



71C

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1990 N. CALIFORNIA BOULEVARD
SUITE 202, WALNUT CREEK PLAZA
WALNUT CREEK, CALIFORNIA 94596

September 12, 1979

Docket Nos. 50-528
50-529
50-530

Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona 83036

Attention: Mr. E. E. Van Brunt, Jr.
Vice President, Construction Projects

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,

A handwritten signature in cursive script, appearing to read "R. H. Engelken".

R. H. Engelken
Director

Enclosures:

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

cc w/enclosures:
F. W. Hartley, APS

1049 181

7909270270
~~7909270270~~

①

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

September 12, 1979

IE Bulletin No. 79-23

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:

"A potential problem can exist if the the primary windings of the excitation transformer are connected to the control power transformer (CPT) between the neutrals, or a connection between the neutrals exist, high circulating currents may exceed transformer rating and cause failure.

DUPLICATE DOCUMENT

Entire document previously
entered into system under:

ANO 7908220104

No. of pages: 05

1049 182