

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

ATTACHMENT TO LER 80-002/04X-1

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During normal operations, personnel noted that the air operated drain valve on the "B" waste neutralizer tank (42-AOV-111B) associated with the plant's makeup demineralizer system was open. The makeup demineralizer processes raw water from Lake Ontario for use where high purity water is required for other plant systems. The valve which was found open, and its companion valve on waste neutralizer tank "A" are normally closed except during discharge of the tank when the pH of the contents have been neutralized to within the pH limits of Environmental Technical Specifications, Paragraph 2.2.3.

Investigation indicates that the discharge valve for the "B" neutralizer tank may have been open since December 19, 1979. During the time period from December 19, 1979 until the valve was discovered open on January 2, 1980, two chemical regenerations of the makeup system cation and anion ion exchange beds were conducted resulting in a release of approximately 50,000 gallons of chemical wastes. Calculations indicate that at various times during the release of the chemical waste the pH could have varied between 4.0 and 9.1 compared to a limit of 6.0 to 9.0. In addition, Paragraph 2.2.3 requires pH and conductivity sampling and continuous measurement of the pH during release which was not conducted.

It should be noted that the event did not cause the release of any radioactive material and that in estimating the pH ranges discussed above, no credit was taken for possible buffering effects as a result of other chemical compounds which normally are present in the waters of Lake Ontario. In addition, the maximum release rate of the chemical waste was 300 GPM compared to dilution flow in the plants discharge tunnel of approximately 375,000 GPM. In view of these calculations, the release of 50,000 gallons of chemical waste should not cause any significant environmental damage.

Investigation revealed that the discharge valve (42-AOV-111B) was open due to sticking of the valves solenoid operator (42-SOV-111B). The solenoid valve was disassembled, cleaned, returned to service and satisfactory operation of 42-AOV-111B was restored. To preclude recurrence, the operating procedure associated with the makeup water treating system will be changed by February 15, 1980 to require verification of proper neutralizer tank drain valve position prior to the start of ion exchange bed regeneration or other activities which could result in the release of untreated and/or unmonitored wastes if the drain valve was open. Further, this event has been discussed with the personnel who operate the system to preclude recurrence.

NOTE: Revision 1 of this LER is submitted to include all of the required limiting conditions for operation which were not met and provide additional detail with respect to corrective action. Items 9, 17, 18 and the attachment were revised.