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April 27, 1993

Document Control Desk U.S. Nuclear Regulatory Commission Washington, DC 20555

**CERTIFIED MAIL** 

Attention:

**Document Control Desk** 

Subject:

Potential 10 CFR 21 Report Failure of MSIV to Close

Gulf States Utilities - River Bend Nuclear Station

#### Gentlemen:

A&M has become aware of a failure of one (1) MSIV to close at the subject nuclear plant. The failure to close has been determined to be "cocking" of the MSIV poppet in the open position in the valve body at the bottom rib.

This letter will provide notification that the subject failure is being reported to US BWR and PWR Nuclear Plants having A&M MS!V's of similar design. The complete list of plants notified is attached.

The exact cause of the failure is being investigated. Indications are that the valve poppet, in the open position, vibrates and/or rotates as a result of fluid-borne disturbances or pipeline vibrations. This motion causes wear of the lower guide rib.

In the case of the MSIV at River Bend, this wear appears to have been sufficient to allow the poppet to engage the worn area of the lower guide rib in the valve body and fail to close.

In addition, the potential exists that clearances and alignment between parts may have contributed to this wear. (July 272 595 En 11 272 [E19

Subject:

Failure of MSIV to Close

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This notification is being provided so that each nuclear plant can evaluate whether this failure to close is reportable under 10 CFR Part 21.

Certain MSIV's have been modified to preclude the damage resulting from the above mentioned vibration.

I trust the information provided herein is acceptable.

Please advise if we can supply additional information.

Very truly yours,

ATWOOD & MORRILL CO., INC.

8. N. Shields

Vice President Engineering

Attachment

# MAIN STEAM ISOLATION VALVES April 27, 1993 Page 1 of 3

## MANUFACTURED BY

## ATWOOD & MORRILL CO., INC.

## PWR UNITS

Utility	Station	Qu	antity and Valve Size
Duke Power Co.	Catawba 1 & 2	8	34-inch
Duke Power Co.	McGuire 1 & 2	8	32-inch
Houston Lighting & Power	South Texas Project 1 & 2	8	32-inch
South Carolina Elec & Gas	Virgil Summer 1	3	32-inch
TVA	Bellefonte 1 & 2	8	32-inch
TVA	Sequoyah 1 & 2	8	32-inch
TVA	Watts Barr 1 & 2	8	32-inch
Duquesne Light	Beaver Valley 2	3	28-inch

NOTE: All valves are wye pattern unless otherwise specified.

## MAIN STEAM ISOLATION VALVES April 27, 1993 Page 2 of 3

## HANUFACTURED BY

## ATWOOD & MORRILL CO., INC.

## BWR UNITS

Utility	Station	Quantity and Valve Size
Boston Edison	Pilgrim 1	8 20-inch
Cleveland Elec. Illuminating	Perry 1 & 2	16 26-inch
Detroit Edison	Enrico Fermi 2	8 26-inch
Georgia Power	Hatch 1	8 24-inch
Gulf States Util.	River Bend 1	8 24-inch
Illinois Power	Clinton 1	8 24-inch
GPU Nuclear	Oyster Creek 1	4 24-inch
Mississippi Power & Light	Grand Gulf 1 & 2	16 28-inch
Niagara Mohawk Power Corp.	Nine Mile Point 1	<pre>2 24-inch angle pattern 2 24-inch</pre>
Northern States Power Co.	Monticello	8 18-inch
Pennsylvania Power & Light	Susquehanna 1 & 2	16 26-inch
Philadelphia Electric	Limerick 1 & 2	16 26-inch
Philadelphia Electric	Peach Bottom 2 & 3	16 26-inch

## MAIN STEAM ISOLATION VALVES

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## MANUFACTURED BY

## ATWOOD & MORRILL CO., INC.

## BWR UNITS (cont'd)

Utility	Station	Quantity and Valve Size
Public Service Electric & Gas	Hope Creek 1 & 2	16 26-inch Unit 2 cancelled
TVA	Browns Ferry 1, 2 & 3	24 26-inch
TVA	Hartsville A1, A2, B1 & B2	32 26-inch Units B1 & B2 cancelled
TVA	Phipps Bend 1 & 2	16 26-inch Units cancelled

S. N. Shields, V.P. Engineering Atwood & Morrill Co., Inc.