



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
511 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011

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November 26, 1980

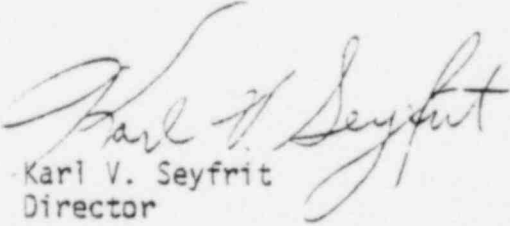
Docket Nos. 50-313
50-368

Arkansas Power and Light Company
ATTN: Mr. William Cavanaugh III
Vice President of Generation
and Construction
P. O. Box 551
Little Rock, Arkansas 72203

Gentlemen:

This IE Information Notice is provided as an early notification of a possible significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

Sincerely,


Karl V. Seyfrit
Director

Enclosures:

1. IE Information Notice
No. 80-29 Supplement No. 1
2. List of Recently Issued
IE Information Notices

cc: James P. O'Hanlon, Plant Manager
Arkansas Nuclear One
P. O. Box 608
Russellville, Arkansas 72801

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SSINS No.: 6835
Accession No.:
8006190028

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D. C. 20555

IE Information Notice No. 80-29
Supplemental No. 1
Date: November 26, 1980
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BROKEN STUDS ON TERRY TURBINE STEAM INLET FLANGE

Description of Circumstances:

In the original Information Notice the failed Terry Turbine steam inlet flange studs were identified as probably manufactured from ASTM-A193-Grade B7 steel. Subsequently, the vendor has informed the NRC that the bolting material used at ANO-1 was AISI C-1117 steel. Independent laboratory analyses by the NRC and Arkansas Power and Light have verified that the bolting material was a re-sulphurized, re-phosphorized cold drawn carbon steel.

From the analysis performed, the failure was caused by high overload which resulted in a primarily brittle transgranular fracture (cleavage) in probably less than 10 cycles. This is consistent with the operating experience (water slugging) and the inherent low toughness of the bolting material used.

Licensees are encouraged to review the materials selected for safety-related bolting applications considering especially those situations where impact loadings could occur. The use of low toughness carbon steel (re-sulphurized free machining plain carbon steel) for bolting is discouraged by the NRC; particularly in situations where possible high loading conditions could be anticipated.

This Information Notice is provided as an early notification of a possibly significant matter that is still under review by the NRC staff. It is expected that recipients will review the information for possible applicability to their facility. No specific action or response is requested at this time. If you have any questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

LISTING OF RECENTLY ISSUED
IE INFORMATION NOTICES

| Information Notice No. | Subject | Date Issued | Issued To |
|------------------------|---|-------------|--|
| 80-37 | Containment Cooler Leaks and Reactor Cavity Flooding at Indian Point Unit 2 | 10/24/80 | All nuclear power facilities holding power reactor Operating Licenses (OLs) or Construction Permits (CPs) |
| 80-38 | Cracking in Charging Pump Casing Cladding | 10/30/80 | All Pressurized Water Reactor Facilities holding power reactor Operating Licenses (OLs) and Construction Permits (CPs) |
| 80-39 | Malfunctions Of Solenoid Valves Manufactured By Valcor Engineering Corporation | 10/31/80 | All light water reactor facilities holding power reactor Operating Licenses (OLs) or Construction Permits (CPs) |
| 80-40 | Excessive Nitrogen Supply Pressure Actuates Safety-Relief Valve Operation to Cause Reactor Depressurization | 11/7/80 | All power facilities with an Operating License (OL) or Construction Permit (CP) |
| 80-41 | Failure of Swing Check Valve in the Decay Heat Removal System at David-Besse Unit No. 1 | 11/10/80 | All power reactor facilities with an Operating License (OL) or Construction Permit (CP) |
| 80-42 | Effect of Radiation on Hydraulic Snubber Fluid | 11/24/80 | All power reactor facilities with an Operating License (OL) or Construction Permit (CP) Enclosure |