CENTRAL FILES

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

January 5, 1981

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W., Suite 3100
Atlanta, Georgia 30303

Serial No. 950
NO/RMT:ms
Docket Nos. 50-338
~~50-339~~
50-280
50-281
License Nos. NPF-4
NPF-7
DPR-32
DPR-37

Dear Mr. O'Reilly:

This is in response to your letter of November 21, 1980 which forwarded IE Bulletin No. 80-24, "Prevention of Damage Due to Water Leakage Inside Containment (October 17, 1980 Indian Point 2 Event)". The information required by the Bulletin for North Anna Power Station Unit Nos. 1 and 2 and Surry Power Station Unit Nos. 1 and 2 is attached.

Very truly yours,

B. R. Sylvia
Manager - Nuclear
Operations and Maintenance

Enclosure (3)

cc: Director, NRC, Office of Inspection and Enforcement
Washington, D. C. 20555

COMMONWEALTH OF VIRGINIA)
) S. S.
CITY OF RICHMOND)

Before me, a Notary Public, in and for the City and Commonwealth aforesaid, today personally appeared B. R. Sylvia, who being duly sworn, made oath and said (1) that he is Manager-Nuclear Operations and Maintenance, of the Virginia Electric and Power Company, (2) that he is duly authorized to execute and file the foregoing response in behalf of that Company, and (3) that the statements in the response are true to the best of his knowledge and belief.

Given under my hand and notarial seal this 5th day of January, 1981.

My Commission expires January 19, 1982.

Evelyn C. Yaros
Notary Public
(I was commissioned as Evelyn Cheney)

(SEAL)

RESPONSE TO I.E. BULLETIN 80-24
NORTH ANNA UNITS 1 AND 2

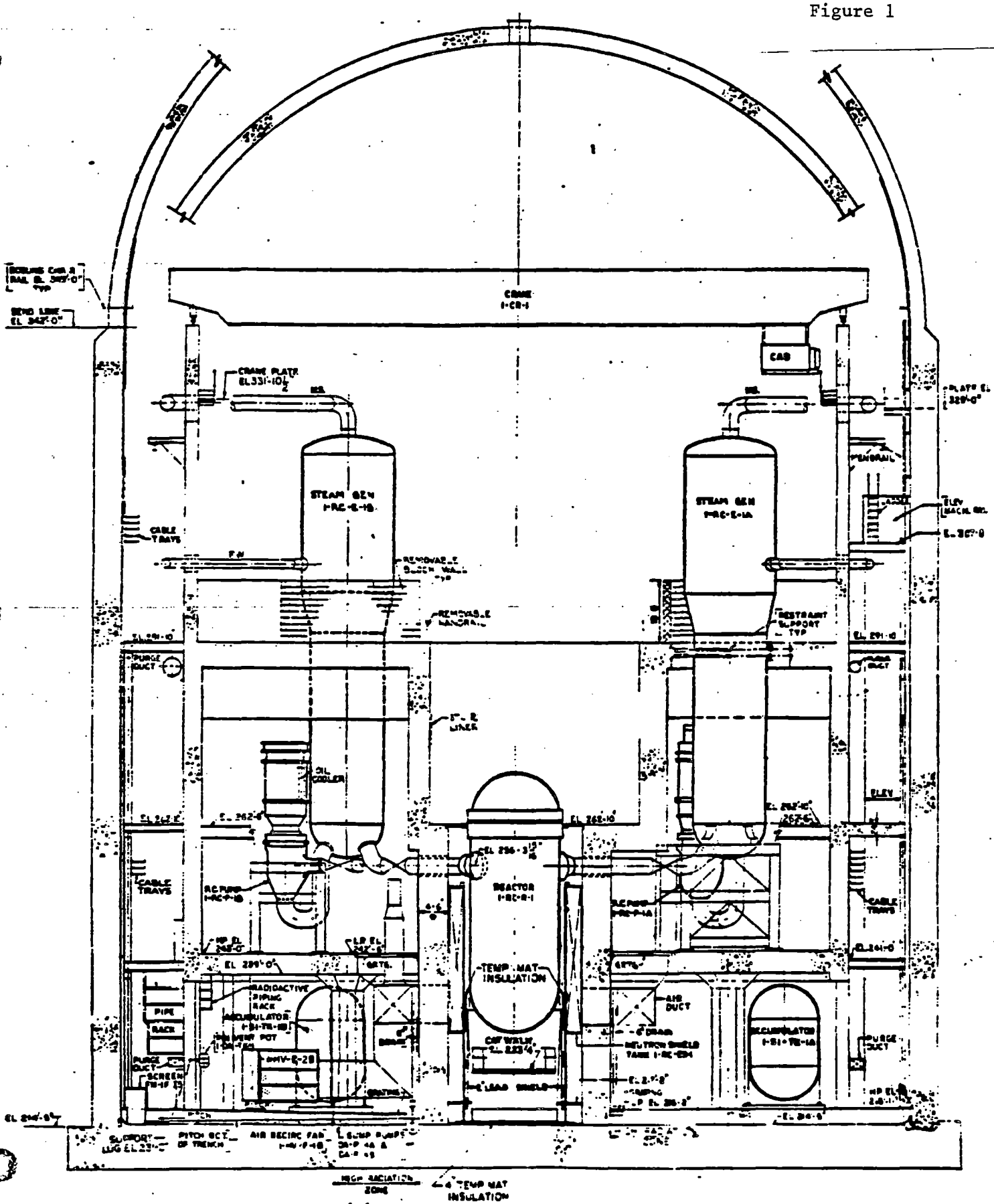
1. North Anna Power Station, Units 1 and 2, has no open cooling water systems supplying loads inside the containment which operate during routine operations. The service water system does supply cooling water to the recirculation spray heat exchangers during Containment Depressurization Actuation (CDA), and it is capable of supplying cooling water to the containment air recirculation fan cooling coils, but such operation is blocked by administrative control. The reactor vessel is located at such an elevation as to provide numerous diversified indications of flooding prior to reaching a level where the vessel would be exposed to external water. (Ref. Fig. 1).

