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R. P. McDonald  
 Senior Vice President



Alabama Power

*the southern electric system*

May 9, 1988

Docket Nos. 50-348  
 50-364

U. S. Nuclear Regulatory Commission  
 Attention: Document Control Desk  
 Washington, D. C. 20555

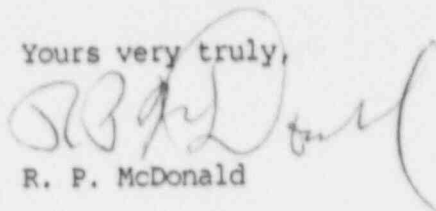
Subject: Joseph M. Farley Nuclear Plant NPDES Permit

Gentlemen:

The Joseph M. Farley Nuclear Plant has requested permanent approval from the Alabama Department of Environmental Management (ADEM) to conduct a chlorination treatment program to control biofouling in the service water system. Attached is correspondence containing the request as submitted to the ADEM.

This report is made in accordance with the Joseph M. Farley Nuclear Plant Technical Specifications, Appendix B, Section 3.2. Should you have any questions or comments, please advise.

Yours very truly,



R. P. McDonald

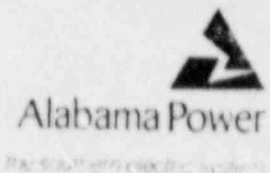
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Attachment

cc: Mr. L. B. Long (w/attachment)  
 Dr. J. N. Grace (w/attachment)  
 Mr. E. A. Reeves (w/attachment)  
 Mr. W. H. Bradford (w/attachment)

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April 15, 1988

Farley Nuclear Plant  
NPDES Permit No. AL 0024619

Mr. James M. Moore, III  
Alabama Department of  
Environmental Management  
1751 Federal Drive  
Montgomery, AL 36130

Dear Mr. Moore:

On October 28, 1986, approval was granted to Alabama Power Company, in accordance with Section 423.13(b)(2) of EPA's Steam Electric Effluent Guidelines as well as the \*\*\*footnote on page I-1b of the above referenced permit, to conduct an extended service water chlorination study. This study was necessary to determine what additional measures were needed to provide an adequate macroinvertebrate control program. The object of this study was to determine the minimum combined chlorine concentration and exposure time necessary for macroinvertebrate (*Corbicula*) control. The Nuclear Regulatory Commission (NRC) has documented through various reports and bulletins their concern with flow blockage of cooling water for various components (i.e., safety related equipment). As a result of NRC's concerns and requirements license holders must demonstrate the use of a program to adequately control items such as biofouling within their facility.

Per the approval given to conduct the chlorination study, attached is a report which assesses the minimum level of chlorination possible for *Corbicula* control. We request you review the enclosed report, which demonstrates the need for additional treatment in order to provide adequate control of the macroinvertebrate problem which could result in fouling in the service water system at Farley Nuclear Plant. Based on the study results, we request approval to chlorinate the service water system for *Corbicula* control (in accordance with the conclusions of the report) as provided for in the above referenced EPA and ADEM regulations and conditions. This program will be conducted as follows:

1. The service water system chlorination program will be initiated annually, beginning May 1 or upon initiation of the *Corbicula*'s spring spawn (whichever occurs first) and continue through December 31.
2. Each chlorination period will last for eight weeks or until greater than 90% mortality is reached (whichever occurs first) in indicator organisms.

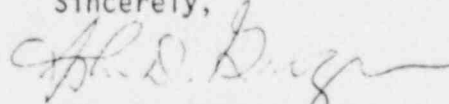
Mr. James M. Moore, III  
Page 2  
April 15, 1988

3. Chlorine concentrations will be maintained such that at least 0.20 mg/l free available chlorine is present at the main discharge surge tank, while not exceeding 0.2 mg/l total residual chlorine at the river discharge structure.
4. Each unit will be chlorinated at a nominal frequency of eight weeks between the end of one treatment and the start of the next treatment.
5. During chlorination of a unit's service water system for Corbicula control, the opposite unit will be treated with the existing chlorination program of three intermittent treatments per day to control microfouling.

We are requesting temporary approval to perform the above chlorination treatment program until your office has reviewed the report and an agreement is reached on a permanent chlorination program. Monitoring will be performed as previously approved per the November(87)-January(88) chlorination of Unit 1. We would appreciate your timely notification of this approval, since the arrival of the 1988 spring spawning season will necessitate initiation of a control program in the near future.

Should you have any questions, please contact Mr. Mike Godfrey at 250-4194.

Sincerely,



John D. Grogan, Manager  
Environmental Compliance

JMG:dy

Encl.