ENCLOSURE 5

Exelon Nuclear

Exelon Generation
Quad Cities Generating Station
22710 206th Avenue North
Cordova, IL 61242-9740
Tel 309-654-2241

www.exeloncorp.com

August 23, 2001

SVP-01-092

Illinois Environmental Protection Agency
Bureau of Water, Compliance Assurance Section
1021 North Grand Ave. East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject: Non-Compliance for Quad Cities Generating Station
NPDES Permit No. IL0005037

In accordance with Standard Condition 12 of NPDES Permit No. IL0005037, Quad Cities Generating Station submits the following notice of non-compliance.

Discharge:

Outfall(s): 001/002 Open Cycle Diffusers

Parameter and Permit Limit:

Parameter: Total Residual Chlorine / Total Residual Oxidant (TRC/TRO)***
Permit Limit: Daily Maximum of 0.2 mg/l

*** Special Condition 15. A discharge limit of 0.05 mg/l (instantaneous maximum) shall be achieved for total residual oxidant when bromine biocides are used for condenser biofouling control, in accordance with Special Condition 3.

Noncompliance & Date:

On July 23, 2001, a TRC/TRO daily maximum concentration of 0.08 mg/l was obtained from a grab sample during biocide treatment of the Unit 1 Main Condenser. The noncompliance lasted approximately 21 minutes.

Quad Cities Generating Station uses sodium bisulfite as a dechlorinating agent at the outlet of the main condensers during bromine biocide treatment of the main condensers. At the time the 0.08 mg/l residual was measured, the sodium bisulfite injection rate was 1.1 gpm, which was approximately twice the amount needed to neutralize the TRC/TRO levels measured at the outlet of the condenser during the previous week. The sodium bisulfite and biocide injection rates had been constant since July 2, 2001, and all TRC/TRO readings at Outfall 001/002 were less than 0.02 mg/l. After receiving the reading of 0.08 mg/l, the sodium bisulfite injection rate was increased to 1.6 gpm. Following the increase in the sodium bisulfite injection rate, the TRC/TRO was measured and found to be less than 0.02 mg/l.

On July 24, 2001, the sodium bisulfite equipment was tested and found to be working properly. On July 25, 2001, the sodium bisulfite injection rate was returned to 1.1 gpm and biocide injection was performed on the main condensers. All TRC/TRO readings from that condenser treatment (on July 25, 2001) were less than 0.02 mg/l.

During the timeframe that the TRC/TRO limit exceeded 0.05 mg/l, three samples were analyzed that exceeded the limit. This incident is being reported as one exceedance per conversation with Jim Kammueller of the IEPA Peoria District on August 15, 2001.

Cause:

The Station was unable to determine the cause of the non-compliance; however, actions were initiated to identify any potential equipment-related causes (as detailed in the Corrective Actions).

Corrective Actions:

As soon as the TRC/TRO result of 0.08 mg/l was verified, the injection skids were inspected to ensure that the equipment was operating properly and flow rates were correct. After verifying that equipment was operating correctly, the sodium bisulfite injection rate was increased from 1.1 gpm to 1.6 gpm. Sampling at Outfall 001/002 occurred until TRC/TRO results returned to a normal level of less than 0.02 mg/L

On July 24, 2001, drawdown tests were performed on the sodium bisulfite injection skid and the equipment was verified to be pumping at expected rates. The sodium bisulfite low flow sensor was tested and verified to be working properly, and the biocide system shutdown functioned correctly when a sodium bisulfite low flow alarm was received.

There are no plans for any additional corrective actions as a result of this event.

If there are any questions, please call K. Moser at 309-227-3200.

Respectfully,

Timothy J. Tulon
Site Vice President
Quad Cities Generating Station

cc: Jim Kammueller - Illinois Environmental Protection Agency
NRC Regional Administrator, Region III
NRC Senior Resident Inspector