve remains at this elevation until August 30 when it begins to lower. The curve lowers 10 feet to elevation 480 feet by December 31 and remains constant until filling begins the next February 17.

Article 401 of the license for the Yates and Thurlow Project (FERC No. 2407) requires the licensee to release from the Thurlow development a minimum flow in accordance with Part I, Paragraphs 1,2,3,5,7 and 9 of the "Agreement for Continuous Minimum Releases from Thurlow Dam and Associated Environmental Studies" (Agreement).<sup>4</sup> According to the Agreement, the target minimum flow is 1200 cubic feet per second (cfs), where the actual minimum flow is based on a number of calculations, as described in the Agreement. Once a week, the licensee is to determine whether there is

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<sup>1</sup> Order Issuing New License. 3 FERC ¶ 61,137. Issued May 11, 1978.

<sup>2</sup> Order Issuing New License. 66 FERC ¶ 62,068. Issued February 3, 1994.

<sup>3</sup> The elevations noted in the licensee's December 29, 2008, filing and on the original rule curve, dated 1978, are in "Martin Datum", rather than referenced to mean sea level (msl). Martin Datum is the equivalent of 1 foot below msl.

<sup>4</sup> Attached to the Order Issuing New License.

sufficient run-off in the Tallapoosa Basin, that when combined with the normal filling and/or drawing of Harris (FERC No. 2628) and Martin reservoirs, will supply both power needs and the target minimum flow. If it is determined that run-off is insufficient to supply the minimum flow, a reduced target minimum flow would be computed in accordance with the Agreement. Article 401 allows the minimum flow to 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 (ADCNR). If the flow is so modified, the licensee is required to notify the Commission as soon as possible, but no later than 10 days after each such incident.

## LICENSEE'S PLAN

Due to significant drought conditions in Alabama, the licensee is proposing a temporary variance to the Martin Project rule curve, for the period beginning upon Commission approval of the request to May 1, 2009. Included in the licensee's request are several illustrations depicting the state of the drought in Alabama. The U.S Drought Monitor<sup>5</sup> published November 25, 2008, showed that the Tallapoosa and Coosa River systems were in a moderate drought. The U.S. Seasonal Drought Outlook<sup>6</sup> predicted that the drought conditions would persist for the period from November 20, 2008 through February 2009. Also included in the licensee's request was the three month outlook of precipitation probability<sup>7</sup> which predicted that precipitation would be below normal from December 2008 through February 2009.

Based on this information the licensee proposes the following:

1. Maintain the winter pool elevation 3 feet higher than normal, at elevation 483 instead of elevation 480.
2. Begin maintaining the winter pool elevation earlier than normal, upon Commission approval.
3. Initiate the filling process earlier than normal, beginning January 15 instead of February 17.

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<sup>5</sup> Displayed on the website, <http://drought.unl.edu/DM/MONITOR.HTML>, last accessed February 2, 2009.

<sup>6</sup> Published by the National Weather Service on the website, [http://www.cpc.noaa.gov/products/expert\\_assessment/seasonal\\_drought.html](http://www.cpc.noaa.gov/products/expert_assessment/seasonal_drought.html), last accessed February 2, 2009.

<sup>7</sup> Published by the National Weather Service on the website <http://www.cpc.ncep.noaa.gov/index.htm>, last accessed February 2, 2009.

4. Reach and maintain summer pool elevation earlier than normal, on April 1 rather than April 29.

The licensee states that without the variance, the reservoir may only reach an elevation of 485, which is five feet below the normal summer pool elevation. The licensee also states that with the rule curve variance, the reservoir could reach summer pool by early April. In addition, licensee states that this would greatly enhance its ability to support the many reservoir and downstream needs during the next summer's critical period.

The licensee states that during evaluation of the rule curve variance, consideration was given to the minimum flow releases at the downstream Thurlow Project. Along with its proposed variance to the Martin rule curve, the licensee is providing notification to the Commission, under Article 401 of the Yates and Thurlow license, that upon approval of the Martin variance, the minimum flow releases at the Thurlow Project would be temporarily modified as follows:

1. Change will be in effect until May 1, 2009.
2. Discharge no less than 350 cfs until the Martin Reservoir elevation reaches the existing rule curve.
3. When the reservoir elevation is at or above the existing rule curve but below the temporary rule curve, the licensee would discharge the greater of 350 cfs or the inflow at the upstream Heflin gage.
4. When Martin Reservoir elevation is at or above the temporary rule curve, the licensee would discharge no less than 1200 cfs from Thurlow.

#### AGENCY COMMENTS

The licensee provided the ADCNR, and the Alabama Department of Environmental Management (ADEM) with copies of the draft variance request by emails dated November 24, 2008. In addition, the licensee provided the Alabama Department of Economic and Community Affairs (ADECA) with a copy of the draft variance request by email dated December 23, 2008. The licensee also provided the U.S. Fish and Wildlife Service (FWS) a copy of the draft variance request by letter dated December 4, 2008.

By email dated December 1, 2008, the ADCNR concurred with the licensee's request. By email dated December 4, 2008, the ADEM concurred that the variance would not negatively affect water quality and had no other comments. By email dated December 23, 2008, the ADECA stated that it does not oppose the modifications to the

Martin license. The FWS, in letter filed on January 9, 2009,<sup>8</sup> stated that it concurs with the request and encouraged the licensee to continue to participate in weekly or bi-weekly conference calls with resource agencies regarding the status of projects on the Tallapoosa River.

