

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 3 1 1980

Those on Attached Address Listing:

Enclosed is IE Circular No. 80-23 which requires consideration by you with regard to your nuclear power facility.

Should you have any questions regarding this circular or the actions recommended therein, please contact this office.

Sincerely,

Charles & Morelin

James G. Keppler Director

Enclosure: IE Information Notice No. 80-23

cc w/encl:
Mr. D. W. Kane,
Sargent & Lundy
Reproduction Unit NRC 20b

RIII's CORPORATE ADDRESSES FOR OPERATING LICENSEES AND CONSTRUCTION PERMIT HOLDERS (BWR's and PWR's)

Docket No. 50-440 Docket No. 50-441

The Cleveland Electric Illuminating Company
ATTN: Mr. Dalwyn R. Davidson
Vice President - Engineering
P. O. Box 5000 ...
Cleveland, OH 44101

cc w/encl:
Central Files
Director, NRR/DPM
Director, NRR/DOR
PDR
Local PDR
NSIC
TIC
Harold W. Kohn, Power
Siting Commission
Mr. Daniel D. Wilt,
Attorney
Helen Evans,
State of Ohio

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

cc w/encl:
Mr. D. P. Hoffman, Nuclear
Licensing Administrator
Mr. C. J. Hartman,
Plant Superintendent
Mr. R. W. Montross, Nanager
Central Files
Director, NRR/DPM
Director, NRR/DOR
AEOD

Resident Inspectors, RIII
PDR
Local PDR
NSIC
TIC
Ronald Callen, Michigan
Public Service Commission
Myron M. Cherry, Chicago

SSINS No.: 6830 Accession No.: 8008220243 IEC 80-23

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

October 31, 1980

IE Circular No. 80-23: POTENTIAL DEFECTS IN BELOIT POWER SYSTEMS EMERGENCY GENERATORS

#### BACKGROUND

This circular addresses a potential deficiency involving the field leads of generators manufactured by Beloit Power Systems. It is known that the subject generators have been coupled with Fairbanks Morse diesel engines for use in nuclear power facilities; however, it is not known whether they have been coupled with other diesel engines for such use. Accordingly, the intent of this circular is to notify all nuclear power facilities of the potential defect and to assure that appropriate remedial actions are taken, if needed.

The Nuclear Regulatory Commission was first informed of the potential defect by a phone call from Mr. R. H. Beadle of the Fairbanks Morse Engine Division of Colt Industries to Mr. D. W. Hayes of Region III on September 19, 1980. On September 20, 1980, a conference call was held between the NRC Duty Officer, personnel from Prairie Island Nuclear Power Station, Mr. Beadle of Fairbanks Morse and Mr. C. Evenson of Beloit Power Systems, the principal spokesman. The purpose of this call was to describe an inspection method which Prairie Island personnel could use to examine the field lead assemblies of their generators for the potential defect. (We have since been informed by the Resident Inspector that the field lead assemblies of the Prairie Island generators did not have the suspected defects.)

In order to disseminate this information on a timely basis, the NRC Duty Officer at Bethesda called those operating facilities which he knew were using the suspect generators on September 20 and 21, 1980. The information conveyed included a description of the potential defect and a description of the aforementioned inspection method. The operating facilities called were:

FACILITY	NO.	OF	UNITS	
Calvert Cliffs 1 and 2		3		
Crystal River 3		2		
Hatch 1 and 2		5		
Duane Arn 1d		2		
North Arna 1 and 2		4		
Millstone 1 and 2		3		
Robinson 2		2		
Prairie Island		2		
Vermont Yankee				
Peach Bottom 2 and 3				
Arkansas Nuclear One, Unit 2	DIII	PT.T	CATE	

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 8008 220 243

No. of pages:



#### UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 631 PARK AVENUE KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-333

DEC 1 7 1980

Power Authority of the State of New York James A. FitzPatrick Nuclear Power Plant ATTN: Mr. R. J. Pasternak Resident Manager P. O. Box 41 Lycoming, New York 13093

#### Gentlemen:

The enclosed IE Information Notice No. 80-45, "Potential Failure of BWR Backup Manual Scram Capability," is forwarded to you for information. No written response is required. If you desire additional information regarding this matter, please contact this office.

