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

NOV 16 1979

In Reply Refer To:
~~RII:JPO~~
50-395

South Carolina Electric and Gas Company
Attn: T. C. Nichols, Jr., Vice President
Power Production and System
Operations
P. O. Box 764
Columbia, South Carolina 29218

Gentlemen:

The enclosed IE Circular No. 79-22, is forwarded to you for information. No written response is required. Should you have any questions related to your understanding of this matter, please contact this office.

Sincerely,

James P. O'Reilly
Director

Enclosures:
1. IE Circular No. 79-22
2. List of IE Circulars Issued
In Last Six Months

1434 342

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7911290 153

cc w/encl:
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7908220142

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

November 16, 1979

IE Circular No. 79-22

STROKE TIMES FOR POWER OPERATED RELIEF VALVES

Description of Circumstances:

Most PWRs utilize power-operated relief valves (PORVs) to prevent overpressurization of the reactor coolant system when the reactor is at low temperature. On April 13, during a pressure transient at Robinson 2, the PORVs did not function as rapidly as intended. The estimated stroke time for the PORVs was three to five seconds whereas the intended stroke time is two seconds. As a result, the pressure transient did approach a pressure limit which is based on nil ductility considerations. Prior to April 13, the PORVs had not been used or exercised since February, 1978, when they had been repacked and stroked. Although the valve stems were scored at that time, stroke times were satisfactory. The licensee and the valve manufacturer believe that the scored stems and the 14-month interval without exercise resulted in poor performance of the PORVs.

Recommended Actions for Licensees' Consideration:

All holders of PWR operating licenses or construction permits should be aware of the potential problem of the type discussed above. Because of the generic implications in this matter, it is recommended that both licensees of operating facilities and holders of construction permits conduct a review to determine if periodic surveillance of PORVs is necessary to assure that the PORVs will perform as intended.

No written response to this Circular is required. If you require additional information regarding these matters, contact the Director of the appropriate NRC Regional Office.

1434 344

LISTING OF IE CIRCULARS ISSUED IN LAST SIX MONTHS

Circular No.	Subject	Date of Issued	Issued to
79-22	Stroke Times for Power Operated Relief Valves	11/16/79	All Power Reactor Operating facilities and all facilities having a CP
79-21	Prevention of Unplanned Releases of Radioactivity	10/19/79	All Power Reactor Operating facilities and all facilities having a CP
79-20	Failure of GTE Sylvania Relay, Type PM Bulletin 7305, Catalog 5U12-11-AC With A 120V AC Coil	9/24/79	All Power Reactor Operating facilities and all utilities having a CP
79-19	Loose Locking Devices on Ingersoll-Rand Pumps	9/13/79	All Power Reactor Operating facilities and all utilities having a CP
79-18	Proper Installation of Target Rock Safety-Relief Valves	9/10/79	All Power Reactor Licensees with a CP and/or OL
79-17	Contact Problem in SB-12 Switches on General Electric Company Metalclad Circuit Breakers	8/14/79	All Power Reactor Licensees with a CP and/or OL
79-16	Excessive Radiation Exposures To Members Of The General Public And A Radiographer	8/16/79	All Radiography Licensees
79-15 (Correction)	Bursting of High Pressure Hose and Malfunction of Relief Valve "O" Ring in Certain Self-Contained Breathing Apparatus	8/22/79	All Research Reactors
79-15	Bursting of High Pressure Hose and Malfunction of Relief Valve "O" Ring in Certain Self-Contained Breathing Apparatus	8/8/79	All Materials Priority I, Fuel Cycle and Operating Power Reactor Licensees

LISTING OF IE CIRCULARS ISSUED IN LAST SIX MONTHS

Circular No.	Subject	Date of Issue	Issued to
79-14	Unauthorized Procurement and Distribution of XE-133	7/13/79	All Medical Licensees except Teletherapy Medical Licensees and to all Radiopharmaceutical Suppliers
79-13	Replacement of Diesel Fire Pump Starting Contactors	7/13/79	All Power Reactor Operating Facilities and all Utilities having a CP
79-12	Potential Disel Generator Turbocharger Problem	6/28/79	All Power Reactors Operating Facilities and all Utilities having a CP
79-11	Design/Construction Interface Problem	6/27/79	All Applicants for, and Holders of Power Reactor CPs
79-10	Pipefittings Manufactured from Unacceptable Material	6/26/79	All Power Reactor Licensees with a CP and/or OL
79-09	Occurrences of Split or Punctured Regulator Diaphragms In Certain Self Contained Breathing Apparatus	6/22/79	All Materials Priority I, Fuel Cycle and Operating Reactor Licensees
79-08	Attempted Extortion - Low Enriched Uranium	5/18/79	All Fuel Facilities Licensed by NRC
79-07	Unexpected Speed Increase of Reactor Recirculation MG Set Resulted in Reactor Power Increase	5/2/79	All Holders of BWR OL's or CP's
79-06	Failure to Use Syringe and Bottle Shields in Nuclear Medicine	4/19/79	All Holders of Medical Licensees except teletherapy licensees