



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

TERA

November 26, 1980

Those on Attached List:

This IE Information Notice No. 80-29 (Supplement No. 1) 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 this office.

Sincerely,

*James C. Keppler*  
James C. Keppler  
Director

Enclosure: IE Information Notice  
No. 80-29, Supplement No. 1

8012170525

①

Docket No. 50-346

Toledo Edison Company  
ATTN: Mr. Richard P. Crouse  
Vice President  
Nuclear  
Edison Plaza  
300 Madison Avenue  
Toledo, OH 43652

cc w/encl:

T. D. Murray, Station  
Superintendent

Central Files

AD/Licensing

AD/Operating Reactors

AEOD

Resident Inspector, RIII

PDR

Local PDR

NSI

~~VIC~~

Harold W. Kohn, Power

Siting Commission

Helen W. Evans, State of Ohio

RECEIVED  
SERVICES UNIT

1980 NOV 31 AM 9 09

RECEIVED DISTRIBUTION  
SERVICES UNIT

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

SSINS No.: 6835  
Accession No.:  
8006190028  
IN 80-29  
Supplement No. 1

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
80-42	Effect of Radiation on Hydraulic Snubber Fluid	12/20/80	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

\* Operating Licenses or Construction Permits