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10 January 1995

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C., 20555

Subject: 10CFR, Part 21, Notification No. CFRN 94-03

Gentlemen:

*An audit of activities relative to Title 10 of the Code of Federal Regulations, Part 21, for the 1994 calendar year has recently been completed. The audit was unable to definitively determine whether Attachment A, Location of Equipment, had been sent with Notification No. CFRN 94-03 submitted on 25 October, 1994.*

*BW/IP International, Inc., believes the Attachment was correctly included with the Notification. However, there was no specific reference to Attachment A contained in the text. All utilities with valves effected by this Notification were individually informed of the filing and sent a copy of the Notification on 29 October, 1994, in accordance with our 10CFR, Part 21, procedure.*

*To assure that the official identification requirement has indeed been satisfied for this Notification, Supplement 1, attached, adds a reference to Attachment A to the text and transmits the location of the affected valves as required by 10CFR, Part 21.*

Very truly yours,

D.A. Gibson  
Manager Nuclear Products Operations

Attach.

cc: Mr. F. Costanzo, Manager of Engineering  
Mr. D. Lattimore, Manager of Quality  
Mr. K. Huber, Technical Liaison  
Mr. W. Klenner, Product Manager  
Mr. G. Sausman, Field Service Operations

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NOTIFICATION OF A REPORTABLE  
ISSUE PURSUANT TO 19 CFR 21

DATE: 10 January 1995

TO: U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

**NAME AND ADDRESS OF INDIVIDUAL INFORMING THE COMMISSION:**

Mr. David Gibson  
BW/IP International, Inc.  
Pump Division  
2300 East Vernon Avenue  
Vernon, CA 90058  
(213) 587-6171

For Technical Information Contact: Dr. Kent Huber  
BW/IP Evaluation No. CFR 93-008

**IDENTIFICATION OF THE FACILITY, THE ACTIVITY, OR THE BASIC COMPONENT SUPPLIED FOR SUCH FACILITY OR ACTIVITY WITHIN THE UNITED STATES WHICH FAILS TO COMPLY OR CONTAINS A DEFECT:**

Basic Component: 6-inch 900# Motor Operated Y-Globe Valve

**IDENTIFICATION OF THE FIRM SUPPLYING THE BASIC COMPONENT WHICH FAILS TO COMPLY OR CONTAINS A DEFECT:**

BW/IP International, Inc.  
Pump Division  
Successor to:

BW/IP International, Inc  
Fluid Controls Division  
Successor to:

Borg-Warner Nuclear Valve Division  
7500 Tyrone Avenue  
Van Nuys, CA 91409

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**NATURE OF THE DEFECT OR FAILURE TO COMPLY AND THE SAFETY HAZARD WHICH IS CREATED OR COULD BE CREATED BY SUCH DEFECT OR FAILURE TO COMPLY:**

Design calculations of stem thrust required to close the valve were based on the differential pressure acting on the seat area of the valve. Quantitative measurements of the referenced valve as part of the EPRI MOV Performance Prediction Program in response to NRC Generic Letter 89-10, showed that, when flow through the valve exceeds 5 fps, the stem thrust should be based on the differential pressure acting across the valve guide area. Required stem thrust using the valve guide area can be more than double the value calculated using the seating area.

The calculated forces are used to size the valve actuator and motor and to set the actuator torque switch. If the stem thrust required to close the valve against a differential pressure is higher than the design value, the valve may fail to perform its intended safety function.

**THE DATE ON WHICH THE INFORMATION OF SUCH DEFECT OR FAILURE TO COMPLY WAS OBTAINED:**

EPRI completed testing of the referenced valve on 18 October 1993 and notified BW/IP of the findings on 18 October 1993.

BW/IP initiated an evaluation to determine if a reportable deficiency existed. Prior to completing this evaluation, EPRI reported the dependence of the stem thrust on flow velocity.

**IN THE CASE OF A BASIC COMPONENT WHICH CONTAINS A DEFECT OR FAILS TO COMPLY, THE NUMBER AND LOCATION OF ALL SUCH COMPONENTS IN USE AT, SUPPLIED FOR, OR BEING SUPPLIED FOR ONE OR MORE FACILITIES OR ACTIVITIES SUBJECT TO THE REGULATIONS:**

This Notification applies to all sizes and classes of motor operated Borg-Warner Y-Globe valves. See Attachment A for specific station locations. \*

**THE CORRECTIVE ACTION WHICH HAS, IS BEING, OR WILL BE TAKEN: THE NAME OF THE INDIVIDUAL OR ORGANIZATION RESPONSIBLE FOR THE ACTION: AND THE LENGTH OF TIME THAT HAS BEEN OR WILL BE TAKEN TO COMPLETE THE ACTION:**

If not already done, utilities should review the set-point calculations on all installed Borg-Warner Y-globe valves and take corrective actions as appropriate.

BW/IP has revised the operator selection criteria for new products.

**ANY ADVICE RELATED TO THE DEFECT OF FAILURE TO COMPLY ABOUT THE FACILITY, ACTIVITY, OR BASIC COMPONENT THAT HAS BEEN, IS BEING, OR WILL BE GIVEN TO PURCHASERS:**

BW/IP should be contacted for details and assistance.

LOCATION OF EQUIPMENT

1. Florida Power & Light Co.; St. Lucie Station
2. Texas Utilities Generating Co.; Comanche Peak Station
3. Washington Public Power Supply System; WNP-3 SATSOP
4. Tennessee Valley Authority; Watts Bar, Browns Ferry Stations
5. Entergy Operations; Arkansas Power & Light; ANO-1
6. Arizona Public Service Co.; Palo Verde Station
7. Cleveland Electric Illuminating Co.; Perry Nuclear Station
8. Duke Power Company; Catawba, McGuire Station