

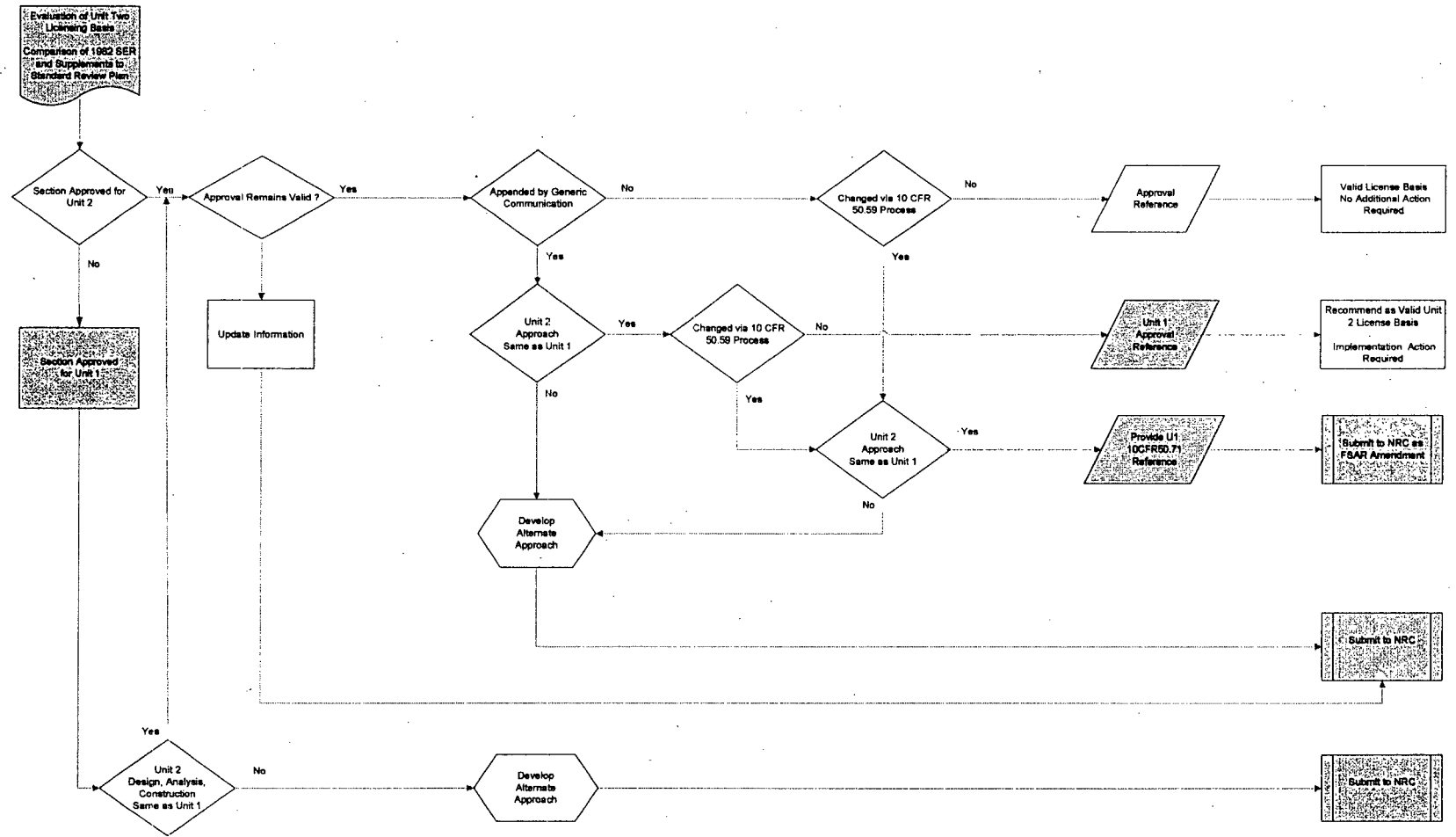
WATTS BAR NUCLEAR PLANT UNIT 2



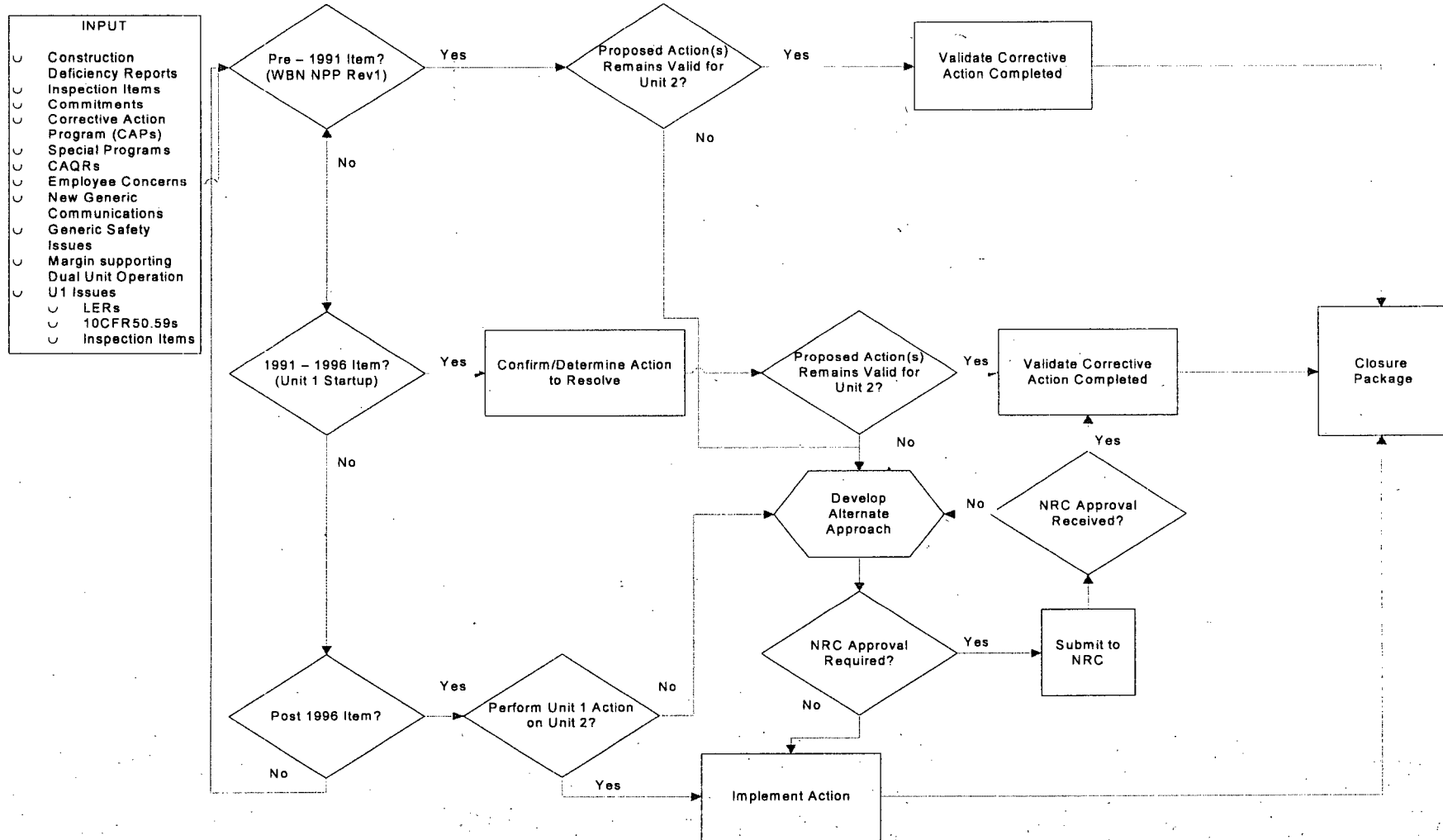
Regulatory Framework Overview

December 12, 2007

Regulatory Framework – Development Logic



Regulatory Framework – Development & Closure Logic



Regulatory Framework – Example 1*



Approved Unit Two Licensing Basis

1982 SER	SRP TITLE	Approval for WBN Unit 2	Approval Reference	Guidance (GL, Bulletins, other) Note 1	Additional Information
3.9.5	3.9.5 - Reactor Pressure Vessel Internals	Original 1982 SER			

* Draft Information for Illustration Only

Regulatory Framework – Example 2*



Approved Unit One Licensing Basis – Same Approach for Unit Two

1982 SER	SRP TITLE	Approval for WBN Unit 2	Approval Reference	Guidance (GL, Bulletins, other) Note 1	Additional Information
3.7.3	3.7.3 - Seismic Subsystem Analysis	3.7.3-Outstanding issue involving use of code cases, damping factors for conduit and use of worst case, critical case and bounding case	Code case use, damping factors for conduit SSER8 – January 1992, use of worst case, critical case and bounding calculations for Unit 1 only in SSER12 - October 1993 (CAP/SP implementation issue resolved in IR 390/93-201)		<p>The staff reviewed the list of specific ASME Code cases TVA intended to use and found that they were either incorporated into the ASME Code or endorsed in Position C.1-of RG 1.84. This issue was considered resolved in SSER8.</p> <p>Deficiencies identified in the use of worst case, critical case and bounding calculations were resolved in IR 50-390/93-201 and this issue was considered resolved for Unit 1 in SSER12.</p> <p>*Conduit Supports Corrective Action Program. Process was reviewed and determined to be acceptable for Unit 1 in SER dated September 1, 1989. Same approach will be used for Unit 2.</p>

