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# AP1000 Review Schedule Issues

# Technical Specifications

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- Small number of remaining bracketed items in DCD Revision 16
- Additional bracketed items with pending reference
- Plan to resubmit Technical Specifications to remove all remaining bracketed items by mid-February 2008

# Technical Specification Bracketed Status

Tech Spec*	Item	Completion Path
SR 3.1.4.3	Rod drop time – 2.47 sec	2/15/08
TS 3.8.1 / 3.8.7	Battery float current	2/15/08
TS 5.5.8	Air lock leak rate and test pressure	2/15/08
Table 3.3.1-1	Table 3.3.1 Note 1 OTdT and OPdT set point equation uncertainty values	2/15/08
Bases Fig B 3.6.8-1	Time permitted to establish containment closure	2/15/08
3.3.1 / 3.3.2 Completion Times and SR Frequency based on WCAP-10271	TS 3.3.1 and 3.3.2 Completion Times and SR Frequency based on AP1000 design basis documents	2/15/08

\* Any associated Bases impacted by the change to the bracketed items will be modified at the same.

# Piping DAC Re-Insertion

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- January 2008 re-insertion of Piping DAC to existing Design Certification Rulemaking status
- Identification of COL Holder Items for related COL Information Items
- Plan is to provide detailed piping design information allowing resolution of the DAC and COL Holder Items

# Piping DAC Closure

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- Replace current list of methodology criteria (Piping DAC) with system-based design ITAAC
- Initial piping analysis package available for NRC review in April 2008
- ASME Class 1 piping analysis packages for risk significant piping available August 2008
- ASME Class 2 and 3 piping analysis packages for risk significant piping available December 2008

# Pipe Break Hazard Evaluation

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- Evaluation of as-designed piping required by a COL Holder Information Item
- Completion expected during COL application review
- Hazard evaluation requires information from piping analysis and does not impact piping design.

# ASME Component Review

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- As-designed code reports including reconciliation to the revised seismic spectrum needed to close COL information items
- COL Holder Items were identified for these reports in January 2008 letter
- Plan is to provide the as-designed reports for NRC review during design certification amendment review

# ASME Component Review

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- Design specifications for major ASME Code, Section III components are complete except one to be completed in February
- As-designed design reports for major components are scheduled to be complete by July.
- Design specifications for ASME Code auxiliary equipment and valves are complete for several types of valves; the remainder are scheduled to be complete in July.

# Containment Sump/IRWST Screen Design

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- GSI 191 Unresolved at Design Certification Rulemaking
- Westinghouse and NRC agreed COL Information Item was appropriate
- COL Information Item 6.3-2
- Technical Report 26 and DCD Revision 16 proposed information to address the COL information Item
- January 18, 2008 docketing letter indicates existing design information as supplemented by TR 147 still remains insufficient for NRC review

# Screen Design Plan

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- NRC stated position is that prior to issuing a COL their review will need to confirm acceptability of the screen design through review of:
  - Detailed screen design
  - Screen performance testing
  - Long term cooling analysis
- Review must confirm long term coolability of the core

# Commitments

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- Provide additional details on the Containment Recirculation and IRWST screen designs (March 1, 2008)
- Demonstrate by test that the screen designs meet AP1000 screen pressure loss limits (March 1, 2008)
- Demonstrate by analysis and evaluations that downstream effects do not adversely impact long term coolability of the core (March 31, 2008)
- Evaluate existing ITAAC (based on screen surface areas) to identify changes (March 31, 2008)
- Demonstrate by analysis that there is adequate margin between screen performance and AP1000 safety limits (April 30, 2008)

# Steps

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- January 31, 2008 Westinghouse letter documenting detailed commitments (deliverables and dates)
- Technical Meeting with NRC staff to discuss details (mid-February)
  - Screen design detail can be previewed
  - Testing complete; results can be discussed
  - Analysis well-underway (methodology and some preliminary results can be discussed in February)
  - Portions of the meeting will be proprietary

# Actions Going Forward

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- Screen design and performance NRC review should be able to begin on March 1, 2008
- Remaining deliverables are to confirm core cooling margins
  - Ex-vessel downstream effects
  - In-vessel downstream chemical effects
  - Core cooling sensitivity to screen pressure drop
  - Low amounts of debris and chemicals in AP1000 design result in these analyses not expected to be challenging
- NRC action to review proposal and confirm by letter that the planned deliverables will allow review schedule development