

OYSTER CREEK



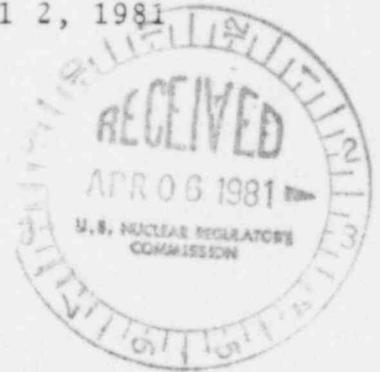
NUCLEAR GENERATING STATION

**JCP&L / GPU**

Jersey Central Power & Light  
Company is a Member of the  
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(609) 693-6000 P.O. BOX 388 • FORKED RIVER • NEW JERSEY • 08731

April 2, 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. 50-219/81-10/3L

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/81-10/3L in compliance with paragraph 6.9.2.b(1) of the Technical Specifications.

Very truly yours,

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

I.F: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. 50-219/81-10/3L

Report Date

April 2, 1981

Occurrence Date

March 2, 1981

Identification of Occurrence

Main Steam Line High Radiation Monitor RN06B was found to trip at a setting less conservative than the Technical Specifications limit of  $\leq 10$  times normal background (Table 3.1.1 item B.6).

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.b(1).

Conditions Prior to Occurrence

The plant was operating at steady state power. Major plant parameters at the time of occurrence were:

Power:     Core               1735 MWt  
          Electrical        595 MWe

Flow:     Recirculation    $14.0 \times 10^4$  gpm  
          Feedwater        $6.28 \times 10^6$  lb/hr

Description of Occurrence

On March 2, 1981 during performance of the Main Steam Line Radiation Monitor Front Panel Test (Plant procedure 621.4.008), monitor RN06B was found to trip at 855 units. The procedural limit is  $< 850$  units and the Technical Specifications limit is  $< 10$  times Normal Background at full rated power. Surveillance testing yielded the following data:

<u>Monitor</u>	<u>Required Trip</u>	<u>Actual Trip</u>
RN06A	$< 850$ units	850 units
RN06B	$< 850$ units	855 units
RN06C	$< 850$ units	820 units
RN06D	$< 850$ units	850 units

A review of the logs indicated that the average radiation monitor readings taken during plant operation at normal rated power, following the last refueling outage, was approximately 85 units. The Technical Specification limit based on this would be 850 units. However, this is an average reading of all four monitors and it should be noted that the readings for an individual monitor or an average of the four monitors at any particular time varied above and, more significantly, below the average reading of 85 units. Since the start of the current Fuel Cycle, the plant has operated at full power for a limited number of days. The evaluation of normal background for this report was based on six (6) days of full power operation.

It was also determined that the instrument setpoints were conservatively selected during a period of operation when the average reading was approximately 100 units or greater.

#### Apparent Cause of Occurrence

Although the apparent cause of the occurrence could be attributed to instrument repeatability, the root cause was the failure to revise the instrument trip settings to account for changes in the normal background radiation levels observed during plant operation at normal rated power.

#### Analysis of Occurrence

Main steamline high radiation is an indication of excessive fuel failure. Scram and reactor isolation are initiated when high activity is detected in the main steam lines. These actions prevent further release of fission products to the environment. This is accomplished by setting the trip at  $< 10$  times normal rated power background. Although these actions are initiated at this level, at lower activities the system also provides for an alarm and continuous monitoring of radioactivity in the primary steam lines. Such capability provides the operator with a prompt indication of any release of fission products from the fuel to the reactor coolant above normal rated power background. The gross failure of any single fuel rod could release a sufficient amount of activity to approximately double the background activity at normal rated power. This would be indicative of the onset of fuel failures and would alert the operator to the need for appropriate action.

Since the other three instrument channels were operating and found to trip within the selected settings, they would have initiated the desired protective actions. Furthermore, channel "B" would have functioned at a radiation level only slightly higher than the prescribed setting.

It should also be noted that the instrument was operating well within the design accuracy of  $\pm 25\%$ .

#### Corrective Action

The monitor was reset to trip at  $< 850$  units. The alarm and trip setpoints will be reduced significantly below  $10$  times the background levels observed during this cycle at normal rated power.

Additionally, the readings will be monitored at rated power following each refueling outage to verify the conservatism of the trip settings selected.

Failure Data

Not applicable.

