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F. L. CLAYTON, JR.  
Senior Vice President



November 21, 1979

Docket No. 50-348

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

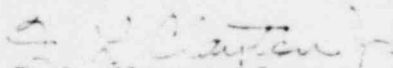
Dear Mr. Denton:

On October 24, 1979 Alabama Power Company submitted a response to the Nuclear Regulatory Commission as requested by Mr. Eisenhut's letter of September 13, 1979. In this submittal, Alabama Power Company outlined their commitments to implement the Short-Term Lessons Learned and Emergency Preparedness Recommendations, including implementation schedule. After receipt of your letter dated October 30, 1979, Alabama Power Company's submittal was reviewed with regard to its complete agreement with the staff's requirements as previously documented in NUREG-0578, the September 13, 1979 letter, the additional information contained in the October 30, 1979 letter, and discussions with the NRC staff on November 16, 1979. In response to your letter of October 30, 1979, Alabama Power Company submits the following:

Supplemental Response Short-Term Lessons Learned -  
Enclosure (1)

As additional information is supplied by the Division of Operating Reactors regarding requirements in the areas of Lessons Learned or as further study by Alabama Power Company requires the commitments contained in enclosure (1) will be amended.

Yours truly,

  
F. L. Clayton, Jr.

FLCJr/ODK:bhj

Enclosure

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- References:
- (1) NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations", July, 1979.
  - (2) "Follow-Up Actions Resulting from the NRC Staff Reviews Regarding the Three Mile Island Unit 2 Accident", September 13, 1979.
  - (3) Handouts at Atlanta Regional Meeting, "Regional Meeting's TMI Short-Term Implementation Action", September 28, 1979.
  - (4) "Discussion of Lessons Learned Short-Term Requirements", October 30, 1979.

1390 082

Enclosure One (1)

SUPPLEMENTAL RESPONSE - SHORT TERM LESSONS LEARNED

2.1.3.A - Direct Position Indication of Relief and Safety Valves

Alabama Power Company is now able to refine its previous commitment with respect to the schedule for installing safety grade positive indication with associated alarm on reactor coolant system code safety valves.

The scheduled date for the installation of the code safety valves positive position indication is during a planned two week outage for surveillance testing which will commence sometime during the period of March 1, 1980 to May 1, 1980. This date is compatible with an expedited installation of the position indication system based upon the following information:

1. Formal proposal for indication system expected from Crosby Valve week of November 26, 1979.
2. Delivery of Equipment (Critical Path): Tentative date of 8 to 10 weeks for limit switches after proposal acceptance.
3. Equipment installation requires two (2) weeks with plant in cold shutdown.

1390 083

2.1.3.B - Primary Coolant Saturation Meter

Alabama Power Company is now able to refine its previous commitment with respect to the schedule for installing a primary coolant saturation meter. The schedule date for installation of the primary coolant saturation meter is during a planned outage for surveillance testing which will commence during the period of March 1, 1980 to May 1, 1980. This date was selected because it will be the outage scheduled to install the safety valve positive position indication installation and it will afford the cold shutdown conditions necessary for installation.

Alabama Power Company revises its commitment with respect to the Shift Technical Advisor's responsibilities to state that the Shift Technical Advisor as a part of his training will be schooled (e.g. complete training addressed in Section 2.2.1.B) in thermodynamics, thermohydraulics, and heat transfer and would be available if assigned by shift supervision to monitor the thermal state of the reactor coolant system.

1390 084

2.1.4 - Containment Isolation Provisions for PWR's and BWR's

Alabama Power Company clarifies its response with respect to the behavior of containment isolation valves following reset of Containment Phase A or Phase B Isolation reset. Containment isolation valves will not reopen when these isolation signals are reset.

Alabama Power Company revises its response with respect to the results of its investigation to determine that all non-essential systems are isolated by Containment Phase A or Phase B Isolation to state that this investigation has been completed. All non-essential systems are isolated by these signals.

1390 085

2.1.5.C - Capability to Install Hydrogen Recombiner at Each Light  
Water Nuclear Power Plant

Alabama Power Company revises its commitment with respect to the emergency procedure for operation of electric hydrogen recombiners located inside containment to state that this procedure will be reviewed and upgraded as necessary prior to January 1, 1980.

1390 086

2.1.6.A - Integrity of Systems Outside Containment Likely to Contain  
Radioactive Materials (Engineered Safety Systems and  
Auxiliary Systems) for PWR's and BWR's

Alabama Power Company revises its response with respect to its previous  
leak reduction program commitment in the following areas:

A. Systems Included in Program

1. High Head Safety Injection System (Recirculation Portion Only)
2. Low Head Safety Injection System (Recirculation Portion Only)
3. Residual Heat Removal System
4. Reactor Coolant System Letdown and Makeup System
5. Reactor Coolant Sampling System
6. Containment Spray System (Recirculation Portion Only)
7. Radioactive Waste Gas System

B. Systems Excluded From Program

1. Radioactive Liquid Waste System - Excluded by NRC in Regional Meeting
2. Radioactive Waste Gas System - Portions of system not contaminated by Volume Control Tank off-gas processing will be excluded. Off-gas processing would be the means of handling highly radioactive gases resulting from various accidents.

