Date: 13 September 2021

Validity: until the closure of APR1400WG

Version: 1

## Multinational Design Evaluation Programme APR1400 Working Group

Programme Plan 2020-2021

Related to Design-specific Working Group Activities

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# Multinational Design Evaluation Programme APR1400 Working Group

#### Programme Plan 2020-2021

### 1) Long-term goals

Leverage national regulatory resources by sharing information and experience on the regulatory safety design reviews of the APR1400 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 the 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 Multinational Design Evaluation Programme (MDEP) co-operation (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 or design changes and then documenting the reasons for differences.
- 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 between the designs as a result of different 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 APR1400WG members to leverage resources and focus design reviews on safety issues in areas that are important to make licensing decisions including Fukushima-related issues;
- Encourage harmonisation of designs through design safety review co-operation when there is a clear safety benefit;
- Document the activities of the technical expert subgroups through technical reports and common positions;
- Provide a forum for feedback of design-related issues during the early phase of commissioning and operation.

## 3) 2020-2021 MDEP APR1400WG Work Plan

Continue to communicate timelines for sharing regulatory evaluations of the APR1400 among all APR1400WG member countries.

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Continue to share information on design review, construction issues and commissioning activities including significant events during the commissioning.

Continue to share information among APR1400WG members in the areas such as Severe Accidents (SA) – (Lead: UAE), Accidents and Transients (A&T) – (Lead: Korea). These groups should perform the following:

- The TESGs should carry out tasks according to the work plan which contain the description and scope of issues to be addressed to the APR1400WG and report on the status at every APR1400WG meeting.
- TESGs meet as needed to exchange information on relevant aspects of the design review.
- Share relevant evaluations, including significant licensing/technical challenges and/or their resolutions.
- Produce technical expert subgroup technical reports on subjects that the subgroup deems
  important to safety to identify and document similarities and differences among designs,
  regulatory safety review approaches and resulting evaluations.
- Post evaluations, positions, reports, etc. in the MDEP library.

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 APR1400 (appropriate coordination with VICWG).

Provide recommendations, when appropriate, to the STC for considering possible items as topics to address generically.

Provide recommendations, when appropriate, to issue-specific working groups and other design-specific working groups regarding addressing important issues relevant to design safety reviews.

Prepare and complete the closure report identifying the main outcomes of APR1400 design working group and its two associates TESGs (i.e. A&T, SA), following the template approved by the MDEP PG.

## 4) Outputs of the APR1400WG during 2020-2021

- Report on Comparison of Regulatory Requirements on PRA
- Technical report on Hydrogen Control
- Closure report for the APR1400WG

## 5) Key Stakeholders with whom the APR1400WG members will interact

- Other non-APR1400WG regulators when appropriate (care taken to NOT share proprietary or sensitive info inappropriately)
- CNRA (WGRNR, WGOE, etc.)
- KHNP, KNF, KEPCO E&C, ENEC, NAWAH, and other applicants/licensees/operators, as applicable
- Other Groups as appropriate to further enhance the MDEP goals

#### 6) Closure of the APR1400WG

It is anticipated that the APR1400WG will close by the end of 2021, consistent with MDEP Policy Group's strategy. The APR1400WG has reviewed its continuation of co-operation activities against the closure criteria agreed by the STC and has concluded it is appropriate to sunset its activities at the end of 2021. The APR1400WG considers that ongoing engagement between active regulators will be beneficial post-closure of the working group outside of the MDEP framework, under existing bilateral agreements.