2. Not applicable since there are no open cooling water systems supplying loads inside the containment.

3. Two closed systems supply cooling water to equipment inside the containment, which are the chilled water system and the component cooling water system. There has been no history of leakage from the chilled water system, and only minor leakage has been detected from the component cooling system.

Approximately four manhours were expended in preparation of this report.

Enclosure 1
Figure 1



RESPONSE TO IEB-80-24
PREVENTION OF DAMAGE DUE TO WATER LEAKAGE
INSIDE CONTAINMENT (OCT. 17, 1980 INDIAN POINT 2 EVENT)

HIGHLIGHTS: At Surry, there are no open service water cooled systems within the containment during normal plant operations. The Rx vessel is located at such an elevation as to provide numerous diversified indications of flooding prior to reaching a level where the vessel would be exposed to external water.

SPECIFIC RESPONSE:

1) The service water to the recirculating spray system heat exchangers is the only open cooling water system present inside containment.

   a) During normal operation, this system is isolated and drained. This system is automatically unisolated to perform its necessary function.

   b) River Water - Chemistry; Typtical pH 7.6 Cl 3500 PPM, Na + 2400 PPM.

   c) Material of piping and coolers:
   H/X - 90/10 CuNi 1.5-2.0% Fe
   Tubes - 90/10 CuNi 1.1-1.5% Fe
   Piping - Stainless Steel - RS
   Carbon Steel - SW

   NOTE: The H/X flanged strong-backs use a welded diaphragm for leak-tightness design.

   (d) History and type of repairs to coolers and piping systems (Attachment 1).

   (e) The individual line to and from the containment can be remotely isolated from the Control Room and can be manually isolated in the Safeguard's Building, which is external to the containment. In addition, the system valving allows for remote and/or manual isolation of two supplying lines should one of the single isolation valves fail. Two operable H/X's remain in service. There is only the one isolated valve on the discharge side of the RS H/X; however, because of this elevation and the normal vacuum on the discharge tunnel, this is adequate for isolation.

2) This section is not applicable due to the fact that there is only an open system during a LOCA condition.

   (a) Monthly surveillance to evaluate containment sump level and pumping system are available. Continuous safe operation will be evaluated in the event either the detection or removal systems become inoperable.

3. Summary of experience of cooling water system leakage into containments (January, 1980 - June, 1980). (Attachment 2).

ESTIMATED MANPOWER:

Estimated manpower hours expended in review and preparation of this report: 18 manhours.

