NSP

## NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

September 25, 1980

Mr J G Keppler, Director, Region III Office of Inspection & Enforcement U S Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, IL 60137

Dear Mr Keppler:

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket No. 50-282 License No. DPR-22
50-306 DPR-60

Environmental Event Report 80-03 Chlorine - TS B 2.4.1

On August 28, 1980, the plant circulating water system was subjected to a Special Chlorination Program designed to destroy the parasitic amoeba found in the system. Conduct of the program was in accordance with the NRC authorization dated August 27, 1980.

During conduct of this program certain levels of chlorine were found outside the circulating water system that exceed the concentration limits set in TS-B 2.4.1. Although the protection conditions in this section are not strictly applicable to aspects of the special program, we are reporting the occurrence as an Environmental Event consistent with TS-B 5.4.2.A.

During conduct of the six hour long chlorination cycle, recirculation canal water was found moving towards the river from the intake structure skimmer wall. Because of this condition, samples were collected on the river side of the skimmer wall and the following results were logged:

Time	Camala	Chlorine
Time	Samples	Total, ppm
10:42	Near the surface	0.0
11:15	Near the surface	0.15
11:45	Near the surface	0.7
12:45	Near the surface	0.80
13:20	20' toward the river	1.1
13:50	Near the surface	0.55
14:25	6' toward the river	0.8
14:25	Under the wall	1.6
14:55	6' toward the river	1.2
14:55	Under the wall	1.4

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Our biologists have reviewed the incident and conclude for the short time that elevated chlorine levels were found, the environmental impact of this was minimal in magnitude and limited to the immediate intake vicinity. The high chlorine demand of the ambient river water would rapidly reduce the chlorine levels. A representative of the Minnesota Department of Natural Resources in attendance during the program observed that the chlorine levels did not cause significant fish kills.

For future chlorination programs, the blowdown from the plant will be increased in an attempt to prevent chlorinated water from moving into the river at the intake canal. During the just conducted special chlorination program, blowdown flow to the river and natural evaporation was estimated to be 25 cfs. Increasing the blowdown to 50-60 cfs will increase the flow towards the plant intake and prevent recirculation of chlorinated water into the river.

A complete report is being developed for the Minnesota Pollution Control Agency regarding the particulars of the program. The report scope will include test results of the success of destroying the parasitic amoeba and other items as fish losses and cooling tower drift. Copies of this report will be furnished to NRC as requested in the authorization documents.

Yours very truly,

E C Ward, PE

Manager-Nuclear Environmental Services

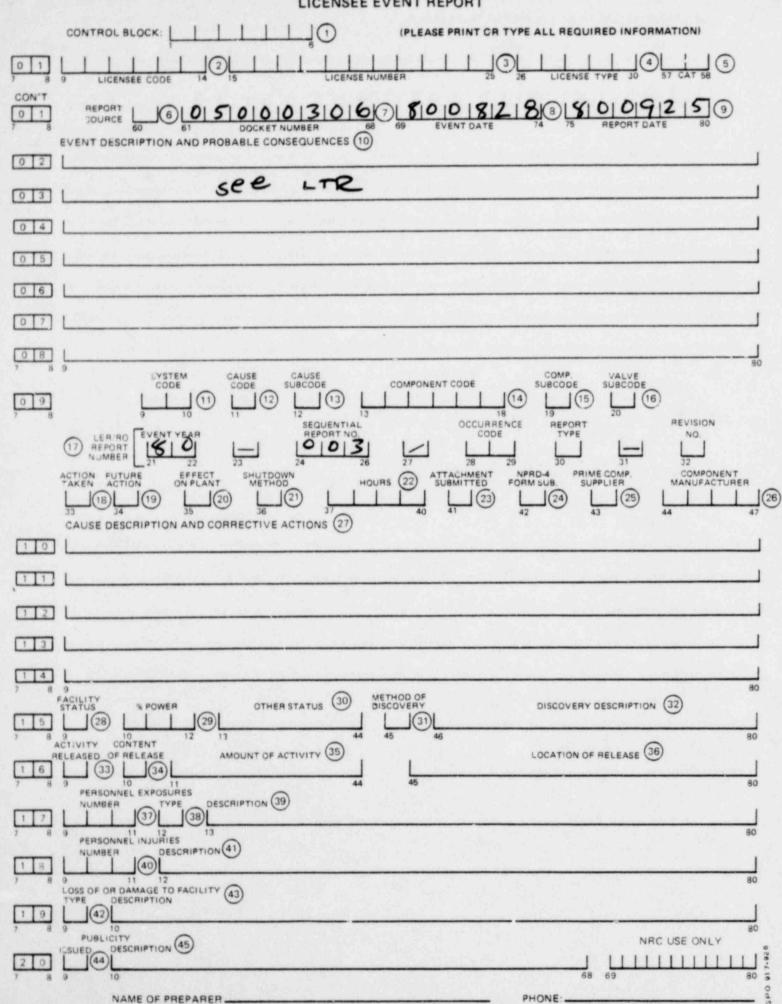
ECW/jh

cc Director, NRR c/o DSB (17)

MPCA

Attn: J W Ferman

## LICENSEE EVENT REPORT



## LICENSEE EVENT REPORT

