UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 20, 1994

Docket No. 52-003

APPLICANT: Westinghouse Electric Corporation

FACILITY: AP600

SUBJECT: SUMMARY OF AP600 CONSISTENCY REVIEW MEETING

On May 11, 1994, representatives of the U.S. Nuclear Regulatory Commission (NRC) and Westinghouse met at the Westinghouse offices in Monroeville, Pennsylvania, to discuss the resolution of certain issues related to the mechanical, materials, and structural design for the AP600 that arose previously in the staff's review of the advanced boiling water reactor (ABWR) and System 80+ standard plant reviews. These included issues related to non-seismic-to-seismic (II/I) interaction, welding, and the Advisory Committee on Reactor Safeguards concerns with piping design acceptance criteria. The purpose of the meeting was to ensure that the resolution of the issues and the documentation in the AP600 standard safety analysis report and certified design material will be consistent with the manner in which they were resolved in the ABWR and System 80+ design certification reviews. Enclosure 1 is a list of attendees.

During the meeting, Westinghouse indicated that it will be proposing a different approach to the resolution of several issues than the approach used for the ABWR and System 80+ designs. In the piping design area, Westinghouse is discussing the possibility of completing preliminary piping layout and stress analyses as well as high and moderate energy line break studies as a part of design certification rather than having the combined license perform the analyses and studies. In addition, Westinghouse is proposing to perform as-built walkdowns such as for II/I by using its 3-dimensional computer-aided drawing (3-D CAD) system instead of requiring personnel to physically enter the plant. The staff noted that 3-D CAD walkdowns might be appropriate for certain as-built verifications, but would not be suitable for many verifications, such as checking anchor bolt installation and pipe whip restraint clearance gaps.

At the conclusion of the meeting, Westinghouse indicated that they will review the resolution of issues on the ABWR and System 80+ designs and identify to the staff where it proposes to deviate from those resolutions.

Enclosure 2 contains the information provided by the NRC staff during the meeting. Enclosure 3 contains the information provided by Westinghouse.

Original Signed By:

Kristine M. Shembarger, Project Manager
Standardization Project Directorate
Associate Directorate for Advanced Reactors
and License Renewal, NRR

Enclosures:
As stated

cc w/enclosures:
See next page

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Docket File	PDST R/F	DCrutchfield	RBorchardt
PDR	RArchitzel	KShembarger	PShea
FHasselberg	TKenyon	EJordan, 3701	JMoore, 15B18
WDean, EDO	GBagchi, 7H15	DTerao, 7H15	WTravers
ACRS (11) (w/o encl)			

OFC	LA:PDST:ADAR	PM:PDST:ADAR	PM:PDST:ADAR	SC:PDST:ADAR
NAME	PShea	KShembarger:th	TKenyon	RArchitzel
DATE	05/18/94	05/18/94 KMS	05/18/94	05/ /94

DOCUMENT NAME: W0511.KMS

cc: Mr. Nicholas J. Liparulo
Nuclear Safety and Regulatory Analysis
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Mr. B. A. McIntyre
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, Pennsylvania 15230

Mr. John C. Butler
Advanced Plant Safety & Licensing
Westinghouse Electric Corporation
Energy Systems Business Unit
Box 355
Pittsburgh, Pennsylvania 15230

Mr. M. D. Beaumont
Nuclear and Advanced Technology Division
Westinghouse Electric Corporation
One Montrose Metro
11921 Rockville Pike
Suite 350
Rockville, Maryland 20852

Mr. Sterling Franks
U.S. Department of Energy
NE-42
Washington, D.C. 20585

Mr. S. M. Modro
EG&G Idaho Inc.
Post Office Box 1625
Idaho Falls, Idaho 83415

Mr. Steve Goldberg
Budget Examiner
725 17th Street, N.W.
Room 8002
Washington, D.C. 20503

Mr. Frank A. Ross
U.S. Department of Energy, NE-42
Office of LWR Safety and Technology
19901 Germantown Road
Germantown, Maryland 20874

Mr. Victor G. Snell, Director
Safety and Licensing
AECL Technologies
9210 Corporate Boulevard
Suite 410
Rockville, Maryland 20850

