

November 2, 1978

Mr. Boyce H. Grier  
 Director  
 United States Nuclear Regulatory Commission  
 Region I  
 631 Park Avenue  
 King of Prussia, PA. 19406

RE: Docket No. 50-220  
 LER 78-036/04T-0  
 Nine Mile Point Nuclear Station Unit #1

Dear Mr. Grier:

Environmental Technical Specifications Table 2.3-1, Limiting Values for Chemicals in Liquid Effluents, allows a maximum increase over lake ambient concentration of 1.5 mg/liter for sodium and 3.0 mg/liter for sulfate. An analysis of the monthly proportional composite for September, 1978, indicates that these values were exceeded. Calculations show that the actual concentrations of sodium and sulfate were 1.81 mg/liter and 4.43 mg/liter above lake ambient concentration respectively.

This event was a result of the synergistic effect of a seal failure on the caustic addition pump allowing continuous leakage of caustic to the MUD waste tank, and a failure of the flow transmission loop on the make-up demineralizer (MUD) waste tank discharge. The former failure required large amounts of acid to be added to the MUD waste tank for neutralization, and the latter degraded discharge flow control of the resultant high concentrations of sodium (from the caustic) and sulfate (from the acid).

A review of the individual waste tank data sheets has indicated that the actual discharge rate exceeded the maximum rate specified on the discharge data sheets as follows:

<u>Tank</u>	<u>Discharge Date</u>	<u>Max. Discharge Rate</u>	<u>Actual Rate</u>
MUD Waste	9-8-78	36.8 gpm	50.8 gpm
MUD Waste	9-11-78	27.6 gpm	48.7 gpm
MUD Waste	9-13-78	55.6 gpm	52.5 gpm
MUD Waste	9-15-78	19.8 gpm	29.8 gpm
MUD Waste	9-18-78	22.1 gpm	38.7 gpm

There were no radiological releases involved in this event, nor did it create an unresolved safety question.

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Subsequent to the event, the acid-caustic addition system has been repaired to stop continuous addition to the MUD waste tank; and a new flow control loop on the MUD waste tank discharge has been installed and operationally tested. Corrective action was completed on October 30, 1978. Additionally, review of individual waste tank discharge data has been assigned to specific technicians, as a management control, to identify trends and take corrective action early enough to preclude future problems.

Very truly yours,

Original Signed by R.R. Schneider

R.R. Schneider  
Vice President -  
Electric Production

mtm