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OYSTER CREEK



NUCLEAR GENERATING STATION



Jersey Central Power & Light Company is a Member of the General Public Utilities System

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July 8, 1981

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement
Region I
United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406



Dear Mr. Grier:

SUBJECT: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/81-24/3L

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/81-24/3L in compliance with paragraphs 6.9.2.b.2 and 6.9.2.b.3 of the Technical Specifications.

Very truly yours,

Ivan R. Finfrock, Jr.
Ivan R. Finfrock, Jr.
Vice President - JCP&L
Director - Oyster Creek

IRF:dh
Enclosures

cc: Director (40 copies)
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Director (3)
Office of Management Information
and Program Control
United States Nuclear Regulatory Commission
Washington, D. C. 20555

NRC Resident Inspector (1)
Oyster Creek Nuclear Generating Station
Forked River, N. J.

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/81-24/3L

Report Date

July 8, 1981

Occurrence Date

June 8, 1981

Identification of Occurrence

The plant was operating in a degraded mode as permitted by a limiting condition for operation as given in Technical Specification paragraph 3.4.C.4, when two Emergency Service Water pumps were found to be inoperable, and the required operability check of the operable pumps was not performed in the time period specified.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraphs 6.9.2.b.2 and 6.9.2.b.3.

Conditions Prior to Occurrence

The plant was operating at steady state power.

Major Plant Parameters

Power:	Reactor	1081 MWt
	Generator	310 MWe
Flow:	Recirculation	12.0×10^4 gpm
	Feedwater	3.5×10^6 lb/hr

Description of Occurrence

At approximately 12:35 A.M. on June 8, an operability check of the Emergency Service Water pumps was performed due to grass clogging problems at the intake structure. Pump 52B was found to have unacceptable motor current, and pump 52C was found to have unacceptable discharge pressure. (Based on acceptance criteria given in the Containment Spray and Emergency Service Water Pump Operability Test procedure, 607.4.001). The remaining pumps, 52A in System I and 52D in System II, met the acceptance criteria.

After discussion with the NRC Resident Inspector, at approximately 11:30 A.M. on June 9, an operability check was again performed on the four ESW pumps (approximately 35 hours after the first operability check). Once again pumps 52B (System I) and 52C (System II) failed to meet acceptance criteria, and 52A and 52D were operable.

On June 10, the four pumps were again tested, and in addition to measuring motor current and pump discharge pressure, the system flow was measured using ultrasonic measuring equipment. Based on the fact that each pump delivered more than the acceptable flow rate, the four ESW pumps were then considered operable. The test data for the three (3) days is as follows:

June 8

<u>ESW Pump</u>	<u>Disch. Pressure(psig)</u>	<u>Current(amps)</u>
52A	100	51
52B	100	*48
52C	* 95	51
52D	115	55

June 9

<u>ESW Pump</u>	<u>Disch. Pressure(psig)</u>	<u>Current(amps)</u>
52A	100	51
52B	* 95	*48
52C	* 97	51
52D	140	54

June 10

<u>ESW Pump</u>	<u>Disch. Pressure(psig)</u>	<u>Current(amps)</u>	<u>Flow(gpm)</u>
52A	100	50.5	3420
52B	* 95	*47	3830
52C	* 95	51	3750
52D	115	53.5	4000

Acceptable Limits:

- >100 psig pressure
- 53 + 3 amps current
- > 3000 gpm flow (design flow)

*Denotes unacceptable values

Apparent Cause of Occurrence

Following the June 8 testing of the ESW pumps and after a management review of the test data, it was decided to consider the pumps with questionable readings operable. This decision was based on past experience of poor correlation between pump flow and pressure/current readings. At the same time, engineers were assigned to evaluate the test data and conduct flow tests in order to verify the status of the pumps in question.

Subsequently, it was found that pump flows were well within acceptable limits and in fact the pumps were operable. Additionally, it was found that the ammeter on the 'B' pump was faulty and slight clogging of the pump suction of 'B' and 'C' pump contributed to the low discharge pressure readings.

Analysis of Occurrence

The Containment Spray and Emergency Service Water Systems are engineered safety systems designed to remove fission product decay heat from the primary containment in the event of a loss of coolant accident. There are two independent systems used to accomplish this, with each system having redundant pumps, each capable of performing the safety function. The systems are designed so that a single Containment Spray pump and a single Emergency Service Water pump can provide the necessary cooling.

In this case, the safety significance is minimized by the fact that the redundant pump in each system was operable (52A in System I and 52D in System II). Based on this, the system would have been able to perform its designed function in the event of a LOCA. It should also be noted that the of June 10 shows that the pumps are still capable of delivering rated flow even with the low current or pressure.

Corrective Action

Since the time of the occurrence, the faulty ammeter has been replaced. Emergency Service Water pumps 52B and 52C were removed and the suction bells were cleaned. Testing performed after this maintenance yielded current and pressure readings which were all within acceptable limits.

Currently, engineers have been assigned to provide flow instrumentation on this system in order to provide positive indication of pump operability. In the interim, the pump testing procedure and pump acceptance criteria are being evaluated in order to determine possible changes to provide better indication of actual operability status.

In the future when a question on equipment operability arises as a result of surveillance data or other conditions that can't be immediately dispositioned, a conservative approach will be taken and the subject equipment declared inoperable and the appropriate surveillance performed as required by Technical Specifications until resolved.

Failure Data

Manufacturer - Byron Jackson
Type - Vertical-Centrifugal, 3000 gpm, 1770 RPM