UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

CF

In Reply Refer To:
RII:JPO
50-325, 50-324
50-400, 50-401
50-402, 50-403
50-261

AUG 7 1980

Carolina Power and Light Company
ATTN: J. A. Jones
Senior Executive Vice President and
Chief Operating Officer
411 Fayetteville Street
Raleigh, NC 27602

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
2. List of Recently Issued
Information Notices

cc w/encl:
A. C. Tollison, Jr., Plant Manager

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 ASTM-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.

Enclosure

RECENTLY ISSUED
IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued To
80-29	Broken Studs on Terry Turbine Steam Inlet Flange	8/7/80	All Light Water Reactor facilities holding an OL or CP
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
80-28	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 Contamination 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