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CHRIS H. POINDEXTER  
VICE PRESIDENT  
ENGINEERING AND CONSTRUCTION

August 28, 1985

U.S. Nuclear Regulatory Commission  
Division of Licensing  
Washington, DC 20555

ATTENTION: Mr. Edward J. Butcher, Acting Chief  
Operating Reactors Branch #3

SUBJECT Calvert Cliffs Nuclear Power Plant  
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318  
Inservice Inspection Program Request for Relief from ASME Code Section  
XI Requirements Determined to be Impractical

Gentlemen:

In accordance with 10 CFR 50.55a(g)(6)(i), we are requesting an exemption from ASME Code Section XI requirements that have been determined to be impractical. In accordance with the NRC Staff Guidance letter dated November 24, 1976, the information concerning the exemption request is presented herein.

It has been determined that hydrostatic pressure testing in accordance with Class 2 requirements of the Safety Injection System piping from the loop isolation Motor Operated Valves (MOVs) to the loop check valves is impractical. These lines should be pressure tested at the Class 1 requirements of Section XI. It has also been determined that a portion of this piping between the Low Pressure Safety Injection (LPSI) MOVs and the first check valve downstream of these MOVs is impractical to hydrostatically pressure test.

**I. COMPONENTS FOR WHICH RELIEF IS REQUESTED**

- A. The attached sketches #1 and #2 illustrates the system configuration and class boundaries. The following portions of Class 2 piping from the High Pressure Safety Injection (HPSI), Auxiliary HPSI, and Low Pressure Safety Injection (LPSI) Loop Isolation MOVs to the Reactor Coolant System (RCS) cannot be isolated from the RCS.

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<u>UNIT 1</u>		
<u>FROM</u>	<u>TO</u>	<u>LINE NOS.</u>
1-SI-118	1-SI-615-MOV 1-SI-616-MOV 1-SI-617-MOV	6" CC-13-1001 2" CC-13-1019 3" CC-13-1014 2" CC-13-1005 2" CC-6-1002
1-SI-128	1-SI-625-MOV 1-SI-626-MOV 1-SI-627-MOV	6" CC-13-1002 2" CC-13-1018 3" CC-13-1015 2" CC-13-1006 2" CC-6-1004
1-SI-138	1-SI-635-MOV 1-SI-636-MOV 1-SI-637-MOV	6" CC-13-1003 2" CC-13-1016 3" CC-13-1021 2" CC-13-1007 2" CC-6-1005
1-SI-148	1-SI-645-MOV 1-SI-646-MOV 1-SI-647-MOV	6" CC-13-1004 2" CC-13-1017 3" CC-13-1020 2" CC-13-1008 2" CC-6-1006

<u>UNIT 2</u>		
<u>FROM</u>	<u>TO</u>	<u>LINE NOS.</u>
2-SI-118	2-SI-615-MOV 2-SI-616-MOV 2-SI-617-MOV	6" CC-13-2001 2" CC-13-2019 3" CC-13-2014 2" CC-13-2005 2" CC-6-2002
2-SI-128	2-SI-625-MOV 2-SI-626-MOV 2-SI-627-MOV	6" CC-13-2002 2" CC-13-2018 3" CC-13-2015 2" CC-13-2006 2" CC-6-2004
2-SI-138	2-SI-635-MOV 2-SI-636-MOV 2-SI-637-MOV	6" CC-13-2003 2" CC-13-2016 3" CC-13-2021 2" CC-13-2007 2" CC-6-2005
2-SI-148	2-SI-645-MOV 2-SI-646-MOV 2-SI-647-MOV	6" CC-13-2004 2" CC-13-2017 3" CC-13-2020 2" CC-13-2008 2" CC-6-2006

- B. The portions of piping listed below cannot be hydrostatically tested due to inability to align charging pumps to pressurize this piping and the operability requirements of these portions when the RCS is pressurized.

UNIT 1

<u>FROM</u>	<u>TO</u>	<u>LINE NO.</u>
1-SI-114	1-SI-615-MOV	6" CC-13-1001
1-SI-124	1-SI-625-MOV	6" CC-13-1002
1-SI-134	1-SI-635-MOV	6" CC-13-1003
1-SI-144	1-SI-645-MOV	6" CC-13-1004

UNIT 2

<u>FROM</u>	<u>TO</u>	<u>LINE NO.</u>
2-SI-114	2-SI-615-MOV	6" CC-13-2001
2-SI-124	2-SI-625-MOV	6" CC-13-2002
2-SI-134	2-SI-635-MOV	6" CC-13-2003
2-SI-144	2-SI-645-MOV	6" CC-13-2004

**II. ASME REQUIREMENT FROM WHICH RELIEF IS REQUESTED**

ASME Code Section XI requires hydrostatic pressure testing of all Class 2 piping and components as set forth in Articles IWA-5000 and IWC-5000. The test pressure requirement for Class 2 piping and components is 1.25 times the design pressure when tested at 100°F. This test pressure exceeds the hydrostatic pressure test requirements of the Class 1 system downstream of the check valve. Therefore, testing to the Class 2 requirement is prohibited.