Mr. Raymond N. Ng, Manager
Technical Division
Nuclear Management and
Resources Council
1776 Eye Street, N.W.
Suite 300
Washington, D.C. 20006-3706

WESTINGHOUSE AP600
CONSISTENCY REVIEW MEETING
MAY 11, 1994

Name	Organization
D. Lingren	Westinghouse
D. Bhowmick	Westinghouse
C. Kim	Westinghouse
P. Kotwicki	Westinghouse
R. Orr	Westinghouse
E. Cummins	Westinghouse
R. Mandava	Westinghouse
D. Terao	NRC/NRR
K. Shembarger	NRC/NRR

Enclosure 1

AP600 Consistency Review

(1) Welding and Welding Acceptance Criteria

Need SSAR commitments on weld design (codes/standards) and weld acceptance criteria for:
- ASME pressure boundary components
- non-ASME pressure boundary components
- structural steel
- electrical cable tray and conduit support
- HVAC supports
- refueling cavity and spent fuel pool liner

(2) Non-Seismic to Seismic (II/I) Interaction

Need commitment in SSAR:

> The COL applicant will describe the process for completion of the design of balance-of-plant and non-safety related systems to minimize non-seismic-to-seismic (II/I) interactions and propose procedures for an inspection of the as-built plant for II/I interactions.

(3) Wind/Tornado Loads on Non-Category I Structures

SSAR to address how non-Cat I structures are to be designed to wind and tornado loads to preclude adverse interaction with near-by safety-related SSCs.

(4) Seismic Loads on Non-Cat I SSCs

SSAR to address seismic design of non-Cat I SSCs (not only structures) to preclude adverse interactions with safety-related SSCs.

(5) LBB Evaluation Report

SSAR to include a description of the contents of a LBB evaluation report. Commitment for a LBB evaluation report needed in Tier 1 Piping Design Description. LBB evaluation report is to document the final LBB analyses using as-built piping configuration and actual material properties and should show that the as-built LBB piping meet the LBB acceptance criteria.

(6) Pipe Break As-Built Inspection

SSAR to include a commitment for COL licensee to perform an as-built walkdown of the high-energy lines to verify pipe break analysis assumptions. The SSAR should describe what should be included in the walkdown.

(7) Pipe Break Analysis Report

SSAR to include a commitment for a COL licensee to complete the high- and moderate-energy line analyses and should include a description of what should be included in a pipe break analysis report. The commitment for a pipe break analysis report should also be discussed in the Tier 1 Piping Design

Description and ITAAC. The pipe break analysis report is should document the results of the COL licensee's completion of the high- and moderate-line break analyses.

(8) Piping As-Built Walkdown and Final Stress Analyses

The SSAR should include a commitment for the COL licensee to complete the as-built piping analyses using the piping DAC and document the results in a ASME Code certified stress report. The SSAR should also discuss the need to perform a final piping as-built walkdown and describe what attributes should be inspected.

(9) Guidelines for Piping As-Built Reconciliation

How are piping as-builts reconciled? The NRC staff accepts "Guidelines for Piping System Reconciliation," EPRI NP-5639 (May 1988) (Also referred to as NCIG-05, Rev. 1)

(10) Certified Piping Design Description

See 18 key points that should be addressed in the Tier 1 piping design description.

(11) Piping ITAAC Wording

See examples of ABWR and System 80+ ITAAC for wording necessary to resolve ACRS concerns.

SSAR Input on II/I

The COL applicant will describe the process for completion of the design of balance-of-plant and non-safety related systems to minimize non-seismic-to-seismic (II/I) interactions and propose procedures for an inspection of the as-built plant for II/I interactions.

SSAR Input on LBB Evaluation Report

Reconciliation of the as-built piping systems with the final design will be documented by the COL applicant in a LBB Evaluation Report. The LBB Evaluation Report shall contain results of the LBB evaluation for as-built piping. The LBB evaluations shall employ methods described in Section __. Reconciliation of each as-built piping system qualified for LBB will be made by the COL applicant by demonstrating that:

(1) the final dimensional and actual material properties of the as-built piping system have been considered in the final LBB analyses, and
(2) the as-built piping responses meet the ASME Code allowable stress limits and the LBB acceptance criteria provided in Section __.

