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August 13, 1979

Mr. Victor Stelle, Jr., Director  
Division of Reactor Operations Inspection  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Serial No. 90B  
PO/RMT:scj  
Docket No. 50-338  
License No. NPF-4

SUBJECT: I.E. BULLETIN 79-01  
NORTH ANNA POWER STATION UNIT NO. 1

Dear Mr. Stello:

This letter is in response to IE Bulletin 79-01, "Environmental Qualification of Class IE Equipment", and is a supplement to our earlier response, Serial No. 90A, dated July 2, 1979.

As noted in our July 2, 1979 letter, the following two potentially unqualified items were identified during our review of qualification information:

1. Chiller Equipment used for control and relay room air conditioning.
2. Safeguards Building Ventilation Pass.

Additional information on these items is included in attachments 1 and 2.

We also stated in our July 2, 1979 letter, that we were pursuing NSSS vendor-supplied safety-related qualification documentation and had made arrangements to receive additional information from our NSSS vendor. We have received a listing of references which provide qualification information (see attachment 3). We are providing this documentation to our A-E whom we have directed to perform a review to determine the qualification status of NSSS vendor supplied equipment. This review is now well underway, and we will forward the results as soon as they are available.

Very truly yours,

*CMS*

C. M. Stallings  
Vice President-Power Supply  
and Production Operations

cc: Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
Region II

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1. Equipment Description & Mark No.A. Control & Relay Room A/C Chillers

Westinghouse; 1-HV-E-4A,B,C; P. O. NA247; located in Chiller Room.

B. Air Conditioning SelfCleaning Strainers

Elliot Company; 1-HV-S-1A, B; P. O. NA-299; located in Chiller Room.

C. Motor Operated Valves - Fisher Governor Company - Continental Division - Field P. O. - Natkin No. 8514-A-2008, located in charcoal filter duct from Chiller Room. Intakes - 30 minutes.D. Motor Operated Valves - Elliot Company 1-MOV-HV-115-1,2 1-MOV-HV-116-1,2 P. O. NA-299 locate in Chiller Room as components of self-cleaning strainers.E. In-Line Pumps - Air Conditioning - Bingham-Williamette Company 1-HV-P-20A,B, C; 1-HV-P-22A,B,C; P. O. NA-276; located in Chiller Room.2. Qualification Deficiencies

Equipment potentially not qualified for exposure.

## A. High ambient temperature 211°F

## B. Saturated atmosphere, 100% R.H. (Typical for all equipment listed on this page).

3. Resolution

Use equipment in unaffected Unit to maintain Control Room environment.

4. Justification for Resolution

In the event of a main steam line break (MSLB) in either turbine building and the corresponding failure of a main steam stop valve to shut, the temperature in the control room A/C chiller room will approach 180°F at 100% relative humidity due to steam blowdown entering the chiller room. A/C chiller systems have not been qualified to withstand these environmental conditions.

In order to maintain habitable temperatures in both Units' control rooms under the above conditions it is necessary to operate two A/C chillers in the unaffected unit.

Continued operation of Unit 1 can be justified on the basis of always having two Unit 2 A/C Chillers, one Unit 2 emergency diesel generator and the two Unit 2 emergency busses available. Since the analysis

assumes that a main steam trip valve fails to shut, no other single failure need be postulated per Regulatory Guide 1.81. Therefore, only one Unit 2 diesel generator need be available to operate two A/C chillers (this requires tying emergency buses 2H and 2J).

1. Equipment Description & Mark No.

Axial Flow Fans - Joy Mfg. Co., P. O. No. NA-201; 1-HV-F-71A,B located in Safeguards Bldg.

2. Qualification Deficiencies

Equipment potentially not qualified for exposure to:

A. Radiation -  $1 \times 10^6$  rads

3. Resolution

Replace with qualified motors.

4. Justification for Unit Operation Until Motor Replacement

Fans 1-HV-F-71A and B have been installed to provide ventilation to each recirculating spray pump and safety injection pump cubicle following a design basis accident (LOCA) and subsequent loss of exhaust resulting from a tornado-missile which may occur 24 hours following a LOCA. In the event of a LOCA, the safeguards area ventilating fans 1-HV-F-71A and B are potentially not qualified to withstand the resulting radioactivity and may become inoperable.

Continued plant operation until a qualified motor can be obtained is justified since the probability of a design basis accident (LOCA) followed by a tornado is less than  $10E - 7$ . (Reference NuReg 75-087).

5. Schedule

A lead time of 26 to 28 weeks is required, after release for fabrication, to obtain a qualified replacement motor. New motors will be installed as soon as they are available.

North Anna Unit No. 1  
NSSS Vendor Supplied Safety-Related  
IE Equipment Qualification References

<u>Function</u>	<u>Manufacture/Model</u>	<u>Qualification Reference</u>
1. Steam Flow	Rosemount/1152 DP	Rosemount Test Report 117415 Rev. A, 9-24-75
2. Pressurizer Pressure	Barton/763 (Lot 1)	NS-TMA-1950 Submitted to NRC 9-29-78.
3. Pressurizer Level	Barton/764 (Prototype)	NS-CE-1384 Submitted to NRC 3-23-77
4. RCS Pressure wide range	Barton/763 (Prototype)	NS-CE-1384 submitted to NRC 3-23-77.
5. Wide Range RTDs	Rosemount/176KS	WCAP 9157
6. Narrow Range RTDs	Rosemount/176KF	WCAP 9157
7. Narrow Range S/G Level	Rosemount/1152DP	Same as 1 above
8. Valve Motor Operators	Limitorque/SMB	WCAP 7744 NS-CE-692, 7-10-75 NS-CE-756, 8-15-75 NS-CE-847, 11-24-75