

Upton Hatch, Assoc. Dir.
Water Resources Research Institute
North Carolina State University
Box 7912, 1131 Jordan Hall
2800 Faucette Dr
Raleigh, NC 27695

January 28, 2008

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Federal Energy Regulatory Commission Project No. 2165
Warrior River Project Re-licensing
Concern Regarding Inclusion of Economic Portion of ADECA/FIMS Study

Dear Secretary Bose:

I am Dr. Upton Hatch, Professor Emeritus of the Department of Agricultural Economics and Rural Sociology of Auburn University, Research Professor of the Department of Agricultural and Resource Economics at North Carolina State University, Associate Director of the North Carolina Water Resource Research Institute and President-elect of the National Institutes for Water Resources. I was contacted by the Smith Lake Improvement and Stakeholders Association (SLISA) and Dr. Marvin Feldman, of Resource Decisions, to review the parts of the Applicant Prepared Environmental Assessment (APEA) that were based on the Alabama Department of Economic and Community Affairs/Fisheries Information Management Systems (ADECA/FIMS) Study.

The economic component of ADECA/FIMS Study was based on my work as lead principal investigator for the economic portion of the study, when I was a Professor at Auburn University. I am a water resource economist and have worked extensively in the area of valuing the use of water in a variety of uses, particularly recreational. This note serves to alert FERC to the fact that the economic analysis of recreational values associated with Smith Lake, developed in the ADECA/FIMS study, was omitted in the APEA. This omission seems particularly problematic due to the need to balance power and non-power values. Equally unfortunate is the omission of any consideration of alternative management schemes.

In my review of these parts of the APEA, I noted that the APEA utilized the Lake recreation use data from the ADECA/FIMS study but did not use the extensive analysis of the economic value of the recreation that was a major part of the ADECA/FIMS report. The APEA also omitted the portions of the ADECA/FIMS report that address the issue of the very significant impact that management of Smith Lake water levels would have on the economic values related to recreation benefits.

The APEA includes considerable detail on the visitation information from the ADECA/FIMS study but totally ignores the economic component of that same study. The economic analysis included effects of water level on property values, recreational users, marinas and lake-based businesses, and fishing tournament users. It also assessed the environmental values of non-users. Effects of summer level, winter drawdown and length of time at full pool were all estimated using an intensive surveying effort. Economic value was found to be clearly sensitive to all three of these lake management characteristics. This very comprehensive analysis could be extremely useful in any assessment of the value of recreational activity on Smith Lake. In addition, if this work were to be updated, it would be helpful in decisions related to appropriate changes in the rule curve. The absence of this critical information in the APEA deprives FERC of information that could form a critical basis for decision-making in this re-licensing process.

The current rules on monthly water levels are antiquated and do not appropriately recognize the changing nature of the use of Smith Lake over the decades since its original construction. Smith Lake, as with many other lakes of its nature in Alabama and the Southeast, are no longer single use reservoirs, but major economic growth engines for their respective local communities and states, e.g. Lakes Lanier and Martin. The changes in use of many of Alabama's reservoirs have been appreciated and changes in seasonal water levels have resulted. The APEA does not address any changes to the current rule curves. The information that I developed with colleagues, and which was included in the ADECA/FIMS study, should be considered in the current application. Specifically, the application should consider alternative monthly lake level schemes, as was done with other recent re-licensing of Alabama reservoirs.

To give some indication of the importance of the economic values associated with recreation on Smith Lake, consider the following findings from the Executive Summary of the FIMS report Volume 4—Smith Lake Pages xiv-xv:

For the population of Lewis Smith Reservoir system users, the total current annual estimate of recreationally-related economic value was about \$223.7 million (trip expenses + consumer surplus + preservation value + equipment expenditures + fish harvested). When considering those economic values (trip expenditures + consumer surplus + annual equipment expenditures = \$163.0 million) that were evaluated as a function of declines in summer full-pool water level of 0, 1, 2, 3, 4 and 5 feet, the potential loss varied from \$8.15 million at one foot down, to \$40.75 million at five feet down. These absolute losses translate into relative annual losses of 5% and 25%, respectively.

Note that these values are in 1995 dollars and do not take into consideration the considerable lakeshore development that has occurred since 1995.

With the soon to be completed Interstate 22 connecting Smith Lake with Birmingham, the demand for the lake is likely to grow even more rapidly. In addition, this growing

recreational value of Smith Lake is closely tied to its environmental quality and natural beauty based on its unique location in Headland National Forest and adjoining Sipsey Wilderness. The extremely low water levels that might be experienced under proposed rules will greatly jeopardize these aesthetic and environmental values when they should be capitalizing on this unique location. Fish and aquatic habitat is being decimated at a time when these characteristics are fundamental to the value of the lake.

Based on my research and the ADECA/FIMS study, it is clear that alternative winter drawdown levels and length of time at full pool are definitely crucial to recreational demand and economic benefits. As such, these variables should be rigorously investigated to determine the seasonal levels and time periods that would maximize economic benefits of the use of Smith Lake. A balanced decision regarding the re-licensing of Smith Lake should incorporate the information on these non-power benefits as developed in the ADECA/FIMS study, with appropriate inclusion of updated information.

In summary, there are four principal problems with the current FERC submission:

- a. The economic section of the ADECA/FIMS study was ignored.
- b. No assessment of alternative lake management rules was considered.
- c. The future trajectory of the economic value of the lake is very likely to increase dramatically as the new Interstate 22 is completed and facilitates visitation from the Birmingham metropolitan area.
- d. Environmental quality and aesthetics are crucial to the value of recreational resources – the dramatic current winter drawdown at Smith Lake undermines the benefits the lake could accrue based on its location in Headland National Forest and adjoining Sipsey Wilderness. Smith Lake has a very unique location in terms of environmental quality, aesthetics and recreational potential.

Because of the important omissions in the APEA, FERC should not issue its decision, or a final EA, without carefully considering all of the economic information my colleagues and I developed in the ADECA/FIMS study.

John H. H. C.