SSAR Input on Pipe Break Analysis Report

The COL applicant will provide final designs of high- and moderate-energy fluid systems. The final designs and results of high- and moderate-energy piping analyses will be documented in a pipe break analysis report. The pipe break analysis report shall provide the results of the pipe break analyses. These analyses shall be based on criteria used to postulate cracks and breaks in high- and moderate-energy piping systems as defined in Section __ and shall employ the analytical methods described in Section __.

For postulated pipe breaks, the Pipe Break Analysis Report shall confirm that:

(1) piping stresses in the containment penetration area are within their allowable stress limits,

(2) pipe whip restraints and jet shield designs are capable of mitigating pipe break loads, and

(3) loads on safety-related structures, systems, and components are within their design load limits.

The Pipe Break Analysis Report shall also confirm that structures, systems, and components required for safe shutdown can withstand the environmental effects of postulated cracks and breaks.

SSAR Input on Pipe Break As-Built Inspection

An inspection of the as-built high-energy piping systems will be performed. The inspection of the as-built high energy pipe break features shall be performed to verify:

(1) the location of pipe break mitigation devices (pipe whip restraints, jet shields),

(2) clearances and gaps between restraints and piping,

(3) the location of nearby safety-related targets to be protected from high-energy line breaks.

Any differences between the as-built information and the as-designed information will be reconciled and documented in a pipe break analysis report.

SSAR Input on Pipe Stress Reconciliation /As-Built Inspection

The COL applicant will perform an as-built inspection of the pipe routing, location and orientation, the location, size, clearances and orientation of piping supports, and the location and weight of pipe mounted equipment. The inspection will be performed by reviewing the as-built drawings containing verification stamps, and by performing a visual inspection of the installed piping system. The piping configuration and component location, size, and orientation shall be within the tolerances specified in the certified as-built piping stress report. The tolerances to used for reconciliation of the as-built piping system with the as-designed piping system are provided in __. A reconciliation analysis using the as-built and as-designed information shall be performed. The certified as-built stress report shall document the results of the as-built reconciliation analyses.

Contents of Piping (Tier 1) Design Description

- scope: Safety-related ASME Code Class 1, 2, and 3 unless otherwise specified in the Design Description (e.g., NNS high-energy lines)
- Piping shall meet ASME Code, Section III requirements.
- Piping shall retain dimensional stability to ensure its functional capability.
- Specify piping loads to be considered (e.g., pressure, weight, thermal, seismic, wind, tornado, fluid transients, thermal stratification, missiles, and pipe breaks).
- Analytical methods and load combinations shall be specified in the ASME Code certified stress report.
- Computer programs for dynamic piping analysis shall be benchmarked.
- Piping systems shall be designed to minimize (or reduce) the effects of erosion-corrosion.
- Control of ferretic materials and fabrication process to preclude brittle fracture.
- Control of austenitic materials and fabrication process to preclude cracking.
- Pipe supports shall meet NF.
- Equipment allowable loads shall be met.
- Safety-related SSCs shall be protected against dynamic effects of pipe breaks in high-energy Category I and NNS piping.
- Safety-related SSCs shall be protected against or qualified to withstand environmental effects of spraying, flooding, pressure and temperatures due to Category I and NNS pipe breaks.
- Pipe breaks shall be documented in a pipe break analysis report.
- Piping systems qualified for LBB may exclude design features needed to mitigate the dynamic effects of postulated HELBs.
- Piping shall be designed to provide clearances from nearby SSCs.
- As-built piping shall be reconciled with the certified piping design requirements.
- LBB criteria shall be met for as-built piping and materials.

Welding and Weld Acceptance Criteria

The requirements listed below are considered by the staff to be essential in controlling welding activities and are needed to support the welding ITAAC requirements for the AP600 plant. Westinghouse should add the following welding commitments to its SSAR in the appropriate sections.