U	MR	SYS	MARKNO		SUMMARY	WKPERF	RETSERVDT
1	805281835	SW	MOV	MOV-SW-106A	Clean Inspect+Test(Alleyway)	Cleaned Inspected+Tested	06/07/78 09/07/78
2	903071246	SW	Valve	MOV-SW-203B	Remove And Test Before Cleaning	Remove Valve Tested Reinstalled	05/08/79
2	903071247	SW	Valve	MOV-SW-203A	Remove Ane Test Before Cleaning	Tested VAlve	05/08/79
2	903071248	SW	Pump	MOV-SW-203B	Disconnect For Mech+Reconnect	Reconnected Test Sat	04/02/79
2	903071249	SW	Valve	MOV-SW-203A	Disconnect For Mech+ Reconnect	Connected And Tested Sat	04/02/79
1	903090522	SW	Pump		Coupling Broken	Void	06/06/79
2	907090930	SW	Valve	2-SW-209	Steam Broken	Installed New Valve	01/07/80
2	907091540	SW	Piping	2-SW-207	Repair Drain Line	Installed New Valve	09/13/79
2	907130828	SW	Valve	2-SW-206	Excessive Leakage On PT 16.4	Repaired Valve	01/26/80
2	907130829	SW	Valve	2-SW-208	Excessive Leakage On PT 16.4	Repaired Valve	01/26/80
2	907281400	SW	Instr		Alarm SW Faulty	Alarm SW Repaired	07/30/79
2	003051240	SW	Piping	24-WS-128-10	Expansion Joint Deformed	Void	04/30/80
2	003051412	SW	Piping	24-WS-135-10	Remove Expansion Joint	Replaced Seats Tested At 45 PSI	07/17/80
2	003051413	SW	Piping	24-WS-130-10	Remove Expansion Joint	Replaced Seats And Restud At 45 PSI	07/17/80
2	003051414	SW	Piping	24-WS-128-10	Remove Expansion Joint	Replaced Seats Tested At 45 PSI	07/02/80
2	003051415	SW	Piping	24-WS-134-10	Remove Expansion Joint	Adjusted Seats Tested At 45 PSI	07/02/80
1	003051416	SW	Piping	24-WS-126-10	Remove Expansion Joint	Replaced Seats Tested Sat 45 PSI	06/26/80
2	003261004	SW	MOV	MOV-SW-205C	Packing Leaks		07/28/80
2	004181500	SW	Valve	MOV-SW-203A	Remove And Test For Leakage	Replaced Seats+Expansion Joint	05/07/80
2	004181501	SW	Valve	MOV-203A	Remove And Test For Leakage	Adjust Limit Switches	05/09/80
2	004301429	SW	MOV	MOV-SW-203C	Disconnect Motor For Mechanics	Complete	06/25/80
2	004301906	SW	Valve	2-SW-206	Leaks Thru On PT 16.4	Lapped Disc+Seats	05/06/80
2	004301908	SW	Aux	2-SW-208	Leak Thru On PT 16.4	Lapped Disc+Seats	05/06/80
2	005100948	SW	MOV	MOV-SW-204D	Leaks Thru	Mov Clean Dry And Back In Service	05/13/80
2	005101106	SW	MOV	MOV-SW-205C	Leaks Thru		07/28/80
2	005280950	SW	Piping	24-WS-135-10	Install New Joint		
2	006100900	SW	Valve	MOV-SW-205A	Leaks Through	Adjusted Seats Test Sat At 45 PSI Sat	06/26/80
2	006241849	SW	Piping	2-SW-67	Bolt Missing	Replaced Bolt	06/25/80
2	006241852	SW	Valve	2-SW-68	Stem Bent	Straightened Stem	06/25/80
2	007301415	SW	Valve	MOV-SW-205C	Cracks In Joints		
2	007301416	SW	Valve	MOV-SW-205D	Cracks In Joints		
1	009191425	SW	MOV	MOV-SW-103A	Overhaul		
1	009191426	SW	MOV	MOV-SW-103B	Overhaul		
1	009191427	SW	MOV	MOV-SW-103C	Remove Blank Off Water Supply		
1	009191428	SW	MOV	MOV-SW-103D	Remove Blank Off Water Supply		
2	009261135	SW	Valve	2-SW-113	Check Valve Upstream Of 2-SW-11	Repaired Check Valve	9/26/80
1	009261230	SW	Valve	1-SW-113	Replace Check Valve		
2	011100315	SW	Valve	2-SW-208	Water Leak Around Stem	Repacked	11/11/80
2	803051307	SW	Piping	2-SW-176-21B	Hole In Pipe Or Leaking Joint		

