

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



IE31 51

Gentlemen:

The enclosed information notice provides early notification of an event that may have safety significance. Accordingly, you should review the information notice for possible applicability to your facility.

No specific action or response is requested at this time. If you have questions regarding this matter, please contact this office.

Sincerely,

James P. C'Reillø

Regional Administrator

Enclosures:

- 1. IE Information Notice No. 81-36
- 2. List of Recently Issued
 - IE Information Notices

Distribution for IE Information Notice 81-36

December 3, 1981

Addresses

- Alabama Power Company Attn: R. P. McDonald Vice President-Nuclear Generation Post Office Box 2641 Birmingham, AL 35291
- Carolina Power and Light Company Attn: J. A. Jones Senior Executive Vice President and Chief Operating Officer
 411 Fayetteville Street Raleigh, NC 27602
- Duke Power Company Attn: L. C. Dail, Vice President Design Engineering P. O. Box 33189 Charlotte, NC 28242
- 4. Duke Power Company Attn: W. O. Parker, Jr. Vice President, Steam Production
 P. O. Box 2178 Charlotte, NC 28242
- Florida Power and Light Company Attn: R. E. Uhrig, Vice President Advanced Systems and Technology P. O. Box 529100 Miami, FL 33152

Florida Power Corporation
 Attn: J. A. Hancock, Assistant
 Vice President Nuclear Operations
 P. O. Box 14042, Mail Stop C-4
 St. Petersburg, FL 33733

(INFORMATION)

In Reference To

50-348 Farley Unit 1 50-364 Farley Unit 2

50-325 Brunswick Unit 1 50-324 Brunswick Unit 2 50-400 Harris Unit 1 50-401 Harris Unit 2 50-402 Harris Unit 3 50-403 Harris Unit 4 50-261 Robinson Unit 2

50-491 Cherokee Unit 1 50-492 Cherokee Unit 2 50-493 Cherokee Unit 3 50-488 Perkins Unit 1 50-489 Perkins Unit 2 50-490 Perkins Unit 3

50-369 McGuire Unit 1 50-370 McGuire Unit 2 50-269 Oconee Unit 1 50-270 Oconee Unit 2 50-287 Oconee Unit 3 50-413 Catawba Unit 1 50-414 Catawba Unit 2

50-335 St. Lucie Unit 1 50-389 St. Lucie Unit 2 50-250 Turkey Point Unit 3 50-251 Turkey Point Unit 4

50-302 Crystal River Unit 3

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- Georgia Power Company Attn: J. H. Miller, Jr. Executive Vice President 270 Peachtree Street Atlanta, GA 30303
- Mississippi Power and Light Company Attn: N. L. Stampley Vice President of Production P. O. Box 1640 Jackson, MS 39205
- 9. Offshore Power Systems Attn: A. R. Collier, President P. O. Box 8000 Jacksonville, FL 32211
- 10. South Carolina Electric and Gas Company 50-395 Summer Unit 1 Attn: T. C. Nichols, Jr., Vice President Power Production and System Operations P. O. Box 764 Columbia, SC 29218
- 11. Tennessee Valley Authority Attn: H. G. Parris Manager of Power 500A Chesthut Street Tower II Chattanooga, TN 37401

12. Virginia Electric and Power Company Attn: R. H. Leasburg Vice President Nuclear Operations P. O. Box 26666 Richmond, VA 23261

In Reference To

50-321 Hatch Unit 1 50-366 Hatch Unit 2 50-424 Vogtle Unit 1 50-425 Vogtle Unit 2 50-416 Grand Gulf Unit 1 50-417 Grand Gulf Unit 2 50-437 FNP 1-8 50-438 Bellefonte Unit 1 50-439 Bellefonte Unit 2 50-259 Browns Ferry Unit 1 50-260 Browns Ferry Unit 2 50-296 Browns Ferry Unit 3 50-518 Hartsville Unit 1 50-519 Hartsville Unit 2 50-520 Hartsville Unit 3 50-521 Hartsville Unit 4 50-553 Phipps Bend Unit 1 50-554 Phipps Bend Unit 2 50-327 Sequoyah Unit 1 50-328 Sequoyah Unit 2 50-390 Watts Bar Unit 1 50-391 Watts Bar Unit 2 50-566 Yellow Creek Unit 1 50-567 Yellow Creek Unit 2 50-338 North Anna Unit 1 50-339 North Anna Unit 2 50-404 North Anna Unit 3 50-280 Surry Unit 1 50-281 Surry Unit 2

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(INFORMATION)