ASME Code Welding

Welding activities shall be performed in accordance with the requirements of Section III of the ASME Code. The required nondestructive examination and acceptance criteria are stated in Table 1. Component supports shall be fabricated in accordance with the requirements of Subsection NF of Section III of the ASME Code except that the visual weld acceptance criteria shall be the Nuclear Construction Issue Group (NCIG) standard NCIG-01, "Visual Weld Acceptance Criteria for Structural Welding of Nuclear Power Plants," Revision 2.

Welding of non-ASME pressure retaining Piping

Welding activities involving non-ASME pressure retaining piping shall be accomplished in accordance with written procedures and shall meet the requirements of the ANSI B31.1, Code. The weld acceptance criteria shall be as defined for the applicable nondestructive examination method described in ANSI B31.1 Code

Welding of Structural and Building Steel

Welding activities shall be accomplished in accordance with written procedures and shall meet the requirements of the American Institute of Steel Construction (AISC) Manual of Steel Construction. The visual acceptance criteria shall be as defined in NCIG-01, Revision 2.

Welding of Electrical Cable Tray and Conduit Supports

Welding activities shall be accomplished in accordance with the American Welding Society (AWS) Structural Welding Code, D1.1 The weld visual acceptance criteria shall be as defined in NCIG-01, Revision 2.

Welding of Heating Ventilating and Air Conditioning Supports

Welding activities shall be accomplished in accordance with the American Welding Society (AWS) Structural Welding Code, D1.1 The weld visual acceptance criteria shall be as defined in NCIG-01, Revision 2.

Welding of Refuel Cavity and Spent Fuel Pool Liners

Welding activities shall be accomplished in accordance with the American Welding Society (AWS) Structural Welding Code, D1.1 The welded seams of the liner plates shall be spot radiographed, liquid penetrant and vacuum box examined after fabrication to ensure that the liner do not leak. The acceptance criteria for these examination shall meet the acceptance criteria stated in subsection NE-5200 of Section III of the ASME Code.

TABLE 1
Welding Activities and Weld Examination Requirements for
ASME Code, Section III Welds

Class 1 Components (1)(2)(3)

Component	Weld Type	NDE Requirements
Vessel	Category A (Longitudinal)	RT plus MT or PT
Vessel, Pipe, Pump, Valve	Category B (Circumferential)	RT plus MT or PT
Pipe, Pump, Valve	Butt weld Fillet and socket welds	RT plus MT or PT MT or PT
Vessels (9)	Category C and similar welds Partial penetration and fillet welds	RT plus MT or PT. RT must be multiple exposure MT or PT on all accessible surfaces
Vessels (9) & Branched Connections	Category D a) Butt welds, all b) Corner welded nozzles c) Corner welded branch and piping connection exceeding 4" nominal diameter d) Corner welds branch and piping 4" and less e) Weld buildup deposits at openings f) Partial penetration g) Oblique full penetration branch and piping connections	 RT plus MT or PT RT plus MT or PT RT plus MT or PT MT or PT UT plus a, b, c above if connected to nozzle or pipe MT or PT progressive and final surface RT or UT plus MT or PT. In addition, UT of weld, fusion zone, and parent metal beneath attachment surface.
General	Fillet, partial penetration, socket welds	MT or PT
General	Structural attachment welds	MT or PT
Special welds	1) Specially designed seals 2) Weld metal cladding 3) Hard surfacing a) Valves 4" or less 4) Tube-tube sheet welds 5) Brazed joints	MT or PT PT PT None PT VT

Class 2 Components (1)(2)(4)

Component	Weld Type	NDE Requirements
Vessel	Category A (Longitudinal) a) Either of the members exceeds 3/16 inch b) Each member 3/16 inch or less	 RT MT, PT, or RT
Pipe, Pump, Valve	Longitudinal	RT
Vessel	Category B (Circumferential) a) Either of the members exceeds 3/16 in. b) Each member 3/16" or less	 RT MT, PT, or RT
Pipe, Pump and Valve	Circumferential a) Butt welds b) Fillet and partial penetration	 RT MT or PT
Vessel (9) and similar joints in other components	Category C a) Corner joints, either of the members exceeds 3/16" of thickness b) Each member 3/16" or less c) Partial penetration and fillet welds	 RT MT, PT, or RT MT or PT
Vessel (9) and similar welds in other components	Category D a) Full penetration joints when either members exceed 3/16" of thickness b) Full penetration corner joints when either member exceeds 3/16" c) Both members 3/16" or less d) Partial penetration and fillet weld joints	 RT MT or PT MT or PT MT or PT
Branch Con. and Nozzles in pipe, valve, pump	a) Nominal size exceed 4" b) Nominal size 4" or smaller	RT MT or PT (external and accessible internal surfaces)

