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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

June 25, 1973

Docket No. 50-219

Jersey Central Power & Light Company
ATTN: R. H. Sims
Vice President
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

Gentlemen:

By letter dated November 13, 1972, you informed us that "prior to June 1, 1973, Jersey Central will submit to the AEC for approval a description and analyses of the gaseous and liquid radwaste system alterations which will be designed to assure conformance with the proposed Appendix I to 10 CFR Part 50." Our letter to you, dated December 12, 1972, requested information within 60 days in regard to plant modifications planned in order to meet low as practicable effluent releases. In response to this request, you stated in Supplement No. 4 to the Application for a Full-Term License dated March 5, 1973: "An FDSAR amendment describing these changes and the analyses to demonstrate compliance with Appendix I will be submitted by June 1, 1973." You informed our staff that the reason for the additional four months was to allow you to consider the alternative systems and make a selection of the system you would propose.

By letter dated June 1, 1973, you submitted a report entitled "Proposed Modification to the Gaseous Radioactive Waste Systems for Oyster Creek Station." This report states that you have four systems under consideration for treatment of condenser off-gas. The cover letter to the report states that studies are in progress to select appropriate modifications to the liquid and solid radioactive waste systems. The schedule given in Table 1-3 of the report shows that your evaluation of modifications began in July 1972.

We have reviewed the report and we acknowledge that any of the four systems that you presently have under consideration for condenser off-gas treatment could be acceptable for reducing the activity in the total gas effluents to a level that is low as practicable. We have accepted similar type systems for other facilities. We recommend that you select the system that

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June 25, 1973

you propose to install and submit a description of the detailed design and an analysis of its performance promptly. In addition, a description of the details of the modifications proposed for the liquid and solid waste treatment systems should also be submitted promptly.

We do not consider that your report of June 1 fulfills your earlier commitments to describe and analyze the systems you propose to use. Because of the length of time that has elapsed since your evaluation commenced and considering the present status of progress as well as your proposed schedule, we presently have under consideration the imposition of interim conditions for operation of Oyster Creek Nuclear Generating Station. These will be intended to assure compliance with Section 50.36a(b) of 10 CFR Part 50, i.e., that except for unusual operating conditions, average annual releases of radioactive material in effluents will be kept at small percentages of the limits specified in Section 20.106 of 10 CFR Part 20.

Sincerely,

Robert Schmidt for
Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

cc: G. F. Trowbridge, Esquire
Shaw, Pittman, Potts, Trowbridge
& Madden
910 - 17th Street, N. W.
Washington, D. C. 20006

Mr. Kenneth B. Walton
Brigantine Tutoring
309 - 21st Street, South
Brigantine, New Jersey 08203

Miss Dorothy E. Horner
Township Clerk
Township of Ocean
Waretown, New Jersey 08753

J. Lester Yoder, Jr., Esquire
206 Horner Street
Toms River, New Jersey 08753

GPU Service Corporation
ATTN: Mr. Thomas M. Crimmins, Jr.
Safety & Licensing Manager
260 Cherry Hill Road
Parsippany, New Jersey 07054

Ocean County Library
15 Hooper Avenue
Toms River, New Jersey 08753

Jersey Central Power & Light Company

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

June 22, 1973

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
Electromatic Relief Valve Failure


This letter is intended to follow up our April 24, 1973 letter reporting one electromatic relief valve NR-108-B failed an operability test. As a result of additional investigation into this problem, the reason for the failure of the "B" electromatic relief valve to open during the test was traced to the failure of the solenoid core guide pin as previously reported. The solenoid core is guided by two 1/2" pins silver soldered to their support plates. The soldered joint failed partially because of marginal soldering. The guide pins were cocked to one side and prevented the solenoid core from moving in the trip direction as required.

To prevent this type failure from reoccurring, the following repair was made to the pins support plate assembly of all five electromatic relief valves at Oyster Creek. (Please refer to the attached drawing.) New 304SS guide pins were machined to the dimensions shown on the attached drawing. The new pins were welded to the underside of the support plates using 308L wire. New 1/8" spacers were installed between the solenoid core frame and the guide support to clear the underside weld.

Upon completion of the repair, the valves were tested satisfactorily with the reactor at rated pressure during our restart following our recent re-fueling outage.