2	002061300	SW	MOV	MOV-SW-205A	Does Not Close Tightly	Completed As Per Emp-P-MOV-45	02/19/80
2	002061301	SW	MOV	MOV-SW-204A	Does Not Close Tightly	Completed As Per Emp-P-MOV-45	02/19/80
2	020164291	SW	PUMP	2-SW-5B	Low Disch Press	Cleaned Nozzle Inlet Pipe+Nozzle	10/28/77
2	803090838	SW	MOV	MOV-SW-203A	Reseat	Cleaned + Adjusted	03/29/78
2	803090840	SW	MOV	MOV-SW-203B	Reseat	Cleaned + Adjusted	03/29/78
2	803201115	SW	MOV	MOV-SW-203A	Disconnect For Mech Maintenance	Disc Recon Tested	03/29/78
2	803201116	SW	MOV	MOV-SW-203B	Disconnect For Mech Maintenance	Disc Reworked LS Gear BX Set+Test	03/29/78
1	805281801	SW	MOV	MOV-SW-105D	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281803	SW	MOV	MOV-SW-105C	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281806	SW	MOV	MOV-SW-105B	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281807	SW	MOV	MOV-SW-104D	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281809	SW	MOV	MOV-SW-103A	Clean Inspect+Test	Cleaned Checked MCC	06/15/78
1	805281810	SW	MOV	MOV-SW-104C	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281813	SW	MOV	MOV-SW-104B	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281816	SW	MOV	MOV-SW-104A	Clean Inspect+Test	Cleaned Inspected+Tested	06/05/78
1	805281818	SW	MOV	MOV-SW-104A	Clean Inspect+Test	Cleaned+Checked MCC	06/15/78
1	805281819	SW	MOV	MOV-SW-104A	Clean Inspect+Test	Cleaned+Checked MCC	06/15/78
1	805281820	SW	MOV	MOV-SW-103C	Clean Inspect+Test	Cleaned+Checked MCC	06/15/80

ENCLOSURE 2

ATTACHMENT 2

U	MR	SYS	MARKNO		SUMMARY	WKPERF	RETSERVDT
2	003050545	cc	Valve	2-cc-218	Packing Leak		
2	005030959	cc	Valve	RV-cc-212B	Leaks By	Dissassembled+Lapped Vlv Seat+Disc	06/23/80
2	006180445	cc	Valve	2-cc-242	Check Valve Leaks	Tightened Plate Bolts	07/02/80
2	007251340	cc	Valve	2-cc-129	Leak Packing	Tightened Packing Gland	07/26/80
1	010121320	cc	Piping	1-cc-829	Pipe To Fe 118 Is Broken Off		
2	001171300	cc	Valve	2-cc-58	Excessive Leakage On PT 16.3B	Completed	02/19/80
2	001171301	cc	Valve	TV-cc-205B	Excessive Leakage On PT 16.3B	Completed	02/18/80
2	001171302	cc	Valve	2-cc-242	Excessive Leakage On PT 16.3B	Repaired	02/17/80
2	001171303	cc	Valve	TV-cc-210A	Excessive Leakage On PT 16.3B	Repaired	02/17/80
2	001171304	cc	Valve	TV-cc-205C	Excessive Leakage On PT 16.3B	Completed	02/19/80
2	001171305	cc	Valve	2-cc-93	Repair Pipe Cap Threads On Valve	Repaired Pipe Threads	01/28/80
2	001171306	cc	Valve	2-cc-59	Excessive Leakage On PT 16.3B	Completed	02/19/80
1	906201000	cc	Piping	1-RH-E-1A	Replace cc Outlet Flange Gasket	Tightened Flange	06/22/79
1	912291545	cc	Piping	1-cc-100-151	Pine Whole Weld Leak	Resoldered Flange	01/04/80