



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

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DEC 18 1979

State of Illinois  
Department of Public Health  
ATTN: Mr. Gary N. Wright, Chief  
Division of Nuclear Safety  
535 West Jefferson Street  
Springfield, IL 62761

Gentlemen:

The enclosed IE Bulletin No. 79-28 titled "Possible Malfunction of Namco Model EA 180 Limit Switches at Elevated Temperatures" was sent to the following licensees on December 7, 1979, for action:

American Electric Power Service Corporation  
Indiana and Michigan Power Company  
D. C. Cook 1, 2 (50-315, 50-316)

Cincinnati Gas & Electric Company  
Zimmer (50-358)

Cleveland Electric Illuminating Company  
Perry 1, 2 (50-440, 50-441)

Commonwealth Edison Company  
Braidwood 1, 2 (50-456, 50-457)  
Byron 1, 2 (50-454, 50-455)  
Dresden 1, 2, 3 (50-10, 50-237, 50-249)  
La Salle 1, 2 (50-373, 50-374)  
Quad-Cities 1, 2 (50-254, 50-265)  
Zion 1, 2 (50-295, 50-304)

Consumers Power Company  
Big Rock Point (50-155)  
Midland 1, 2 (50-329, 50-330)  
Palisades (50-255)

Dairyland Power Cooperative  
LACBWR (50-409)

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Detroit Edison Company  
Fermi 2 (50-341)

Illinois Power Company  
Clinton 1, 2 (50-461, 50-462)

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Iowa Electric Light & Power Company  
Duane Arnold (50-331)

Northern Indiana Public Service Company  
Bailly (50-367)

Northern States Power Company  
Monticello (50-263)  
Prairie Island 1, 2 (50-282, 50-306)

Ohio Edison Company  
Erie 1, 2 (50-580, 50-581)

Public Service of Indiana  
Marble Hill 1, 2 (50-546, 50-547)

Toledo Edison Company  
Davis-Besse 1 (50-346)

Union Electric Company  
Callaway 1, 2 (50-483, 50-486)

Wisconsin Electric Power Company  
Point Beach 1, 2 (50-266, 50-301)

Wisconsin Public Service Corporation  
Kewaunee (50-305)

Sincerely,

*Borothy E. Carroll*  
Borothy E. Carroll, Acting Chief  
Administrative Branch

Enclosure: IE Bulletin  
No. 79-28

cc w/encl:  
Mr. D. W. Kane,  
Sargent & Lundy  
Central Files  
Reproduction Unit NRC 20b  
Local PDR  
NSIC  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

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December 7, 1979

IE Bulletin No. 79-28

POSSIBLE MALFUNCTION OF NAMCO MODEL EA180 LIMIT SWITCHES AT ELEVATED TEMPERATURES

Description of Circumstances:

The NRC has been recently advised through a 10 CFR 21 report from NAMCO Controls that a malfunction of a NAMCO Model EA180 stem mounted limit switch (SMLS) occurred at the Cooper Nuclear Station. Investigation into the switch failure by the licensee revealed yellow and brown "crystal-like" resin deposits on the internal components of the switch. The affected switch is located inside the drywell containment at this facility and was being used as the replacement switch for an unqualified SMLS previously identified in IE Bulletin Nos. 78-04 and 79-01.

According to the manufacturer, the problem was traced to a batch of top cover gaskets of which some were over-impregnated and insufficiently heat cured. It has been determined that this condition can leave an uncured residue of "Loctite" in the gasket, which vaporizes at sustained temperatures above 175°F. To correct the problem, the manufacturer has revised production techniques beginning September 1979 in order to better control the impregnation process and to properly heat cure the gaskets following impregnation. This problem is unique to all NAMCO Model EA180 series switches received by licensees after March 1, 1979. According to the manufacturer, the suspect switches can be identified by checking the date code which is a 4 digit number stamped on the conduit boss of the switch housing. NAMCO recommends that any EA180 series switch with a date code between 02-79 through 08-79 should have its top cover gasket replaced. Also, licensees should request from their suppliers of equipment on which NAMCO EA180 series switches are used that they check their inventory and replace top cover gaskets on switches date coded between 02-79 through 08-79.

The enclosed letter from NAMCO further describes the high-temperature environmental problem with the top cover gaskets used in their EA180 switches and provides recommendations to correct the problem. According to NAMCO, this letter has been sent to each customer who was shipped EA180 switches between February 21, 1979, and August 24, 1979.

Action to be Taken by Licensees of Power Reactor Operating Facilities and Holders of Construction Permits:

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1. Determine if your facility has switches in any safety-related containment, including valve position containment isolation valves.

DUPLICATE DOCUMENT

Entire document previously entered into system under:

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