Enclosed are forty (40) copies of this report.

Very truly yours, -

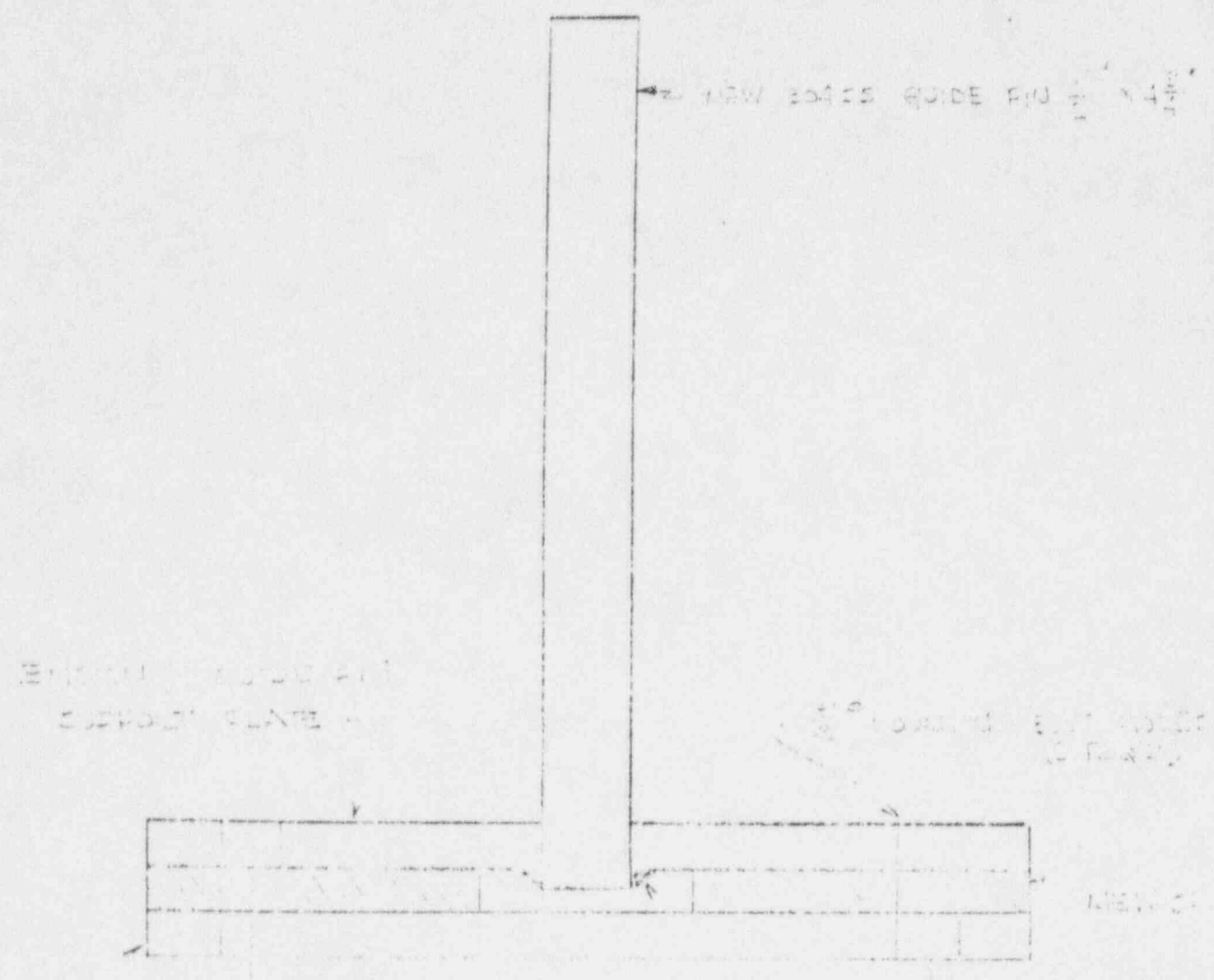

Donald A. Ross
Manager, Nuclear Generating Stations

DAR:es
enclosures

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

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BRASS SUPPORT PLATE

NEW BRASS GUIDE PIVOT

PUSH ROD

VALVE SPRING

VALVE SEAT

BRASS VALVE ASSEMBLY

FIG. 1

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Jersey Central Power & Light Company

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

June 22, 1973

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
Diesel Generator 1-1

The purpose of this letter is to report a failure of diesel generator 1-1 to assume load during a recent surveillance test. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, Paragraph 1.15.G. Notification of this event as required by the Technical Specifications, Paragraph 6.6.B, was made to AEC Region I, Directorate of Regulatory Operations on June 11, 1973.

