



GPU Nuclear Corporation
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Writer's Direct Dial Number:

February 21, 1984

Mr. Frank J. Miraglia, Assistant Director
for Safety Assessment
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Miraglia:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Purge and Vent Valves

Your letter dated January 20, 1984 requested responses to two (2) statements pertaining to containment purge and vent valves.

The first response requested was an assessment of the operability of our purge and vent valves in light of the concerns outlined in your Safety Evaluation Report (SER). Our assessment remains as before, the valves in question will be opened to no more than 30° and will close from the 30° open position in the event of a DBA-LOCA.

The SER that was attached to your January 20, 1984 letter is factually incorrect. In section 3.0, Demonstration, the SER refers to two (2) GPUN letters that were sent to the NRC. These letters deal with two (2) different and separate approaches to the purge and vent questions. The January 23, 1979 letter refers to the purge and vent valves presently installed at Oyster Creek, while the January 13, 1983 letter addressed the new, qualified, purge and vent valves that are to be installed during the Cycle 11 refueling outage. Because of this confusion, the evaluation and summary sections of the SER state incorrect conclusions.

Our engineering evaluation, showing that the presently installed purge and vent valves can close against full dynamic blowdown loads from the 30° position, was submitted to the NRC by a letter dated August 27, 1981. A copy of the evaluation, along with the submittal letter, is attached. Our letter of January 13, 1983 dealt with the new valves that are to be installed during the Cycle 11 outage. That letter stated that a description of the valve qualification program utilized would be provided after the valves are installed. Given the above information, GPUNC believes that our previous assessment of the operability of our purge and vent valves remains valid.

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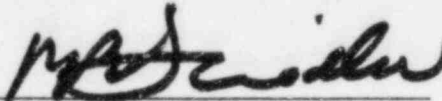
In response to your second request, GPUNC sees no reason to maintain the purge and vent valves sealed closed and to verify them to be closed every 31 days. The requirements quoted in your letter, which were extracted from SRP section 6.2.4, are impractical for any plant with an inerted containment to meet. Mark I inerted containment plants must vent and purge during startup and prior to shutdowns. Oyster Creek's Technical Specifications also require that drywell-suppression chamber differential pressure must be maintained within the acceptable operating range except for a maximum four (4) hour period during which the required operability testing of the drywell-pressure suppression chamber vacuum breakers is conducted. The four (4) hour maximum could not be met without using the larger purge and vent valves. As the Technical Specifications also mandate that all of the drywell-pressure suppression chamber vacuum breakers be tested each month, this would lead to reducing the differential pressure more than once a month to complete the vacuum breaker tests.

In addition to the above requirements, V-26-16 and V-26-18 are our reactor building to suppression chamber vacuum breaker valves. Your letter incorrectly assumes that the interim requirement to limit the opening of the vent and purge valves to no more than 30°, and the final replacement with qualified valves applies to those valves. This is an incorrect assumption. The safety function of the vacuum breaker valves is to open and equalize the pressure between the suppression chamber and reactor building so that the containment external design pressure limits are not exceeded. The system is designed to initiate automatically only when reactor building pressure exceeds the suppression chamber pressure by 0.5 psid. The operability requirements are identified in our Technical Specifications, section 3.5.A.4 on page 3.5-2, and a copy of the applicable page is attached for your review.

To summarize, we believe maintaining our purge and vent valves closed in accordance with SRP section 6.2.4.II.6.f is inappropriate for any Mark I inerted containment plant such as Oyster Creek. The new, qualified valves are to be installed during our Cycle 11 refueling outage. In the interim, we believe that acceptable information has been submitted which demonstrates our present purge and vent valves, which are limited to 30° opening, will close in the event of a DBA-LOCA.

Should you have any other questions, please contact me or Mr. Michael Laggart of my staff at (609)971-4643 or, if you deem it necessary, we would be glad to meet with you to fully discuss the issues.

Very truly yours,

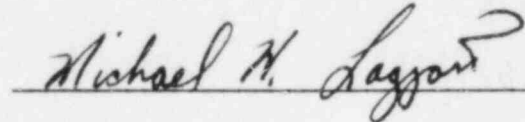


Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:RPJ:dam
Attachment

Sworn to and Subscribed before
me this 21 day of February 1984.

cc: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555



MICHAEL LAGGART
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires December 31, 1985

Dr. Thomas E. Murley, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

4. Reactor Building to Suppression Chamber Vacuum Breaker System

- a. Except as specified in Specification 3.5.A.4.b below, two reactor building to suppression chamber vacuum breakers in each line shall be operable at all times when primary containment integrity is required. The set point of the differential pressure instrumentation which actuates the air-operated vacuum breakers shall not exceed 0.5 psid. The vacuum breakers shall move from closed to fully open when subjected to a force equivalent of not greater than 0.5 psid acting on the vacuum breaker disc.
- b. From the time that one of the reactor building to suppression chamber vacuum breakers is made or found to be inoperable, the vacuum breaker shall be locked closed and reactor operation is permissible only during the succeeding seven days unless such vacuum breaker is made operable sooner, provided that the procedure does not violate primary containment integrity.
- c. If the limits of Specification 3.5.A.3.a are exceeded, reactor shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 24 hours.

