

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

LICENSEE CODE: FABVSL; LICENSE NUMBER: 000-000000000000000000; LICENSE TYPE: 41111; CAT: 58

REPORT SOURCE: L; DOCKET NUMBER: 05000334; EVENT DATE: 110878; REPORT DATE: 121978

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

Normal chlorination was being performed on the river water headers during the current plant shutdown. On 11/5/78, the turbine plant river water system was secured. No chlorination was performed on 11/5/78 or 11/6/78. On 11/7/78, chlorination was performed with a maximum free chlorine residual of 0.24 PPM. On 11/8/78 at 1250 hours, chlorination was performed and the free chlorine residual exceeded the allowable of 0.5 PPM. At 1330 hours, the residuals reached a maximum of 0.6 PPM and, at 1340 hours, it returned to 0.0.

SYSTEM CODE: WA; CAUSE CODE: A; CAUSE SUBCODE: X; COMPONENT CODE: ZZZZZZ; COMP. SUBCODE: Z; VALVE SUBCODE: Z; LER/RO REPORT NUMBER: 78; EVENT YEAR: 78; SEQUENTIAL REPORT NO.: 058; OCCURRENCE CODE: 04; REPORT TYPE: T; REVISION NO.: 0; ACTION: H; FUTURE ACTION: Z; EFFECT ON PLANT: Z; SHUTDOWN METHOD: Z; ATTACHMENT SUBMITTED: Y; NPRO-4 COMPLIANT: N; PRIME COMP. SUPPLIER: Z; COMPONENT MANUFACTURER: Z999

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

The incident resulted from a failure of Chemistry personnel to take into account the reduced chlorine demand with the reduced station river water flow. Personnel were instructed to reduce the chlorination dosage when free residual chlorine is 0.2 PPM or greater.

FACILITY STATUS: G; % POWER: 000; OTHER STATUS: N/A; METHOD OF DISCOVERY: A; DISCOVERY DESCRIPTION: Operator observation

ACTIVITY RELEASED OF RELEASE: Z; AMOUNT OF ACTIVITY: N/A; LOCATION OF RELEASE: N/A

PERSONNEL EXPOSURES: NUMBER: 000; TYPE: Z; DESCRIPTION: N/A

PERSONNEL INJURIES: NUMBER: 000; DESCRIPTION: N/A

LOSS OF OR DAMAGE TO FACILITY: TYPE: Z; DESCRIPTION: N/A

PUBLICITY ISSUED: N; DESCRIPTION: N/A

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NRC USE ONLY

NAME OF PREPARER: J. A. Werling

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Attachment To LER 78-58/04T-0  
Beaver Valley Power Station  
DUQUESNE LIGHT COMPANY  
Docket No. 50-334

During the current plant shutdown, the reactor plant river water (RPRW) headers and the turbine plant river water header were being chlorinated at a dose rate of 250 pounds per day for a total of 45 minutes. On November 5, the turbine plant river water system was secured. No chlorination was performed on November 5 and 6 due to an abnormal lineup. On November 7, chlorination was performed on the "B" RPRW header at a dose rate of 250 pounds per day for 15 minutes. The maximum free chlorine residual was 0.24 PPM. On November 8, at 1250 hours, chlorination was performed on the "B" RPRW header at a dose rate of 250 pounds per day for 15 minutes. Free chlorine residuals measured at the station outfall structure exceeded the allowable value of 0.5 PPM. At 1330 hours, the free chlorine residuals reached a maximum of 0.6 PPM and, at 1340 hours, it returned to 0.0.

Ohio River flow at the time of the incident was approximately  $5.8 \times 10^6$  GPM, resulting in a dilution factor of 600 in the local mixing zone. The high chlorine demand of the river further reduced the effect of the chlorine outside the local mixing zone. No adverse impact to the river ecosystem occurred outside the local mixing zone.

The incident resulted from a failure of Chemistry personnel to reduce the chlorination rate with the reduced plant river water flow. With the turbine plant river water system secured, flow to the outfall was reduced from 25,000 GPM to 9,000 GPM. Also, the high free residual of November 7 indicated a reduced chlorine demand and chlorine dosage should have been reduced on November 8, 1978.

Chemistry personnel were instructed to reduce the chlorination dosage when previous free residual chlorine is 0.2 PPM or greater.