Attachment 3

50-368

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

AUG 1 1985

MEMORANDUM FOR: Dorwin R. Hunter, Chief
Reactor Project Branch 2
Division of Reactor Safety & Projects
Region IV

FROM: Karl V. Seyfrit, Chief
Reactor Operations Analysis Branch
Office for Analysis and Evaluation
of Operational Data

SUBJECT: EVALUATION OF LERs FOR ARKANSAS NUCLEAR ONE, UNIT 2
AEOD INPUT TO SALP REVIEW COVERING THE PERIOD FROM JULY 1, 1984 TO JUNE 30, 1985

In support of the ongoing SALP reviews, AEOD has reviewed the LERs submitted by Arkansas Power & Light Company for Arkansas Nuclear One, Unit 2. Our review concentrated on LER completeness, clarity, understandability and adequacy of the event report contents.

From the LERs that were reviewed, we thought that the reports lacked sufficient depth to adequately describe all possible aspects and evolutions of the event. In particular, the licensee failed to include an adequate assessment of the safety consequences and implications of the events discussed in the LER.

The enclosure provides additional observations from our review of the LERs. If you should have any questions regarding this report, please contact either myself or Ted Cintula of my staff. Mr. Cintula can be reached at FTS 492-4494.

Karl V. Seyfrit, Chief
Reactor Operations Analysis Branch
Office for Analysis and Evaluation
of Operational Data

Enclosure
As stated

cc w/enclosure:
R. Lee, NRR
W. Johnson, R IV
E. Johnson, R IV

ENCLOSURE

AEOD INPUT TO SALP REVIEW FOR ARKANSAS NUCLEAR ONE, UNIT TWO

Arkansas Power & Light Company submitted 23 reports for Arkansas Nuclear One, Unit Two, not including updated reports, in the assessment period from July 1, 1984 to June 30, 1985. Our review included the following LER numbers:

84-017 to 84-029
85-001 to 85-010

The LER review followed the general instructions and procedures of NUREG-1022.

1. LER Completeness

a) Was the information on the abstract sufficient to provide a good understanding of the event?

The abstracts described the major occurrences during the events, including all component or system failures that contributed to the events and significant corrective actions taken or planned to prevent recurrence as stated in NUREG-1022. The abstracts were capable of standing alone with respect to required content as a complete entity and did not contain new information not found in the texts. However, many of the abstracts were brief, and only used 9 or 10 of the 15 lines available for the abstract. In these cases, the licensee should have provided a greater level of detail to describe the major aspects of the event. The licensee should consider using more of the space available in the abstract thereby aiding those who are only able to use the LER abstracts (and not the text) as their data source.

b) Were the LERs coded correctly?

Except in a few cases, we agreed with the licensee's selection in all coded fields. When disagreement did occur, it was minor and did not detract from an overall reasonable selection of coded information.

In reviewing the coded failure data in the LERs, we noted that a total of ten component failures had been identified by the licensee in this assessment period. Of the ten component failures, the licensee attributed the cause of eight component failures to "other." Although the text of the LERs seemed to collaborate this finding, the unusually high proportion of unspecified failure codes could be an indicator that the licensee is not adequately identifying the root cause of the failure. Many of the reports in the assessment period (according to coded data) were submitted late.

c) Was supplemental information provided when needed?

Eight of the twenty-three reports (35%) submitted by the licensee in this assessment period provided supplemental information (in the form of a text) in addition to the abstract of the LER. When supplemental

information was provided, it did not exceed one page in length. When the new LER rule was implemented it was expected that few reportable events would be so simplistic that they could be adequately described in the 1400 characters of the abstract. One of the objectives of the new LER rule was to reduce the number of LERs that must be submitted by the licensees so that more time could be devoted to the preparation of more detailed and informative reports of the more significant events. In this case, ANO-2 is submitting fewer reports (45 LERs in 1983 vs. 29 LERs in 1984) with no commensurate improvement in the quality of reporting.

While the supplementary information did include the major aspects of the event, it did not include sufficient depth of detail for the reader to fully understand all aspects of the event. Consequently, many of the explanations seemed vague and noninformative. For example, component failures described in the text did not include the manufacturer or model number. An equipment identification number, without specific information, such as, the manufacturer's name, model, size, or other unique identification, does little to allow other licensees to determine if they have the same component at their plant. Such information aids in determining whether there are potential generic problems.

The licensee also often failed to include an adequate assessment of the safety consequences and implications of the events discussed in the LERs. Some of the LERs failed to include any discussion of the safety consequences or implications. Other LERs did include phrases or sentences that could be interpreted as relating to safety; however, these references were not considered an assessment of safety consequences or implications.

Licensee event report 85-001 provides another example of incomplete reporting. The LER states that:

> "Inspection of the containment sump screen revealed the west side door to be open. Apparently the door was forced open by the reverse flow from the RWT gravity drain to the containment sump. This door is normally closed...."

The LER did not discuss the safety significance or safety implications of this event. The LER also did not provide adequate information for the probable root cause of the event. That is, the LER did not discuss whether the failure was caused by a design error (e.g., inadequate closure or door locking devices), a human performance problem (e.g., inadequate procedures, failure to follow procedures) or a component failure (e.g., failure of a door lock).

An example of a poor safety assessment would be LER 85-002. In this LER, two of the level transducers on the refueling water tank (RWT) failed high due to freezing in cold weather. Later, a third RWT liquid level transducer also failed high. because a recirculation actuation signal (RAS) needs two of the four RWST liquid level transducers to reach a low level indication for actuation, an automatic RAS was no longer possible. It took over 11 hours to thaw out the three

transducers, with the unit apparently operating at 100% power. The licensees safety assessment for this event was:

> "The RAS transfers suction of the emergency core cooling system safety injection pumps from the RWT to the Containment Sump on low RWT level. RAS channels 1 and 2 were verified operable."

NUREG-1022 requires an assessment of the safety consequences and implications of the event, including the availability of other systems or components that could have performed the same function as the equipment that failed during the event. The safety evaluation provides important information regarding the licensee's justification of the significance or insignificance of an event. The licensee's safety discussion should include: (a) all of the safety consequences of the event including an assessment of the consequences had it been possible for the event to have occurred under a more severe set of initial conditions or (b) if there were no safety consequences or implications, it should explicitly state why there were none.

d) Follow-up Reports

The licensee committed to update four of the reports submitted in this assessment period. They have not been received. LER 84-017 was updated to correct a typographical error (the total number of pages in the LER) on the coded information. However, the licensee did not state, or otherwise indicate, the reason for submitting an updated report. When we reviewed the LERs we found many of the pre-1984 LERs had been updated and some reports had been updated several times. However, with the exception of LER 84-017, none of the 1984 or 1985 LERs have been updated so it is not possible to determine if the new reports are being updated correctly in accordance with the guidelines of NUREG-1022.

e) Were Similar Occurrences Properly Referenced?

The licensee typically listed many previous similar or related events on the LER form. In addition, some LERs noted that no similar occurrences had been reported. Other LERs did not provide an informative statement on the occurrence or lack of occurrence of previous similar events.

2. Multiple Events Reporting in a Single LER

None of the LERs reviewed in this assessment period reported more than one event in a single LER.

3. Prompt Notification Follow-up Reports

Three PNs were submitted in the assessment period. One PN was a reportable event and the licensee submitted an LER for this occurrence. The remaining PNs involved events which were not reportable in LERs.