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

Docket Nos. 50-443
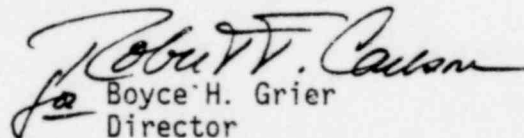50-444   SEP 12 1979

Public Service Company of New Hampshire
ATTN: Mr. W. C. Tallman
       President
1000 Elm Street
Manchester, New Hampshire 03105

Gentlemen:

Enclosed is IE Bulletin 79-23 which requires action by you with regard to your power reactor facility(ies) with an operating license or a construction permit.

Should you have questions regarding this Bulletin or the actions required of you, please contact this office.

Sincerely,

Boyce H. Grier
Director

Enclosures:
1.   IE Bulletin No. 79-23
2.   List of IE Bulletins Issued in the Last Six Months

cc w/encls:
John D. Haseltine, Project Manager

Accession No. 7908220104
SSINS No.: 6820

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

IE Bulletin No. 79-23
Date: September 12, 1979
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POTENTIAL FAILURE OF EMERGENCY DIESEL GENERATOR FIELD EXCITER TRANSFORMER

Description of Circumstances:

Florida Power and Light Company recently reported a problem encountered during a 24-hour full load test of the emergency diesel generators (EDG) at their Turkey Point facility. Approximately 10 hours into the test, the A-EDG tripped due to a differential-relay lockout on B and C phases; the B-EDG was manually stopped, thus interrupting the test at that point in time.

Subsequent investigation and testing by the licensee revealed a design error on both the A and B EDGs which resulted in overheating of the Exciter Power Transformers (EPTs) at sustained high load operation.

The following nameplate data applies to the equipment installed at Turkey Point:

Emergency Diesel Generator

General Motors (Electro-Motive Division)
Model EMD-999-20
Engine-turbocharged, 2 cycle,
    EMD design 20-645E4
Generator-EMD-design Model A-20

Exciter Power Transformer

GE-single phase
Model-9T24Y1004
Serial-MD
Cycles-60
KVA 15
Insulation-4160 V

The manufacturer's findings and recommendations regarding the above problem are described below:

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