

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 799 ROOSEVELT ROAD GLEN ELLYN, ILLINOIS 60137

AUG 8, 1980,

State of Illinois
-Department of Public Health
ATTN: Mr. Gary N. Wright, Chief
Division of Nuclear Safety
535 West Jefferson Street
Springfield, IL 62761

Gentlemen:

The enclosed IE Information Notice No. 80-29 titled "Broken Studs on Terry Turbine Steam Inlet Flange" was sent to the licensees listed below on August 7, 1980:

American Electric Power Service Corporation Indiana and Michigan Power Company D. C. Cook 1, 2 (50-315, 50-316)

Cincinnati Gas & Electric Company Zimmer (50-358)

Cleveland Electric Illuminating Company Perry 1, 2 (50-440, 50-441)

Commonwealth Edison Company
Braidwood 1, 2 (50-456, 50-457)
Byron 1, 2 (50-454, 50-455)
Dresden 1, 2, 3 (50-10, 50-237, 50-249)
LaSalle 1, 2 (50-373, 50-374)
Quad-Cities 1, 2 (50-254, 50-265)
Zion 1, 2 (50-295, 50-304)

Consumers Power Company
Big Rock Point (50-155)
Midland 1, 2 (50-329, 50-330)
Palisades (50-255)

Dairyland Power Cooperative LACBWR (50-409)

Detroit Edison Company Fermi 2 (50-341)

Illinois Power Company Clinton 1, 2 (50-461, 50-462) Iowa Electric Light & Power Company
Duane Arnold (50-331)

Northern Indiana Public Service Company Bailly (50-367)

Northern States Power Company Monticello (50-263) Prairie Island 1, 2 (50-282, 50-306)

Public Service of Indiana Marble Hill 1, 2 (50-546, 50-547)

Toledo Edison Company Davis-Besse 1 (50-346)

Union Electric Company Callaway 1, 2 (50-483, 50-486)

Wisconsin Electric Power Company Point Beach 1, 2 (50-206, 50-301)

Wisconsin Public Service Corporation Kewaunee (50-305)

Sincerely,

Haralky & Carrall far Helen Pappas, Chief Administrative Branch

Enclosure: IE Information Notice No. 80-29

cc w/encl:
Mr. D. W. Kane,
Sargent & Lundy
Resident Inspectors, RIII
Central Files
Reproduction Unit NRC 20b
AEOD
Local PDR
NSIC
TIC

SSINS No.: 6835 Accession No.: 8006190028

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

August 7, 1980

IE Information Notice No. 80-29

## BROKEN STUDS ON TERRY TURBINE STEAM INLET FLANGE

When removing the governor and stop valve on the Unit 1 steam driven emergency feedwater pump at Arkansas Nuclear One for repair of a steam leak at the steam inlet flange Arkansas Power and Light discovered that five of the eight studs securing the flange were broken.

The cause of the stud failure is unknown at this time. Metallurgical evaluation of the failed bolting will be performed to identify the mode of failure.

The failed studs are 3/4 in. diameter by 3-1/2 in. long and are thought to be of ASTA-193 grade B7 steel. The turbine flange bolting is generally covered with insulation and not visible for inspection. From the information available, the bolting has not been removed or inspected since installation seven to eight years ago.

The steam driven emergency feedwater pump turbine at ANO-1 is a type G turbine manufactured by the Terry Steam Turbine Company of Hartford, Connecticut. The turbine is rated at 680 BHP and 3560 RPM. The turbine operates at a reduced steam pressure of 270 psig and temperature of 400°F and has previously experienced overspeed trips and vibrations which may have been caused by slugs of water from the piping.

Licensees are encouraged to carefully examine insulation in the flange to turbine casing region for evidence of leakage and consider inspection of the turbine steam inlet flange bolting. Further, during surveillance testing, care should be taken to observe if abnormal vibration or other transients occur which could promote loss of bolting integrity.

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

	IL IN ONDITION		
Information Notice No.	Subject	Date Issued	Issued To
Supplement to 80-06	Notification of Significant Events at Operating Power Reactor Facilities	7/29/80	All holder of Reactor OLs and to near operating license applicants
<b>გე-28</b>	Prompt Reporting Of Required Information To NRC	6/13/80	All applicants for and holders of nuclear power reactor construction
80-27	Degradation of Reactor Coolant Pump Studs	6/11/80	All Pressurized Water Reactor Facilities holding power reactor OLs or CPs
80-26	Evaluation of Contractor QA Programs	6/10/80	All Part 50 Licensees
80-25	Transportation of Pyrophoric Uranium	5/30/80	Material Licensee in Priority/Categories II-A, II-D, III-I and IV-DI; Agreement State Licensees in equivalent categories
80-24	Low Level Radioactive Waste Burial Criteria	5/30/80	All NRC and Agreement State Licensees
80-23	Loss of Suction to to Emergency Feedwater Pumps	5/29/80	All power reactor facilities with an OL or CP
80-22	Breakdown In Contamina- tion Control Programs	5/28/80	All power reactor OLs and near term CPs
80-21	Anchorage and Support of Safety-Related Electrical Equipment	5/16/80	All power reactor facilities with an OL or CP
80-20	Loss of Decay Heat Removal Capability at Davis-Besse Unit 1 While in a Refueling Mode	5/8/80	All light water reactor facilities holding power reactor OLs or CPs