



GPU Nuclear Corporation  
Post Office Box 388  
Route 9 South  
Forked River, New Jersey 08731-0388  
609 971-4000  
Writer's Direct Dial Number:

January 11, 1991  
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U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

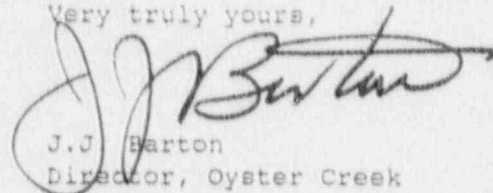
Dear Sir:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Additional Information on In Service Inspections  
for the End of the Second Ten Year Interval

By letter dated September 14, 1990, GPU Nuclear requested four exemptions from ASME Ten Year Interval hydrostatic testing requirements. Subsequent to that letter, a telecon took place in which GPUN was requested to provide additional information. The enclosure to this letter contains the requisite information.

If any further information is required, please contact Mr. John Rogers, Oyster Creek Licensing Engineer at 609-971-4893.

Very truly yours,



J.J. Barton  
Director, Oyster Creek

JJB/JJR/jc  
Enclosure

9101150193 910111  
PDR ADOCK 05000219  
Q PDR

cc: Mr. Thomas Martin, Administrator  
Region 1  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

NRC Resident Inspector  
Oyster Creek Nuclear Generating Station

Mr. Alexander Dromerick  
U.S. Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, DC 20555

(C3212042)

GPUN Letter dated 9/14/90  
Attachment III

System: CONTROL ROD DRIVE AND SCRAM DISCHARGE VOLUME; Class 2 Boundary

Identification: ASME Code Section XI, 1980 Edition through Winter 1981 Addenda; IWC-5222 "System Hydraulic Test" for pressure test requirements.

Required Examination: Hydrostatically test the Control Rod Drive and Scram Discharge Volume systems from the 106 valves to the Scram Discharge Volume drain valves at 1.25 times design pressure (test pressure is approximately 2013 psig).

Alternate Examination: Close the Scram Discharge Volume (SDV) Drain valves and Vent Valves, insert and maintain a manual scram by opening the 126 and 127 valves to fill and pressurize the hydraulic control units and the scram discharge volumes, and perform the Class 1 boundary pressure test (test pressure approximately 1122 psig).

