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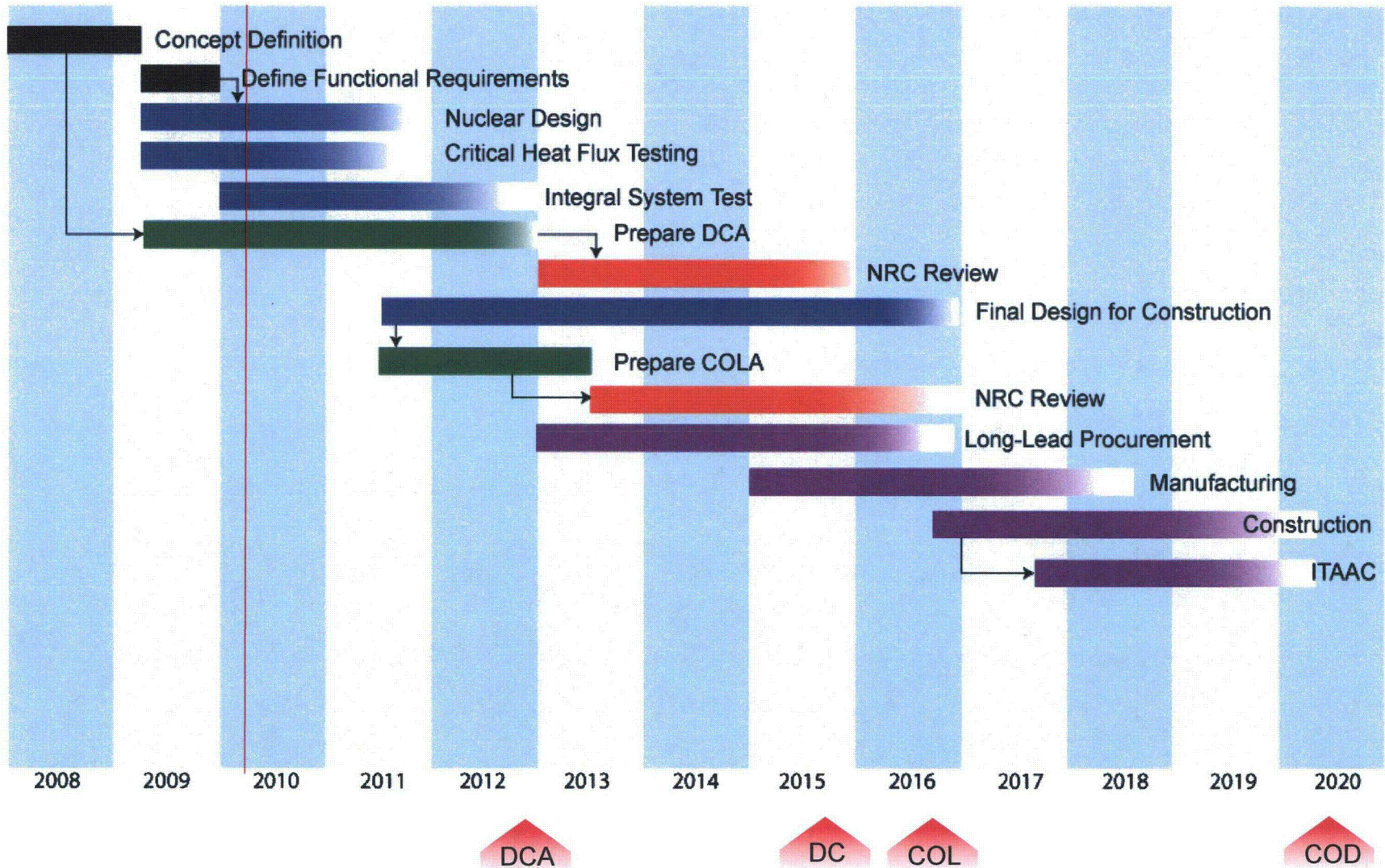


Licensing Update

June 10, 2010

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B&W Nuclear Energy

Baseline Lead Plant Schedule: Deploy by 2020



Licensing Strategy

Goal – R-COL by 2016 to Support Construction/Deployment by 2020

Design Certification

- Proven LWR technology and existing regulatory framework
- Minimize deviations and exemptions
- Leverage GEN III+ licensing experience – Digital I&C, ITAAC, etc.
- Maximize pre-application efforts – LTRs, technical reports, white papers
- Customer input including Consortium, IAC, and EPRI URD
- Comprehensive testing, V&V, PIRT, and independent reviews
- Utilize previous DCD experience (RAIs, etc.)

