Jersey Central Power & Light Company

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

MEMBER OF THE GPU ELECTRIC POWER COMPANIES SYSTEM

General Public Utilities Corporation

January 28, 1974

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
Abnormal Occurrence Report No. 50-219/74/6

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

Donald A. Ross
Manager, Nuclear Generating Stations

cs
Enclosures

cc: Mr. J. P. O'Reilly, Director
Directorate of Regulatory Operations, Region I

B1651

OYSTER CREEK NUCLEAR GENERATING STATION
FORKED RIVER, NEW JERSEY 08731

Abnormal Occurrence
Report No. 50-219/74/6

Report Date:

January 28, 1974

Occurrence Date:

January 22, 1974

Identification of Occurrence:

Twenty-four hours after placing the mode selector switch into RUN, the torus atmosphere contained 6.2% O_2, which is above the limit of 5.0% O_2. This event is considered to be an abnormal occurrence as defined in the Technical Specifications, paragraph 1.15B.

Conditions Prior to Occurrence:

Routine plant startup was in progress.

The major plant parameters at the time of the event were as follows:

Reactor Power	- 1075 MWt, ≈340 MWe
Recirculation Flow	- 7.4×10^4 gpm
Feedwater Flow	- 3.8×10^6 lb/hr
Feedwater Temperature	- 275°F
Reactor Pressure	- 1020 psig
Reactor Water Level	- 78" Yarway

Description of Occurrence:

At 2030 on January 21, 1974, the primary containment inerting process was initiated by first performing a calibration on the torus/drywell O_2 analyzer, as per the operating procedure. The torus atmosphere was then inerted with nitrogen to 4.8% O_2 as indicated in the drywell/torus oxygen recorder and drywell inerting was then commenced. During this process, a "zero check" on the analyzer showed that the instrument "zero" was low. Correcting this condition brought the indicated O_2 level in the torus to 6.2%. Since drywell inerting was already in progress, it was decided to reinert the torus after drywell inerting was complete. Due to a misunderstanding of the procedure on the part of the shift foreman, an attempt was made to inert the drywell to less than 1% O_2 content. Prior to attaining this condition, the plant nitrogen supply reached a level where further consumption in the inerting process would have exhausted the operational supply needed for the nitrogen/air system in the drywell.

An orderly plant shutdown at a 30 MWe rate was started at 1000 on January 22, 1974, 24 hours after going into the RUN mode. Power was reduced to 292 MWe at which time a temporary Technical Specification change was obtained which allowed operation at 50% reactor power with greater than 5% O_2 concentration in the primary containment until 1230 on January 24, 1974.

Apparent Cause of Occurrence:

A misunderstanding of the operating procedure was the main cause of this event. The shift foreman in charge of this operation misjudged the capacity of the plant nitrogen system. In addition, the foreman was informed that a nitrogen truck was enroute and would arrive Tuesday morning with the additional nitrogen needed to complete the inerting process. Unfortunately, due to internal problems, the nitrogen vendor was unable to meet the required delivery time.

Analysis of Occurrence:

The significance of this event lies in operating the reactor at power with an inadequately inerted containment which, under design bases LOCA conditions, would have created a condition whereby the probability of experiencing an explosive concentration of oxygen and hydrogen in the containment would ha. been increased.

Corrective Action:

The nitrogen truck arrived at the site and inerting of the torus to less than 5% O_2 concentration was completed by 2:40 p.m. on January 22, 1974.

The nitrogen purging procedure will be revised to eliminate the chance for misinterpretation by adding a caution statement informing the operator that the nitrogen system with a full nitrogen tank is only capable of reducing the O_2 concentration to approximately 4.5%.

In addition, a Technical Specification change request will be initiated to allow operation when the primary containment is not inerted to less than the 5% O_2 limit.

Failure Data:

Not Applicable.