Initial Telephone Report Date: 5/30/74

Date of Occurrence: 5/29/74

Initial Written Report Date: 5/30/74

Time of Occurrence: 1900

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/ 34

IDENTIFICATION OF OCCURRENCE: Violation of the Technical Specifications, paragraph N/A, Indications of coolant leakage existing in the area of an incore flux monitor reactor vessel housing located at core coordinate 28-05.

This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15E.

CONDITIONS PRIOR TO OCCURRENCE:

____ Steady State Power	____ Routine Shutdown Operation
____ Hot Standby	____ Load Changes During Routine Power Operation
____ Cold Shutdown	____ Other (Specify)
X Refueling Shutdown	
____ Routine Startup Operation	

The reactor was in the REFUEL mode during a hydrostatic test at 850 psig pressure and with coolant temperature approximately 155°F.

DESCRIPTION OF OCCURRENCE: On Tuesday, May 28, 1974, during a scheduled reactor vessel hydrostatic test to inspect the pressure boundary following refueling maintenance activities, leakage was observed in the vicinity of an incore flux monitor tube located at the bottom of the reactor vessel. Further investigation conducted on Wednesday, May 29, 1974, showed evidence of possible leakage in the area of an incore flux monitor housing penetration

located in the reactor vessel bottom head. A second hydrostatic test was conducted at a pressure of 850 psig at approximately 7:00 p.m. on May 29, 1974, whereupon, water was observed leaking between the monitor housing and the reactor vessel. The leakage was measured under the conditions of 850 psig with a temperature of 164°F, and calculated to be on the order of approximately 0.02 gallons per hour.

APPARENT CAUSE OF OCCURRENCE:

_____ Design
_____ Manufacture
_____ Installation/ Construction
_____ Operator
_____ Procedure
_____ Unusual Service Condition
_____ Inc. Environmental
_____ Component Failure
_____ Other (Specify)
_____

The cause of this event has yet to be determined.

ANALYSIS OF OCCURRENCE:

As stated in FDSAR Amendment #37, a postulated failure of the flux monitor tube would result in vessel leakage at a rate which would not cause excessive cladding temperatures and for which core reflooding is possible by engineered safety features. This situation is less severe than the design basis accident. To determine the consequences of a weld failure at a housing for an in-core monitor tube, it is assumed that the weld between the housing and the reactor vessel bottom head fails, allowing the housing and the in-core monitor tube to be ejected from the vessel. The hole provided in the bottom head for the housing has a diameter of two inches; this is the assumed break size. The hole has a break area of .0218 ft^2. Assuming worst conditions, this results in peak clad temperatures less than 1000°F, as updated in FDSAR Amendment #67. This value is well within acceptable limits of the applicable ECCS criteria.

CORRECTIVE ACTION:

The nuclear steam supply vendor and the reactor vessel manufacturer have been contacted with regard to this condition. Discussion will ensue as to the proper course of action to be taken to resolve this matter. Recommendations will be forthcoming pending complete review of this event by the Plant Operations Review Committee.

Prepared by: J. S. Sullivan Jr. Date: 5/30/74

To: James P. O'Reilly
Directorate of Regulatory Operations
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

From: Jersey Central Power & Light Company
Oyster Creek Nuclear Generating Station, Docket #50-219
Forked River, New Jersey 08731

Subject: Abnormal Occurrence Report No. 50-219/74/34

The following is a preliminary report being submitted in compliance with the Technical Specifications paragraph 6.6.2.

Preliminary Approval:

J. T. Carroll, Jr. 5/30/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso

4962

COPY SENT REGION 1

TO F Dreher
RO: A & AIs
To Chron
FO# 402
4/4

UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

MAY 31 1974

H. D. Thornburg, Chief
Field Support and Enforcement Branch
Directorate of Regulatory Operations, HQ

JERSEY CENTRAL POWER AND LIGHT COMPANY
OYSTER CREEK - BWR
ABNORMAL OCCURRENCE AO 74-34

The subject abnormal occurrence report is forwarded for action.

Based on our review of the licensee's preliminary report, it is recommended that RO Headquarters transfer the lead responsibility to DL for review and evaluation of this penetration failure involving primary coolant leakage at the reactor vessel's bottom head. Additionally, DL should be requested to evaluate potential generic aspects of this problem.

RO:I will continue to provide field follow up and review of any forthcoming corrective measures by the licensee in this matter.