**III. SUPPORTING INFORMATION**

The higher pressure requirements of Class 2 hydrostatic pressure testing cannot be accomplished because of the lack of positive isolation from the Class 1 system in the test direction. The Class 1 piping is isolated from the Class 2 system by two check valves. The Class 1 piping test pressure requirement is lower than the Class 2 test pressure requirement.

**IV. IN LIEU OF TESTING**

- A. Perform a hydrostatic pressure test of the piping listed in I.A excluding the piping listed in I.B, to the pressure test requirements of IWB-5000 for Class 1 piping. This piping can be pressurized via alignment of the charging system to the Auxiliary HPSI header to the required test pressure of IWB-5000.

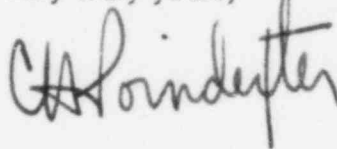
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- B. The following tests and examinations are recommended in lieu of hydrostatic testing for proving the integrity of the piping listed in I.B above.
1. Each refueling cycle, a leakage test of this piping is performed in accordance with Technical Specification 6.14. In this test the piping listed in paragraph I.B. is pressurized to LPSI pump discharge pressure and a visual examination for leakage is conducted.
  2. Welds will be selected and examined per Section XI, Article IWC-2000.

We have determined that this request constitutes an amendment for Calvert Cliffs Unit Nos. 1 & 2, pursuant to 10 CFR 170.21. Accordingly, Baltimore Gas & Electric Company Check No. A345606 in the amount of \$150.00 is remitted herewith.

Should you have further questions regarding this matter, please do not hesitate to contact us.

Very truly yours,

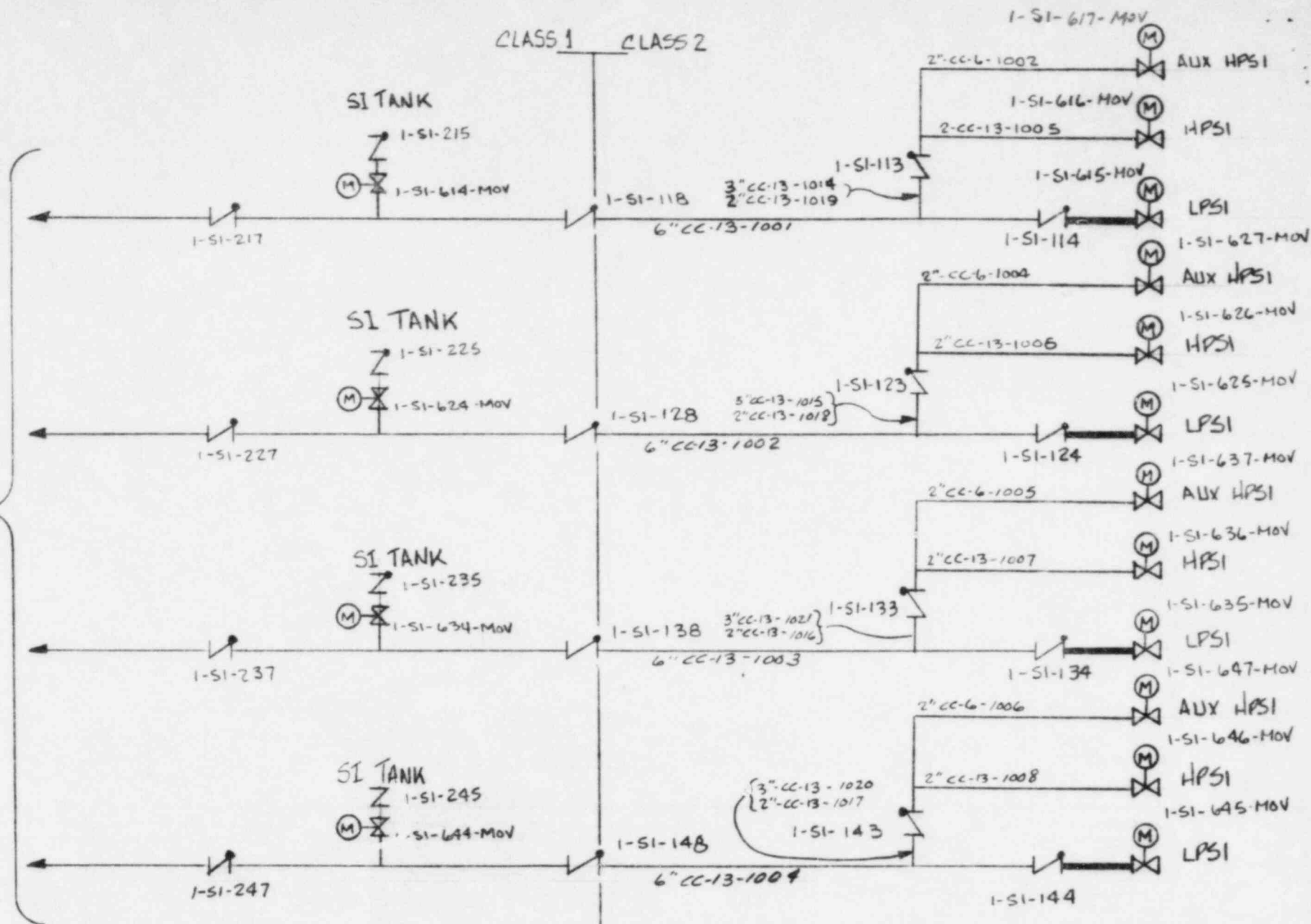


CHP/BCR/gla

Attachment

cc: D. A. Brune, Esquire  
G. F. Trowbridge, Esquire  
D. H. Jaffe, NRC  
T. Foley, NRC