5. Pressure Suppression Chamber - Drywell Vacuum Breakers

- a. When primary containment is required, all suppression chamber - drywell vacuum breakers shall be operable except during testing and as stated in Specification 3.5.A.4.b and c, below. Suppression chamber - drywell vacuum breakers shall be considered operable if:
 - (1) The valve is demonstrated to open from closed to fully open with the applied force at all valve positions not exceeding that equivalent to 0.5 psi acting on the suppression chamber face of the valve disk.
 - (2) The valve disk will close by gravity to within not greater than 0.10 inch of any point on the seal surface of the disk when released after being opened by remote or manual means.
 - (3) The position alarm system will annunciate in the control room if the valve is open more than 0.10 inch at any point along the seal surface of the disk.



Jersey Central Power & Light Company
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07960
(201) 455-8200

August 27, 1981

Director, Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Cycle 10 Refueling/Maintenance Outage

The purpose of this letter is to inform you of our intention to reschedule our Cycle 10 Refueling/Maintenance Outage from November 30, 1981 until the time period of February or March 1982 and to request approval of revised dates for specific regulatory requirements and commitments.

There are several factors which necessitated this change in schedule. The scope of the Cycle 10 Refueling/Maintenance Outage is significantly larger than any previous Oyster Creek Outage. The large outage scope has resulted in the need for an extended time period, in which to better plan, prepare for, and coordinate all the activities associated with the Cycle 10 reload. One of the major outage projects, the Core Spray Sparger replacement, involves an extensive amount of work inside the reactor vessel. Some of the extended planning and coordination effort involves training on a reactor vessel mockup. This will prepare the work crews to efficiently do the sparger replacement and thereby significantly reduce man-hour exposure. Also, a shutdown on November 30, 1981 will cause unnecessary economic hardship for the Jersey Central Power & Light Company (JCP&L) and its customers since TMI Unit 1 is not expected to achieve full power until after the November 30 date. Therefore, JCP&L would be forced to purchase electrical power at the PJM interchange rate.

In addition to the general problems associated with properly preparing for the outage, there are several key pieces of equipment required for modifications to the plant which will not be delivered until after the November 30 date.

1. Since a full core offload is required to install the new core spray spargers, an upgrade to the fuel pool cooling system is being engineered. The motor starters required for this project will not be

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delivered until February 15, 1982.

2. All of the equipment required for upgrading the Reactor Protection System (RPS) instrumentation will not be delivered until approximately April 1982.

3. We are still in the process of designing the modifications to the Scram Discharge Valve (SDV) and do not expect that this project will be ready to support a November 30, 1981 outage.

Due to this change in outage schedule, we are requesting a change in the commitment dates of several regulatory required modifications.

1. By NRC Order dated January 13, 1981, we are required to have completed all major Mark I Containment modifications by December 30, 1981. We request that this Order be revised to require that these modifications be completed prior to startup from Cycle 10 reload refueling/maintenance outage. We feel that this delay will not pose an undue threat to public health and safety since the Oyster Creek facility has completed all of the requirements of the short-term Mark I Program and some of the modifications of the long-term program.

2. By letter dated July 31, 1980, we committed to replace, by December 1, 1981 the Containment Ventilation and Purge Valves with "qualified" valves. We request that this commitment be revised to require these modifications prior to startup from our Cycle 10 reload refueling/maintenance outage. We feel this delay is justified since we are presently following the NRC's interim guidelines for these valves. These are normally closed valves; and when opened they are mechanically restricted from opening more than 30°. In addition, attached is our engineering evaluation showing that these valves can close against full dynamic blowdown loads from the 30° position.

3. We have committed to complete the following NUREG 0737 items by January 1, 1982:

<u>ITEM</u>	<u>SHORT TITLE</u>
II.E.4.1	Dedicated Hydrogen Penetrations
II.F.1	Accident Monitors
II.K.3.14	Isolation Condenser Isolation Signals
II.K.2.19	Recirculation Loop Interlock
II.K.3.25	Recirculation Pump Seals
II.B.2.2	Plant Shielding
II.B.3.2	Post-Accident Sampling

We request that the commitment date for these items be revised

to require that these items be completed prior to startup from our Cycle 10 reload refueling/maintenance outage.

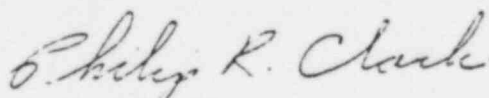
We feel that the delay of these items is justified since they all are longer-term TMI Lessons Learned items that can be planned and scheduled to coincide with scheduled plant outages. Also, all of the short-term Lessons Learned plant changes have been implemented at the Oyster Creek plant.

NUREG 0737, Item II.E.4.2, Containment Isolation, requires that all vent and purge valves be modified to isolate on a high radiation signal. It was our original intention to use the Containment High Radiation Signal for this purpose and have this completed by the NUREG required date of January 1, 1982. After carefully examining this requirement, we have concluded that it would not be an appropriate modification to the Oyster Creek facility. This determination is based upon the fact that the Purge and Vent Valves at Oyster Creek are normally closed during power operation and in the event they were open, they would isolate on the diverse parameters of either low-low reactor water level or high drywell pressure.

It should be noted that we have also requested relief from the United States Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) permit and the New Jersey Department of Environmental Protection NJPDES permits. These permits prohibit scheduled plant shutdowns during the months of December, January, February, or March. Since several different agencies are involved, the scheduling of the refueling outage is contingent upon receipt of relief from all agencies.

Your expeditious review of this request would be appreciated. If you have any further questions, please contact Mr. James Knubei (201 299-2264) of my staff.

Very truly yours,



Philip R. Clark
Vice President-Nuclear
Jersey Central Power & Light Company