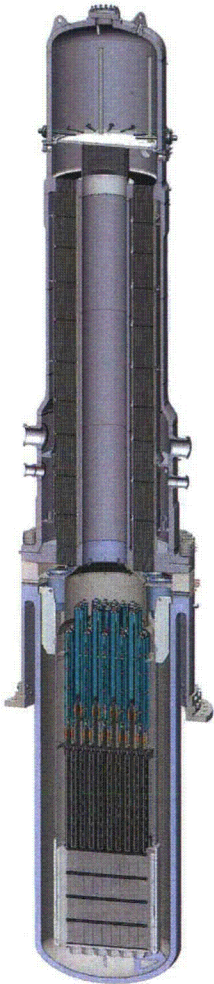




generation
mPower



© 2011 Babcock & Wilcox Nuclear Energy, Inc. All Rights Reserved.

Clinch River Construction Permit Application Development

Second Regulatory Framework Workshop
November 3, 2011



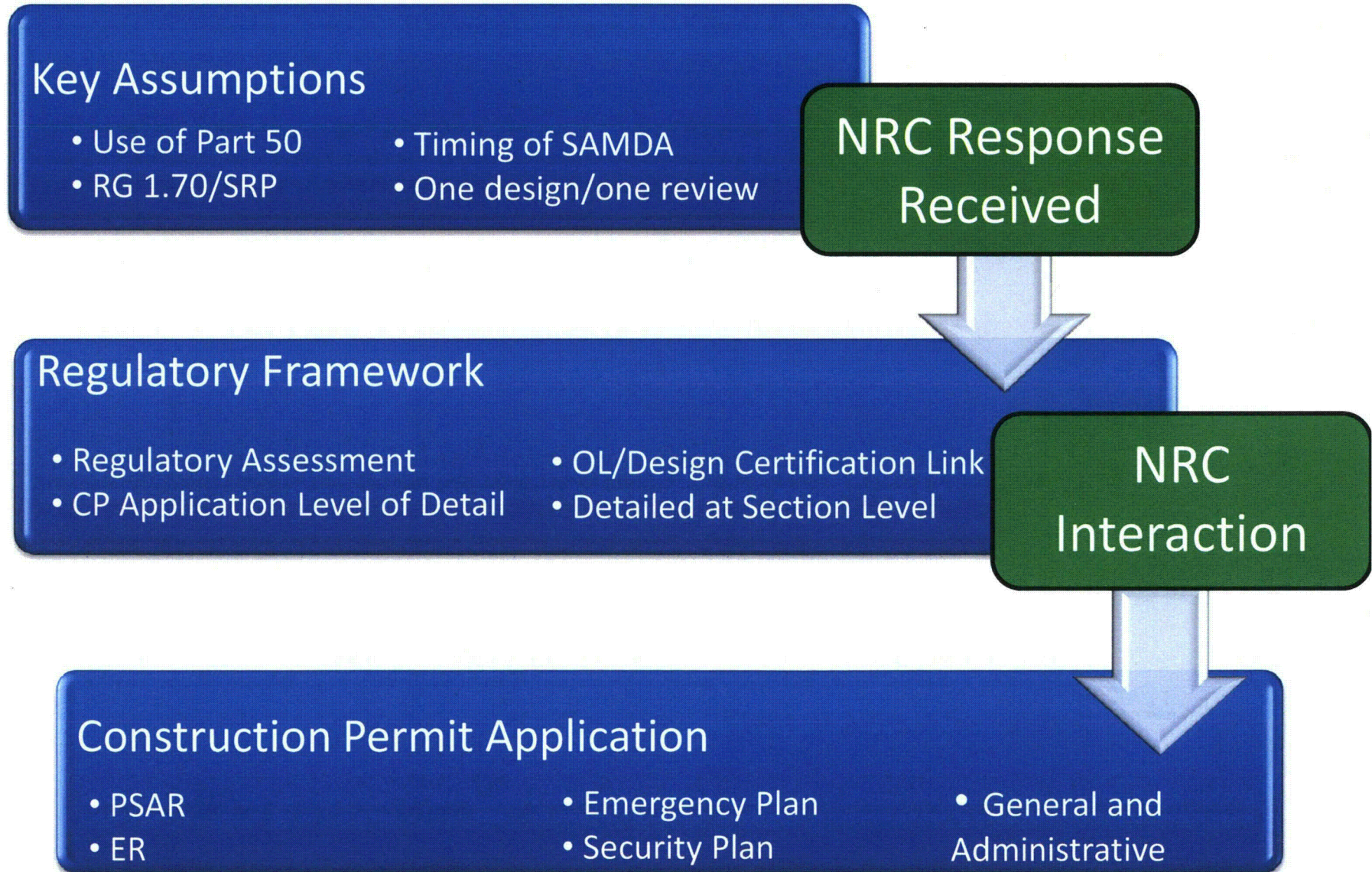
Agenda



-
- Introduction
 - Workshop Objectives
 - Translating RFDs to the PSAR
 - Questions from First Workshop
 - RFDs for Discussion Today
 - PSAR Chapter 1
 - PSAR Sections 3.1-3.2, 3.3, 3.5, 3.6, 3.10, 3.11, 3.12-3.13
 - PSAR Sections 9.2, 9.3, 9.5.2, 9.5.3, 9.5.4
 - PSAR Chapter 11
 - Conclusion