The Commission issued a public notice of the licensee's proposed temporary variance on December 30, 2008, with a 30 day comment period. The Lake Martin Home Owners & Boat Owners Association, various businesses, and numerous individual property owners were all in favor of the proposed temporary variance. Many of the comments expressed concern that low reservoir levels would have a negative impact on the local economy and would decrease recreational opportunities on the reservoir. The Atlanta Regional Commission and the Cobb County-Marietta Water Authority jointly filed comments on January 29, 2009 stating that they do not object to the granting of the variance provided that the variance does not extend beyond May 1, 2009. The State of Georgia (Georgia) also filed comments on January 30, 2009 stating that it does not oppose the variance request as proposed. Georgia also stated that it would likely oppose any attempt to extend the time frame of the proposed variance beyond May 1, 2009.

## DISCUSSION

The licensee is requesting a variance to the existing rule curve in order to minimize the potential effects of low precipitation and in stream flows. Preliminary data from the US Geological Survey (USGS) real-time stream gaging stations upstream of both the Martin and Harris Projects near Heflin, Alabama (USGS 02412000) and Newell, Alabama (USGS 0241300) indicate that stream flow in the Tallapoosa River is currently below the historic average. In addition, the U.S. Drought Monitor currently classifies this region of Alabama as having abnormally dry conditions. Furthermore, the Climate Prediction Center of the National Weather Service predicts that precipitation in the region will be below average from February through April 2009.<sup>9</sup> The licensee has also stated that, in response to the current drought conditions, the U.S. Army Corps of Engineers has granted the licensee a temporary amendment to the operating rule curve for the Harris Project immediately upstream from the Martin Project.

The variance would allow the licensee to maintain a higher winter pool elevation, and start the spring refilling process sooner, in the hope to capture and hold winter rains in Martin Reservoir, rather than allowing that flow to pass out of the system. The licensee states that with the continuing drought conditions, there is a possibility of not being able to fill its reservoirs to their normal elevations next spring. In addition, the licensee states that with the rule curve variance there is good possibility that Martin

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<sup>8</sup> The filing was made by the licensee with letter from FWS attached.

<sup>9</sup> Published by the National Weather Service on the website <http://www.cpc.ncep.noaa.gov/index.htm>, last accessed February 2, 2009

Reservoir could reach summer pool by early April, and enhance the licensee's ability to support the many reservoir and downstream needs during the next summer's critical period. Specifically, the licensee predicts that higher reservoir levels will likely yield a significant increase in the number people participating in water and shoreline based recreational activities, which will have a positive economic impact on the communities surrounding the reservoir. The licensee states that without the variance, the reservoir is expected to only reach an elevation of 485, which is five feet below the normal summer pool elevation.

The licensee requested, and was granted, a similar rule curve variance in 2007.<sup>10</sup> The Order Granting Temporary Amendment to Rule Curve, in part, required the licensee to monitor water quality in Lake Martin from December 2007 through May 2008 in order to determine the impact of the variance on water quality. The licensee submitted the results of the monitoring in its Water Quality Report filed with the Commission on September 30, 2008. The report included data collected from 11 sites on 9 sampling days during the monitoring period. Data collected at each site included: vertical profiles of temperature, dissolved oxygen, specific conductance and pH; chlorophyll-a; dissolved reactive phosphorus; and other water quality parameters.

The report stated that the vertical profiles collected were similar to historic data collected on the reservoir during late winter and spring. The report identified one site with atypical chlorophyll-a values. The licensee stated that they could not determine the cause of the high chlorophyll-a values but they did not believe it was a result of the approved variance. The licensee also stated that there is no evidence that the operation of Martin during the rule curve variance had any impact on water quality. The report was submitted to ADEM, ADCNR, and FWS via email for comment. The licensee's report included email responses from each agency. The responses indicated that there were no problems or concerns with the water quality monitoring report. Based on the results of the 2007-2008 water quality monitoring, the licensee does not recommend conducting water quality monitoring in its current proposal.

Commission staff completed an Environmental Assessment (EA)<sup>11</sup> of the licensee's 2007 proposed variance. The current variance request contemplates a similar request, covering the same affected area, under similar conditions. The primary differences between the 2007 request and the current request are the timing of implementation and the severity of drought conditions. The current request will be implemented later in the winter season and under less severe drought conditions than the 2007 variance. Because the current request does not differ significantly from the 2007

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<sup>10</sup> See Order Granting Temporary Amendment to Rule Curve, 121 FERC ¶ 62,129 (issued November 20, 2007).

<sup>11</sup> See Notice of Availability of Environmental Assessment (issued November 19, 2007).

variance, and based on the 2007 EA, staff concludes that the current temporary variance to the Martin Project rule curve would not constitute a major federal action significantly affecting the quality of the human environment.

The vast majority of the many comments received by the Commission were in support of the temporary variance of the rule curve. The comments submitted by the Atlanta Regional Commission and the Cobb County-Marietta Water Authority, and the State of Georgia indicate that these entities do not oppose the variance as long as the variance does not extend beyond May 1, 2009. The temporary variance request does not include any request to extend the variance beyond May 1, 2009.

## CONCLUSIONS

The project region continues to experience the effects of drought conditions that began in 2006. Current stream flows in the Tallapoosa River are below historic averages and the National Weather Service predicts below normal precipitation in the region through April 2009. The temporary rule curve variance would allow the licensee to capture and store winter precipitation in order to provide water for downstream water quality and navigation, and recreation on Lake Martin, during the summer of 2009. Commission staff believes the proposed temporary variance to the Martin Project rule curve should be approved in order to minimize the effects of abnormally dry conditions in the region.

### The Director orders:

(A) Alabama Power's request for a temporary variance of the Martin Project rule curve, pursuant to Exhibit H, and associated temporarily modified minimum flows from the Thurlow development of the Yates and Thurlow Project from the date of this order, until May 1, 2009, 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.

Joseph D. Morgan  
Director  
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and Compliance

Document Content(s)

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