



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

September 28, 1981

Gentlemen:

The enclosed IE Information Notice provides early notification of an event that may have safety significance. It is expected that recipients will review the information notice for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Bulletin or Circular will be issued to recommend or request specific licensee actions. If you have any questions regarding this matter, please contact this office.

Sincerely,


Karl V. Seyfrit
Director

Enclosures:

1. IE Information Notice No. 81-30
2. List of Recently Issued
IE Information Notices

IE INFORMATION NOTICE NO. 81-30

Licensee

Arkansas Power and Light Company
Little Rock, Arkansas

Nebraska Public Power District
Columbus, Nebraska

Omaha Public Power District
Omaha, Nebraska

Public Service Company of Colorado
Denver, Colorado

Gulf States Utilities
Beaumont, Texas

Houston Lighting & Power Company
Houston, Texas

Kansas Gas & Electric Company
Wichita, Kansas

Louisiana Power & Light Company
New Orleans, Louisiana

Texas Utilities Generating Company
Dallas, Texas

Facility/Docket Number

Arkansas Nuclear One, Unit 1 & 2
50-313; 50-368

Cooper Nuclear Station
50-298

Fort Calhoun Station
50-285

Fort St. Vrain Generating Station ✓
50-267

River Bend
50-458; 50-459

South Texas Project
50-498; 50-499

Wolf Creek
STN 50-482

Waterford-3
50-382

Comanche Peak Steam Electric Station
50-445; 50-446



IE31
5/11

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

September 28, 1981

IE INFORMATION NOTICE NO. 81-30: VELAN SWING CHECK VALVES

Description of Circumstances:

Recent occurrences with Velan swing check valves are described below.

1. On June 30, 1981, Public Service Electric & Gas Company reported (LER 81-035/01T) that on June 6, 1981, while a leak in the bonnet of a swing check valve in the steam supply to the turbine driven auxiliary feedwater pump at Salem Generating Station, Unit 2, was being repaired, the valve was found to be internally damaged. The valve is a Velan 6-in. swing check valve (Type B14-2114 B-2TS).

The valve disk stud had broken and the valve disk was in the bottom of the valve body. The valve also had cracks in the disk, cracked bushings, a warped hinge pin, and all hinge pin holes were elongated.

The licensee inspected the corresponding swing check valve in the other steam supply line and discovered similar damage. An inspection of the corresponding swing check valves on Unit 1 also revealed similar damage (LER 81-059/01T).

The licensee plans to radiologically examine the valves monthly until a reason for the damage can be determined.

2. On July 31, 1981, Wisconsin Electric Power Company reported (LER 81-010/01T-0) that on July 14, 1981, while a check valve leakage test at the Point Beach Nuclear Plant, Unit 1, was being performed, the check valves closest to the reactor coolant system in the low head safety injection lines were found to be leaking more than allowed by the leakage acceptance criteria. The valves are Velan 6-in. 1500 psig ASA swing check valves (Velan Drawing No. 78704).

The valves were disassembled and the disks were found to be stuck in the full-open position due to interference between the disk nut lockwire (disk wire) and the valve body. The disk nut and its shaft can rotate freely, and, in certain random rotational positions, this interference is likely to occur.

The licensee has replaced the disk wire with a cotter pin that will not cause interference with the valve body for any rotational position. Subsequent inspection of the other check valves in the low head safety injection lines was performed. These valves were found to be closed. The lock wires were nevertheless replaced with cotter pins.

The drawing for the same valve used at the Prairie Island plant was also checked. The drawing (Velan Drawing No. 78704) is annotated to require that the lock wire be tack welded down (so it cannot interfere with the valve body). Because this detail is not uniform on the subject drawing and can vary from plant to plant, a verification and/or changeout on this locking device may be necessary.

Additional occurrences with Velan swing check valves are described in IE Bulletin 79-04, "Incorrect Weights for Swing Check Valves Manufactured by Velan Engineering Corporation," and in IE Information Notice 80-41, "Failure of Swing Check Valve in the Decay Heat Removal System at Davis-Besse Unit No. 1."

This information is provided as notification of a potentially 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 you have 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
81-23	Fuel Assembly Damaged due to Improper Positioning of Handling Equipment	8/4/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-24	Auxiliary Feed Pump Turbine Bearing Failures	8/5/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-25	Open Equalizing Valve of Differential Pressure Transmitter Causes Reactor Scram and Loss of Redundant Safety Signals.	8/24/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-26	Compilation of Health Physics Related Information Items	8/28/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-27	Flammable Gas Mixtures in the Waste Gas Decay Tanks in PWR Plants	9/3/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-28	Failure of Rockwell-Edward Main Steam Isolation Valves	9/3/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)
81-29	Equipment Qualification	9/24/81	All power reactor facilities with an Operating License (OL) or Construction Permit (CP)

Enclosure