As a part of the normal surveillance program, an attempt was made to start the No. 1 Diesel generator and load it to greater than 20% power as required by the Technical Specifications, Paragraph 4.7.A.1. However, before the unit could automatically synchronize onto the 10 bus, a "sequence fault" initiated and the generator shut down.

Investigation into this event showed that following a fast start test and with the diesel generator in peaking control, the generator trips immediately upon receipt of a normal stop signal rather than running back the load as might be expected. As a result, the engine governors are not set up for 60 Hz unloaded operation. In attempting to perform the normal surveillance test, the engine governor could not reset at a fast enough rate to match up frequency. Allowable time interval is 60 seconds. Consequently, the "sequence fault" condition occurred and the generator shut down.

The No. 1 diesel generator was taken out of automatic, started locally, was properly synchronized manually and loaded to rated load (2750 kW peaking). Control was then transferred back to the Control Room and the load test completed. The No. 2 Diesel generator was also manually started and voltage and frequency checked locally. The unit was shut down, then given a normal start from the Control Room and the surveillance test satisfactorily completed.

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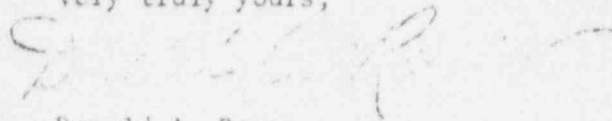
June 22, 1973

The diesel generator units are required to perform their safety function during a loss of power condition; thus, under such circumstances, synchronization is not required. Since both engines started and both generators were excited, their safety function would have been performed. Therefore, no unusual safety significance is associated with this event.

To prevent a recurrence of this kind, the Diesel Fast Start Surveillance Procedure (601) will be revised to include a manual unloading of the diesel generator before tripping the unit. This will run back the governor to normal unloaded position corresponding to 60 Hz. //

Enclosed are forty (40) copies of this report.

Very truly yours,



Donald A. Ross
Manager, Nuclear Generating Stations

DAR:cs
Enclosures (40)

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

Date: June 18, 1973

Time: 1230

ABNORMAL OCCURRENCE

REPORT NO. 73-11

SUBJECT: Violation of the Technical Specification, para. 4.6 C.

A sample of reactor coolant shall be analysed at least every 72 hours to determine the total radioactive iodine content.

Failure of _____ (or)

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, para. 1.15G. Notification of this event as required by the Technical Specifications, para. 6.6.3 was made to AEC Region I Directorate of Regulatory Operations on June 18, 1973.

SITUATION:

A sample of reactor coolant was not analyzed for total radioactive iodine content between 0020 June 9, 1973 and 0830 June 13, 1973 (104 hrs., 10 mins.)

CAUSE: FAILURE TO OBTAIN & ANALYZE REACTOR COOLANT SAMPLE FOR TOTAL RADIOA

The multichannel analyzer is the instrument used to measure total iodine radioactivity. This instrument became inoperative on June 9, 1973, and was not repaired until June 12, 1973. The time lapse was not brought to the attention of the Chemical Supervisor by the Chemistry Technicians.

REMEDIAL ACTION:

Remedial action was not applicable in this case, since at the time the event was discovered, we were on the proper sampling frequency. The immediate action taken to correct the problem was to repair the multichannel analyzer so that the iodine could be determined.

SAFETY SIGNIFICANCE: NONE

Gross beta-gamma counting of reactor water was performed during this period at the normal daily frequency. Gross gamma counting of filtered reactor water was performed during this period at the normal daily frequency. Both of these counting techniques include total iodine radioactivity in the total. None of the results obtained from these analyses showed a deviation from normal during the period of June 9th to June 13th.

Off Gas, which is a direct and sensitive indication of fission product activity, did not show any significant or unexplained deviation from normal during this period. This was shown by operating Stack Gas sample instrumentation and verified by Off Gas sample analysis on June 11, 1973.