Class 2 Components (Cont'd)(1)(2)(4)

Component	Weld Type	NDE Requirements
Vessels designed to NC-3200	· Cat. A	RT
	· Cat. B	RT
	· Cat. C, Butt weld	RT
	· Cat. C, Full penetration corner	UT or RT
	· Cat. C, Partial penetration corner and fillet welds	MT or PT both sides
	· Cat. D, Full penetration (6)	RT
	· Cat. D, Partial penetration	MT or PT both sides
	Fillet, Partial Penetration, socket, and structural attachment welds	MT or PT
Special Welds	a) specially designed seals	MT or PT
	b) weld metal cladding	MT or PT
	c) hard surfacing	PT
	d) hard surfacing for valves with inlet connection 4" nominal pipe size or less	None
	e) tube-tube sheet welds	PT
	f) Brazed joints	VT
Storage Tanks (Atmospheric)	a) side joints	RT
	b) roof and roof-to-sidewall	VT
	c) bottom joints	vacuum box testing of at least 3 psi
	d) bottom to sidewall	vacuum box + MT or PT
	e) Nozzle to tank side	MT or PT
	f) Nozzle to roof	VT
	g) Joints in nozzles	RT
	h) others	Similar welds in vessels
Storage Tanks (0-15 psi)	a) sidewall	RT
	b) roof	RT
	c) roof-to-sidewall	RT if not possible, MT or PT
	d) bottom & bottom-to-side	vacuum box method + MT or PT
	e) nozzle tank	MT or PT
	f) joints to nozzles	RT
	g) others	same as similar vessel joints

Class 3 Components (1)(2)(5)

Component	Weld Type	NDE Requirements
Vessels	Category A (Longitudinal)	
	1. a) Thickness exceeding the limits of Table ND. 5211.2-1	RT
	b) Welds based on joint efficiency permitted by ND.3351.1	RT
	c) butt welds in nozzles attached to vessels in a or b above	RT
	2. Welds not included in 1 above	Spot RT each 50 ft of weld. additional RT to cover each welders work.
	3. Nonferrous vessels exceeding 3/8 inch	RT
Pump, Valve, Pipe	· pipes greater than 2 in. size · pumps & valves greater than 2 in.	RT, MT, or PT according to the product form
Vessel	Category B (Circumferential)	
	1. a) Thickness exceeds Table ND.5211.2 for Ferrous metals	RT
	b) thickness exceeds 3/8 in for nonferrous metals	RT
	c) joint efficiency according to ND.3352.1(a)	RT
	d) attachments to vessels and exceeds nominal pipe size 10" or thickness 1 1/8 in.	RT
	2. welds not involved in 1 above	RT 6 in. long sections + the intersections of Cat. A welds
pipe, pump and valve	Greater than 2" nominal pipe size	RT, PT, or MT
Vessel	Category C:	
	1. a) Thickness exceeds Table ND-5211.2 or ND-5211.3	RT
	b) Attachments exceed 10 inch NPS or 1 1/8 inch wall thickness	RT
	2. Welds not involved in 1 above	Spot RT to cover each welders work
Pipe, Pump, Valves	Greater than 2" nominal pipe size	RT, PT, or MT

Class 3 Components (Cont'd)(1)(2)(5)

