

ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

LEON D. WHITE, JR.  
VICE PRESIDENT

TELEPHONE  
AREA CODE 716 546-2700

December 20, 1974



Mr. James P. O'Reilly, Director  
Directorate of Regulatory Operations  
Region I  
U. S. Atomic Energy Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Subject: Abnormal Occurrence 74-21, Failure of a Boric Acid Tank  
Level Transmitter  
R. E. Ginna Nuclear Power Plant, Unit No. 1  
Docket No. 50-244

Dear Mr. O'Reilly:

In accordance with Technical Specifications, Article 6.6.2a, the  
attached report of Abnormal Occurrence 74-21 is hereby submitted.

Very truly yours,

*L. D. White, Jr.*  
L. D. White, Jr.

Attachment

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COPY SENT REGION I

1. Report Number: 50-244/74-21
- 2a. Report Date: December 20, 1974
- 2b. Occurrence Date: December 11, 1974
3. Facility: R. E. Ginna Nuclear Power Plant, Unit No. 1
4. Identification of Occurrence:

This abnormal occurrence is defined by Technical Specification Article 1.9d: Failure of one or more components of an engineered safety feature or plant protection system that causes or threatens to cause the feature or system to be incapable of performing its intended function.

5. Conditions Prior to Occurrence:

The unit was at full licensed power.

6. Description of the Occurrence:

Control room annunciator "Boric Acid Tank Low Low Level 10%" annunciated. Operations verified zero level indication on Boric Acid Tank "A" level channel LC 171.

7. Designation of Apparent Cause of Occurrence:

The Boric Acid Tank "A" level channel LC 171 power supply module failed.

8. Analysis of Occurrence:

Two boric acid tanks together, contain a minimum of 2,000 gallons of 12 to 13% weight solution. This fluid is the initial preferred suction supply for the Safety Injection pumps upon receipt of a safety injection signal.

Each tank is equipped with two level sensing channels. The output signals of these channels operate auxiliary relays associated with the opening circuitry of the boric acid tank outlet to safety injection valves 826 A, B, C and D.

Downscale failure of a level channel in any one tank would cause the associated relay contacts for the open circuitry of these valves to be open; however, the redundant level channel of that tank would still permit proper operability of all boric acid tank discharge valves.

Both level channels of the same tank would have to fail downscale to prevent these valves from permitting flow from the boric acid tanks for safety injection.

It is considered that no hazard was presented to the general public as a result of the single channel failure.

9. Corrective Action:

In accordance with recommendations from the PORC, the failed power supply module was replaced with a spare which was bench tested prior to its installation.

10. Failure Data:

a. This is the first power supply failure in this system although similar electronic component losses have occurred randomly throughout the plant life.

b. Equipment Identification:

Manufacturer:	Foxboro
Model No.:	610 AR-O
Style:	A
Output:	63-95 Volts DC, 50-10 milliamps