

UNITED STATES NUCLEA® PEGULATORY COMMISSION WASHINGTON, D. C. 20555

OCT 0 6 1989

Docket No. 50-313

Mr. T. Gene Campbell Vice President, Nuclear Arkansas Power and Light Company P.O. Box 551 Little Rock, Arkansas 72201

Dear Mr. Campbell:

SUBJECT: BULLETINS 79-02 AND 79-14 FOLLOW-UP INSPECTION REPORT 50-313/89-200

This inspection was conducted to verify compliance with NRC Bulletins 79-02 (anchor bolts and baseplates) and 79-14 (piping analysis consistency with plant configuration).

In reviewing Arkansas Power and Light Company's (AP&L) effort regarding Bulletin 79-02 the team discovered that AP&L's program underestimated the number of bolts to be tested and as a consequence more testing is required. Even though additional testing is required, the inspection team concluded that AP&L had provided reasonable assurance that anchor bolts and baseplates had been adequately designed and constructed.

With respect to Bulletin 79-14, the inspection team could not establish confidence that the existing analyses were consistent with the as-bui't plaut configuration. The inspection identified numerous discrepancies between the piping design analyses and the field piping arrangement, as well as nonconservative modeling practices and lack of certain design analyses. AP&L previously instituted an Iso-Update Program to reconcile these discrepancies. However, this program is only 10 percent complete. Therefore, AP&L needs to focus more management attention on the completion of the Iso-Update Program in a timely and thorough manner to achieve compliance with Bulletin 79-14. AP&L is requested to commit to a completion date for the Iso-Update Program.

The discrepancies noted in Appendix A are considered to be the more significant issue: identified during the inspection. Appendix B to the inspection report concains the remainder of open discrepancies not previously discussed in Appendix A. The Appendix B discrepancies are considered to be isolated errors and are individually less significant. Therefore, we are treating these discrepancies collectively as a single open item. It is our understanding that you agree with and will resolve the discrepancies contained in this report The NRR technical staff is available to discuss your planned actions.

Several strengths were identified in the engineering initiatives and work products reviewed as discussed in the report.

6710160314 891006 PDR ADGCK 05000313 Q PDC

Mr. T. Gene Campbell

1

""AL is requested to describe why it had not completed the actions specified in Bulletin 79-14. Please inform us of the date by which actions related to all the items identified in this report will be available for followup inspection. Some of the identified items may be potential enforcement findings. Any enforcement actions will be identified by Region IV in separate correspondence.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room.

Should you have any questions concerning this inspection, please contact the NRR Project Manager, Craig Harbuck or the inspection team leader, Ron Parkhill. Messrs. Harbuck and Parkhill can be reached at (301) 492-1337 and (301) 492-0963, respectively.

Sincerely,

Original signed by

Frederick J. Hebdon, Director Project Directorate IV Division of Reactor Projects III/IV/V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

1. Executive summary

2. Inspection Report 50-313/89-200

cc w/enclosures: See next page

RUP EL 10/3#2 C: RELERIS AU-FAD DE D: PD4: DRSP SC:RSIB:DRIS RSIB:DRIS FJHebdon JEBichardson EKGrimes WDLanning RWParkhill:bt EVImbro 09/2789 09/6/89 99/ 1/89 09/72/89 09/31/89 09/21/89 10 10 milar

Mr. T. Gene Campbell Arkansas Power & Light Company

Arkansas Nuclear One, Unit 1

cc w/enclosures:

1

Mr. Early Ewing, General Manager Technical Support and Assessment Arkansas Nuclear One P.O. Box 608 Russellville, Arkansas 72801

Mr. Niel Carns, Director Nuclear Operations Arkansas Nuclear Cne P.O. Box 608 Russellville, Arkansas 72801

Mr. Nicholas S. Reynolds Bishop, Cook, Purcell & Reynolds 1400 L Street, N.W. Washington, DC 20005-3502

Mr. Robert B. Borsum Babcock & Wilcox Nuclear Power Generation Division 1700 Rockville Pike, Suite 525 Rockville, Maryland 20852

Senior Residence Inspector U.S. Nuclear Regulatory Commission 1 Nuclear Plant Road Russellville, Arkansas 72801

Regional Administrator, Region IV U.S. Nuclear Regulatory Commission Office of Executive Director for Operations 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

Honorable Joe W. Philips County Judge of Pope County Pope County Courthouse Russellville, Arkansas 72801

Ms. Greta Dicus, Director Division of Environmental Health Protection Arkansas Department of Health 4815 West Markham Street Little Rock, Arkansas 72201 Distribution: Docket File 50-313 RSIE R/F DRIS R/F TEMurley, NRR JHSniezek, NRR FJHebdon, NRR BKGrimes, NRR WDLanning, NRR EVImbro, NRR RWParkhill, NRR CPoslusny, NRR CCHarbuck, NRR GBagchi, NRR PTKuo, NRR LBMarsh, NPR RLSpessard, AEOD IBarnes, RIV DDChamberlain, RIV Regional Administrators Regional Division Directors Inspection Team LPDR PDR ACRS (3) OGC (3) IS Distribution

*

EXECUTIVE SUMMARY

ţ,

INSPECTION REPORT 50-313/89-200

ARKANSAS NUCLEAR ONE-UNIT 1

An inspection team composed of NRC staff and consultants reviewed Arkansas Power and Light (AP&L) Company's compliance with NRC Bulletin 79-02 (anchor bolt and baseplate design and construction) and Bulletin 79-14 (as-built piping consistency with as-assigned). The more significant discrepancies are summarized in Appendix A to this inspection report which substantiate the following conclusions.

For Bulletin 79-02 the inspection team was generally satisfied that AP&L had demonstrated that the anchor bolts and baseplates were adequately designed and installed. However, the associated program had underestimated the number of bolts to be tested by an order of magnitude. Thus, AP&L needs to do additional bolt testing to be in compliance with the bulletin.

For Bulletin 79-14, AP&L had not adequately completed the actions specified by the bulletin. Even though architect-engineer supposedly fulfilled the bulletin's requirements in the last quarter of 1979, many discrepancies between the as-built piping and design were continuing to be identified. AP&L had acknowledged these differences and initiated a self-monitored program entitled "Iso Update" in 1986 to rectify the problems. However, at the time of the inspection only 10 percent of the safety-related systems had been reconciled. In addition, the inspection team identified more discrepancies including nonconservative modeling practices, nonfunctional pipe supports, no verification of spring hanger settings, and lack of various analyses to justify the design. At the time of the exit meeting none of the discrepancies identified by the inspection team had resulted in a operational concern. However, not all of the discrepancies had been fully evaluated by AP&L and consequently their operational impact was undetermined. The inspection team concluded that if other systems were reviewed, similar issuer would be identified. Therefore, AP&L needs to focus more management attention on the completion of the Iso-Update Program in a timely and thorough manner to achieve compliance with Bulletin 79-14. AP&L is requested to commit to a completion date for the 1so-Update Program.

Several strengths were identified in the engineering initiatives and work products reviewed as discussed in Section 5 of the report.