Vessel	Category D: 1. Full penetration butt welds designed for joint efficiency per ND.3352.1(a)	RT
	2. In nozzles or communicating chambers attached to vessels or heads requiring full RT	RT
	3. Welds not covered by 1 and 2 above	Spot RT to cover each welders work
Pipe, Pump and Valve	Greater than 2" nominal pipe size	RT, PT, or MT
Special Welds	a) weld metal cladding	PT
	b) hard surfacing	PT
	(i) hard surfacing for valves with inlet connection 4" nominal pipe size or less	none
	c) tube-tube sheet welds	PT
	d) Brazed joints	VT
Storage Tanks (Atmospheric)	a) sidewall joints	Same as Category A or B vessel joints
	b) roof and roof-to-sidewall	VT
	c) bottom joints	vacuum box testing of at least 3 psi, or PT or MT plus VT during pressure test
	d) bottom to sidewall	Same as bottom joints
	e) Nozzle to tank side	MT or PT
	f) Nozzle to roof	VT
	g) Joints in nozzles ex. roof nozzles	MT or PT
	h) others	Similar welds in vessels
Storage Tanks (0-15 psi)	a) sidewall	Same as Category A or B vessel joints
	b) roof	Same as Category A vessel joints
	c) roof-to-sidewall	Same as above if possible, or MT or PT
	d) bottom & bottom-to-side	Vacuum box testing at least 3 psi, or PT pr MT plus VT during pressure test
	e) nozzle to tank	MT or PT
	f) joints in nozzles	MT or PT
	g) others	same as similar vessel joints

Containment Vessel (1)(2)(6)

Component	Weld Type	NDE Requirements
Containment	Category A, Butt Welds (Long'l)	RT
Containment	Category B, Butt Welds (Circ.)	RT
Containment	Category C, Butt weld	RT
Containment	Category C, Nonbutt Welds	UT or MT or PT
Containment	Category D, Butt Welds	RT
Containment	Category D, Nonbutt Welds	UT or MT or PT
Containment	Structural attachment welds	
	a) Butt Welds	RT
	b) Nonbutt Welds	UT or MT or PT
Special welds	Weld Metal Cladding	PT

Components Supports (1)(2)(7)

Component	Weld Type	NDE Requirements
Class 1 Supports	Primary Member, Full Penetration Butt Welds	RT
	All other welds	MT or PT
	Secondary Member Welds	VT
Class 2 and MC Supports	Primary Member, Full Penetration Butt Welds	RT
	Partial Penetration or fillet welds throat greater than 1"	MT or PT
	All other Welds	VT
	Secondary Member Welds	VT
Class 3 Supports	Primary Member, Groove or throat greater than 1"	MT or PT
	All other welds	VT
	Secondary Member Weld	VT
Special Requirements, All Classes	Welds Transmitting Loads in the Through Thickness Direction in Members Greater than 1"	UT base metal beneath the weld

Core Support Structures (1)(2)(8)

Component	Weld Type	NDE Requirements
Core Support Structures (Provide direct support or restrain of the fuel, etc. under normal operating conditions.)	Category A, longitudinal butt welds Category B, circumferential butt welds Category C, flange to shell welds Category D, nozzle to shell welds Category E, beam end conections to other structures	Examinaton may be by any technique or certain combinatons of techniques, from simple VT to MT or PT plus RT or UT. Quality factor n and fatigue factor f are dependant on the technique(s) selected, in accordance with Table NG-3352-1
	Repaire welds under 3/8 in. or 10% deep	MT or PT
	Repair welds over 3/8 in. or 10% deep	MT or PT plus RT or RT
Internal Structures (Can be any other structure within the reactor vessel.) Nonmandatory	Same as above	Same as above
Temporary Attachments (Removed before operation)	All	MT or PT

NOTES:

1) The required confirmation that facility welding activities are in compliance with the certified design commitments will include the following th rd party verifications:

   a. Facility welding specifications and procedures meet the applicable ASME Code requirements
   b. Facility welding activities are performed in accordance with the applicable ASME Code requirements
   c. Welding activities related records are prepared, evaluated and maintained in accordance with the ASME Code requirements
   d. Welding processes used to weld dissimilar base metal and welding filler metal combinations are compatible for the intended applications
   e. The facility has established procedures for qualifications of welders and welding operators in accordance with the applicable ASME Code requirements
   f. Approved procedures are available and used for preheating and post heating of welds, and those procedures meet the applicable requirements of the ASME Code
   g. Completed welds are examined in accordance with the applicable examination method required by the ASME Code

