Entergy
Operations

Entergy Operations, Inc.
Route 3, Box 137G
Russellville, AR 72801
Tel 501-964-3100

June 30, 1993

OCAN069303

U. S. Nuclear Regulatory Commission
Document Control Desk
Mail Station P1-137
Washington, DC 20555

Subject: Arkansas Nuclear One - Units 1 & 2
Dockets Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6
Update on Historical Commitments

Gentlemen:

This is to update the progress of the ANO Historical Review Project (HRP) in reviewing past NRC correspondence for commitments. During this effort, commitments have been identified for which ANO's docketed position requires clarification or change. To date, correspondence from 1982 to the present has been reviewed and the status of identified commitments has been obtained. Enclosed is a summary of 4 items identified during the past three months which require clarification/change. These items were previously discussed with Region IV during teleconferences held May 26, 1993 and June 23, 1993.

Guidelines are in place to assure changes to commitments identified during the HRP are considered for any safety significant implications. The commitment changes identified in this report were reviewed against the guidelines and were not considered to have any safety significant implications.

No action is being requested from the NRC on any items from this report. Should you have any questions, please contact me.

Very truly yours,

James J. Fisicaro

James J. Fisicaro
Director, Licensing

Attachment

JJF/KJM/klc

A001
1/1

cc: Mr. James L. Milhoan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

NRC Senior Resident Inspector
Arkansas Nuclear One - ANO-1 & 2
Number 1, Nuclear Plant Road
Russellville, AR 72801

Mr. Roby B. Bevan, Jr.
NRR Project Manager, Region IV/ANO-1
U. S. Nuclear Regulatory Commission
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

Mr. Thomas W. Alexion
NRR Project Manager, Region IV/ANO-2
U. S. Nuclear Regulatory Commission
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852

## Commitment to Place Core Protection Calculators (CPCs) into "CEAC INOP" Prior to Beginning CPC Test or Calibration

Licensee Event Report (LER) 368/85-015 concerned a reactor trip caused by an erroneous Control Element Assembly (CEA) position signal. The cause of this event was determined to be an electronic transient related to performance of a calibration procedure. The LER states, "To prevent recurrence, the CPC test and calibration procedures were changed to require placing the CPCs into "CEAC INOP" prior to beginning the test or calibration". This commitment is being clarified.

An unintentional reactor trip can only occur in Mode 1 (Power Operation) and Mode 2 (Start-up). Current procedures strongly suggest that the CPCs be placed into "CEAC INOP" to prevent actuation of the trip circuit breakers for all modes; however, this can be waived at Operations Supervision's discretion. To further enhance this control, a procedure revision is in progress which will require placing the CPCs into "CEAC INOP" in Modes 1 or 2 and allow Operations discretion in other modes.

## Commitment Regarding Distribution of Revisions to Q-Designated Design Change Packages

Violation 313;368/8317-01 Item F was cited against ANO for failure to comply with procedure ESP-201, "Design Change Package Control." ESP-201 required that all changes to Q-designated Design Change Packages (DCPs) be brought to the attention of the Project Engineer and/or his Group Leader by the plant staff. ESP-201 also required that a conversation memorandum be prepared to document whether it was necessary to stop work to perform an evaluation of the change or whether the evaluation could wait until DCP closeout.

In 1983 when this violation was cited, ANO was not preparing conversation memorandums and ANO procedure requirements did not match Little Rock (ESP-201) procedure requirements with regard to notification of the Project Engineer. ANO committed in response to this item to revise Procedure 1032.011 to assure that the Little Rock Project Engineer was on distribution for approved DCPs and revisions. It was also revised to clarify the distribution of documentation of significant technical discussions regarding DCPs. For consistency, ESP-201 was revised to delete the requirement for conversation memorandums.

Since 1983, when this violation was cited, several changes have occurred which render these procedural commitments unnecessary. Design Engineering has relocated from Little Rock to ANO and ESP-201 was deleted. Per procedure 6010.001 (DCP Development), if a DCP is revised by a Design Change Package Revision (DCPR) or Field Change Request (FCR), the Design Engineer must concur with the change prior to completion of the installation process.

Both groups now use the same set of procedures with the same requirements. This resolved the interface problem between Design Engineering and modifications. Procedural commitments concerning telecon documentation of significant technical discussions are no longer necessary to prevent recurrence of this violation. Consequently, ANO is rescinding the commitments related to 313;368/8317-01, Item F.

