



Westinghouse
Electric Corporation

Water Reactor
Divisions

Nuclear Technology Division

Box 355
Pittsburgh Pennsylvania 15230

May 19, 1982

NS-EPR-2600

Mr. James R. Miller, Chief
Special Projects Branch
Division of Project Management
Nuclear Regulatory Commission
Phillips Building
7920 Norfolk Avenue
Bethesda, Maryland 20014

Dear Mr. Miller:

Enclosed are:

1. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-AE-1, "Medium Pump Motors (Outside Containment)" (Non-Proprietary)
2. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, A01A "Westinghouse Medium Motor and Gearing Division Motor, Insulation Class H (Environmental and Seismic Testing)" (Proprietary)
3. Fifteen (15) copies of Revision 4 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-AE-2, "Large Pump Motors (Outside Containment)" (Non-Proprietary)
4. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, A02A "Westinghouse LMD Motor Insulation (Environmental Testing)" (Proprietary)
5. Fifteen (15) copies of Revision 4 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-AE-3, "Chempump Canned Motor Pump (Outside Containment)" (Non-Proprietary)
6. Twenty-five (25) copies of Revision 2 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, A03A "Chempump Canned Motor Pump (Outside Containment) (Environmental and Seismic Testing)" (Proprietary)
7. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-1, "Pressure Transmitters: Qualification Group A" (Non-Proprietary)

NEED 2 R.ds

PROP Encls
T007

1/25

NON-PROP Encls

T008

1/15

REC'd with out ENCLOSURES

1, 12, + 14

8. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E01A "Barton Pressure Transmitters - Group A (Seismic and Environmental Testing)" (Proprietary)
9. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-3, "Differential Pressure Transmitters: Qualification Group A" (Non-Proprietary)
10. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E03A "Barton Differential Pressure Transmitters - Group A (Seismic and Environmental Testing)" (Proprietary)
11. Fifteen (15) copies of Revision 5 to WCAP 8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-4, "Differential Pressure Transmitters: Qualification Group B" (Non-Proprietary)
12. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E04A "Barton Differential Pressure Transmitters: Qualification Group B (Seismic Design Verification Testing)" (Proprietary)
13. Twenty-five (25) copies of Revision 2 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E04B "Veritrak Differential Pressure Transmitters: Qualification Group B (Seismic Design Verification Testing)" (Proprietary)
14. Fifteen (15) copies of Revision 4 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-6, "Resistance Temperature Detectors: RCS Well Mounted" (Non-Proprietary)
15. Twenty-five (25) copies of Revision 2 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E06A "Resistance Temperature Detector (RCS Well Mounted) (Seismic and Environmental Testing)" (Proprietary)
16. Fifteen (15) copies of Revision 4 to WCAP 8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-7, "Resistance Temperature Detectors: Fast Response Well Mounted" (Non-Proprietary)
17. Twenty-five (25) copies of Revision 2 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E07A "Resistance Temperature Detectors (Fast Response Well Mounted) (Seismic and Environmental Testing)" (Proprietary)
18. Fifteen (15) copies of Revision 4 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-16, "SSPS Two-Train (Three and Four Bay) and Safeguard Test Cabinet" (Non-Proprietary)

19. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E16A "Two Train Solid State Protection System (Normal and Abnormal Temperature and Humidity Testing)" (Proprietary)
Although no technical changes have been made to this report, it has been issued to delete bracketing and notation.
20. Twenty-five (25) copies of Revision 2 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E16B "Equipment Qualification by the Combined Analysis and Test Approved for the Four-Bay Cabinet of the Two-Train Solid State Protection System (SSPS) (Seismic Design Verification Analysis and Design)" (Proprietary)
21. Twenty-five (25) copies of Revision 0 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E16C "Two-Bay Safeguards Test Cabinet (Seismic Design Verification Testing)" (Proprietary)
22. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-21, "Pressure Sensor" (Non-Proprietary)
23. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E21A "Pressure Sensor" (Proprietary)
24. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-ESE-22, "Four Section Power Range Neutron Detectors" (Non-Proprietary)
25. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, E22A "Four Section Power Range Neutron Detector (Environmental and Seismic Testing for Comanche Peak)" (Proprietary)
26. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-HE2/HE5, "Safety Related Solenoid Valves (Qualification Group A) (Qualification Group B)" (Non-Proprietary)
27. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, H02A/H05A "ASCO Solenoid Valves (Environmental and Seismic Testing)" (Proprietary)
28. Fifteen (15) copies of Revision 3 to WCAP-8587 "Equipment Qualification Data Packages" Supplement 1, EQDP-HE-4, "Safety Related Limitorque Valve Electric Motor Operators (Qualification Group B)" (Non-Proprietary)
29. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, H04A, Revision 1, "Limitorque Electric Motor Operators (Environmental and Seismic Testing) (Outside Containment) (Non-HELB Environments)" (Proprietary)

30. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, Appendix A1 "Short Term Component Aging Test Program" (Proprietary)
31. Twenty-five (25) copies of Revision 1 to proprietary report WCAP-8687 "Equipment Qualification Test Reports" Supplement 2, Appendix A2 "Materials Aging Analysis" (Proprietary)
32. Fifteen (15) copies of Revision 5 to WCAP-8587 "Methodology for Qualifying Westinghouse WRD Supplied Safety Related Electrical Equipment"

Please note that this revision supersedes all of the previously issued revisions (1, 2, 3 and 4) to WCAP-8587 methodology. Changes (deletions/additions) as a result of Revision 5 are indicated by a "bar" and the number "5" located along the outside margin of the affected page.

We recognize that EG&G Idaho has begun their review of Revision 4 to WCAP-8587 methodology, for the NRC EQ Branch, and we feel that it is essential that this revision (5) be included in that review.

This revision (5) incorporates the resolution of independent utility technical review comments along with information which has been included as a result of knowledge accumulated through completed testing programs.

Also enclosed are:

1. One (1) copy of Application for Withholding AW-82-28 (Non-Proprietary)
2. One (1) copy of Affidavit (Non-Proprietary)

The above reports are being provided as a result of the completed review and acceptance by the Westinghouse Users Group. These revisions have incorporated comments received as a result of that review. These reports will replace those reports (initial submittals or revisions) previously submitted by Westinghouse for WCAP's 8587/8687.

The enclosed information is being submitted in connection with the commitments made by Westinghouse in WCAP-8587, "Methodology for Qualifying Westinghouse WRD Supplied Safety Related Electrical Equipment." The generic qualification program described in WCAP-8587 is in accordance with Regulatory Guide 1.89 (IEEE 323-1974) and 1.100 (IEEE 344-1975). It is referenced by a number of plants in Section 3.11 of the FSAR.

Some of these revisions contain proprietary information of Westinghouse Electric Corporation. In conformance with the requirements of 10CFR Section 2.790, as amended, of the Commission's regulations, we are enclosing with this submittal an application for withholding from public disclosure and an affidavit. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission.

May 19, 1982

Correspondence with respect to the affidavit or application for withholding should reference AW-82-28 and should be addressed to R. A. Wiesemann, Manager of Regulatory and Legislative Affairs, Westinghouse Electric Corporation, P.O. Box 355, Pittsburgh, Pennsylvania 15230.

At our meeting in Bethesda in January, we agreed that since the Westinghouse qualification program, as described in WCAP-8587, is an ongoing program and we will continue to incorporate new items of equipment, it would be prudent for the NRC to review the Westinghouse program in stages. The first two stages of review would cover (1) the methodology, as described in WCAP-8587, and (2) the first block of equipment qualification programs completed. This is currently a convenient point to draw the line for completing these first two stages.

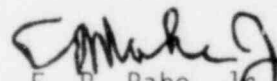
By carbon copy of this letter, we are sending two (2) additional copies of all of the reports listed above to Mr. Paul Shemanski of the NRC Equipment Qualification Branch. We are requesting that Mr. Shemanski maintain one (1) copy for himself and forward one (1) copy to EG&G Idaho. This is being done to provide the necessary documentation which will permit EG&G Idaho to complete the first two review stages of the Westinghouse program as agreed at our meeting on January 8, 1982, at the NRC with Mr. Shemanski and members of EG&G Idaho staff.

Table 1 summarizes those Westinghouse programs that have been completed and for which the qualification documentation has been reviewed and accepted by the working group which represents a group of utilities who are referencing WCAP-8587 for qualification purposes. With this submittal, the NRC now has all of this information. Table 2 summarizes the status of other Westinghouse ongoing qualification programs which we expect to be completed in the near term. The ongoing programs described in Table 2 should be deferred for a later review phase.

At your earliest convenience, we would appreciate an estimate from you of the completion date for your review of this material. If a meeting with Westinghouse, or any other support we can give, would help you with this review, please do not hesitate to contact myself, George Butterworth (412) 373-5761, or Alex Ball (412) 373-5792 of my staff.

