

631 Park Avenue
King of Prussia, Pennsylvania 19406

AUG 17 1973

Jersey Central Power & Light Company
Attention: Mr. I. R. Finrock, Jr.
Vice President - Generation
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960

Docket No. 50-219

Gentlemen:

The reports of your action in response to Regulatory Operations Bulletin No. 73-3, dated July 27, 1973, and other information concerning Bergen-Paterson hydraulic shock absorbers, indicates that additional action is advisable.

Enclosed is Regulatory Operations Bulletin No. 73-4 which provides you with additional information and lists certain actions that appear appropriate on a timely basis. The Directorate of Licensing currently is evaluating the need for a continuing surveillance program for hydraulic shock absorbers.

You are requested to take the action shown under ACTION INDICATED in the enclosed Regulatory Operations Bulletin No. 73-4, dated August 17, 1973.

Should you have questions concerning this matter, please contact me.

Sincerely,

James P. O'Reilly
Director

Enclosure:
NO Bulletin No. 73-4

cc: Mr. J. T. Carroll, Plant Superintendent

bcc: PDR
Local PDR
NSIC
TIC
State of New Jersey

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PDR FOIA
DEKOK95-258 PDR

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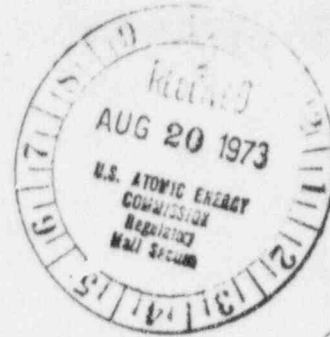
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Jersey Central Power & Light Company

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

August 17, 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

The purpose of this letter is to report a failure of a component which could have caused the failure of No. 1 diesel generator to start. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, Paragraph 1.15D. Notification of this event, as required by the Technical Specifications, Paragraph 6.6.2a, was made to the AEC Region 1 Directorate of Regulatory Operations on Wednesday, August 8, 1973.

While conducting a routine six-month surveillance inspection of the No. 1 diesel generator, it was discovered that one of the two starting motors failed to engage. This engagement failure would have prevented the unit from starting under normal conditions. The engagement shaft bushing at the pinion end of the starting motor was discovered to be rotating with the shaft. Due to wear, the bushing had slipped out of position thus preventing the pinion gear from engaging the engine ring gear. Details of the diesel generator starter are as follows:

Manufacturer: Delco Remy
Model No.: 1109758H
Serial No.: 222
Voltage: 64VDC

Prior starter failures, although all associated with failed or weak starter solenoids, are tabulated below:

<u>Date</u>	<u>Diesel Generator</u>	<u>Problem</u>
10/19/69	2	Both starter pinion solenoids were burnt, causing "hard" dc system ground.
2/21/70	1	No reason found.

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<u>Date</u>	<u>Diesel Generator</u>	<u>Problem</u>
10/03/70	1	Starter motor pinions not engaging the ring gear properly.
12/04/72	2	One of the two starter motor pinions failed to engage. Heavier duty solenoid installed.

Based on our review of past starter failures, this appears to be the first one associated with mechanical failure of the starting motor. To correct this situation, a new starter motor was installed and tested satisfactorily. Control lead connections were tightened and a satisfactory operability test was then conducted.

The significance of this event is minimal due to the fact that the difficulty was identified and corrected in conjunction with a routine six-month surveillance inspection. Had this condition gone undetected, a failure of one diesel to start has been considered in Appendix L to the FDSAR which contains a probability analysis regarding the availability of standby cooling systems and includes an analysis of off-site power availability concurrent with a loss of coolant accident. The results indicated that the reliability of available power from off-site sources or from a self-contained unit -- only one diesel generator was considered in the analysis -- was quite high. Since the station is provided with two separate diesel generator units, having one unit out of service has no effect at all upon the results of the analysis. In addition, the effects of single bus operation during a loss of coolant accident was analyzed in Amendment 32 to the FDSAR and the unit loading under this condition was found to be within the normal KVA rating of the diesel generator. Thus, there is no additional safety significance associated with this event beyond that already analyzed.

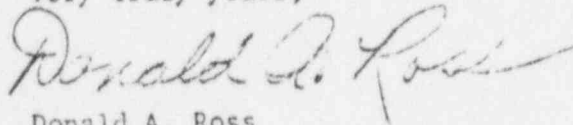
To prevent this type of failure from reoccurring, the diesel manufacturer (General Motors) will be contacted and requested to supply the following:

- (a) Recommendations for a positive locking mechanism to secure the shaft bushing at the pinion end of the starting motor.
- (b) Recommendations for preventative maintenance on the diesel generator starters.

In addition, the station's semi-annual diesel generator inspection procedure will be reviewed and revised, as required, based on the experience gained from this event and possible future recommendations from the manufacturer.

We are enclosing forty copies of this report.

Very truly yours,



Donald A. Ross
Manager, Nuclear Generating Stations

pk

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