**Commitment to Perform a Visual Inspection of Steam Generator Handholes and Manways Each Refueling Outage**

Closure of Open Item 313/8737-02: Inspection and acceptance criteria established for manway and handhole flange assemblies on the Once-Through Steam Generator (OTSG), states that the inspector reviewed Preventative Maintenance procedure PMEE-099. The inspector "verified that visual inspections are to be conducted on an 18 month interval...." This statement from 0CNA038931 could be taken as a passive commitment and should be clarified.

Inspection 87-37 (December 1987) reviewed the erosion and subsequent leakage of the carbon steel steam generator (SG) handholes on the OTSGs. The handholes had been inspected by Arkansas Power & Light (AP&L) in November 1986 as part of the actions taken following boric acid attack of a High Pressure Injection nozzle. AP&L determined at that time that the handholes should be reinspected during 1R8 (August 1988) but no immediate concern was warranted. Open Item 313/8737-02 was assigned to track the creation of a periodic inspection of the SG handholes. AP&L indicated in the Exit Meeting that a decision had already been made to add these items to the Preventive Maintenance program on a 7 to 9 year interval. Internal actions were also assigned in the Exit Meeting to determine if the interval and acceptance criteria were stringent enough and to add the visual inspection to the PM program.

Internal ANO reviews determined that a 90 month interval would be acceptable and should be the committed interval. Since an interval of 7 to 9 years had already been discussed with the NRC at the Exit Meeting, no commitment changes would be needed. However, the PM group chose to establish a conservative initial performance interval of 18 months in PMEE-099. This was the interval reported in 0CNA038931, not the commitment interval of 90 months.

This visual inspection has been performed during three outages with no corrective maintenance action required for handholes or manways. Visual inspections of ANO-2 U-Tube SGs manways and handholes yielded identical results. This maintenance history has been evaluated in accordance with approved ANO procedures and provides justification for increasing the performance interval to every fourth refueling. This interval will begin with the upcoming 1R11 when the OTSG handhole and manway visual inspection will not be performed.

A performance interval of every fourth refueling is more conservative than the intended commitment of 90 months. The 18 month interval that was quoted in the open item closure was an initial performance interval, not the ANO committed interval. ANO-1 continues to be committed to the original inspection interval for OTSGs of 90 months. Performance intervals may vary depending on the results of future inspections.

## Commitment to Use the Square Root of the Sum of the Squares (SRSS) Method to Combine Load Case Calculations for Each Direction of Movement

During the ANO-1 Emergency Feedwater (EFW) Safety System Functional Inspection (SSFI) the inspector identified a concern with the analysis of the seismic support design of the EFW pump room chiller. The inspector questioned the loading calculation since it did not appear to account for the effects of seismic forces acting simultaneously in both horizontal directions. The SSFI found the support in question to be acceptable; however, open item 313/8601-12 was created based on questions about the design of other seismic supports. The item was held open pending further NRC review of ANO methods for performing seismic calculations.

Open Item 313/8601-12 was closed during Inspection 90-11 (0CAN059014) by reviewing "Specification APL-M-2414" [actually APL-M-2514], "Technical Specification for the Design of Piping for the Arkansas Nuclear One - Units 1 and 2", Revision 0. The inspectors noted that the section covering load combinations "required a separate load case calculation for each direction of movement with the results combined by the square root of the sum of the squares (SRSS) method." The inspectors also verified that the SRSS method was acceptable per RG 1.92. This commitment is being clarified.

ANO-1 is not committed to RG 1.92. However, RG 1.92 methods are used to the extent practicable for new designs on ANO-1. These methods are also used for the majority of ANO-1 redesigns or modification work on ASME Section III/ANSI B31.7 Class 2 & 3 systems and Seismic Category 1 ANSI B31.1 systems.

APL-M-2514, now ANO-M-2514, is applicable only to ASME Section III Class 2 & 3, ANSI B31.7 Class 2 & 3 and ANSI B31.1 piping stress analyses for new designs. Other ANO design guides allow the use of original plant design methodologies for reconciliation or re-analysis of minor modifications to existing piping systems. Thus ANO-M-2514 is not the applicable document for all ANO-1 piping analyses.

ANO-M-2514 does not consider other seismic qualifications such as pipe supports, equipment supports, etc. which were the basis of the original open item. Pipe support loads are generally applied using current design methods, which usually include the use of SRSS as part of the qualifying analysis. The specific method used is determined based on whether or not the pipe stress calculation is being reviewed for reconciliation, minor modifications, or re-analysis due to a major design change.

In summary, ANO is clarifying the commitment to use the SRSS method of combining seismic loads as only applicable to the specific document quoted in the NRC closure, ANO-M-2514.