SECY-10-0034

- Regulatory policy issues potentially affecting economic viability of SMRs
- Collaboration with NEI, ANS, EPRI, and NIC
- Timely resolution of the issues required for a “build” decision

R-COL

- Preparation of COLA could begin as early as 2011
- Utilization of LWA

Licensing Update – NRC Engagement

Staff

- April 28, 2009 – B&W letter of intent
- July 7, 2009 – First pre-application meeting
- October 27, 2009 – Second pre-application meeting
- December 17, 2009 – B&W letter on topical report schedule
- March 31, 2010 – Third pre-application meeting
- March 31, 2010 – Submittal of QAP topical report
- April 1, 2010 – B&W response letter to RIS 2010-003
- April 29, 2010 – Submittal of CHF test plan technical report
- May 27, 2010 – Submittal of B&W *mPower* design overview technical report

Commission and Senior Management

- Drop-in meetings with Klein, Lyons, and Svinicki in May 2009
- Met with Commission Nominees Apostolakis and Magwood
- Drop-in with Johnson/Mayfield on 3/29/10
- Drop-in meetings with Jaczko, Svinicki, and Klein on 3/30/10
- Participation in 4/6/10 Commission Meeting

Licensing Update – Staffing

- ENERCON providing licensing services
 - Completed basis documents/engineering deliverables
 - Responsibility for assembling DCD

- Plan to hire up to 4 to 5 B&W licensing managers/engineers
 - Licensing Manager responsible for DCD
 - Licensing Manager responsible for R-COLA
 - Licensing Manager responsible for regulatory issues
 - Licensing Senior Engineer for ITAAC
 - Licensing Senior Engineer for digital I&C

- Gary Sozzi Consulting – PIRT and topical report review

- GSI Consulting – NEI and customer relations

Planned LTRs Technical Reports & White Papers

✓ QA Program Plan	March	2010
✓ Critical Heat Flux Test Plan	April	2010
✓ B&W <i>mPower</i> Design Overview	May	2010
■ Integrated Systems Test Plan	June	2010
■ Core/Fuel Design Criteria & Analysis Methodology	July	2010
■ Accident Analysis Codes & Methodology	October	2010
■ CRDM Design/Testing Plan	October	2010
■ Security/Safeguards Plan	December	2010
■ SBLOCA/PIRT	December	2010
■ Multi-module Control Room & Operations Staffing	April	2011
■ Digital I&C Platform	July	2011

Generic Regulatory Issues

Recognition of Need to Resolve a Set of Regulatory Issues for SMR

- SECY-10-0034 identified 21 issues
- ANS working on developing white papers on selected issues
- EPRI plans to update URD Volume 1 for SMRs
- NEI SMR Task Force
- NIC SMR Committee

Issues Identified by NEI SMR Task Force to Actively Pursue

- Physical security and security force staffing
- Offsite Emergency Preparedness (EPZ and activities)
- Control room staffing; control room layout
- Installation of a new module next to an operating module
- Risk metrics
- NRC annual fees
- Price-Anderson (liability)
- Decommissioning funding

Security Design Basis – Action Plan

Security Design Task Force Assembled

- James Noel – B&W NOG
- David Godshalk – Outside Security Consultant (ENERCON)
- Design engineers
- Licensing engineer

Security Design Task Force Areas of Focus

- Minimize complexity of perimeter
- Limit entranceways into plant (hatchways, doors, storm drains, etc.)
- Minimize number of interior passageways in and around safety-related equipment
- Limit ingress/egress to vital areas as permitted by NRC
- Maximize use of technology for monitoring and responding
- Minimize plant staff traffic into and out of protected area
- Maintain non-essential staff outside protected area

Apply “security simplification” into plant design