2) Radiographic film will be reviewed and accepted by the COL applicant's nondestructive examination (NDE), Level III examiner prior to final acceptance

3) The NDE requirements for Class 1 components will be as stated in subarticle NB-5300 of Section III of the ASME Code

4) The NDE requirements for Class 2 components will be as stated in subarticle NC-5300 of Section III of the ASME Code

5) The NDE requirements for Class 3 components will be as stated in subarticle ND-5300 of Section III of the ASME Code

6) The NDE requirements for containment vessels will be as stated in subarticle NE-5300 of Section III of the ASME Code

7) The NDE requirements for component supports will be as stated in subarticle NF-5300 of Section III of the ASME Code

8) The NDE requirements for core support structures will be as stated in subarticle NG-5300 of the Section III of the ASME Code

9) For corner joints UT may be used instead of RT. For Type 2 full penetration corner weld joints, if RT is used, the fusion zone, and parent metal beneath the attachment surface shall be UT examined after welding.

LEGEND:

RT - Radiographic Examination; UT - Ultrasonic Examination; MT - Magnetic Particle Examination; LP - Liquid Penetrant Examination; VT - Visual Examination

Fig. NB-3351-1 Welded joint locations typical of categories A, B, C, and D

Fig. NB-3352-1 typical butt joints

1. WELDING AND WELDING ACCEPTANCE CRITERIA

SEISMIC CATEGORY I STRUCTURES (INCLUDING SUPPORTS FOR CABLE TRAYS, CONDUITS AND DUCTS) ARE DESIGNED TO AISC N690 OR AISI. WELDING IS IN ACCORDANCE WITH AWS D1.1

2. SEISMIC INTERACTION (RAI 210.90)

CRITERIA FOR DESIGN AGAINST INTERACTION ARE PROVIDED IN SSAR SUBSECTION 3.7.3.13. THESE CRITERIA ARE PART OF DESIGN CERTIFICATION.

DETAIL DESIGN OF BALANCE OF PLANT AND NON-SAFETY SYSTEMS WILL CONTINUE AFTER DESIGN CERTIFICATION BUT MUST SATISFY THE CRITERIA IN THE SSAR.

DRAWINGS HAVE BEEN PREPARED SHOWING SEISMIC / NON SEISMIC AREAS ON A ROOM BY ROOM BASIS. AP600 HAS REDUCED SEISMIC AREAS RELATIVE TO CONVENTIONAL PLANTS. ALL NONSEISMIC ITEMS WITHIN A SEISMIC AREA WILL BE REVIEWED FOR INTERACTION.

THREE DIMENSIONAL COMPUTER MODEL AND COMPOSITES USED DURING THE DESIGN PROCESS TO AID IN EVALUATING AND DOCUMENTING THE REVIEW FOR SEISMIC INTERACTION. THIS DOCUMENTATION IS AVAILABLE FOR NRC AUDIT DURING PLANT CONSTRUCTION. IT WILL INCLUDE RECONCILIATION OF ANY CHANGES DURING CONSTRUCTION.

3. WIND/TORNADO LOADS ON NON-CATEGORY I STRUCTURES

SSAR SUBSECTION 3.3.2.3.

4. SEISMIC LOADS ON NON-CATEGORY I STRUCTURES

SSAR SUBSECTION 3.7.2.8 FOR STRUCTURES AND 3.7.3.8 FOR SYSTEMS AND COMPONENTS.

STRUCTURES ADJACENT TO NUCLEAR ISLAND - BEING RECLASSIFIED FROM SEISMIC CATEGORY II TO NON-SEISMIC. DEMONSTRATION OF NON-COLLAPSE, OR ACCEPTABILITY OF COLLAPSE, UNDER DISCUSSION WITH STRUCTURAL BRANCH.

NONSEISMIC SYSTEMS AND COMPONENTS THAT ARE LOCATED SUCH THAT FAILURE COULD JEOPARDIZE SAFETY RELATED SSCs ARE ANALYZED TO THE SAME CRITERIA AS SEISMIC CATEGORY I.