Addresses

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In Reference To

- 13. Institute of Nuclear Power Operation Attn: R. W. Pack Lakeside Complex 1820 Waterplace Atlanta, GA 20339
- 14. Southern Company Services, Inc. ATTN: O. Batum, Manager Nuclear Safety & Licensing Department P. O. Box 2625 Birmingham, AL 35202
- 15. Department of Energy Clinch River Breeder Reactor Plant Project Office ATTN: Chief, Quality Improvement P. O. Box U Oak Ridge, TN 37830
- EDS, Nuclear, Inc. ATTN: E. H. Verdery 330 Technology Park/Atlanta Norcross, GA 30092

SSINS No.: 6835 Accession No.: 8107230039 IN 81-36

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

December 3, 1981

IE INFORMATION NOTICE NO. 81-36: REPLACEMENT DIAPHRAGMS FOR ROBERTSHAW VALVE (MODEL NO. VC-210)

Description of Circumstances:

The Georgia Power Company's Hatch 1 facility experienced problems in early July 1981 with the Robertshaw Diaphragm Control Valve (Model No. VC-210) installed in the Terry Turbine Mechanical Hydraulic Overspeed Complex which contributed toward unreliability of the High Pressure Coolant Injection (HPCI) system. During a routine inspection of the valve, it was discovered that the diaphragm supplied by Robertshaw was enlarged and leaking oil. The diaphragm was replaced on July 12, 1981 and failed again on July 21 and August 11, 1981. The cause of the failures was determined to be incompatibility of a neoprene replacement diaphragm, supplied by Robertshaw, with oil in the hydraulic overspeed complex. Following the August 11, 1981 failure, a fabric-reinforced Buna-N diaphragm was installed. The diaphragm satisfied the following service conditions:

- . Compatible with the turbine oil recommended by the turbine vendor
- . 40 psig maximum service pressure
- . 250°F maximum service temperature
- . 1000 minimum cycles

Replacement Buna-N diaphragms are available from Terry Corporation or through the General Electric Company. An order placed directly with Robertshaw will result in the supply of a thin, non-reinforced neoprene diaphragm with reduced duty cycle life because the valves are supplied for other applications. We understand that the reinforced Buna-N diaphragm should be identified as <u>Terry piece No. 890151A01</u> on the purchase order. Also, if a replacement Robertshaw Valve (Model No. VC-210) is ordered (Terry piece No. 107282A01), it is necessary to <u>separately order</u> the reinforced diaphragm (Terry piece No. 890151A01). The diaphragm is shown in the Terry HPCI Instruction Manual, Section 15-M-14, Instruction for Robertshaw Diaphragm Control Valve No. VC-210, Figure 14, Part 4.

This information notice on replacing diaphragms is being provided as an early notification of a potentially significant matter. This experience with diaphragm failures serves as a reminder that a single material change may adversely affect safety system reliability. Such a change may reduce service life or negate environmental qualification. Each component or material change in a system important to safety should be carefully reviewed in order to assure system operability. Recipients should review the information for possible applicability to their facilities.

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No written response to this information notice is required. For additional information regarding this matter, contact the Regional Administrator of the appropriate NRC Regional Office.

Attachment: Recently issued IE Information Notices

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Attachment IN 81-36 December 3, 1981

RECENTLY ISSUED IE INFORMATION NOTICES

Information	enne i de Marcollino en en en al de servicio de la constante en de servicio de servicio de servicio de servici	Date of	
Notice No.	Subject	Issue	Issued to
81-35	Check Valve Failures	12/2/81	All power reactor facilities with an OL or CP
81-34	Accidental Actuation of Prompt Public Notification System	11/16/81	All power reactor facilities with an OL or CP
81-33	Locking Devices Inadequately Installed on Main Steam Isolation Valves	11/9/81	All power reactor facilities with an OL or CP
81-32	Transfer and/or Disposal of Spent Generators	10/23/81	All medical licensee
81-31	Failure of Safety Injection Valves to Operate Against Differential Pressure	10/8/81	All power reactor facilities with an UL or CP
81-30	Velan Swing Check Valves	9/28/81	All power reactor facilities with an OL or CP
81-29	Equipment Qualification Testing Experience	9/23/81	All power reactor facilities with an OL or CP
81-28	Failure of Rockwell-Edward Main Steam Isolation Valves	9/3/81	All power reactor facilities with an OL or CP
81-27	Flammable Gas Mixtures in the Waste Gas Decay Tanks in PWR Plants	9/3/81	All power reactor facilities with an OL or CP
81-26	Compilation of Health Physics Related Information Items	9/3/81	All power reactor facilities with an OL or CP
81-25	Open Equalizing Valve of Differential Pressure Transmitter Causes Reactor Scram and Loss of Redundant Safety Signals	8/21/81	All power reactor facilities with an OL or CP

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OL = Operating License CP = Construction Permit