C. Procedures for Determining (Measuring) Leakage

1. High Head Safety Injection System - Integrated Leak Rate Test
2. Low Head Safety Injection System - Integrated Leak Rate Test
3. Residual Heat Removal System - Integrated Leak Rate Test
4. Reactor Coolant System Letdown and Makeup System - Integrated Leak Rate Test
5. Reactor Coolant Sampling System - Integrated Leak Rate Test
6. Contain Spray System - Integrated Leak Rate Test
7. Radioactive Waste Gas System - Method not determined as of this

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2.1.6.A - Page 2

date. A supplemental report will be submitted by January 1, 1980 stating the progress on this system.

D. Schedule for Performing Leak Rate Measurements and Transmittal to NRC

1. High Head Safety Injection System - January 1, 1980
2. Low Head Safety Injection System - January 1, 1980
3. Residual Heat Removal System - January 1, 1980
4. Reactor Coolant System Letdown and Makeup System - January 1, 1980
5. Reactor Coolant Sampling System - January 1, 1980
6. Containment Spray System - January 1, 1980
7. Radioactive Water Gas System - Will be submitted when a method is developed to quantify the leakage. A supplemental report will be submitted by January 1, 1980 stating the progress (e.g. should include estimated leakage) on this system.

1390 088



2.1.6.B - Design Review of Plant Shielding and Environmental Qualification of Equipment for Spaces/Systems Which May be Used in Post-Accident Operations

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Alabama Power Company revises its response with respect to plant shielding to stipulate that source terms postulated by the NRC will be used in the design review, aspects of all major accidents will be covered in the design review, and shielding additions developed in the design review will be implemented by January 1, 1981.

1390 089

2.1.8.A - Post-Accident Sampling Capability

Alabama Power Company is now able to refine its previous commitment with respect to the schedule for completing modifications required to obtain highly radioactive samples of the reactor coolant and the containment atmosphere. These modifications will be completed by January 1, 1981.

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2.1.8.B - Interim Procedures for Quantifying High Level Accidental  
Radioactive Releases

Alabama Power Company revises its response with respect to being able to estimate release rates if presently installed stack measuring devices go off-scale. A pressurized ion chamber will be permanently mounted in a shielded collimator outside the stack. The detector will be set up in a manner to provide measurement of a representative portion of the radioactive mixture being released out the plant stack. The ion chamber is powered by a DC power supply which has a minimum life of 30 days. Measured dose rate will be converted to concentration using volume source calculations. The readout will be available continuously to operations personnel to assess release concentrations.

1390 091

2.1.8.C - In-plant Iodine Instrumentation

Alabama Power Company revises its response with respect to techniques postulated for measuring airborne iodine concentrations. A portable monitoring system consisting of a single channel analyzer will be available for use by January 1, 1980. By January 1, 1981, Alabama Power will have the capability to purge these samples of possibly entrapped noble gases by the use of nitrogen gas.

1390 092

Containment Pressure Indication (ACRS)

Alabama Power Company after discussion with the NRC staff was unable to understand the postulated reasoning (e.g. accidents beyond design bases) behind the requirement for upgrading containment pressure monitoring instrumentation to three (3) times the containment design basis; therefore, we request that additional justification be provided by the staff so that this requirement may be evaluated further.

1390 093

Containment Water Level Monitor (ACRS)

Alabama Power Company has reviewed its presently installed wide range containmert water level instrumentation with respect to the revised volume requirement of 600,000 gallons; Farley instrumentation has the range to measure volumes in excess of the new requirement.

1390 094

Containment Hydrogen Indication (ACRS)

Alabama Power Company clarifies its response with respect to the range of presently installed hydrogen monitoring equipment; this instrumentation has the capability of assuring a range of 0 - 10% hydrogen concentration.

1390 095

Reactor Coolant System Venting

Alabama Power Company revises its response with respect to reactor coolant system venting to include a commitment to install a reactor vessel head vent by January 1, 1981. A conceptual design will be submitted by January 1, 1980.

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2.2.1.B - Shift Technical Advisor

Alabama Power Company clarifies its previous commitment to satisfy NUREG-0578 training requirements for its Shift Technical Advisors to stipulate that designees will receive training by January 1, 1981 in the basic physical concepts of mathematics, chemistry, metallurgy, atomic physics, reactor physics, heat transfer, fluid mechanics, thermodynamics, and thermohydraulics. In addition training will be provided in the response and analysis of the plant for various transients and accidents and in basic plant design and layout including the capabilities of instrumentation and controls in the control room.

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