February 16, 2009

RE: Martin Dam Relicensing (P-349-150)
Study Plan Comments

Secretary Kimberly D. Bose
Federal Energy Regulatory Commission
888 First Street N. E.
Washington, D. C.

Dear Secretary Bose:

The Lake Martin Home Owners and Boat Owners (HOBOs) Association, Inc., a non-profit organization dedicated to preserving Lake Martin for future generations, submits the following comments concerning the Relicensing of Martin Dam (FERC Project No. 349). These comments are supplemental submissions to our letter of October 13, 2009, required by subsequent meetings held with FERC personnel and Alabama Power representatives on January 7, 2009 in Alexander City, Alabama, and on February 10, 2009, at Alabama Power's offices in Birmingham, Alabama.

For clarity, comments are submitted by specific Study Plan:

Draft Study Plan 8—Baseline Water Quality

Under section 5.0, the phrase beginning the third sentence "If future studies are deemed necessary," should be deleted and replaced by the word "Needed"… Section 6.2, replace the first sentence with the following: "Nutrient data has been collected for Lake Martin by Lake Watch of Lake Martin supported by the Alabama Water Watch Program office at Auburn University over the last several years." In section 11.0 (references) add: Alabama Water Watch database--Alabama Water Watch Program Office, Auburn University; and Tallapoosa Watershed Project, A Transferable Model of Stakeholder Partnerships for Addressing Nutrient Dynamics in Southeastern Watersheds—Annual Report 2005, dated May 2006.

Draft Study Plan 12 (A)—Rule Curve Change Modeling Analysis

In reference to proposed Study Plan 12 (A), the model methodology provided in the plan's Attachment A does not adequately describe how three of the four key stakeholder concerns cited will be analyzed. Means to determine needed changes in Martin's rule and operating curves to effect a higher winter pool level, a longer full-pool season and attainment of a full pool earlier in the year are not specifically addressed in the methodology.

Under the 'Technical Parameters, Processes and Tools' section of the methodology (pages 3-5) proposed analyses are limited to annual flood frequency analysis and related modeling to assess downstream annual flood effects. Analyses to justify seasonal or monthly changes to these curves are lacking. Moreover, reference is also made to a Feburary1990 flood, which did not occur according to USGS and USCOE data.

The flood frequency analysis (FFA) proposed in study plan 12 (A) is predicated on standard guidelines (Bulletin 17B) for determining the magnitude and frequency of annual floods. The resulting exceedance probabilities and associated recurrence intervals (the reciprocals of the exceedance probabilities) are valid measures only for annual flood occurrences--the probability of a particular peak flow (flood) occurrence each year or for any given year—but are NOT valid for a specific date or time period within a year. Therefore, the utility of annual FFA output to assess the effects of seasonal reservoir-pool rule curve changes, and commensurate changes in available storage to control/mitigate flood effects, is very limited.

The 'model methodology' in Appendix A of study plan 12(A) does not clearly describe how what is proposed as "a probability analysis of the 100 year flood on a seasonal and monthly basis" will be used in assessing possible rule curve changes—especially for the winter months. The evaluation of the timing and magnitude of prospective reservoir storage (rule curve) changes may be better served by additional scrutiny of monthly peak flows through a partial duration flood frequency analysis, in this case, a monthly duration basis in addition to the annual FFA. Monthly FFA computations can be done and are allowed according to Bulletin 17B as long as the purpose is appropriately limited. Using the USCOE's unimpaired flow database for the Tallapoosa River, similar computations of monthly flood peak discharges and associated exceedance probabilities can be calculated as is done with an annual frequency analysis. Logarithms of monthly peak discharges can be fitted to a Pearson Type III distribution using the method of moments to compute mean, standard deviation, and skew of the log-transformed data just as is done with flow data for annual floods. The resulting monthly flow peaks (for Dec – May) for any specified recurrence interval can then be compared to those of the annual flood magnitudes (i.e. 100-year January flood, 50-year January flood as for other months compared to the 100-year and 50-year annual flood, etc.). For example, the peak 1-day average flow for a 1% or 100-year flood during the month of January is approximately 85,000 cfs—45,000 cfs lower than a 100-year annual flood peak. Similar flood frequency data can be calculated for each month of concern to assess needed reservoir storage capacity. A partial duration flood frequency analysis or similar means to estimate the magnitude and frequency of monthly floods should be incorporated into the overall methodology to address stakeholder concerns regarding rule curve changes.

Further, it is believed the winter lake level established around 1978 at 481' msl is a negotiated level between stakeholders, Russell Lands, Inc., and the Federal Power Commission. We strongly encourage FERC to investigate the history of the current winter lake level determination to ascertain if any scientific basis exists for the decision made at that time. If there was no scientific basis for the 481' msl, then FERC should insist a proper study be completed, rather than just adjusting a level that lacks scientific justification.

To address stakeholder concerns, the above mentioned, or similar means to estimate the magnitude and frequency of monthly floods, must be incorporated into the overall methodology to address stakeholder concerns.

Draft Study Plan 12 (G)—Effects of Raising Winter Pool Level and Increasing the Duration of Summer Pool on Lake Martin Recreation use and Economic Indicators

During the September 2008, meeting, Jim Crew, APCo Relicensing Manager, announced to the attendees of the Scoping Meeting, that Alabama Power would develop and fund a comprehensive economic analysis of the impact of Lake Martin on the three county area. This study was defined in the September 29, 2008, letter as Study Plan 12 (g), and was endorsed in the October 13, 2008, letter to FERC by the Lake Martin HOBOs. In a subsequent submission by APCo on November 18, 2008, the economic impact analysis plan was altered to eliminate a very important segment of the study, ie, an evaluation of Lake Martin's impact on the property values and taxes in the surrounding three county area.

In section 6.0, Proposed Methodology, the following provision cited in earlier drafts of the plan was deleted: "An estimate of property and sales tax revenue from existing and proposed future development related to the Lake, economic impacts of the Lake, and a discussion of how these may be affected by increasing duration of summer pool and/or level of winter pool." During the January 2009 Martin study plan review meeting in Alexander City, an Alabama Power representative said that the above would be addressed in another study sponsored by the Lake Martin Resource Association/Russell Lands, Inc. and others, and therefore would not be included in the proposed economic study outlined in this study plan. However, there was no formal commitment that the results of this other study would be incorporated in the overall economic evaluation of proposed change to operations of the Martin project. The HOBOs recommend that APCo ensure the data and findings of the locally sponsored economic study are incorporated into the overall evaluation of socio-economic impacts of potential changes to Martin project operations.

Better yet, we recommend that Alabama Power reinstitute the economic impact analysis plan as presented in the September 29, 2008, letter. The value of the economic impact analysis was further reinforced by statements from the FERC representative during the February 10, 2009, flood analysis workshop meeting with stakeholders, Alabama Power, and FERC held in Birmingham, Alabama.

Special Note: Alabama Power has to date, shared no details of Study Plan 12(g); therefore, the Lake Martin HOBOs must reserve comment until such time as details are available.

The Lake Martin HOBOs appreciate the opportunity afforded by FERC regulations to participate in the relicensing process of Martin Dam. We are confident that the deliberate consideration granted by FERC to the expressed concerns of stakeholders will prove mutually beneficial for all of us.

FOR THE BOARD OF DIRECTORS

Sincerely,

Jesse M. Cunningham
President
Lake Martin HOBOs

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