APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-313/85-25
50-368/85-26

Licenses: DPR-51
NPF-6

Dockets: 50-313
50-368

Licensee: Arkansas Power & Light Company (AP&L)

Facility Name: Arkansas Nuclear One (ANO), Units 1 and 2

Inspection At: Arkansas Nuclear One, Russellville, Arkansas

Inspection Conducted: October 30 through November 1, 1985

Inspectors: Charles A. Hackney 12-19-85
C. A. Hackney, Emergency Preparedness Analyst Date
Emergency Preparedness and Safeguards Programs
Section

Accompanying Personnel: D. H. Schultz, Comex Corporation

Approved: Lawrence A Yandell 12-26-85
L. A. Yandell, Chief, Emergency Preparedness Date
and Safeguards Programs Section

Inspection Summary

Inspection Conducted October 30 through November 1, 1985 (Report 50-313/85-25; 50-368/85-26)

Areas Inspected: Routine, announced inspection of the license's performance and capabilities during a demonstration drill of the emergency plan and procedures. The inspection involved 46 inspector-hours onsite by 2 NRC inspectors.

Results: Within the emergency response areas inspected, no violations or deviations were identified. Two deficiencies were identified (NUREG 0654 Emergency Action Levels (EALs) are not adequately addressed in Emergency Plan Implementing Procedures (EPIPs) and the scheme of classification for Final Safety Analysis Report (FSAR) design basis accidents is not addressed in EPIPs, paragraph 2; EPIP 1903.10 only addresses summed offsite dose rates, paragraph 2).

DETAILS

1. Persons Contacted

Principal Licensee Personnel

*T. Campbell, Vice President, Nuclear Operations
*J. Levine, ANO General Manager
*D. Boyd, ANO Emergency Planning Coordinator
*F. Van Buskirk, ANO Emergency Planning Coordinator
*M. Tull, Corporate Emergency Coordinator (EC)
*D. Snellings, Little Rock General Office (LRGO) Manager, Nuclear Programs
*T. Cogburn, LRGO General Manager, Nuclear Services
*D. Lomax, Plant Licensing Supervisor
*P. Campbell, Plant Licensing Engineer

*Denotes persons attending the exit interivew

The NRC inspectors also held discussions with other station and corporate personnel in the areas of emergency response organization and training.

2. Emergency Response Exercise

This special inspection was performed to determine the staffing of the Emergency Operations Facility (EOF) as required in NUREG-0737, Supplement 1, and committed to in a letter to NRC dated June 14, 1985.

The licensee conducted the drill during the time period from 8:30 a.m. to 2:00 p.m. on October 31, 1985. The drill scenario was written to demonstrate emergency detection, classification, notification, emergency response facility staffing, dose assessment, and radiological monitoring.

During the drill, the licensee demonstrated the capability to staff the Technical Support Center (TSC), Operational Support Centers (OSC), and the EOF during regular shift hours within the time specified in NUREG-0737, Supplement 1.

The NRC inspectors had the following observations:

- Personnel were kept informed as to the nature of onsite and offsite conditions by the TSCEC and EOF Director (EOFD).

- The TSCEC kept the EOFD well informed of plant conditions.

- Excellent coordination was observed between the dose assessment, TSC, and EOF personnel in the process of down grading the emergency classification.

- The TSCEC and the EOFD both demonstrated the change of command without interfering with the emergency response center's activities.

- The TSC staff routinely projected plant status to assure timely declarations of changing classifications. For example, time to reach saturated conditions in the reactor coolant system was projected to determine time for exceeding the EAL for declaration of Site Area Emergency (SAE); time to exceed 1 percent fuel damage was projected to determine time of reaching EAL for declaration of General Emergency. Many other examples of thinking "ahead" were demonstrated that enhanced the anticipatory response capability of the TSC.

- Timely, routine, meaningful plant status updates were excellent by the EC and enhanced the TSC staff's understanding of current conditions and expected activities.

- Radiological habitability checks, including issuance of personnel dosimetry and recommendations for personnel protection, were timely and correct.

- Numerous event/activity logs were maintained in the TSC that were timely and meaningful. Entries from many of the logs were transcribed by word processing personnel into an information management system (computer based) that connects site Emergency Response Facilities and corporate facilities, making accident information readily available.

The following are items for improvement:

- Reactor technical expertise should be available in the EOF to assist the EOFD and coordinate with the NRC site team.

- Review all emergency response facility communicator personnel to assure that adequate communicators are available for 10 CFR 50.72 and Health Physicis Network (HPN) requirements.

- State's action on AP&L's offsite protective action recommendations should be recorded and posted.

- The telefax number to the State should be readily available at all times.

- Blank pages transmitted to offsite agencies should have "NA" or "Page" crossed out to indicate no information.

- Dose assessment personnel should have a personnel roster board similar to the TSC and EOF.

- Dose assessment communicator should have a telephone directory, as he was told to make a call and did not have the number.

- Dose assessment status board should read "PAR" not "PAG."

- Dose assessment status board should be maintained.

- Dose assessment status board should have space for noting the emergency class.

The inspectors reviewed Revision 1, dated November 1, 1985, (effective date November 1, 1985), to the ANO Emergency Plan, and Revision 18, dated September 9, 1985, (effective date November 1, 1985), to EPIP 1903.10, EAL Response/Notifications.

The following deficiencies were observed:

- The ANO EALs listed in the E/P and EPIP (event oriented) were compared to the NUREG-0654, "Example Initiating Conditions," of Appendix I, and it was noted that numerous EALs of NUREG-0654 were not addressed.

  Table D-2 of the Emergency Plan lists the correlation of Design Basis Accidents of the FSAR to various emergency classes. However, no scheme of classification is provided in the EPIPs that assurances that all FSAR accidents have applicable EALs listed (313/8525-01; 368/8526-01).

- The EAL (classification criteria) for SAE (paragraph 8.1.1, EPIP 1903.10) dealing with offsite dose rates, addresses only "Projected summed offsite dose rates. . . ." rather than in-situ results of monitoring (also) as is required by 10 CFR 50, Appendix E, Paragraph B, and NUREG-0654 (313/8525-02; 368/8526-02).

The NRC inspectors attended the post-exercise critique by the licensee staff on November 1, 1985, to evaluate the licensee's identification of deficiencies and weaknesses as required by 10 CFR 50.47(b)(14) and Appendix E of Part 50, paragraph IV.F.5. The licensee staff identified the deficiencies listed below. Corrective action for identified deficiencies and weaknesses will be examined during a future NRC inspection.

- Station page system did not function for initial personnel notification.
- An aperture card was missing from library file system.
- Only one offsite monitoring vehicle was available.
- Radio problems existed in offsite monitoring vehicles.
- Offsite monitoring personnel need additional training in the use of radios.
- EC duties were turned over to someone not qualified to be an EC.
- Offsite monitoring data was late getting to the State.
- TSC had problems getting information from EOF.
- Criteria are needed for downgrading the emergency class from a General Emergency.

3. Exit Interview

The NRC inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on November 1, 1985. The NRC inspectors summarized the purpose and the scope of the inspection and the findings. Additionally, the licensee representatives were informed that additional findings may result following a briefing of Region IV Management. The licensee's actions during the drill were found to be adequate to protect the health and safety of the public. No violations or deviations were identified