UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NOV 23 1979

Docket No. 50-364

Mr. Alan R. Barton
Senior Vice President
Alabama Power Company
500 North 18th Street
Birmingham, Alabama 35291

Dear Mr. Barton:

SUBJECT: PROPOSED REVISION 2 TO REGULATORY GUIDE 1.97 "INSTRUMENTATION FOR LIGHT-WATER-COOLED NUCLEAR POWER PLANTS TO ASSESS PLANT AND ENVIRONS CONDITIONS DURING AND FOLLOWING AN ACCIDENT" (FARLEY UNIT 2)

The Regulatory staff is revising Regulatory Guide 1.97 to provide more specific guidance than that contained in the guide now being used. A draft of proposed revision 2 of this guide is enclosed (Enclosure 1). The Advisory Committee on Reactor Safeguards has reviewed proposed Revision 2 of the guide and has agreed to its issuance for comment.

Enclosure 1 is based on the results of Task Action Plan A-34, "Instrumentation for Monitoring Radiation and Process Variables During an Accident" which was initiated in June 1977 to develop more specific guidance concerning implementation of Regulatory Guide 1.97. A major addition to the current Regulatory Guide 1.97 is the identification of specific parameters to be measured, the range of the measurements and design criteria for the instruments. The enclosed draft guide also incorporates the applicable recommendations in NUREG-0578 "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

The proposed Revision 2 of this guide will have a significant impact on the design of plants such as yours that are currently under review for an operating license. Therefore, we are requesting early comments on proposed Revision 2 from applicants for these plants. We have arranged meetings in Bethesda, Maryland to discuss these comments. We will meet with nine applicants for pressurized water reactors on December 13, 1979 and with five applicants for boiling water reactors on December 14, 1979.

We request that you attend the meeting as indicated in the enclosed meeting notice (Enclosure 2) to discuss your comments on the feasibility of designing and installing instruments meeting the requirements of proposed Revision 2 to Regulatory Guide 1.97 in your plant. An advance copy of major comments and the associated rationale should be given to V. Benaroya, Chief, Auxiliary Systems Branch, DSS, NRC prior to the meeting.

If there are any questions regarding the meeting, call L. L. Kintner (301) 492-8344.

Sincerely,

S. A. Varga, Acting Assistant
Director for Light Water Reactors
Division of Project Management

Enclosures:
1. Draft of Proposed Revision 2 to Regulatory Guide 1.97
2. Meeting Notice

cc w/Encls: See next page

Mr. Alan R. Barton

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cc: George F. Trowbridge, Esq.
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Mr. Ruble A. Thomas, Vice President
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Encl 1

Draft 1
October 15, 1979

PROPOSED REVISION 2 TO REGULATORY GUIDE 1.97

INSTRUMENTATION FOR LIGHT-WATER-COOLED NUCLEAR POWER PLANTS TO ASSESS PLANT AND ENVIRONS CONDITIONS DURING AND FOLLOWING AN ACCIDENT

A. INTRODUCTION

Criterion 13, "Instrumentation and Control," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, "Licensing of Production and Utilization Facilities," includes a requirement that instrumentation be provided to monitor variables and systems for accident conditions as appropriate to ensure adequate safety.

Criterion 19, "Control Room," of Appendix A to 10 CFR Part 50 includes a requirement that a control room be provided from which actions can be taken to maintain the nuclear power unit in a safe condition under accident conditions, including loss-of-coolant accidents and that equipment at appropriate locations outside the control room be provided with a design capability for prompt hot shutdown of the reactor including necessary instrumentation.

Criterion 64, "Monitoring Radioactivity Releases," of Appendix A to 10 CFR Part 50 includes a requirement that means be provided for monitoring the reactor containment atmosphere, spaces containing components for recirculation of loss-of-coolant accident fluid, effluent discharge paths, and the plant environs for radioactivity that may be released from postulated accidents.

This guide describes a method acceptable to the NRC staff for complying with the Commission's regulations to provide instrumentation to monitor plant variables and systems during and fol
nuclear power plant.