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MEMO ROUTE SLIP <small>Form AIC-90 (Rev. May 11, 1972) AIC-90-10</small>		See me about this <small>Time and return</small>	For concurrence <small>For signature</small>	For action <small>For information</small>
TO (Name and unit) H. D. Thornburg, Chief, FS&EB		INITIALS DATE	REMARKS Licensee: Jersey Central Power & Light Co. Docket No.: 50-219 Abnormal Occurrence: TWX dated 6/18/73 (RO-73-11)	
TO (Name and unit) RO:HQ (5) DR Central Files (1) Regulatory Standards Dir. of Licensing (13)		INITIALS DATE (3)	REMARKS The attached report from the subject licensee is forwarded in accordance with RO Manual Chapter 10	
TO (Name and unit) RO Files		INITIALS DATE	REMARKS The action taken by the licensee is considered appropriate. Followup will be performed during the next inspection as appropriate. Copies of	
FROM (Name and unit) <i>D. L. Capton</i> D. L. Capton, RO:I		REMARKS the report have been forwarded to the PDR, Local PDR, NSIC, DTIE and State representatives. The licensee will submit a 10 day written report to Licensing.		
PHONE NO.	DATE 6/20/73			

USE OTHER SIDE FOR ADDITIONAL REMARKS

GPO : 1971 O -

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Date: June 18, 1973

Time: 12:30 p.m.

ABNORMAL OCCURRENCE

REPORT NO. 73-12

SUBJECT: Violation of the Technical Specification, para. _____

(or)

Failure of Containment Spray System 2, to automatically reset to the operable mode upon returning the mode switch to automatic due to a burned relay, 16K22B. Additionally, failure of Containment Spray Pump 51C to start upon actuating the key lock and control switch in the Control Room due to a disconnected wire on the key lock switch.

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, para. 1.15D. Notification of this event as required by the Technical Specifications, para. 6.6.B was made to AEC Region I Directorate of Regulatory Operations on Monday June 18, 1973.

SITUATION:

Following successful performance of the Containment Spray System automatic initiation test, the system was returned to normal standby readiness. However, about an hour and a half later, an odor of burned insulation was detected in the 4605MR Room, in which is located Containment Spray logic panel EA8B. The odor was traced to relay 16K22B which performs the function of automatically resetting the system to a standby condition when the mode switch is returned to "automatic". The relay was found in the de-energized state when it normally should have been energized.

Upon replacing the coil and series resistor on the relay, the system was placed in the "Dynamic Test" mode and an operability check attempted on Containment Spray Pump 51C. However, the pump did not start. Pump 51D, in the same system, was checked and found to start satisfactorily. Voltage checks were made across the key lock switch and the problem was determined to exist at that point. Further checking revealed a loose wire broken off one of the key lock terminals.

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CAUSE:

The premature failure of relay 16K22B is thought to have been caused by an internal breakdown of the coil insulation resulting in an "open" in the coil windings. The pump starting failure was traced to a wire which had become disconnected from the key lock switch.

REMEDIAL ACTION:

The circuitry and components associated with relay 16K22B were checked to eliminate any external cause for the failure. The coil and series resistor on 16K22B were replaced. The system mode switch was then placed in "Dynamic" test, a surveillance test run during which time the loose wire on the key lock switch was found and tightened, and the mode switch returned to "automatic". The system returned to a standby condition and the relay was checked to be energized. Further voltage checks were made on the relay and found to be satisfactory.

SAFETY SIGNIFICANCE:

In each of the two above cases, the Containment Spray System would have functioned normally had it been called upon for service. Following the failure of relay 16K22B, the system would not have "reset" automatically if the mode switch had been moved out of "automatic" to some other mode, then back to "automatic". The operator, however, would have been aware of this failure due to the presence of the "disabled" alarm, and could have reset the system manually.

