

(CAR 1267)

CONTROL BLOCK: 1 2 3 4 5 6 ①

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	N	Y	R	E	G	I	2	0	0	-	0	0	0	0	-	0	0	3	4	1	1	1	1	4		5						
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LICENSEE CODE														LICENSE NUMBER										LICENSE TYPE						CAT 58			

0	1	L	6	0	5	0	0	0	2	4	4	7	0	7	1	1	8	0	8	0	7	2	4	8	0	9	
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CON'T		REPORT SOURCE		DOCKET NUMBER										EVENT DATE						REPORT DATE							

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

① During routine analysis of samples from boric acid storage tanks concentration showed 11.7% and 11.8% boric acid. (T.S. 3.2.3.c) Reactor power reduction was started, and tank contents enriched to 12%. With tanks isolated, analysis on 7/14/80 again indicated low concentration. Tanks were again enriched. After titrant was changed, concentration was found greater than 13%. Power reduction was started, and proper concentration was restored.

0	9	P	C	11	D	12	Z	13	A	C	C	U	M	U	14	Z	15	Z	16	17	8	0	—	0	0	6	—	0	1	T	—	0
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		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE		LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.				
		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER														
		E		G		B		Z		0000		Y		N		Z		Z999														

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ⑳

① Ascarite used to protect NaOH titrant from CO₂ was saturated with water, some of which dropped into titrant. Reagent check now being done in conjunction with tank sampling. Consolidation incorporating all procedures which respond to exceeding action limits being written. Sample frequencies to be increased during certain operations. Procedures for above to be in effect by 10/80. Mechanical modifications to decrease dilution probability being considered. Tech. Spec. change to allow up to 13.5% being considered.

1	5	E	28	1	0	0	29	NA	B	31	Chemical analysis	32
7	8	9	10	11	12	13	14	15	16	17	18	19
		FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION		
		E		100		NA		B		Chemical analysis		
		ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY		LOCATION OF RELEASE				
		Z		Z		NA						
		PERSONNEL EXPOSURES		NUMBER		TYPE		DESCRIPTION				
		000		37		Z		NA				
		PERSONNEL INJURIES		NUMBER		DESCRIPTION						
		000		40		NA						
		LOSS OF OR DAMAGE TO FACILITY		TYPE		DESCRIPTION						
		Z		42		NA						
		PUBLICATION		ISSUED		DESCRIPTION						
		N		44		NA						

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Attachment to LER 80-06/01T-0
Rochester Gas and Electric Corporation
R. E. Ginna Nuclear Power Plant, Unit No. 1
Docket No. 50-244

With the plant operating at full power the normal samples were taken of the boric acid storage tanks at 0815 hours on July 11, 1980. The samples indicated the concentrations had dropped to 11.7% and 11.8%. The shift supervisor indicated there had been operations performed which could have led to tank dilution. It was assumed at this time that the samples were correct.

A power reduction was commenced and the normal steps taken to isolate the tanks and increase the boric acid concentration. The concentrations were brought up to greater than 12.0% by 1540 hours. Samples were taken at 2 hour intervals during the next several days.

On July 14, 1980 the tanks again appeared to have been diluted even with all possible sources of dilution isolated. One tank was less than 12.0% and it was brought into specification within 3 hours. At 0900 hours the titrant was changed, and it was found that the old titrant was of incorrect concentration. It was determined that the tank concentrations then exceeded 13%. The same steps as mentioned above were taken and the boric acid concentrations were brought into specification by 1615 hours.

The source of the concentration change in the titrant was the Ascarite which is used to protect the NaOH titrant from CO_2 . Ascarite is made with a caustic material, and it had become saturated with moisture. Hydroxide was dissolved in the liquid, which dropped into the titrant reservoir, contaminating the titrant. This gave the false indication that the boric acid concentration in the tanks was low. To insure this type of contamination does not reoccur the Ascarite tube is being placed lower than the titrant reservoir. The laboratory analysis procedure will be changed to include a QC check of the titrant each time the normal storage tank samples are taken. Procedures used in response to exceeding concentration administrative limits will be drawn together under a new comprehensive procedure which will include the sequence of sampling, QC, data evaluation and corrective actions.

There are certain operations that increase the probability of dilution of the tank contents. Procedures governing these operations will be changed to require notifying the laboratory to increase sampling frequency following these operations.

Mechanical modifications to further decrease the possibility of tank dilutions are being investigated.

Consideration is being given towards applying for a Technical Specification change to allow the maximum boric acid concentration of 13.5% since the present Technical Specification minimum temperature of 145°F will provide solubility of boric acid to a concentration of 14%.