E. J. Brunner, Chief
Reactor Operations Branch

Enclosure
AO 74-34

5 cy Inquiry
Dupe of 8304080485

F. J. REGER

To: James P. O'Reilly
Directorate of Regulatory Operations
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

From: Jersey Central Power & Light Company
Oyster Creek Nuclear Generating Station, Docket #50-219
Forked River, New Jersey 08731

Subject: Abnormal Occurrence Report No. 50-219/74/34

The following is a preliminary report being submitted in compliance with the Technical Specifications paragraph 6.6.2.

Preliminary Approval:

J. T. Carroll, Jr. 5/30/74
J. T. Carroll, Jr. Date

cc: Mr. A. Giambusso

dupe of 8304080489

Report Date: 6/07/74 Occurrence:

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/ 34

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This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15E,

CONDITIONS PRIOR TO OCCURRENCE:

____	Steady State Power	____	Routine Shutdown Operation
____	Hot Standby	____	Load Changes During Routine Power Operation
____	Cold Shutdown	____	Other (Specify)
X	Refueling Shutdown		
____	Routine Startup Operation		

The reactor was in the REFUEL mode during a hydrostatic test at 850 psig pressure and with coolant temperature approximately 155°F.

DESCRIPTION OF OCCURRENCE: On Tuesday, May 28, 1974, during a scheduled reactor vessel hydrostatic test to inspect the pressure boundary following refueling maintenance activities, leakage was observed in the vicinity of an incore flux monitor tube located at the bottom of the reactor vessel. Further investigation conducted on Wednesday, May 29, 1974, showed evidence of possible leakage in the area of an incore flux monitor housing penetration

located in the reactor vessel bottom head. A second hydrostatic test was conducted at a pressure of 850 psig at approximately 7:00 p.m. on May 29, 1974, whereupon, water was observed leaking between the monitor housing and the reactor vessel. The leakage was measured under the conditions of 850 psig with a temperature of 164°F, and calculated to be on the order of approximately 0.02 gallons per hour.

APPARENT CAUSE OF OCCURRENCE:

_____ Design
_____ Manufacture
_____ Installation/ Construction
_____ Operator
_____ Procedure
_____ Unusual Service Condition Inc. Environmental
_____ Component Failure
_____ Other (Specify) _____

The cause of this event has yet to be determined.

ANALYSIS OF OCCURRENCE:

As stated in FDSAR Amendment #57, a postulated failure of the flux monitor tube would result in vessel leakage at a rate which would not cause excessive cladding temperatures and for which core reflooding is possible by engineered safety features. This situation is less severe than the design basis accident. To determine the consequences of a weld failure at a housing for an in-core monitor tube, it is assumed that the weld between the housing and the reactor vessel bottom head fails, allowing the housing and the in-core monitor tube to be ejected from the vessel. The hole provided in the bottom head for the housing has a diameter of two inches; this is the assumed break size. The hole has a break area of .0218 ft^2. Assuming worst conditions, this results in peak clad temperatures less than 1000°F, as updated in FDSAR Amendment #67. This value is well within acceptable limits of the applicable ECCS criteria.

The nuclear steam supply vendor and the reactor vessel manufacturer have been contacted with regard to this condition. Discussion will ensue as to the proper course of action to be taken to resolve this matter. Recommendations will be forthcoming pending complete review of this event by the Plant Operations Review Committee.

By: John S. Sullivan Jr. Date: 5/30/74

TO: B. H. Grier, RO

FS&EB ACTION CONTROL FORM

A. Action Code FO# 402

Name of Licensee and Facility Jersey Central Power and Light Co. (Oyster/ Creek)

Docket No. or License No. 50-219

Title Transfer of Responsibility

Origin Region I Date Rec'd 5/31/74

B. FS&EB Branch Coordinator:

Bryan _____ Dreher X H. D. Thornburg _____

Ellis _____ Paulus _____ G. Gower _____

C. Action Requested of:

ADREMP _____ M&PPOB _____ EPB _____ RPB _____ ADCO X

OB _____ CB _____ TAB _____ OOE _____ REGION _____

Date Requested 6/6/74 Completion Requested by 7/3/74

Reference Memo - E. J. Brunner to H. D. Thornburg dated 5/31/74 and AO-50-219/74-34

D. Action Requested: Please review above referenced documents and if agreeable transfer lead responsibility to DL.

E. Date Action Completed _____

Close-out (Date & Method) _____

Comments: If completion date is not consistent with your work schedule, please let us know.

Harold D. Thornburg

Harold D. Thornburg, Chief
Field Support & Enforcement Branch
Directorate of Regulatory Operations

cc: J. G. Davis