

Technical Paper #1
Revised Interim Operations Plan (RIOP)
&
Farley Nuclear Plant Requirements

1. The Joseph M. Farley Nuclear Plant, located on the Chattahoochee River near Dothan in southeast Alabama, is owned by Alabama Power Company and operated by Southern Nuclear Operating Company. It is one of three nuclear facilities in the Southern electric system. The Joseph M. Farley Nuclear Plant is a two unit Pressurized Water Reactor (PWR) facility.
2. Correspondence from Southern Nuclear Operating Company dated 13 February 1995 to the Mobile District indicates that the power plant requirements include the following: A 2,000 cfs flow as well as a minimum elevation of 75.0 ft. msl in Lake Seminole to support the plants water supply pumps. Additionally, a 2003 agreement between the States of Georgia, Alabama, and Florida included a 2,000 cfs minimum flow requirement to insure adequate flow at the Plant. These requirements were also included in the Affidavit of Thomas C. Moorer and Williard Bowers, dated 23 July 2006.
3. The Revised Interim Operations Plan (RIOP) supports both requirements. Concerning flow requirements, the HEC-5 model simulation results indicate flows in the middle Chattahoochee River reach are essentially the same under the RIOP as under the 1989 ACF Water Control Plan. More specifically, the percent of time that flow is equal to or greater than minimum flow at Farley and Columbus, GA is statistically identical under the RIOP as compared to the 1989 ACF Water Control Plan. Historically, flow at the two locations has been met 95% of the time and will not change under the RIOP.
4. Concerning river stage height requirements, the HEC-5 model simulation results indicate that the Lake Seminole pool elevations are virtually identical under the RIOP compared to the 1989 ACF Water Control Plan. Modeling indicates that stage levels below 76 ft. msl can be expected to occur less than 1% of the time for both the RIOP and the 1989 ACF Water Control Plan.
5. In conclusion, the RIOP will not affect percent of time the minimum flow or stage height in the middle Chattahoochee River reach that includes the Columbus, GA and Farley Nuclear Power Plant.