



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II

101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

NOV 26 1980

In Reply Refer To:

RII:JPO

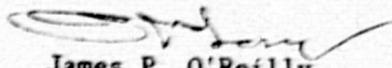
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50-260, 50-296, 50-518
50-519, 50-520, 50-521
50-553, 50-554, 50-327
50-328, 50-390, 50-391
50-566, 50-567

Tennessee Valley Authority
ATTN: H. G. Parris
Manager of Power
500A Chestnut Street Tower II
Chattanooga, TN 37401

Gentlemen:

This 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,


James P. O'Reilly
Director

Enclosures:

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

cc w/encl:

A. M. Qualls, Plant Superintendent
W. R. Dahnke, Project Manager
J. F. Cox, Supervisor, Nuclear
Licensing Section
D. L. Terrill, Project Engineer
H. N. Culver, Chief, Nuclear Safety
Review Staff
H. L. Abercrombie, Plant Superintendent
R. E. Rogers, Project Engineer
J. E. Wills, Project Engineer

cc w/encl: Cont'd.

W. P. Kelleghan, Project Manager
G. G. Stack, Project Manager
J. M. Ballentine, Plant Superintendent
M. J. Burzynski, Project Engineer
C. C. Mason, Acting Plant Superintendent
J. E. Wilkins, Project Manager
D. P. Ormsby, Project Engineer
M. M. Price, Project Manager
R. T. Hathcote, Project Manager
M. A. McBurnett, Project Engineer

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

SSINS No.: 6835
Accession No.:
8006190028

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November 26, 1980

IE Information Notice No. 80-29 (Supplement No. 1): 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.

RECENTLY ISSUED
 IE INFORMATION NOTICES

Information Notice No.	Subject	Date of Issue	Issued to
80-29 Supp. 1	Broken Studs on Terry Turbine Steam Inlet Flange	11/26/80	All LWR facilities holding OL or CP
80-42	Effect of Radiation on Hydraulic Snubber Fluid	11/24/80	All power reactor facilities with OL or CP
80-41	Failure of Swing Check Valve in the Decay Heat Removal System at Davis-Besse Unit No. 1	11/10/80	All power reactor facilities with an OL or CP
80-40	Failure of Swing Check Valve in the Decay Heat Removal System at Davis-Besse Unit No. 1	11/10/80	All power facilities with and OL or CP
80-39	Malfunctions of Solenoid Valves Manufactured by Valcor Engineering Corporation	10/31/80	All light water reactor facilities holding power reactor OLs or CPs
80-38	Cracking in Charging Pump Casing Cladding	10/30/80	All PWR facilities with an OL or CP
80-37	Containment Cooler Leaks and Reactor Cavity Flooding at Indian Point Unit 2	10/24/80	All nuclear power facilities holding power reactor OLs or CPs
80-36	Failure of Steam Generator Support Bolting	10/10/80	All nuclear power reactor facilities holding power reactor OLs or CPs
80-35	Leaking and Dislodged Iodine-124 Implant Seeds	10/10/80	All categories G and G1 medical licensees
80-34	Boron Dilution of Reactor Coolant During Steam Generator Decontamination	9/26/80	All pressurized water reactor facilities holding power reactor OLs
80-33	Determination of Teletherapy Timer Accuracy	9/15/80	All teletherapy (G3) licensees
80-32	Clarification of Certain Requirements for Exclusive-use Shipments of Radioactive Materials	8/12/80	All NRC and agreement state licensees