

June 16, 2010

Jim Crew
Alabama Power Company
600 North 18th Street
Birmingham, Alabama 35291

Subject: American Rivers comments on Martin Hydroelectric Project (P-349)

Jim:

Thank you for the opportunity to provide comments on Alabama Power Company's progress on Study Plans 3, 12(a), and 12(f) for the relicensing of the Martin Hydroelectric Project. Although I was unable to attend the update meeting on May 19, 2010, I have a few thoughts and recommendations as the study phase of the proceeding moves forward.

Study Plan 3 (Evaluation of Minimum Flows Downstream of Martin Dam)

American Rivers is interested in exploring opportunities for the Martin Project to operate in a manner that more closely mimics pre-dam hydro-graphs. We believe this will benefit paddlefish spawning and other aquatic species as well as improving recreational opportunities for boaters and anglers.

At the March 30 MIG 1 study update meeting we requested additional information that specifies prime paddlefish spawning periods during the March to mid-May paddlefish spawning season and how often during those times releases from Thurlow meet or exceed the 6,000cfs threshold. To better understand the Martin Project's impact on paddlefish spawning in the Tallapoosa River it will be important to learn with as much accuracy as possible when paddlefish typically spawn at the highest rates during the nearly 3 month period. It will also be important to understand how daily operations and the resulting timing of high and low flows at Martin could impact spawning during these critical times. For example, if paddlefish typically spawn at night and Martin typically operates during the day spawning success could be negatively impacted because of egg stranding and desiccation even if river flows exceed the 6000cfs threshold on a daily average the vast majority of the time.

American Rivers recommends that APC provide additional flow data that includes:

- Minimum and maximum flows during the spawning period over the period of record
- Variation of flow during the spawning period at Montgomery Water Works and Milstead gages
- More specificity about prime days and weeks for spawning during the nearly 3 month period (do paddlefish typically spawn in late March or late April?)

- Number of days when the average daily flow exceeded 6,000cfs and the minimum daily flow was less than 6,000cfs during the spawning period and during the prime spawning period

Draft Study Report 12(a): Rule Curve Change Modeling Analysis

The modeling analysis that was presented at the March 31 meeting was helpful in understanding the various operational scenarios and their affect downstream on the Tallapoosa River. It is less clear how the Martin Project operates within the Tallapoosa/Alabama system. A scientifically accepted water balance model would be helpful to develop a better water resource planning and management strategy regarding the Martin Project. Considering the new license for the Martin Project will extend 30-50 years and one can reasonable expect increased pressure on the Tallapoosa River along with increasingly unpredictable weather patterns (more droughts and floods), water balance simulation for a multiple reservoir system like the Tallapoosa River is important to assess alternate operational plans and could provide important information for the 12 Series Studies. Water Balance Models are frequently used in hydropower relicensings throughout the country.

American Rivers recommends APC address the following in future reports:

- If flooding results in bank erosion downstream on the Tallapoosa River, modeling results of the different operational scenarios should be applied to Study Plan 10: Erosion and Sedimentation. This would be helpful in understanding how each operational scenario affects downstream erosion.
- Include the differences of the different operational scenarios in terms of timing, frequency, magnitude, and duration of flows to the results of Study Plan 3: Evaluation of Minimum Flows Downstream of Martin Dam. This information could be useful in assessing alternate operational plans and policies. (minimum flows, seasonably variable flows, recreation flows, etc.)

Draft Study Report 12(f): Effects of the Rule Curve Change on Downstream Recreation

Although American Rivers was unable to attend the study update meeting on May 19th, we found the draft study report 12(f): Effects of the Rule Curve Change on Downstream Recreation helpful in understanding the different operational scenarios effect on downstream recreation. Based on the CD that APC provided, we have a few thoughts and recommendations for studying downstream recreation.

American Rivers recommends APC include the following information in future study reports:

- The information in the draft report focused on the various operational scenarios impact on preferred flows for on one recreational use; whitewater boating. The Tallapoosa River below Thurlow to the confluence is a free flowing river that is and will continue to be a high value recreational resource for a variety of user groups including wade fishing, non-whitewater boaters, swimmers, and boat

fishing. APC should provide information that analyzes the impact on preferred flow ranges of the various operational scenarios for the above user groups.

- The majority of river recreation occurs during warmer months, during weekends and during holidays. APC should specify when during the year optimal flows for whitewater boating as well as for wade-fishing, non-whitewater boating, swimming, and boat fishing are gained or lost due to various operational scenarios. For example, during a wet year with a winter elevation of 482 and an early spring fill, 17 days of flows between 5,001-10000 are lost. If these lost days primarily occur during winter months when the Tallapoosa River receives less recreational use then that specific operational scenario may have less of an impact. The opposite is also true. If the 17 lost days primarily occur during the high season then the scenario may have a greater impact. This analysis should be applied for all user groups and all operational scenarios.
- The flow ranges (1,201cfs to 5,000cfs, 5,001cfs-13,000cfs, and 13,001cfs-18,000cfs) identified for whitewater boating are broad. It is likely that there are optimal flows for specific whitewater features and for the 1.5 mile run within each of these flow ranges. For example Sticky Hole may be better for play boating at 7,500cfs than at 12,000cfs. To better understand the different operational scenarios impact on optimal flows for whitewater boating APC should test different flows with experienced whitewater boaters familiar with the run starting with 1,200cfs increasing in 1500cfs increments to 18,000cfs. This kind of study is typical for hydropower relicensings where there is an impact on a high value whitewater resource.

We appreciate the opportunity to comment on the progress of studies to date and look forward to continued dialogue with APC staff, other stakeholders, and the Federal Energy Regulatory Commission.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Rice", with a long horizontal flourish extending to the right.

Matt Rice
American Rivers
Associate Director of Southeast Conservation