

January 4, 2006

Mr. Gene Ellis  
Licensing and Property Manager  
Alcoa Power Generating Inc.  
PO Box 576  
Badin, North Carolina 28009-0576

Re: Yadkin Hydroelectric Project (FERC No. 2197)  
Draft Application for New License

Dear Mr. Ellis:

The South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the Draft License Application (DLA) for the Alcoa Power Generating Inc. (APGI) Yadkin Hydroelectric Project and offers the following comments.

SCDHEC is a Party to the enhanced-traditional FERC relicensing effort for the Yadkin Project and has formally participated in the negotiation meetings for the past two years. SCDHEC is responsible for permitting various water related activities in South Carolina including, but not limited to, NPDES permitting of wastewater discharges, Water Quality Certification of projects under Section 401 of the Clean Water Act, construction and operation of drinking water treatment facilities and activities potentially impacting navigable waters of the State. Due to these responsibilities, the Department is vitally concerned with the quality, quantity, and timing of flow in the Yadkin/Pee Dee River below the APGI and Progress Energy hydroelectric projects in North Carolina.

Operation of APGI's Yadkin Project and Progress Energy's Yadkin-Pee Dee River Project have significant control of flow in the Pee Dee River as it enters South Carolina. While Progress Energy has direct control over flows entering South Carolina through operation of its Tillery and Blewett Falls hydroelectric projects, APGI's Yadkin Project has the potential to significantly impact instream flows in South Carolina through the quantity and timing of delivery of flow to Progress Energy's projects. Current operation of these projects under existing FERC licenses results in flows in the South Carolina portion of the Pee Dee River that are much more variable and, at times, much less than would be expected under natural, unregulated conditions. SCDHEC's goal in the relicensing of both the APGI and Progress Energy projects is to restore more natural flow in the South Carolina portion of the Pee Dee River in order to protect water supply, water quality and wastewater assimilation, navigation, aquatic habitat for fish and other biota, diadromous fish migration, and the integrity of the designated Pee Dee State Scenic River and Great Pee Dee River Heritage Preserve. The Department also seeks to prevent detrimental

salinity intrusion in the lower Pee Dee River and Atlantic Intracoastal Waterway (AIWW) through adoption of an appropriate flow regime.

A number of methods have been used by various agencies to evaluate the instream flows needed to protect South Carolina's varied interests. These methods are described in detail in comments being submitted on the Projects by the S.C. Department of Natural Resources (SCDNR). These evaluations have been utilized by the SCDNR to determine that a minimum instantaneous flow below Blewett Falls Dam of 1200 cubic feet per second (cfs) is needed under normal conditions to protect for designated navigational uses in the Pee Dee River in South Carolina. Initial SCDHEC review indicates that a flow of 1200 cfs would protect domestic and industrial water withdrawals in South Carolina. Modeling conducted by the U.S. Geological Survey indicates that a minimum release of 900 cfs from Blewett Falls is needed to minimize salinity intrusion in the lower Pee Dee River and AIWW to protect, to the extent feasible, surface water withdrawals in the lower Pee Dee system. Work is currently ongoing to determine appropriate flows for aquatic habitat and diadromous fish migration in South Carolina.

The DLA indicates that, under normal flow conditions, APGI is proposing to operate the Yadkin Project with a year round weekly average minimum release for Falls Reservoir of 900 cfs. The Department is concerned that this operation schedule will not provide adequate amount of water to allow Progress Energy to release sufficient flow for South Carolina needs. Additional evaluation utilizing the OASIS and/or CHEOPS Operations Models is needed to ensure sufficient water is delivered in such a manner that Progress Energy can meet downstream requirements. The DLA also indicates APGI plans to operate in accordance with a low inflow protocol (LIP) that has not yet been completed. The development of a LIP is needed to quantify the magnitude, frequency and duration of low flow events to determine a critical low flow for evaluation of NPDES permits. Additional work is needed to complete this important part of the licensing effort.

SCDHEC will continue to participate in the relicensing effort and is hopeful that continued effort on the remaining questions will result in an agreement that will allow successful operation of the APGI and Progress Energy hydroelectric facilities while protecting downstream uses in South Carolina. We appreciate the opportunity to work with you and comment on the draft license agreement. Please contact Larry Turner of my staff at 803.898.4005 or at [TurnerLE@DHEC.SC.GOV](mailto:TurnerLE@DHEC.SC.GOV) if you have questions concerning our comments.

Sincerely,

M. Rheta Geddings, Director  
Division of Water Quality

Cc: Danny Johnson, SCDNR