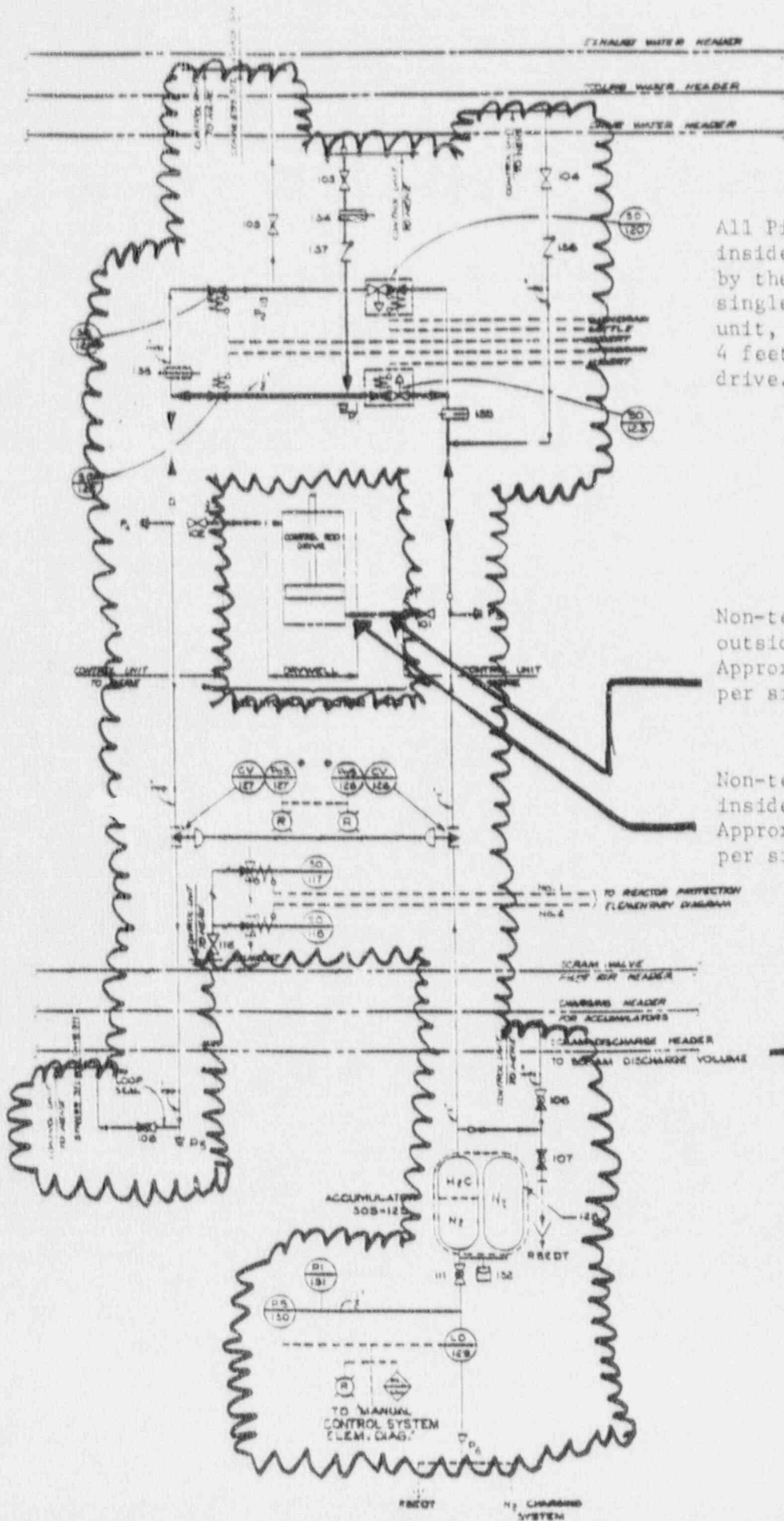
Basis for Exemption: The design of the Control Rod Drive mechanism (CRDM) allows leakage past the piston and collet housing. This leakage provides cooling water flow for the CRDM, but makes it nearly impossible to perform a Class 2 boundary hydrostatic test on the Control Rod Drive piping external to the hydraulic control unit (HCU) without overpressurizing the reactor pressure vessel.

The only way the piping and the HCU can be tested is to remove the CRDM and install a blank flange on each of the CRD housing flanges. Although this is a new-construction post installation test requirement, the massive exposure required to perform this evolution now on all 137 CRDMs cannot be justified.

As noted in the attached drawing, only about 4 feet of approximately 210 feet of the CRD piping is internal to the HCU and testable. Testing this piping would require 137 separate hydrostatic pressure tests and would result in less than 2% of the actual pipe run being pressurized.

The SDV system is downstream of the HCU and communicates with the reactor pressure vessel. Therefore, with the SDV drain valve closed, the SDV can never see a pressure greater than reactor pressure. Performing an ASME hydrostatic test would require another two separate tests. The amount of radiation exposure required to test this downstream portion of the CRD system cannot be justified to perform the ASME ten year test.

Finally, the NSSS vendor Operations Engineer surveyed boiling water reactors with experience in ten year hydrostatic test requirements. The respondents either had exemptions from testing the CRD/SDV system, or had requested those exemptions from Class 2 requirements.



All Piping and valves inside area surrounded by the "bubble" are a single hydraulic control unit, approximately 4 feet per side, per drive.

Non-testable piping outside of Drywell. Approximately 80 feet per side, per drive.

Non-testable piping inside of Drywell. Approximately 125 feet per side, per drive.

Discharge to SDV