

TIC



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

SEP 26 1979

In Reply Refer To:

RII:JPO

50-413, 50-414

50-491, 50-492

50-493, 50-488

50-489, 50-490

Duke Power Company  
Attn: L. C. Dail, Vice President  
Design Engineering  
P. O. Box 33189  
Charlotte, North Carolina 28242

Gentlemen:

The enclosed Information Notice provides information with regard to failures of lube oil coolers for emergency diesel generators.

Sincerely,

James P. O'Reilly  
Director

Enclosures:

1. Information Notice 79-23
2. List of IE Information Notices Issued in the Last Six Months

1100 107

7910040167

SEP 26 1979

Duke Power Company

-2-

cc w/encl:

D. G. Beam, Project Manager

Post Office Box 223

Clover, South Carolina 29710

J. T. Moore, Project Manager

Post Office Box 422

Gaffney, South Carolina 29340

1100 108

Accession No: 7908220121  
SSINS: 6870

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

September 26, 1979

IE Information Notice No. 79-23

EMERGENCY DIESEL GENERATOR LUBE OIL COOLERS

Within a two week time span (August 27 to September 11, 1979), the tube sheets failed in the Arkansas Nuclear One (ANO) Unit 1 lube oil coolers for both of the Unit 1 Emergency Diesel Generators. The introduction of water into the diesel lube oil system resulted in trips of both diesels during surveillance testing. The diesels were not considered capable of sustained operation.

Investigation by the licensee has indicated cracks around the outer periphery of the tube sheets. The exact failure mode has not been assessed; however, the licensee has replaced the Emergency Diesel lube oil coolers for both diesels with a cooler of different design. The original lube oil coolers had tube sheets which were one-eighth (1/8) inch in thickness and the tubes were soldered in place. Epoxy was also used as a sealer on the tube (water side) of the lube oil cooler. The new coolers have one-half (1/2) inch tube sheets and the tubes are rolled.

The ANO, Unit 1 Emergency Diesel Generators were purchased in 1970 and were manufactured by the Electromotive Division of General Motors Corporation. The lube oil coolers (Model Number D-191700) were manufactured by Young Radiator Corporation.

This information is provided as an early notification of a possible significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

1100 109