* Draft Information for Illustration Only

Regulatory Framework – Example 3*



Approved License Basis – Supplemented by Generic Communication

1982 SER	SRP TITLE	Approval for WBN Unit 2	Approval Reference	Guidance (GL, Bulletins, other) Note 1	Additional Information
3.8.3	3.8.4 - Other Seismic Category 1 Structures	Original 1982 SER		B 80-11	*B 80-11 "Masonry Wall Design" - NRC accepted all but completion of corrective actions in IR 50-390/93-01 and 50-391/93-01 (February 25, 1993) and closed for Unit 1 in IR 50-390/95-46 (August 1, 1995) – Complete implementation for Unit 2.

* Draft Information for Illustration Only

Regulatory Framework – Example 4*



Alternate Action for Unit Two

1982 SER	SRP TITLE	Approval for WBN Unit 2	Approval Reference	Guidance (GL, Bulletins , other) Note 1	Additional Information
4.4	4.4 - Thermal and Hydraulic Design	4.4.8 – LC Detectors for Inadequate core cooling (II.F.2)	SSER10 – October 1992	GL 82-28/NUREG 0737, II.F.2	<p>In the original SER, the review of the ICC instrumentation was incomplete. The January 24, 1992 letter in response to GL 82-28/II.F.2 "Inadequate Core Cooling Instrumentation System" superseded the previous responses on this issue. This letter addressed both WBN Units 1 and 2. NRC reviewed and approved for WBN Units 1 and 2 in SSER 10. WBN Unit 2 action - Install Westinghouse ICCM-86 and associated hardware.</p> <p>TVA will provide an equivalent system for WBN Unit 2. TVA will submit information for NRC review by XXX</p>

* Draft Information for Illustration Only

Regulatory Framework – CAP & SP Example*



Program Description	References	Unit 2 Status and TVA Commitment
<p><u>CAP - Cable Tray Supports</u> Deficiencies with cable trays and their supports included inadequate tray connections, inconsistencies between as-designed versus as-built tray configurations and their orientation, and failure to evaluate all loading on cable tray members.</p> <p>The CAP for Unit 1 assured the structural adequacy and compliance with design criteria and licensing requirements by:</p> <ul style="list-style-type: none"> • Review and revision of design criteria. • Review or development of design output requirements to comply with design criteria and to adequately translate TVA design requirements. This included validation calculations for typical hardware configurations and critical cases. • Walkdown of field configurations to identify deviations from design output. • Modifications to field conditions, where necessary, to ensure that they are consistent with design output documents. 	<p><u>CAP Plan and Closure:</u> TVA letter dated September 6, 1991, WBN – Nuclear Performance Plan, Volume 4, Revision 1, Section III.2.2, Cable Tray and Cable Tray Supports TVA letter dated October 20, 1995, Cable Tray and Cable Tray Supports Corrective Action Program Closure Report</p> <p><u>NRC Approval of Approach:</u> Safety Evaluation of the WB CAP Plan for Category I Cable Tray and Cable Tray Supports, September 13, 1989 SSER 6, April 1991</p>	<p>CAP is open (Design and Physical Modification)</p> <p>For Unit 2, the Unit 1 approach will be used. Walkdowns will be performed to identify deviations from design documents; calculations will be developed for those configurations that were not present on Unit 1, and acceptance criteria revised as appropriate, limits for acceptable configurations determined and drawings revised to include these configurations; and modifications made, as required.</p>

* Draft Information for Illustration Only

Regulatory Framework – Closing Comments



- Provides the Unit Two Licensing Basis
- Based on the Staff Requirements Memorandum
 - Unit One and Unit Two Licensing Basis Fidelity
- Addresses October 23rd Information Request
- Regulatory Framework Submittal – January 31, 2008

Regulatory Framework



QUESTIONS ?

Scope of Watts Bar Nuclear Plant Unit 2 Licensing Review

Identification of Topics for Additional Technical Review

Unit 1 Licensing Basis Standard

