



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 1217
ATLANTA, GEORGIA 30303

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In Reply Refer To:

- RII:JPO
- 50-438, 50-439
- 50-259, 50-260
- 50-296, 50-518
- 50-519, 50-520
- 50-521, 50-553
- 50-554, 50-327
- 50-328, 50-390
- 50-391, 50-566
- 50-567

Tennessee Valley Authority
Attn: Mr. N. B. Hughes
Manager of Power
830 Power Building
Chattanooga, Tennessee 37401

Gentlemen:

The enclosed Circular 78-15, is forwarded to you for information.

If there are any questions related to your understanding of the suggested actions, please contact this office.

Sincerely,

Dudley Thompson
Deputy Director

Enclosures:

- 1. IE Circular No. 78-15
- 2. List of IE Circulars
Issued in 1978

to 2
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Tennessee Valley Authority

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cc w/encl:

J. E. Gilleland
Assistant Manager of Power
830 Power Building
Chattanooga, Tennessee 37401

W. W. Aydelott, Project Manager
Bellefonte Nuclear Plant
P. O. Box 2000
Hollywood, Alabama 35752

J. F. Cox
400 Commerce Street
W9D199
Knoxville, Tennessee 37902

J. G. Dewease, Plant Superintendent
Box 2000
Decatur, Alabama 35602

R. T. Hathcote, Project Manager
Hartsville Nuclear Plant
P. O. Box 2000
Hartsville, Tennessee 37074

G. G. Stack, Project Manager
Sequoyah Nuclear Plant
P. O. Box 2000
Daisy, Tennessee 37319

J. M. Ballentine
Plant Superintendent
Sequoyah Nuclear Plant
P. O. Box 2000
Daisy, Tennessee 37319

T. B. Northern, Jr.
Project Manager
Watts Bar Nuclear Plant
P. O. Box 2000
Spring City, Tennessee 37381

W. P. Kelleghan, Project Manager
Phipps Bend Nuclear Plant
P. O. Box 2000
Surgoinville, Tennessee 37873

M. M. Price, Project Manager
Yellow Creek Nuclear Plant
P. O. Box 2000
Iuka, Mississippi 38852

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

July 20, 1978

IE Circular No. 78-15

TILTING DISC CHECK VALVES FAIL TO CLOSE WITH GRAVITY IN VERTICAL POSITION

The Anchor/Darling Valve Company reported to the NRC on May 23, 1978 a condition at the San Onofre Nuclear Plant where an 8" - 1500# tilting disk check valve failed to close with gravity because it was installed in a vertical rather than a horizontal pipeline. The valve disc was counter weighted to close with the force of gravity when installed in a horizontal pipe. The manufacturer did not determine the reverse flow necessary to close the improperly installed valve. The check valve is located in the Low Pressure Safety Injection System as the first valve inside the containment and may not have closed as required to maintain the containment integrity.

Anchor/Darling has notified all purchasers of such valves and indicated to them possible implications of vertical installations.

It should be noted that similar problems may arise with tilting disc check valves from other manufacturers.

Tilting disc checkvalves can be designed for either horizontal or vertical piping but not for both. Improperly installed tilting disc check valves will not function properly.

All holders of operating licenses or construction permits should be aware of the potential for malfunction of safety-related systems caused by improperly positioned tilting disc check valves. Consideration should be given to the importance of verifying that all such valves in critical systems are installed only in the orientation specified by the manufacturer.

No written response to this circular is required.

If you require additional information regarding this matter, contact the Director of the Regional office.

LISTING OF IE CIRCULARS ISSUED IN 1978

Circular No.	Subject	Date of Issue	Issued To
78-01	Loss of Well Logging Source	4/5/78	All Holders of Well Logging Source Licenses
78-02	Proper Lubricating Oil for Terry Turbines	4/20/78	All Holders of Reactor OLs or CPs
78-03	Packaging Greater Than Type A Quantities of Low Specific Activity Radioactive Material for Transport	5/12/78	All Holders of Reactor OLs, CPs, Fuel Cycle, Priority I Material and Waste Disposal Licenses
78-04	Installation Error That Could Prevent Closing of Fire Doors	5/15/78	All Holders of Reactor OLs or CPs
78-05	Inadvertent Safety Injection During Cooldown	5/23/78	All Holders of Reactor OLs or CPs
78-06	Potential Common Mode Flooding of ECCS Equipment Rooms at BWR Facilities	5/23/78	All Holders of Reactor OLs or CPs
78-07	Damaged Components of a Bergen-Paterson Series 25000 Hydraulic Test Stand	5/31/78	All Holders of Reactor OLs or CPs
78-08	Environmental Qualification of Safety Related Equipment at Nuclear Power Plants	5/31/78	All Holders of Reactor OLs or CPs
78-09	Arcing of General Electric Company Size 2 Contactors	6/5/78	All Holders of CPs

IE Circular No. 78-15
July 20, 1978

LISTING OF IE CIRCULARS ISSUED IN 1978

Circular No.	Subject	Date of Issue	Issued to
78-10	Control of Sealed Sources Used in Radiation Therapy	6/14/78	All Medical Licensees in Categories G and G1
78-11	Recirculation M-G Set Overspeed Stops	6/15/78	All Holders of BWR OLs or CPs
78-12	HPCI Turbine Control Valve Lift Rod Bending	6/30/78	All Holders of BWR OLs or CPs for plants with HPCI Terry Turbine
78-13	Inoperability of Multiple Service Water Pumps	7/10/78	All Holders of Reactor OLs and CPs except for plants located in: AL, AK, CA, FL, GA, LA, MS, SC
78-14	HPCI Turbine Reversing Chamber Hold Down Bolting	7/12/78	All Holders of BWR OLs or CPs for plants with a HPCI Terry Turbine excepting Duane Arnold and Monticello

Enclosure
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