Establishing Regulatory Alignment Consistent with NRC Requirements and Guidance





Workshop Objectives



- Present proposed Clinch River Licensing Baseline
 - Regulatory Framework Documents
 - Section Outlines
- Reach understanding how the RFDs and Section Outlines translate into a PSAR section
- Engage NRC Staff in discussions on RFD/Section Outline content
- Develop understanding of NRC CPA level of detail needs
- Address Questions from First Workshop
- Obtain NRC agreement on Identified Issues
- Identify areas for future interaction

Goal: NRC Acceptance of Licensing Baseline for CPA



Regulatory Framework Purpose



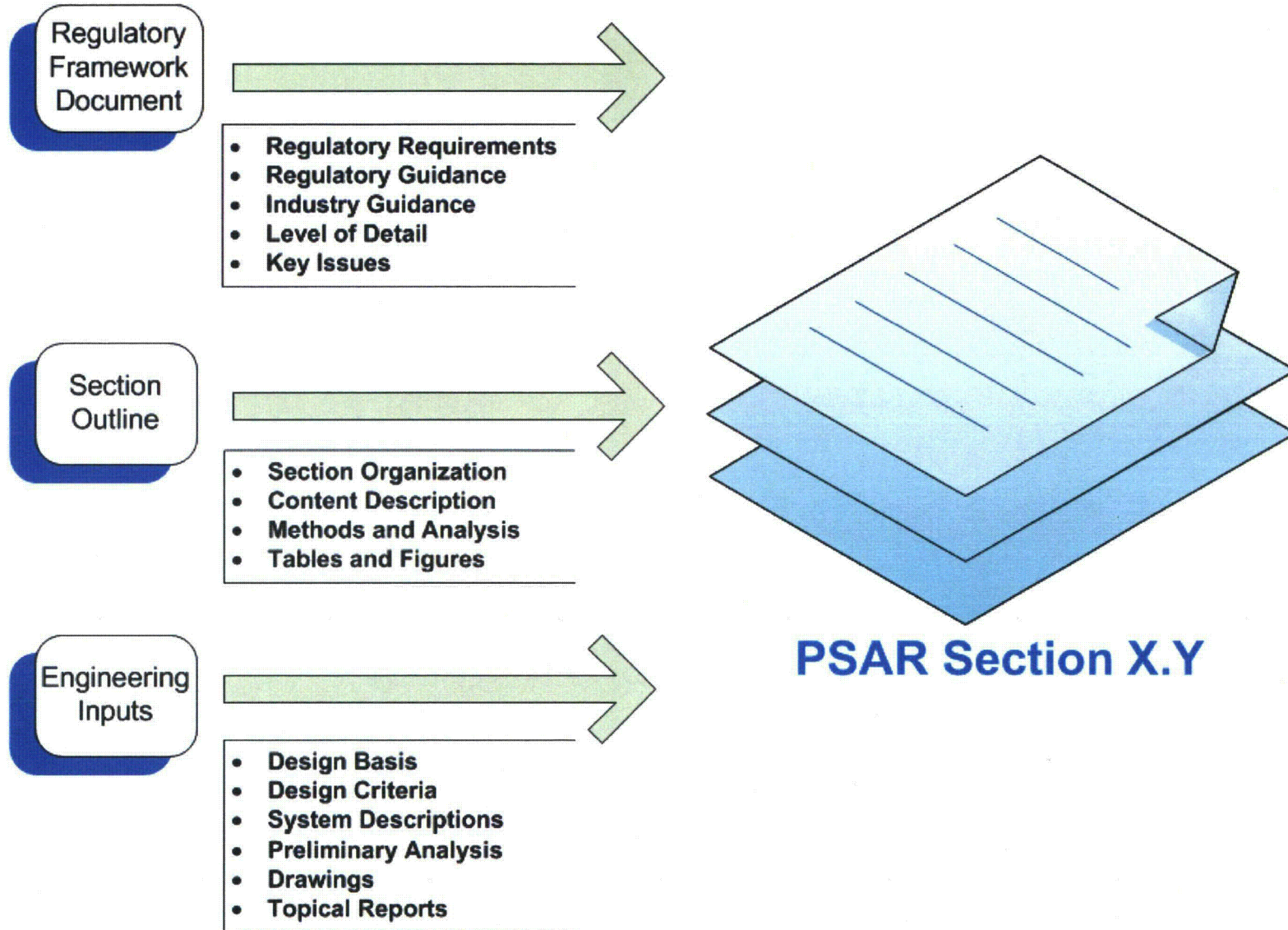
- Regulatory Framework Documents will be prepared for all PSAR Sections and for Parts 1 (General), 4 (Emergency Planning) and 5 (Physical Security Plan)
- Current Regulations and Regulatory Guidance will be addressed
 - Construction Permit (CP) (PSAR)
 - Design Control Document (DCD) (Standard Plant Design)
 - Operating License (OL) (FSAR)
- Establish Licensing Baseline for Construction Permit
 - Regulations
 - Regulatory Guidance
 - Generic Communications
 - Level of Detail



