



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I  
631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-219

SEP 24 1979

Jersey Central Power and Light Company  
ATTN: Mr. Ivan R. Finfrock, Jr.  
Vice President  
Madison Avenue at Punch Bowl Road  
Morristown, New Jersey 07960

Gentlemen:

The enclosed Circular No. 79-20, 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,

  
Boyce H. Grier  
Director

Enclosures:

1. IE Circular No. 79-20
2. List of IE Circulars Issued in the Last Six Months

cc w/encls:

- J. T. Carroll, Station Superintendent  
A. Z. Roisman, Natural Resources Defense Council

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ENCLOSURE 1

Accession No.: 7908220118  
SSINS No.: 6830

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

IE Circular No. 79-20  
Date: September 24, 1979  
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FAILURE OF GTE SYLVANIA RELAY, TYPE PM BULLETIN 7305, CATALOG 5U12-11-AC WITH  
A 120V AC COIL

Description of Circumstances:

During inspection of relays in the Engineered Safeguards Actuation System at Metropolitan Edison Three Mile Island Nuclear Station Unit #1, relay 62X2B/RC1A failed to drop out when the coil was deenergized. The failed relay would not prevent component starting but would have reduced the 2 of 3 coincidence logic to 2 of 2, affecting Decay Heat Closed Cooling Pump A and Nuclear Services Closed Cooling Pump A or B. The cause for failure was attributed to a notch in the armature operating rod. The notch occurs where the rod vibrates against the magnet assembly due to coil hum. A review of the history of this component indicates that similar relays failed during 1977 through 1979 at least one of which was attributed to notching. An inspection of forty-eight (48) relays by this licensee indicated that twenty-five (25) of the relays had detectable notches ranging from 0.001 to 0.003 inches deep.

Recommended Actions for Licensees' Consideration:

1. Ensure that all GTE Sylvania Relays Type PM Bulletin 7305, with a 120V AC Coil used in or affecting the operation of safety-related equipment are examined to ensure that the armature operating rod is not notched and is operating freely.
2. Relays found with detectable notches on the operating rod should be corrected. If correction cannot be accomplished then administrative controls should be initiated to assure demonstrated operation until the relay condition is corrected.

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

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ENCLOSURE 2

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LISTING OF IE CIRCULARS ISSUED IN  
LAST SIX MONTHS

Circular No.	Subject	First Date of Issue	Issued To
79-06	Failure to Use Syringe and Bottle Shields in Nuclear Medicine	4/19/79	All Holders of Medical Licenses Except Teletherapy Licenses
79-07	Unexpected Speed Increase of Reactor Recirculation MG Set Resulted in Reactor Power Increase	5/2/79	All BWR Power Reactor Facilities with an OL or CP
79-08	Attempted Extortion-Low Enriched Uranium	5/18/79	All Fuel Facilities and Licensed Reactors
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
79-10	Pipefittings Manufactured from Unacceptable Material	6/26/79	All Power Reactor Facilities with an OL or CP
79-11	Design/Construction Interface Problem	6/27/79	All Applicants for, and Holders of CPs
79-12	Potential Diesel Generator Turbo-charger Problem	6/28/79	All Power Reactor Facilities with an OL or CP
79-13	Replacement of Diesel Fire Pump Starting Contactors	7/16/79	All Power Reactor Facilities with an OL or CP
79-14	Unauthorized Procurement and Distribution of Xenon-133	7/16/79	All Medical Licensees except Teletherapy Medical Licensees, and all Licensed Radiopharmaceutical Suppliers

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LISTING OF IE CIRCULARS ISSUED IN  
LAST SIX MONTHS

Circular No.	Subject	First Date of Issue	Issued To
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
79-16	Excessive Radiation Exposures to Members Of The General Public And A Radiographer	8/16/79	All Radiography Licensees
79-17	Contact Problem in SB-12 Switches on General Electric Metalclad Circuit Breakers	8/14/79	All Power Reactor Licensees with an OL or CP
79-18	Proper Installation of Target Rock Safety-Relief Valves	9/10/79	All Power Reactor Licensees with an OL of CP
79-19	Loose Locking Devices on Ingersoll-Rand Pumps	9/13/79	All Power Reactor Licensees with an OL or CP

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