

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

Gentlemen:

The enclosed circular is forwarded for your information. Your review of this matter and correction of any identified problems is expected before licensing of your plant. If you have questions related to this matter, please contact this office.

Sincergly, Martin for James P. O'Reilly

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Director

Enclosures: 1. IE Circular No. 81-09 2. List of Recently Issued IE Circulars Distribution for IE Circular No. 81-09

July 10, 1981

# Addresses

## In Reference To

- Alabama Power Company Attn: R. P. McDonald Vice President-Nuclear Generation Post Office Box 2641 Birmingham, AL 35291
- 2. Carolina Power and Light Company Attn: J. A. Jones Senior Executive Vice President and Chief Operating Officer 411 Faye teville Street Raleigh, NC 27602
- 3. 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 50-348 Farley Unit 1 50-364 Farley Unit 2

50-325 Brunswick Unit 1 50-324 Brunswick Unit 2 50-261 Robinson Unit 2

50-369 McGuire Unit 1 50-269 Oconee Unit 1 50-270 Oconee Unit 2 50-287 Oconee Unit 3

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

50-302 Crystal River Unit 3

(ACTION)

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# Addresses

 Georgia Power Company Attn: J. H. Miller, Jr. Executive Vice President 270 Peachtree Street Atlanta, GA 30303

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- Tennessee Valley Authority Attn: H. G. Parris Manager of Power
  500A Chestnut Street Tower II Chittanooga, TN 37401
- Virginia Electric and Power Company Attn: J. H. Ferguson Executive Vice President-Power P. O. Box 26666 Richmond, VA 23261

# (ACTION)

#### In Reference To

50-321 Hatch Unit 1 50-366 Hatch Unit 2

50-259 Browns Ferry Unit 1 50-260 Browns Ferry Unit 2 50-296 Browns Ferry Unit 3 50-327 Sequoyah Unit 1 50-328 Sequoyah Unit 2

50-338 North Anna Unit 1 50-339 North Anna Unit 2 50-280 Surry Unit 1 50-281 Surry Unit 2 Distribution for IE Circular No. 81-09

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#### Addresses

- 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
- 3. 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
- Georgia Power Company Attn: J. H. Miller, Jr. Executive Vice President 270 Peachtree Street Atlanta, GA 30303

#### (INFORMATION)

#### In Reference To

- 50-400 Harris Unit 1 50-401 Harris Unit 2 50-402 Harris Unit 3 50-403 Harris Unit 4
- 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
- 50-370 McGuire Unit 2 50-413 Catawba Unit 1 50-414 Catawba Unit 2

50-389 St. Lucie Unit 2

50-424 Vogtle Unit 1 50-425 Vogtle Unit 2 IE Circular No. 81-09

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 Mississippi Power and Light Company Attn: N. L. Stampley Vice President of Production
P. O. Box 1640 Jackson, MS 39205

- South Carolina Electric and Gas Company 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 Chestnut Street Tower II Chattanooga, TN 37401

12. Virginia Electric and Power Company Attn: J. H. Ferguson Executive Vice President-Power P. O. Box 26666 Richmond, VA 23261 (INFORMATION)

50-416 Grand Gulf Unit 1 50-417 Grand Gulf Unit 2

50-395 Summer Unit 1

50-438 Beliefonte Unit 1 50-439 Bellefonte Unit 2

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 50-390 Watts Bar Unit 2 50-391 Watts Bar Unit 2 50-566 Yellow Creek Unit 1 50-567 Yellow Creek Unit 2

50-404 North Anna Unit 3

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- Institute of Nuclear Power Operation Attn: R. W. Pack Lakeside Complex 1820 Waterplace Atlanta, GA 30339
- 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
- 16 EDS, Nuclear, Inc. Attn: E. H. Verdery 330 Technology Park/Atlanta Norcross, GA 30092