Gary Suydes

#### Enclosures:

IE Information Notice No. 80-45

List of Recently Issued IE Information Notices

CONTACT: D. L. Caphton (215-337-5266)

cc w/encls:

George T. Berry, President and Chief Operating Officer

J. P. Bayne, Senior Vice President-Nuclear Generation

A. Klausmann, Director, Quality Assurance

M. C. Cosgrove, Site Quality Assurance Engineer

J. F. Davis, Chairman, Safety Review Committee

C. M. Pratt, Assistant General Counsel

G. M. Wilverding, Manager-Nuclear Licensing

SSINS No.: 6835 Accession No.: 801216002 IN 80-45

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

December 17, 1980

IE Information Notice No. 80-45: POTENTIAL FAILURE OF BWR BACKUP MANUAL SCRAM CAPABILITY

The primary purpose of this Notice is to advise BWR licensees that a mechanism exists which could defeat one of the backup manual scram (reactor trip) features normally available to the reactor operator. In some GE-designed reactors, placing the Mode Selector Switch (MSS) in "Shutdown" should actuate a scram. This feature is used at some facilities as part of a normal reactor shutdown, and for certain plant situations the Technical Specifications require placing the MSS in the "Shutdown" position as a means of attaining immediate shutdown. As described below, a situation may arise that blocks this scram.

The Pilgrim Nuclear Power Station has reported that following the loss of power from a vital M-G set and manual transfer to the alternate power source, the annunciator "Shutdown Scram Reset Permissive" came on and stayed on. Since such an annunciator may not be provided for all BWRs, some facilities may not be able to detect this condition. Subsequent investigation revealed that when one RPS bus power supply is lost and the MSS is in the "Run" mode, relay K-17 is immediately deenergized and after two seconds one of two series bypass contacts in the MSS scram circuit is closed. Upon restoration of RPS bus power, it is possible for relay K-16 to be energized before K-17 (i.e., a relay race). If this occurs, the following conditions will result: (1) the normally open K-16 contact in the MSS scram bypass circuit is closed, thereby bypassing the MSS in "Shutdown" Scram; and (2) relay K-17 will be kept deenergized.

Even with this condition (i.e., the bypass circuit made up and the MSS in "Run") a Scram should occur if the MSS is turned in a deliberate manner to "Shutdown" with a pause in either the "Startup" or "Refuel" mode; however, if the MSS is turned to "Shutdown" quickly such that relay K-17 is not energized, a Scram due to MSS manipulation may not occur.

We understand that General Electric has been informed of this potential for bypassing the MSS and that General Electric is preparing a Service Information Letter (SIL) containing recommendations for preventing such bypassing.

This Information Notice is provided as an early notification of a possibly significant matter that is still under review by the NRC staff. Recipients should review the information for possible applicability to their facilities. No specific action or response is requested at this time; however, if NRC evaluations so indicate, further licensee actions may be requested or required.

If you have any question regarding this matter, please contact the director of the appropriate NRC Regional Office.

## RECENTLY ISSUED IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued to	
80-44	Actuation of ECCS in the Recirculation Mode While in Hot Shutdown	12/14/80	All holders of a PWR power reactor OL or CP	
80-43	Failures of the Continuous Water Level Monitor for the Scram Discharge Volume at Dresden Unit No. 2	12/5/80	All holders of a BWR power reactor OL or CP	
80-29 Supplement No. 1	Broken Studs on Terry Turbine Steam Inlet Flange	11/26/80	All holders of a power reactor OL or CP	
80-42	Effects of Radiation on Hydraulic Snubber Fluid	11/24/80	All holders of a power reactor OL or CP	
80-41	Failure of Swing Check Valve in the Decay Heat Removal System at Davis-Besse Unit No. 1	11/10/80	All holders of a power reactor OL or CP	
80-40	Excessive Nitrogen Supply Pressure Activates Safety-Relief Valve Operation to Cause Reactor Depressurization	11/6/80	All holders of a power reactor OL or CP	
80-39	Malfunctions of Solenoid Valves Manufactured by Valcor Engineering Corporation	10/31/80	All holders of a power reactor OL or CP	
80-38	Cracking in Charging Pump Casing Cladding	10/30/80	All holders of a PWR power reactor OL or CP	
80-37	Containment Cooler Leaks and Reactor Cavity Flooding at Indian Point Unit 2	10/24/80	All holders of a power reactor OL or CP	