

Jersey Central Power & Light Company



MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N. J. 07960 • 201-539-6111

General



Public Utilities Corporation

April 3, 1975



Mr. A. Giambusso
Director, Division of Reactor Licensing
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Giambusso:

Subject: Oyster Creek Station
Docket No. 50-219
Abnormal Occurrence Report No. 50-219/75-8

The purpose of this letter is to forward to you the attached abnormal occurrence report in compliance with paragraph 6.6.2.a of the Technical Specifications.

Enclosed are forty copies of this submittal.

Very truly yours,

Donald A. Ross, Manager
Generating Stations-Nuclear

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Enclosures

cc: Mr. J. P. O'Reilly, Director
Office of Inspection and Enforcement, Region 1

*50-219
incident*

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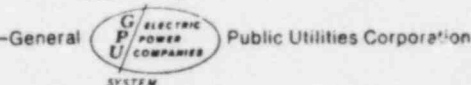
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OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/75-8

Report Date

April 3, 1975

Occurrence Date

March 25, 1975

Identification of Occurrence

Violation of the Technical Specifications, paragraph 3.10.A. Power operation continued with the average linear heat generation rate of four fuel assemblies in excess of the maximum average LHGR shown in Figure A-1, Appendix A, to an "Order for Modification of License" issued on December 27, 1974 by Edson G. Case, Acting Director, Office of Nuclear Reactor Operation, Nuclear Regulatory Commission. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15.B.

Conditions Prior to Occurrence

The plant was undergoing load change during routine power operation with major parameters as follows:

Power:	Electric, 644 MWe
	Reactor, 1848.3 MWt
Flow:	Total Recirculation, 156,000 GPM
	Feedwater, 6.88×10^6 lb/hr
Stack Gas:	40,500 μ ci/sec

Description of Occurrence

On Friday, March 21, 1975 at 2200, plant power was reduced to 550 MWe to accommodate core flux shaping. During this period, the control rod group (Group 23), one rod of which is near LPRM location 36-17, was withdrawn from position 32 to position 36. At this time, various locations of the core were monitored,

including location 36-17, and it was determined that power level increases with recirculation flow could commence. On Sunday, March 23, 1975 at 1000, with plant power at 623 MWe, various locations of the core were again monitored using the Traversing Incore Probe (TIP) System. It was found that the APLHGR for the Type II fuel around LPRM location 12-41 was 96% of its limit. At this time, control rod group 23 was inserted from position 36 to position 34 to reduce the APLHGR of 12-41. On Tuesday, March 25, 1975, a power distribution calculation was performed and it calculated an APLHGR of 11.00 Kw/ft for assembly A052 which is 104.0% of its limit of 10.57 Kw/ft at the local exposure of the fuel involved.

Apparent Cause of Occurrence

The cause of this occurrence was the failure to properly monitor the reactor core. Following any movement of control rods, it is the responsibility of the Technical Engineering Department to determine the core LPRM locations which monitor the limiting APLHGR's for each type fuel. Following the power shaping of March 21, 1975, there was a judgment error made in selecting which Type II fuel to monitor. This error resulted in operating four (4) Type II fuel assemblies in excess of their APLHGR limit. The error was detected from the core power distribution results following a full core neutron flux scan with the TIP system.

Analysis of Occurrence

In the event of a loss of coolant accident (LOCA), the four (4) fuel assemblies might have exceeded the 2200°F peak clad temperature and 17% local metal/water reaction limit as specified in 10CFR50, Appendix K, and calculated using the General Electric blowdown analysis submitted in support of the Technical Specification change dated August 22, 1974, and subsequently modified by the above mentioned AEC order of December 27, 1974. The significance of this event was minimized by the small extent of the limit excess and by the relatively short time duration.

Corrective Action

The average planar linear heat generation rate of the affected fuel was reduced to 9.92 Kw/ft (93.8% of its limit) by insertion of control rod group 23 from position 34 to position 32 at approximately 1800 on March 25, 1975.

The Technical Supervisor will reevaluate the core monitoring requirements during power level changes and make recommendations to the Technical Engineer to prevent recurrence.

Failure Data

Fuel Assembly:	JCA052	JCA147	JCA145	JCA086
Bundle Average				
Exposure:	16,500 mwd/mt	16,500 mwd/mt	16,500 mwd/mt	16,500 mwd/mt
Local Exposure:	18,500 mwd/mt	18,500 mwd/mt	18,500 mwd/mt	18,500 mwd/mt
Core Location:	37-36	37-18	15-36	15-18

Previous abnormal occurrences involving operation above APLHGR limits are as follows:

1. Abnormal Occurrence Report No. 50-219/73-26
2. Abnormal Occurrence Report No. 50-219/74-45
3. Abnormal Occurrence Report No. 50-219/75-4