Prepared by: J. B. [Signature] Date: June 19, 1973

(AO-73-72)

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MEMO ROUTE SLIP Form ABC-10 (Rev. May 11, 1962) AFM 0210		See me about this. For signature	For concurrence. For signature	For action. For information
TO (Name and unit) H. D. Thornburg, Chief, FS&EB		INITIALS	REMARKS Licensee: Jersey Central Power & Light Co.	
		DATE	Docket No.: 50-219	
			Abnormal Occurrence: TWX dated 6/18/73	
TO (Name and unit) RO:HQ (5) DR Central Files (1) Regulatory Standards (3) Dir. of Licensing (13)		INITIALS	REMARKS	
		DATE	The attached report from the subject licensee is	
			forwarded in accordance with RO Manual Chapter 10	
TO (Name and unit) RO Files		INITIALS	REMARKS	
		DATE	The action taken by the licensee is considered	
			appropriate. Followup will be performed during	
			the next inspection as appropriate. Copies of	
FROM (Name and unit) <i>D. L. Caphton</i> D. L. Caphton, RO:I		REMARKS		
		the report have been forwarded to the PDR, Local		
		PDR, NSIC, DTIE and State representatives. The		
		licensee will submit a 10 day written report to		
		Licensing.		
PHONE NO.	DATE 6/20/73			

USE OTHER SIDE FOR ADDITIONAL REMARKS

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Jersey Central Power & Light Company

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

June 5, 1973

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
Drywell Head Manhole Cover

The purpose of this letter is to report a failure of the drywell head manhole cover double gasket seal to meet acceptable leakage as specified in Technical Specifications 4.5.F.1.D. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, Paragraph 1.15.E. Notification of this event as required by the Technical Specifications, Paragraph 6.6.B, was made to AEC Region I, Directorate of Regulatory Operations, on May 27, 1973.

While attempting to pressurize the double gasket seal on the drywell head manhole cover, significant pressure decay was observed between the gaskets. A check of the manhole cover plate with leak teck showed that there was a significant amount of leakage through the outer gasket. No attempt was made to determine whether the inside gasket was leak tight. The allowable leakage for a penetration is 10% of $L_t(20)$ or 19.9 SCFH.

Visual inspection of the gaskets showed that the outer gasket was brittle and would crack when pulled, but the inner gasket was less brittle and still had some resilience left when it was pulled.

Both gaskets on the manhole cover were replaced.

The test showed the outer gasket was leaking and the visual inspection indicated that the inner gasket was sound and might have been leak tight. (Note this point was not verified by any measurement.) If the inner gasket was tight, there is no particular safety significance except the lack of a redundant gasket seal.

The failure of both gaskets could result in primary containment leakage (into secondary containment) in excess of technical specification

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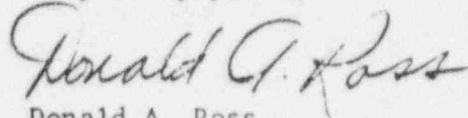
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June 5, 1973

limits and in excess of the leakage assumed for off-site dose calculations described in the basis for Technical Specification 4.5. However, there is a possibility that the inside gasket was tight and that primary containment leakage would be less than allowable.

To prevent recurrence of this type failure, a schedule for gasket replacement needs to be developed. This particular gasket is estimated to have been in service 4 or 5 years. In the future, it will be replaced every 3 years since it is located in a higher temperature region of the containment. As future experience dictates the need for gasket replacement in other areas of the containment, it will be factored into our replacement schedule.

Very truly yours,



Donald A. Ross
Manager, Nuclear Generating Stations

DAR:cs
Enclosures (40)

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

DIRECTORATE OF REGULATORY OPERATIONS
Memo Route SL

OB:AR:162

R. T. Carlson Region I	X	DRYWELL HEAD MANHOLE COVER
E. M. Howard Region I		The enclosed report from the Jersey Central Power and Light Company to the Directorate of Licensing, pertaining to deterioration of the gaskets associated with the drywell head manhole cover at the Oyster Creek facility, is forwarded for your information.
E. J. Brunner Region I	X	
F. J. Long Region II		cc: H. D. Thornburg, RO
W. C. Seidle Region II	X	
C. E. Murphy Region II	X	Enclosure: Jersey Central ltr. dtd 6/5/73
G. Fiorelli Region III	X	
D. M. Hunnicutt Region III	X	
W. E. Vetter Region III		
G. L. Madsen Region IV	X	
G. S. Spencer Region V	X	

B/2/4

J. H. Sniezek
DATE

FROM:

J. H. Sniezek

6/20/73