

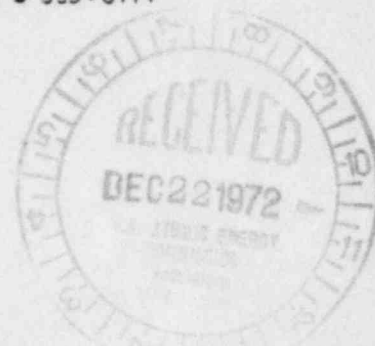
Jersey Central Power & Light Company



MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 539-6111

December 19, 1972

Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
United States Atomic Energy Commission
Washington, D. C. 20545



Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Floor Drain Sample Tank -- Recycle Line Failure

The purpose of this letter is to advise you of a violation of the Technical Specifications Paragraph 3.6.B -- Unmonitored release to the environment due to a failure of the recycle line to floor drain sample tank "A" external to the radioactive waste treatment building. This is considered to be an abnormal occurrence as defined in the Technical Specifications Paragraph 1.15.B and D.

On December 6, 1972, while recirculating floor drain sample tank "A" prior to sampling, a failure occurred in the recirculation line allowing floor drain sample tank water with an activity of 2.05×10^{-2} uci/cc to spray into and beyond a curbed area surrounding both floor drain sample tanks and both waste sample tanks located external to the radioactive waste treatment facility. The water drained from the curbed area through a two-way valve lined up to direct rainwater drainage to the discharge canal via the service water overboard line, resulting in an unmonitored release to the environs. Water was also evident in a small area just outside of the curbed section.

The cause of the failure was corrosion and erosion in an elbow on the carbon steel recirculation line to floor drain sample tank "A".

Tank recirculation was stopped immediately upon discovering the failed line. The total time involved was approximately 20 minutes. Measures were taken to decontaminate the area outside the curbed section. Blotter paper was used to absorb the excess water. Smears taken in this area showed a maximum contamination level of 800 d/m. The two-way valve which had been aligned so that rainwater would be directed to the discharge canal was realigned to direct water collected inside the curbed area to the 1-9 sump in the radwaste facility. The leak was repaired by welding and the floor drain recirculation line returned to service.

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Mr. A. Giambusso
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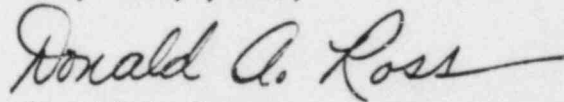
Based on the chart recorder indication, the maximum amount of water released was 50 gallons. This release occurred during a 20-minute period at a release rate of 2-1/2 gpm.

Concurrently, waste sample tank "B" was being released via the identical path to the discharge canal at 17.5 gpm. To evaluate whether or not the limits of 10CFR20 were exceeded, the weighted average concentration was determined to be 3.13×10^{-3} uci/cc for the combined release. The total curies released during the 20-minute period were 4.73×10^{-3} curies excluding tritium and 6.93×10^{-3} curies of tritium. Of this, 4.0×10^{-3} curies excluding tritium and 1.89×10^{-4} curies of tritium were due to water from the leak. On an identified isotopic basis, the permissible release rate would be 341 gpm. As the combination of the two releases only totaled 20 gpm, the limits of 10CFR20 were not exceeded and, therefore, the significance of this event was minimal.

To prevent a recurrence of this event, the drains from this curbed area will be directed to the 1-9 radwaste sump. In addition, we will verify that the surge tank curbed area drains are directed into a radwaste sump.

We are enclosing forty copies of this report.

Very truly yours,

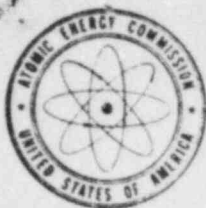


Donald A. Ross
Manager, Nuclear Generating Stations

DAR/pk

Enclosures

cc: Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region 1



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

RO Inquiry Report No. 50-219/72-320

Licensee: Jersey Central Power & Light Company
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

License No.: DPR-16

Facility: Oyster Creek - BWR
Forked River, New Jersey

Descriptive Title: Equipment Failure - Floor Drain Sample Tank
Recirculation Line

Prepared by:

F. S. Cantrell
F. S. Cantrell, Reactor Inspector

12/15/72
Date

A. Date and Manner AEC was Informed:

On December 7, 1972, during an inspection at the site.

B. Description of Particular Event or Circumstance:

When the operator started the recirculation pump for the "A" floor drain sample tank, at about 8:00 a.m., December 6, 1972, he noted a slight decrease in tank level. He immediately went to the sample tank area (which is outside the radwaste building) and observed water spraying against the building and running down into the curbed area around the tanks, and spraying on the sidewalk outside the curbing. He immediately went back inside and stopped the pump. A tank inventory showed that 50 gallons of water was lost from the tank. An inspection in the area showed that the drain line inside the curbing was valved to go to the discharge canal rather than to return to the radwaste building. As a result, only approximately 1 gallon of water was recovered.

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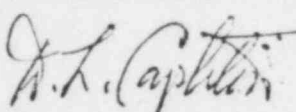
C. Action by Licensee:

1. A sample of water was obtained from the tank and was analyzed, with the following results:

<u>Isotopes</u>	<u>Activity (uCi/cc)</u>	<u>Ratio (Activity/MPC)</u>
Gross Activity	2.05×10^{-2}	-
Cobolt-60	5.89×10^{-3}	117.8
Cesium-144	4.08×10^{-3}	453.3
Cesium-137	5.99×10^{-3}	299.5
Manganese-54	3.55×10^{-3}	35.5

2. The pipe that failed was on the discharge side of the pump and was located just outside of the building between the building and the tank. This pipe is 3" carbon steel pipe and was repaired by welding a patch over the failed area. According to the maintenance foreman, he has ordered stainless steel pipe to replace this line and the comparable line to the "B" floor drain sample tank.
3. The water that landed on the sidewalk outside of the curb was soaked up with a blotter, however, before the area was surveyed for contamination, it started raining. The sidewalk was not smeared for contamination until December 7, 1972. At that time, the sidewalk was clear of contamination, however, the area inside the curb was contaminated up to 5000 cpm. The sand next to the sidewalk was also contaminated. The upper layer of sand was removed with the contamination. The licensee issued instructions for the drain from the curbed area to be either valved closed, or to the radwaste building sumps.
4. The licensee plans to survey other equipment to determine the potential for this type of corrosion-erosion failure as part of his general study of the operation of the radwaste facility.
5. The licensee will submit a written report to the Directorate of Licensing within 10 days as required by the Technical Specifications.

Ro Files

MEMO ROUTE SLIP		See me about this.	For concurrence.	For action.
* Form AFM-94 (Rev. May 11, 1961) M 0210		Note and return.	Signature.	For information.
TO (Name and unit)	INITIALS	REMARKS		
J. G. Keppler, RO (2)	DATE			
		RO INQUIRY REPORT NO. 50-219/72-32Q		
		JERSEY CENTRAL POWER & LIGHT CO.		
		OYSTER CREEK		
TO (Name and unit)	INITIALS	REMARKS		
cc: XXXXXX RO:HQ (5) DR Central Files Reg. Standards (3) Dir. of Licensing (13)	DATE			
		The subject inquiry report is forwarded for your information. Distribution will be made by this office to the PDR, LPDR, NSIC, DTIC		
		and State representatives after review by the licensee for proprietary information.		
TO (Name and unit)	INITIALS	REMARKS		
	DATE			
FROM (Name and unit)		REMARKS		
 D. L. Caphton, RO:I				
PHONE NO.	DATE			
	12/18/72			

USE OTHER SIDE FOR ADDITIONAL REMARKS

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