Very truly yours,

WESTINGHOUSE ELECTRIC CORPORATION


E. P. Rahe, Jr., Manager
Nuclear Safety

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Enclosures

TABLE 1
Complete Qualification Program Documentation May 1982

<u>Program Number</u>	<u>Equipment Description</u>	<u>Final Version of EQDP and EQTR</u>
	WCAP-8587, Methodology	Revision 5
AE-1	Medium Pump Motors	EQDP-AE-1, Rev. 3 EQTR-A01A, Rev. 1
AE-2	Large Motors	EQDP-AE-2, Rev. 4 EQTR-A02A, Rev. 1
AE-3	Canned Motors	EQDP-AE-3, Rev. 4 EQTR-A03A, Rev. 2
ESE-1	Pressure Transmitters Group A (Barton)	EQDP-ESE-1, Rev. 3 EQTR-E01A, Rev. 1
ESE-2	Pressure Transmitters Group B	EQDP-ESE-2, Rev. 4 EQTR-E02A, Rev. 1 (Barton) EQTR-E02B, Rev. 1 (Veritrak)
ESE-3	DP Transmitters Group A (Barton)	EQDP-ESE-3, Rev. 3 EQTR-E03A, Rev. 1
ESE-4	DP Transmitters Group B	EQDP-ESE-4, Rev. 5 EQTR-E04A, Rev. 1 (Barton) EQTR-E04B, Rev. 2 (Veritrak)
ESE-6	RTD's - Well Mounted	EQDP-ESE-6, Rev. 4 EQTR-E06A, Rev. 2
ESE-7	RTD's - Fast Response	EQDP-ESE-7, Rev. 4 EQTR-E07A, Rev. 2
*ESE-10	Nuclear Instrumentation	EQDP-ESE-10, Rev. 4 EQTR-E10A, Rev. 2
*ESE-14	Indicators	EQDP-ESE-14, Rev. 3 EQTR-E14A, Rev. 1
*ESE-15	Recorders	EQDP-ESE-15, Rev. 3 EQTR-E15A, Rev. 1
ESE-16	Solid State Protection System	EQDP-ESE-16, Rev. 4 EQTR-E16A, Rev. 1 EQTR-E16B, Rev. 2 EQTR-E16C, Rev. 0
*ESE-18	Static Inverter	EQDP-ESE-18, Rev. 4 EQTR-E18A, Rev. 1

<u>Program Number</u>	<u>Equipment Description</u>	<u>Final Version of EQDP and EQTR</u>
*ESE-19	Instrument Bus Distribution Panels	EQDP-ESE-19, Rev. 3 EQTR-E19A, Rev. 1
*ESE-20	Reactor Trip Switchgear	EQDP-ESE-20, Rev. 4 EQTR-E20A, Rev. 2
ESE-21	Pressure Sensor	EQDP-ESE-21, Rev. 3 EQTR-E21A, Rev. 1
ESE-22	Power Range 4-Section Excore Detector	EQDP-ESE-22, Rev. 3 EQTR-E22A, Rev. 1
HE-2&5	Solenoid Valves (One Report)	EQDP-HE2/HE5, Rev. 3 EQTR-H02A/H05A, Rev. 1
HE-3&6	Limit Switch (One Report)	EQDP-HE3/HE6, Rev. 3 EQTR-H03A/H06A, Rev. 1
HE-4	Motor Operators	EQDP-HE4, Rev. 3 EQTR-H04A, Rev. 2
-	Component Aging Program	WCAP-8687, Appendix A1, Rev. 1
-	Materials Aging Program	WCAP-8687, Appendix A2, Rev. 1

*NRC already has final version of EQDP and EQTR.

TABLE 2
Status of Westinghouse Programs Not Yet Completed
As of May 1982

<u>Program Number</u>	<u>Equipment Description</u>	<u>Estimated Completion Date</u>
ESE-1	Pressure Transmitters Group A (Veritrak)	9/30/82
ESE-3	Differential Pressure Transmitters Group A (Veritrak)	9/30/82
ESE-5	RTD's - RCS Bypass Manifold	6/30/82
ESE-8	2-Section Excore Detectors	7/30/82
ESE-12	Main Control Board Switch Modules	12/31/82
ESE-13	Process Protection System	7/30/82
ESE-17	SSPS - 3 Train	6/30/82
ESE-23	Loop Stop Valve Cabinet	12/31/82
ESE-24	RCP Speed Sensor**	12/31/82
ESE-27	N-16 Detector	6/30/82
ESE-40	DP Indicating Switch - Group B	6/30/82
ESE-47*	Boron Dilution Fix	7/30/82
HE-1	Motor Operators	9/30/82

*This qualification includes the source and intermediate range detectors, pre-amps and drawers. Includes information previously included in ESE-9 and 11.

**Upgrade Addition.