REACTOR  
COOLANT  
SYSTEM



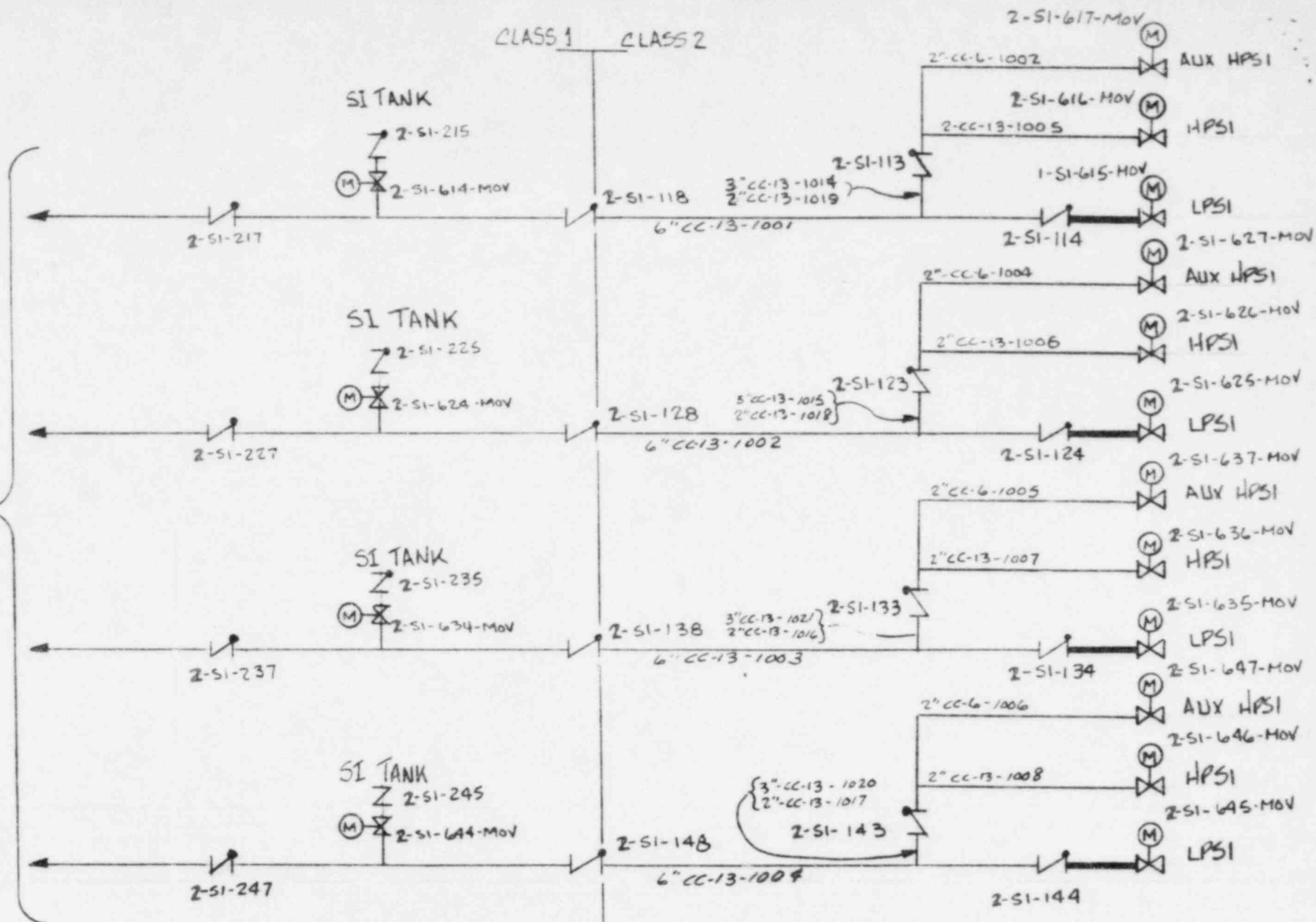
TEST REQUIREMENT (IWB-5000)  
1.02 X 100% OP PRESS AT 500°F

TEST REQUIREMENT (IWC-5000)  
1.25 X DESIGN PRESSURE AT 100°F

CLASS 1 CLASS 2

CALVERT CLIFFS UNIT 1  
SKETCH 1

REACTOR  
COOLANT  
SYSTEM



CLASS 1 CLASS 2

CALVERT CLIFFS UNIT 2  
SKETCH 2