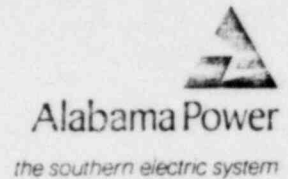


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June 16, 1982

OG-71

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Phillips Building  
7920 Norfolk Avenue  
Bethesda, Maryland 20014

Dear Mr. Denton:

Fuel Management to Reduce Neutron Flux

Enclosed is a copy of a document entitled "Fuel Management to Reduce Neutron Flux," which was prepared by Westinghouse Electric Corporation for the Westinghouse Owners Group. This transmittal is in response to our commitments in the March 23, 1982 WOG letter OG-68. It contains a discussion of the benefits and penalties of fuel management schemes to reduce fluence.

Should a utility determine that some type of remedial action is required to reduce the effects of a pressurized thermal shock event, a number of remedial actions are possible. One such action is reduction of vessel fluence at critical material locations of the reactor vessel by special fuel management schemes. An assessment of the benefits and penalties of this action is contained in the attached report.

Whereas most remedial actions can be fully evaluated prior to initiation of that action, the feasibility, desirability, and effects of low leakage loading patterns must be evaluated for each fuel cycle. Because of the occurrence of not-as-planned refueling, the required fuel, burnable poison assemblies, etc., may not be available to achieve a particular loading pattern without a significant reduction in safety margins or a plant derating. It should also be noted that a reduction in vessel fluence may have only a small effect on the end of life vessel material properties for some plants.

The attached report demonstrates that the use of dummy fuel assemblies appears to offer little or no fluence reduction advantage when compared to a low leakage loading pattern. Dummy fuel assemblies can, in fact, be a safety detractor and an economic deterrent.

Y001

Mr. Harold R. Denton

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Each utility must be able to evaluate all possible remedial actions and determine which are appropriate in order to ensure reactor safety. We believe that it would be inappropriate to apply specific regulatory criteria to fuel loading schemes in order to effect fluence reductions.

Contact me if you desire further information on the above.

Very truly yours,

A handwritten signature in black ink, appearing to read 'O. D. Kingsley', is written over the typed name.

O. D. Kingsley, Jr., Chairman  
Westinghouse Owners Group

/pab

Enclosure