

July 29, 1998

Mr. Brian A. McIntyre, Manager
Advanced Plant Safety and Licensing
Energy Systems Business Unit
Westinghouse Electric Company
P.O. Box 355
Pittsburgh, PA 15230-0355

SUBJECT: TIER 2* INFORMATION FOR THE AP600 DESIGN

Dear Mr. McIntyre:

The U. S. Nuclear Regulatory Commission (NRC) staff has determined that certain information (i.e., design commitments) in the AP600 Standard Safety Analysis Report (SSAR), if proposed for a change by an applicant or licensee that references the AP600 standard design, will require prior NRC approval before the proposed change can be implemented. This information will be referred to as Tier 2* in the proposed design certification rule for the AP600 design and must be explicitly identified with italicized text or brackets and an asterisk (or comparable designations) in the AP600 design control document (DCD). An index for this information should be provided in Tier 2 (Chapter 1) of the DCD. The staff has also determined that the Tier 2* designation should expire for some of this information after a plant that references the AP600 design achieves full power for the first time. The Tier 2* information for the AP600 design and the staff's decision on whether it should expire at first full power is listed in Enclosure 1 to this letter. If you have any questions on this matter, you may contact me at 301-415-3145.

Sincerely,

original signed by:

Jerry N. Wilson, Senior Policy Analyst
Standardization Project Directorate
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Docket No. 52-003

Enclosure: As stated

cc w/enclosure: See next page

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DOCUMENT NAME: A:TIER-LTR.JNW

*See previous concurrence

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Mr. B. A. McIntyre
Westinghouse Electric Company

Docket No. 52-003
AP600

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<u>SSAR location</u>	<u>Subject</u>	<u>Expiration</u>
Figure 3.7.1-16	Dimensions for Nuclear Island Structures	Yes
Figure 3.7.2-12	Nuclear Island Key Structural Dimensions	Yes
3.8.2.2	ASME Code, Section III, Edition etc.	Yes
3.8.2.5 + 3G	ASME Code Case N-284	Yes
3.8.3.5.8	Design Summary of Critical Sections	Yes
3.8.4.4.1	ACI 318-95	Yes
3.8.4.5.1	ACI 349-90	Yes
3.8.4.5.2	ANSI/AISC N690	Yes
3.8.4.5.4 + 3H	Design Summary of Critical Sections	Yes
3.8.5.4.5	Design Summary of Critical Sections	Yes
3.8.5.5	ACI 349-90 and ACI 318-95	Yes
3.10.1.1	Seismic Qualification Standards	Yes
3.10.2	Methods and Procedures for Qualifying Electrical Equipment, Instrumentation, and Mechanical Components	Yes
4 + Table 1.6-1	WCAP-12488-A, "Fuel Criteria Evaluation Process"	No
4.1	Maximum Fuel Rod Average Burnup	No
4.1.1	Principal Design Requirements	No
Table 4.3-1	Reactor Core Description (First Cycle)	Yes
Table 4.3-2	Nuclear Design Parameters (First Cycle)	Yes
Table 4.3-3	Reactivity Requirements for Rod Cluster Control Assemblies	Yes
5.2.1.1	ASME Code, Section III, Edition and Addenda	Yes
5.4.8.1.2	MOV Design and Qualification	Yes
5.4.8.1.3	POV Design and Qualification	Yes
5.4.8.5.2	Motor - Operated Valves	Yes
5.4.8.5.3	Power - Operated Valves	Yes

<u>SSAR location</u>	<u>Subject</u>	<u>Expiration</u>
7 + Table 1.6-1	WCAP-13383, "AP600 Instrumentation and Control Hardware & Software Design, Verification, & Validation Process Report," Rev. 1	Yes
7 + Table 1.6-1	WCAP-14605, "Westinghouse Setpoint Methodology for Protection Systems, AP600," Rev. 0	Yes
7.1.2.15	Verification & Validation	Yes
7.1.4.1.8	Conformance with Industry Standards	Yes
Figure 9A-1	Nuclear Island Fire Areas	Yes
Figure 9A-2	Turbine Building Fire Areas	Yes
Figure 9A-3	Annex I & II Building Fire Areas	Yes
Figure 9A-4	Radwaste Building Fire Areas	Yes
Figure 9A-5	Diesel Generator Building Fire Areas	Yes
18 + Table 1.6-1	WCAP-14396, "Man-In-The-Loop Test Plan Description," Rev. 2	No
18 + Table 1.6-1	WCAP-14401, "Programmatic Level Description of the AP600 Human Factors Verification and Validation Plan," Rev. 3	No
18 + Table 1.6-1	WCAP-14351, "Integration of Human Reliability Analysis with Human Factors Engineering Design Implementation Plan," Rev. 2	No
18 + Table 1.6-1	WCAP-14695, "Description of the Westinghouse Operator Decision Making Model and Function Based Task Analysis Methodology," Rev. 0	No
18 + Table 1.6-1	WCAP-14701, "Methodology & Results of Defining Evaluation Issues for the AP600 Human System Interface Design Test Program," Rev. 1	No
18 + Table 1.6-1	WCAP-14822, "AP600 Quality Assurance Procedures Supporting NRC Review of AP600 SSAR Sections 18.2 and 18.8," Rev. 0	No
18.2.1.3	Applicable Facilities	No
18.2.1.4	Applicable Human System Interfaces	No
18.2.1.5	Applicable Plant Personnel	No
18.2.1.6	Technical Basis	No
18.2.2.1	Responsibility	No

<u>SSAR location</u>	<u>Subject</u>	<u>Expiration</u>
18.2.2.3	Composition [first paragraph & listing of design team disciplines]	No
18.2.3.1	General Process and Procedures [last paragraph of Design Review of HFE Products only]	No
Figure 18.2-1	Human System Interface Design Team Process	No
18.5.1	Task Analysis Scope	No
18.5.2	Task Analysis Implementation Plan	No
18.7	Integration of Human Reliability Analysis with HFE	No
18.8.2	Safety Parameter Display System (through 18.8.2.7, inclusive)	No
18.8.3.2	Main Control Area Mission and Major Tasks	No
18.8.3.4	Remote Shutdown Workstation Mission and Major Tasks	No
18.8.3.5	Technical Support Center Mission and Major Tasks	No
18.11	Human System Interface Design Test Program	No
18.12	Inventory [through 18.12.3]	No