# RECENTLY ISSUED IE CIRCULARS

Circular No.	Subject	Date of Issue	Issued to
81-10	Steam Voiding in the Reactor Coolant System During Decay Heat Removal Cooldown	7/2/81	All power reactor facilities with an OL or CP
81-08	Foundation Materials	5/29/81	All power reactor facilities with an OL or CP
81-07	Control of Radiactiviely Contaminated Material	5/14/81	All power reactor facilities with an OL or CP
81-06	Potential Deficiency Affecting Certain Foxboro 20 to 50 Milliampere Transmitters	4/14/81	All power reactor facilities with an OL or CP
81-05	Self-Aligning Rod End Bushings for Pipe Supports	3/31/81	All power reactor facilities with an OL or CP
81-04	The Role of Shift Technical Advisors and Importance of Reporting Operational Events	4/30/81	All power reactor facilities with an OL or near-term OL
81-03	Inoperable Seismic Monitoring Instrumentation	3/2/81	All power reactor facilities with an OL or CP
81-02	Performance of NRC-Licensed Individuals While on Duty	2/9/81	All power reactor facilities (researc & test) with an OL or CP
81-01	Design Problems Involving Indicating Pushbutton Switches Manufactured by Honeywell Incorporated	1/23/81	All power reactor facilities with an OL or CP
80-25	Case Histories of Radiography Events	12/5/80	All radiography licensees

OL = Operating Licenses CP = Construction Permit

SSIN No.: 6830 Access No.: 810330373 IEC 81-09

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

### July 10, 1981

# IE Circular No. 81-09: CONTAINMENT EFFLUENT WATER THAT BYPASSES RADIOACTIVITY MONITOR

#### Description of Circumstances:

At Indian Point Units 2 and 3 and at H. B. Robinson Unit 2, licensee reviews of service water systems have identified unmonitored effluent paths from containment. Although containment cooler water effluent is monitored, containment cooler fan motor cooling water bypasses the monitors by joining the containment cooler water effluent downstream of the radiation monitoring equipment. This represents a potential unmonitored release path if the containment is at design pressure due to a design basis accident (DBA) and if leaks are present in the fan motor cooler system. Similar designs may exist at other plants. Appropriate monitoring of direct discharges (from containment to the environment following a DBA) having the potential to exceed the limits specified in 10 CFR Part 20 is required.

#### Recommended Actions:

- 1. All water system effluents that are not automatically isolated by a highcontainment-pressure containment isolation signal and that flow directly to the environment from containment should be reviewed to determine whether or not a pathway exists for "significant" unmonitored discharge. A "significant" discharge, for purposes of this circular, is a discharge where projected concentrations in unrestricted areas are likely to exceed the concentrations listed in 10 CFR Part 20, Appendix B, Table II, column 2, with the containment at design pressure due to a design basis accident and with maximum credible leakage, such as a single completely severed cooler tube, assumed to be present in the water system inside containment. You may take credit for design pressure in the water system being higher than containment design pressure only for cases where neither single failures, nor operation in degraded modes as permitted by Technical Specifications under a limiting condition of operation (LCO), are likely to result in operation of the water system at water pressures lower than the containment design pressure.
- 2. All water system effluents that are not automatically isolated by a highcontainment-pressure containment isolation signal and that flow directly to the environment from containment should be reviewed to determine whether or not any "significant" radioactive discharge can be isolated once it is detected. The review should include evaluation of the capability of the system to be isolated without interruption of any safety-related functions. Isolation of the system's inlet as well as its discharge may be required

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to prevent radioactive discharge through the inlet piping to the inlet piping of a parallel system and/or to the environment.

 Corrective actions to install detection and isolation methods that provide performance consistent with Technical Specification requirements should be initiated for any "significant" unmonitored and/or unisolable discharge pathways.

Although no written response to this circular is requested, a report and corrective actions may be required by applicable Technical Specifications in the event an unmonitored and/or unisolable effluent pathway is identified. If you desire additional information regarding this matter, please contact the appropriate IE Regional Office.

Attachment: Recently Issued IE Circulars