ARKANSAS POWER & LIGHT COMPANY
POST OFFICE BOX 551 LITTLE ROCK, ARKANSAS 72203 (501) 371-4000

July 25, 1983

1CAN078310

Mr. John T. Collins
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

SUBJECT: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
IE Bulletin 82-02, Action Item 4

Gentlemen:

The following information is provided to satisfy the requirements of IE Bulletin 82-02, "Degradation of Threaded Fasteners in the Reactor Coolant Pressure Boundary of PWR Plants," Action Item 4, for ANO-1.

Item 4.a.: "A statement that Action Item 1 has been completed."

Response: Procedure 1402.130, "Reactor Coolant Pressure Boundary Threaded Fastener Practices," has been implemented as required by Action Item 1. Presently, a copy of this procedure is attached to each job order that involves breaching a reactor coolant pressure boundary as discussed in our letter dated November 8, 1982 (0CAN118209).

In our letter dated November 8, 1982 (0CAN118209), we committed to have in place by May 25, 1983, Procedure 1402.129, "Cleaning and Inspection of Threaded Fasteners at ANO Units 1 & 2." This procedure was approved on April 18, 1983. During a May 3, 1983, telephone conversation between D. Howard (AP&L) and W. J. Collins (NRC), Mr. Collins indicated that the inspections required by IE Bulletin 82-02 were intended to be a one-time requirement. This interpretation obviates Procedure 1402.129; therefore, we withdraw commitments made regarding future inspections per IE Bulletin 82-02, Action Item 2. Inspections of threaded fasteners will continue as appropriate under applicable codes and standards.

IE11

Action Item 1 recommends that "quality assurance measures should also be established for proper selection, procurement, and application of fastener lubricants and injection sealant compounds to minimize fastener susceptibility to SCC environments." Procedures which currently provide controls for lubricants and injection sealants from initiation of procurement to application on specific components as specified by applicable component procedures were delineated in our April 21, 1983, letter (2CANØ483Ø8).

Action Item 4.b: "Identification of the specific connections examined as required by Action Item 2."

Response: Inspections were performed on reactor vessel closure studs, reactor vessel closure nuts, reactor vessel closure washers and bushings, steam generator fasteners (OTSG-A and B), control rod drive mechanisms (CRDM), reactor coolant pump seals, and valves. Discussion for each type of component is contained in the response to Action Item 4.c.

Action Item 4.c: "The results of the examinations performed on the threaded fasteners as required by Action Item 2. If no degradation was observed for a particular connection, a statement to that effect, identification of the connection, and whether the fasteners were examined in place or removed is all that is required. If degradation was observed, the report should provide detailed information."

Response: Reactor Vessel Closure Studs - A total of 63 reactor vessel closure studs were examined by visual inspection and magnetic particle testing. There were no recordable indications.

Reactor Vessel Closure Nuts - A total of 60 reactor vessel closure nuts were examined by visual and magnetic particle tests. One nut (26-208-44) showed a 0.20-inch linear indication under magnetic particle testing. Subsequent examinations failed to indicate a flaw in the area of interest and the nut was judged acceptable. All other nuts yielded no recordable indications.

Reactor Vessel Closure Washers and Bushings - A total of 60 reactor vessel closure washers and bushings were visually inspected. No recordable indications were noted.

OTSG Threaded Fasteners - Threaded fasteners on the OTSG upper and lower manways and upper inspection covers were inspected. One stud on the OTSG-A upper inspection cover showed a 2-inch linear, axial indication. This stud was replaced.

On the OTSG-B upper inspection cover, one stud was found with broken threads. This stud was replaced. Also, one stud and nut on the OTSG-B upper inspection cover were found galled together. Both were replaced. On the lower manway, three studs and nuts were found galled together. These three pairs were removed and replaced.

Control Rod Drive Mechanisms - A best effort examination was made of CRDM threaded fasteners due to access considerations. Bolts at 61 locations were visually inspected in place and no indications were found. Forty-one CRDM

bolts were examined to the requirements of the Bulletin; no recordable indications were found.

Reactor Coolant Pump Seals - Bolts were inspected on reactor coolant pump B, C and D seals. One bolt on the RCP-D (P-32D) seal was found to have a 5.8-inch linear indication in the longitudinal direction. This bolt was replaced.

Valves - Ten valves on the pressurizer, core flood, decay heat removal and low pressure injection systems were inspected. Four studs were found on PSV-1001 with damaged threads in the center of the studs. These were replaced. One stud on PSV-1002 was found with damaged threads; this stud was replaced. Two studs on CV-1050 (decay heat removal) were not removed from the valve body but were volumetrically inspected by ultrasonic testing.

All components were removed for inspection unless stated otherwise. The inspections did not yield any evidence of damage to threaded fasteners due to stress corrosion cracking. All replacement items had an inspection for baseline data performed; all replacement items were found acceptable.

This letter completes actions required by IE Bulletin 82-02 for ANO-1.

Very truly yours,

John R. Marshall
Manager, Licensing

JRM:JK:sl

cc: Mr. Richard C. DeYoung
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, DC 20555

STATE OF ARKANSAS)
) SS
COUNTY OF PULASKI)

I, John R. Marshall, being duly sworn, subscribe to and say that I am Manager, Licensing for Arkansas Power & Light Company; that I have full authority to execute this oath; that I have read the document numbered 1CAN078310 and know the contents thereof; and that to the best of my knowledge, information and belief the statements in it are true.

John R. Marshall

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 25th day of July, 1983.

Sharon Kaye Hendrix
Notary Public

My Commission Expires:
9-19-89