Regulatory Framework Purpose



-
- Illustrate alignment between CPA, B&W NE mPower™ Design Certification Application (DCA), and the OL Application
 - Provide input to CPA development schedule





PSAR Level of Detail



-
- RFD “Regulatory Basis for Section Content” and “CPA Information beyond RG 1.70” will guide level of detail and required scope of section
 - Consideration of RG 1.206 and operating experience and industry issues
 - Unique mPower design features are considered in level of detail



PSAR Design Basis



-
- Function from System Description
 - SSC Classification from PSAR Section 3.2
 - Effects of Natural Phenomena - refer to Sections 3.3 (wind & tornado), 3.4 (floods), 3.5 (external missiles) and 3.7 (seismic)
 - GDCs – see Section 3.1
 - Codes and Standards from “Regulatory Requirements” and “Industry Guidance”
 - Regulatory Guide from “Regulatory Guidance” – refer to Section 1.9
 - Generic issues - refer to Section 1.9



PSAR Design/System Description



- PSAR Content Derived From
 - Preliminary system design descriptions
 - Preliminary drawings and P&IDs
 - Preliminary system calculations and analyses
- Address Section Outline
- Reference to related Sections for supporting functions:
 - Ventilation
 - Radiation monitoring
 - Instrumentation
 - Power supply



PSAR Safety/Design Evaluation



-
- Compliance with GDC - Section 3.1
 - Compliance with Regulatory Requirements
 - Conformance to Regulatory Guides - Section 1.9
 - Preliminary Engineering Evaluations (as noted in the Section Outlines)



Questions from First Workshop



- Administrative:
 - RFDs are being developed for all PSAR Sections, and CPA Parts 1 (General), 4 (EP), and 5 (Security)
 - RFD and Section Outlines define the scope and level of detail for the PSAR, DCA, and FSAR
 - The Section 9.1.2 Mock Up illustrated how the RFD and Section Outline would be translated into the PSAR
 - CP PSAR alignment with DCA
 - OL FSAR alignment with DCD



Questions from First Workshop



- Regulatory
 - Specific approach to inspection and testing activities will be discussed in a future meeting
 - The RFD process identifies where information supplementing Part 50 requirements will be provided
 - TVA determines when information beyond RG 1.70 is required from:
 - Unique mPower design features
 - Consideration of RG 1.206
 - Operating experience and
 - Key industry issues



Questions from First Workshop



- Regulatory (cont.)
 - OL FSAR will be aligned with DCA standard content supplemented by operational programs and site specific detailed design
 - TVA would welcome NRC audits of methodologies described in the PSAR after Docketing.
 - Current CPA submittal schedule: by fourth QTR 2013
 - LWA – not currently planned, but not ruled out
 - Part 30, 40 and 70 licenses will be applied for with the OLA



Questions from First Workshop



- Technical
 - An EP RFD (Part 4) will be presented at a future Workshop
 - The DCA will include proposed standard TS
 - NEI Templates are considered in the RFD, as applicable, and the PSAR will address adoption of the templates
 - Aircraft impact analysis required under 10 CFR 50.150 will be addressed in PSAR Chapter 19
 - PSAR Chapter 1 will include a description of the B&W mPower research and test program



Regulatory Framework Schedule



-
- Schedule for Future Workshops
 - November 30
 - Future Workshops planned for first QTR 2012



- Chapter 1 – Introduction and General Description of Plant
- Sections 3.1 – 3.2 – GDC Conformance – SSC Classification
- Section 3.3 – Wind and Tornado Loadings
- Section 3.5 – Missile Protection
- Section 3.6 – Protection Against the Dynamic Effects
- Section 3.10 – Seismic and Dynamic Qualification
- Section 3.11 – Environmental Qualification
- Sections 3.12 – 3.13 – ASME Code Class 1, 2, 3
- Section 9.2 – Water Systems
- Section 9.3 – Process Auxiliaries
- Sections 9.5.2, 9.5.3, and 9.5.4 - Other Auxiliary Systems
- Chapter 11- Radioactive Waste Management



Conclusion



-
- Conclusion
 - Recap of Questions/Comments
 - Questions?