Nuclear Safety Standards Committee

44th Meeting, 28 – 30 November, 2017

Agenda item 3.1

DPP DS508: Assessment of the Application of General Requirements for Design of Nuclear Power Plants

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Background Information

1\textsuperscript{st} DDP version presented to NUSSC 43th:

- Proposed scope covered:
  - Assessment of a broad range of engineering aspect of safety in SSR 2/1, chapters 4 and 5 (e.g. design codes&standards, materials, SFC, equipment qualification, etc.)
  - Assessment of safety principles: Defence in depth (DiD) and safety functions, practical elimination (PE)

- NUSCC considered this scope too ambitious and proposed to develop a revised DPP focused on the aspects DEC and PE

- IAEA proposed to maintain the assessment of DEC and PE in the frame of the assessment of DiD and PE.
Revised DPP

- Consultancy Meeting in August with participation of Finland, Germany, USA and ENISS to elaborate a DPP of a limited scope
  - Safety Guide on Safety Assessment for NPPs
  - It develops requirements on Assessment of DiD / Fundamental Safety Functions in GSR Part 4 with corresponding and related requirements in SSR 2/1
- Safety guide will address specifically the assessment of DEC and practical elimination, framing such topics under the assessment of DiD.
NUSSC Member Comments: Summary

- Comments received from Austria (2), France (16), Japan (1) and Korea (2)

- **Type of comments – Resolution**
  - **Terminology and language:** Largely accepted
  - **Title of the document:** Maintained (two different proposals)
  - **Links to the VDNS:** Not accepted. VDNS doesn’t refer to PE. Recommendation based on standards for new plants.
  - **Scope of the revised DPP:** Maintained: It has been emphasized even more that that special focus is placed on DEC and PE.
Reflections and Perspectives

- Safety Guide on DSA (SSG-2) addresses already some relevant aspects of DEC and PE; safety guide just approved for submission to CSS
- Secretariat proposed at NUSSC 41 (2016) the development of a safety guide covering DEC and PE and other aspects
- NUSSC 43: DPP; revised DPP now: limited scope
- Certain overlap noticed between SSG-2 and the new SG being proposed
- This and the intrinsic difficulty of the subject → two alternative proposals for NUSSC on the topic assessment of DiD, including DEC and demonstration of PE

1. To develop a safety guide

  OR

2. To develop a safety report
Requested Action

Decision of path forward

When appropriate

Approval of DPP (DS508) for submission to CSS
Thank you!