

MDEP

AP1000WG

Programme Plan

2017 - 2018

AP1000 Working Group Activities

AP1000WG Programme Plan for 2017 through 2018

Multi-National Design Evaluation Programme
AP1000 Working Group (AP1000WG)

1. AP1000WG Goals

- Progress on multilateral cooperation between Canada, China, United Kingdom (UK), United States, and India on review of the AP1000 design and associated issues such as cooperation on pre-operational testing. To leverage national regulatory resources by sharing information and experience on the regulatory safety design reviews, design changes, and construction challenges of the AP1000 with the purposes of enhancing the safety of the design and enabling regulators to make timely licensing decisions

Actions to Leverage Regulatory Resources by Sharing information to support design reviews

- Exchange experience on licensing process and design reviews, lessons learned, and design-related construction, commissioning, and operating experience
 - Work to understand the differences in regulatory safety review approaches in each country to support potential use of other regulators safety design evaluations, where appropriate
 - Look for opportunities to provide input to issue-specific working groups on potential topics of significant interest
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- Promote safety and standardization of designs through cooperation (consideration should be given to promoting harmonization of regulatory practices where there may be a safety benefit)

Actions to Promote Safety and Standardization of designs and potential harmonization of regulatory practices

- Document common MDEP positions on aspects of the review to enhance safety and standardization of designs (and coordinate communications) as requested
- Identify design differences originating from regulatory requirements and document reasons for differences in regulatory requirements
- Use experience gained in learning about similarities and differences in licensing frameworks to identify potential paths forward to harmonize licensing approaches and practices when there is a safety benefit

2. 2017/2018 MDEP AP1000WG Work Plan

- Continue sharing regulatory evaluations and inspection reports of the AP1000 among all AP1000WG member countries; include evaluations in the MDEP Library, as appropriate
- Discuss Fukushima-related issues (post issuance of the Fukushima Common Position Paper) to evaluate safety of the AP1000 design, as necessary
- The following technical topics will be discussed:
 - Commissioning/Initial Test Program,
 - Digital Instrumentation and Control safety systems,
 - Major Design changes,
 - Construction challenges,
 - Vendor issues
- Other areas for consideration of potential cooperation could be:
 - Reliability of passive safety systems,
 - In-vessel retention,
 - Accidents and transients methodologies and evaluations,
 - Probabilistic safety assessment,
 - Fire protection,
 - Radiation protection,
 - Human factors engineering, etc.
- Continue efforts of Technical Experts Subgroups (TESGs) in the areas of digital instrumentation and control and commissioning. TESGs meet as needed to exchange information on relevant aspects of the design review status. Meetings may be accomplished through teleconferences.
- Whenever areas are chosen in which to cooperate, the main group or subgroup should:
 - Share relevant evaluations when they become available,
 - Produce technical reports on subject that the group deems important to safety to identify and document similarities and differences among designs, regulatory safety review approaches and resulting evaluations
 - Issue joint/coordinated press releases and statements on important safety evaluation findings.
 - Produce MDEP common positions / technical guidelines, where applicable
 - Post evaluations, positions, etc. in the MDEP library
 - Cooperate with VICWG and DICWG as appropriate
- Provide recommendations, when appropriate, to issue-specific working groups and other design-specific working groups regarding addressing important issues relevant to design safety reviews

3. Meetings

Meetings will be held in Paris or in a member country, especially where there is active design review and/or construction activity. The goal is to hold two meetings per year. TEGS or ad hoc groups meet as needed.

4. Outputs of the AP1000 WG during 2017 – 2018

- Technical reports in the following areas:
 - RCP design implementation (China lead)
 - Squib valve design implementation (U.S. lead)
 - IRWST condensate return design change (UK lead)
 - Documentation of questions and answers shared between WG members (U.S. lead)
- Common positions in the areas in which the AP1000WG will cooperate, as appropriate
- Technical reports to identify and document similarities and differences among designs, regulatory safety review approaches and resulting evaluations, as appropriate
- Document lessons learned from design reviews and design issues faced during construction and commissioning
- Recommendations and inputs to other MDEP working groups regarding potential generic issues and harmonization opportunities (coordination with EPRWG, APR1400WG, ABWRWG, VVER, VICWG, DICWG, and CSWG as appropriate)

5. Key Stakeholders with whom the AP1000 WG members will interact

- Other MDEP regulators as needed (care shall be taken NOT to share proprietary or sensitive info inappropriately)
- Non-MDEP regulators, as appropriate
- CNRA/WGRNR
- Westinghouse
- Utilities/Licensees/Operators
- Other Groups as appropriate to further MDEP goals