Multinational Design Evaluation Programme EPRWG Programme Plan 2012 - 2013 Date: 27 Jan 2012 Validity: **until next update or archiving** Version : 1

# MDEP EPRWG Programme Plan 2012 - 2013

Related to: EPR Working Group Activities

**EPRWG Programme Plan for 2012 and 2013** 

# Multi-National Design Evaluation Programme EPR Working Group (EPRWG)

### 1) EPRWG Long-Term Goals

- Leverage national regulatory resources by sharing information and experience on the regulatory safety design reviews of the EPR with the purposes of enhancing the safety of the design and enabling regulators to make timely licensing decisions to ensure safe designs through:
  - Exchanging experience on licensing process and design reviews, lessons learned, and design-related construction, commissioning, and operating experience
  - Working to understand the differences in regulatory safety review approaches in each country to support potential use of other regulators safety design evaluations, where appropriate
  - Looking for opportunities to provide input to issue-specific working groups on potential topics of significant interest
- Promote safety and standardisation of designs through MDEP cooperation (consideration should be given to promoting harmonisation of regulatory practices where there may be a safety benefit) through:
  - Identifying and understanding key design differences including those originating from regulatory requirements and then documenting the reasons for differences in regulatory requirements
  - Documenting common MDEP positions on aspects of the review to enhance safety and standardisation of designs
  - Communicating and coordinate communications on MDEP views and common positions to vendor and operators regarding the basis of safety evaluations and standardisation
  - Using experience gained in learning about similarities and differences in licensing frameworks to identify potential paths forward to harmonise licensing approaches and practices when there is a safety benefit

#### 2) Intermediate Objectives

- Share information including evaluations among EPRWG members to leverage resources and focus design reviews on safety issues in areas that are critical to take licensing decisions including Fukushima-related issues
- Encourage harmonization of designs through design safety review cooperation when there is a clear safety benefit
- Document the activities of the technical expert subgroups through technical reports and common positions

# 3) 2012/2013 MDEP EPRWG Work Plan

- Continue to communicate timelines for sharing regulatory evaluations of the EPR among all EPRWG member countries
- Address Fukushima-related issues within the EPRWG and with the vendors and licensees/operators/applicants to ensure follow-up on safety issues
- Continue to share information among EPRWG members in the areas in which technical experts subgroups (TESGs) have been formed including Digital Instrumentation and Control DI&C (Lead: U.S.), Probabilistic Safety Assessment PSA (Lead: Finland), Severe Accidents SA (Lead: France), Accidents and Transients A&T (Lead: Canada). These groups should perform the following:
  - The technical expert subgroups should provide a work plan including description and scope of issues to be addressed to the EPRWG and report on the status at every EPRWG meeting
  - Continue to meet regularly and exchange information on relevant aspects of the design review status
  - Share relevant evaluations when they become available
  - Produce technical expert subgroup technical reports on subject that the subgroup deems important to safety to identify and document similarities and differences among designs, regulatory safety review approaches and resulting evaluations
  - Produce MDEP EPRWG common positions, especially on important safety evaluation findings
  - Post evaluations, positions, reports, etc. in the MDEP library
  - Consider Fukushima-related issues in subgroup activities to evaluate safety of the designs
- Address important ad hoc topic areas to support design safety review decision making including in the areas of:
  - Radiation protection including source term issues (Lead: Finland/France)
  - Internal hazards (Lead: U.K.)
  - Technical Specifications (Lead: U.S.)
  - Other areas as applicable

Note: Ad hoc groups should consider Fukushima-related issues in its work

- When necessary, plan and conduct design-related inspections to ensure adequate design configuration control, quality assurance, and acceptability of structures, systems, and components of the EPR (appropriate coordination with VICWG)
- Provide recommendations, when appropriate, to the STC for considering possible items as topics to address generically
- 4) Outputs of the EPRWG during 2012/2013

- List of definitions (Each technical expert subgroup [TESG] to take lead and coordinate with EPRWG) 2012
- List of available evaluations on the EPR designs 2012
- Technical report on EPR DI&C issues (DI&C TESG) 2013
- Technical report on corium cooling in the core catcher (SA TESG) 2013
- Technical report on IRWST pH control (SA TESG) 2013
- Technical report on Fukushima-related issues in 2013 (SA TESG) 2013
- Common position on DI&C issues (as updated by the DI&C TESG) 2012
- Common position on Mass and Energy Release (A&T and SA TESGs) 2012
- Common position on Containment Response during design basis and severe accidents (A&T and SA TESGs) 2012
- Technical report on Approaches and Criteria used in the Analysis of Accidents and Transients in MDEP countries (A&T TESG) 2012
- Technical reports on boron dilution, control rod design, and MSLB (possible by A&T subgroup)
- Technical report of PSA comparison (PSA TESG) 2013
- Technical report on Source Term Requirements and Usage 2013 (EPRWG)
- Technical report on selected Fukushima-related issues possible 2013 (EPRWG)
- Possible document on lessons learnt from design reviews and design issues faced during construction and commissioning and early phases of operation, as available 2013 (EPRWG)
- Create and maintain a list of key design changes resulting from regulatory reviews and MDEP cooperation (Lead: U.S.)

# 5) Key Stakeholders with whom the EPRWG members will interact

- Other non-EPRWG regulators when appropriate (care taken to NOT share proprietary or sensitive info inappropriately)
- CNRA (WGRNR, STG on Fukushima)
- AREVA
- EDF, TVO, UniStar, NNB Genco, TNPJVC, and other applicants/licensees/operators, as applicable
- Other groups as appropriate to further MDEP goals