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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

SEP 24 1979

Docket No. 50-155  
Docket No. 50-255

Consumers Power Company  
ATTN: Mr. R. B. DeWitt  
Vice President  
Nuclear Operations  
212 West Michigan Avenue  
Jackson, MI 49201

Gentlemen:

The enclosed IE 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,

*James G. Keppler*  
James G. Keppler  
Director

Enclosure: IE Circular  
No. 79-20

cc w/encl:  
Mr. C. J. Hartman,  
Plant Superintendent  
Mr. J. G. Lewis, Manager  
Central Files  
Director, NRR/DPM  
Director, NRR/DOR  
PDR  
Local PDR  
NSIC  
TIC  
Ronald Callen, Michigan Public  
Service Commission  
Anthony Roisman, Esq., Attorney  
Myron M. Cherry, Chicago

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

September 24, 1979

IE Circular No. 79-20

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.

Enclosure: List of IE Circulars  
Issued in the Last 6 Months

LISTING OF IE CIRCULARS ISSUED IN  
LAST SIX MONTHS

Circular No.	Subject	Date of Issue	Issued to
79-03	Inadequate Guard Training- Qualification and Falsified Training Records	2/23/79	All Holders of and applicants for Special Nuclear Material Licenses in Safeguards Group I
79-04	Loose Locking Nut On Limitorque Valve Operators	3/16/79	All Holders of Reactor OLs or CPs
79-05	Moisture Leakage In Stranded Wire Conductors	3/20/79	All Holders of Reactor OLs or CPs
79-06	Failure to Use Syringe and Bottle Shields in Nuclear Medicine	4/19/79	All Holders of Medical Licensees except teletherapy licensees
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
79-08	Attempted Extortion - Low Enriched Uranium	5/18/79	All Fuel Facilities Licensed by NRC
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 Licensees with a CP and/or OL
79-11	Design/Construction Interface Problem	6/27/79	All Applicants for, and Holders of Power Reactor CPs

LISTING OF IE CIRCULARS ISSUED IN  
LAST SIX MONTHS

Circular No.	Subject	Date of Issued	Issued to
79-12	Potential Diesel Generator Turbocharger Problem	6/28/79	All Power Reactors Operating Facilities and all Utilities having a CP
79-13	Replacement of Diesel Fire Pump Starting Contactors	7/10/79	All Power Reactor Operating Facilities and all Utilities having a CP
79-14	Unauthorized Procurement and Distribution of XE-133	7/13/79	All Medical Licensees except Teletherapy Medical Licensees and to all Radiopharmaceutical Suppliers
79-15	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 Company Metalclad Circuit Breakers	8/14/79	All Power Reactor Licensees with a CP and/or OL
79-18	Proper Installation of Target Rock Safety-Relief Valves	9/10/79	All Holders of a Power Reactor OL or CP
79-19	Loose Locking Devices on Ingersoll-Rand Pumps	9/13/79	All Power Reactor Operating facilities and all utilities having a CP