

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-313/84-35
50-368/84-35

License: DPR-51
NPF-6

Dockets: 50-313
50-368

Licensee: Arkansas Power & Light Company (AP&L)
P. O. Box 551
Little Rock, Arkansas 72203

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

Inspection At: ANO Site, Russellville, Arkansas

Inspection Conducted: December 11 and 12, 1984

Inspector: Blaine Muncay 1/25/85
for R. E. Baer, Radiation Specialist, Facilities Date
Radiological Protection Section

Approved: Blaine Muncay 1/25/85
B. Murray, Chief, Facilities Radiological Date
Protection Section

Orlando J. 1/29/85
L. E. Martin, Chief, Project Section A Date
Reactor Project Branch 2

Inspection Summary

Inspection Conducted December 11 and 12, 1984 (Report 50-313/84-35;50-368/84-35)

Areas Inspected: Special, unannounced inspection of the licensee's radiation protection program during routine and refueling operations including: training of new personnel, internal exposure control, control of radioactive materials and contamination, staffing, and allegations regarding the lack of proper radiation protection controls and improper use of respiratory protection equipment. The inspection involved 19 inspector-hours onsite and 2 hours offsite by one NRC inspector.

Results: Within the four areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

AP&L

- *J. M. Levine, ANO General Manager
- *M. J. Bolanis, Health Physics (HP) Superintendent
- *P. Campbell, Plant Licensing Engineer
- *T. H. Cogburn, Special Projects Manager
- *E. C. Ewing, Engineering and Technical Support Manager
- T. Green, General Employee Training (GET) Trainer
- W. L. Hada, HP Supervisor
- *L. W. Humphrey, Administrative Manager
- *D. B. Lomax, Plant Licensing Supervisor
- J. T. Pugh, GET Lead Trainer
- T. M. Rolniak, HP/Radwaste Lead Trainer
- *D. J. Wagner, Assistant HP Superintendent
- J. R. Waid, Administrative/Technical Support Training Supervisor

Others

B. Thompson, HP Coordinator, Bechtel Corporation

The NRC inspector also interviewed several other licensee and contractor employees including HP and maintenance personnel.

*Denotes those present at the exit interview on December 12, 1984.

2. Training of New Personnel

The NRC inspector reviewed the GET program provided to new personnel assigned to work in the radiological controlled areas (RCA) for compliance with Technical Specifications (TS) and 10 CFR Part 19 requirements.

The licensee provided training to new personnel commensurate with their work assignments. The HP indoctrination (Category II) training is presented to personnel with little or no previous HP experience or knowledge of the licensee's work practices and procedures who must perform work in the RCA without an escort. A practical factor's demonstration is also provided as part of the training program. The NRC inspector noted that trainees are not required to wear a respirator or to demonstrate the proper method of removal during this phase of the training sequence. The licensee stated that this portion of the training was performed during the respiratory protection training session.

No violations or deviations were identified.

3. Internal Exposure Control

The NRC inspector reviewed the licensee's internal exposure control and assessment program to determine compliance with TS's, 10 CFR Part 20.103 and the recommendations of Regulatory Guide 8.15.

The NRC inspector reviewed procedures, representative records for the airborne radioactivity sampling program, whole body counting program, and respiratory protection program. The NRC inspector also interviewed personnel to determine the effectiveness of the program.

The NRC inspector discussed with licensee representatives and the Bechtel HP Coordinator an incident which had occurred on December 1, 1984, where a worker received facial contamination while working in the RCA. The worker was required to wear respiratory protection during certain work activities. He performed the task once, removed the mask and later wore the mask again to perform the task a second time. This incident is documented in a conversation memorandum, dated December 1, 1984, between an ANO HP supervisor and Bechtel personnel which also states in part, ". . . was concerned about HP's instructing workers to put respirators on after having been removed. . . . It can be done without getting contaminated if properly done with clean gloves on."

The NRC inspector met with the licensee's training department personnel to determine what instruction is provided during respiratory protection training on the reuse of masks within the RCA. The licensee staff stated that no instruction is provided regarding the reuse of masks during training. The NRC inspector expressed concern to both training and HP personnel that the practice of allowing the reuse of masks existed, especially with workers with little or no previous experience working in the RCA. The potential of facial contamination occurs not only from the removal and replacement of the mask, but also is affected by how the mask is treated during the period it has been removed from the face. This is considered open item 313/8435-01; 368/8435-01 pending the revision of HP procedures addressing reuse of respirators.

No violations or deviations were identified

4. Control of Radioactive Material and Contamination

The NRC inspector reviewed the implementation of the licensee's program for control of radioactive materials and contamination, surveys, and monitoring for compliance with station procedures.

a. Personnel Contamination

The NRC inspector reviewed the skin contamination incidents which had occurred during the unit 1 outage. The NRC inspector noted that a

considerable number of facial contamination incidents had occurred, and that only a few incidents had resulted from removal of protective clothing. Overall an improvement appeared to have been made over past outages in this regard.

The NRC inspector noted that the RCA exit point was congested during break and quitting times. Health Physics personnel would attempt to regulate the number of personnel in the RCA frisking area but they had no control over workers from the turbine building who entered to turn in their dosimetry devices. The licensee stated that an alternate dosimetry turn-in point would be established for the turbine building workers.

No violations or deviations were identified.

b. Radiation Work Permits (RWPs)

The NRC inspector reviewed the RWP requirements for respiratory protection and protective clothing against radiation, contamination, and airborne radioactivity surveys performed during the period November 23 through December 4, 1984. This review indicated that the specified protective equipment was consistent with the level of contamination detected, and with the requirements of station procedures 1612.003, "Radiological Work Permits," Revision 0, January 15, 1982, and 1622.003, "Radiological Posting and Entry Requirement," Revision 6, August 5, 1983.

No violations or deviations were identified.

5. Organization and Management Controls

The NRC inspector reviewed the licensee's radiation protection organization for compliance with Updated Safety Analysis Report and TS requirements.

The NRC inspector discussed with licensee representatives the HP coverage for off-normal and weekend work. The licensee had 69 contractor HP technicians to supplement the 35 station HP technicians during the outage. HP technicians were normally assigned to six, 10-hour shifts with five HP's assigned to a 12-hour shift. The Bechtel HP Coordinator would advise the licensee of work to be performed on Sundays so that sufficient HP personnel would be available.

No violations or deviations were identified.

6. Exit Interview

The NRC inspector met with licensee representatives at the conclusion of the inspection on December 12, 1984. The NRC inspector summarized the scope and findings of the inspection presented in this report.