47th Meeting of the Waste Safety Standards Committee

18 – 20 June 2019

Agenda Item W 3.1

Draft Safety Guide DS510A and DS510B:

- Safety Assessment for Research Reactors and Preparation of the Safety Analysis Report, 2012 (Revision of SSG-20)
- Safety in the Utilization and Modification of Research Reactors, 2012 (Revision of SSG-24)

– For approval for submission to Member States for comments –

F. Naseer and A. Shokr
Research Reactor Safety Section
Division of Nuclear Installation Safety
Background

• DS510 is a revision (by amendment) of SSG-20 (published in 2012) and SSG-24 (published in 2012).

• SSG-20 and SSG-24 needed revision after publication of the SSR-3 (2016), and some other GSRs.

• Revised to address new safety requirements in SSR-3 (mainly on DECs, subcritical assemblies, interface between safety and security), and to incorporate feedback from use of the these documents.
Scope and structure

• The scope of the drafts expanded to cover subcritical assemblies.

• The structure of the drafts remains essentially the same; for SSG-24, a section on “organizational changes” was added.

• For both drafts, the main revisions were:
  – Guidance added on:
    • Subcritical assemblies;
    • Relevant feedback from Fukushima accident (e.g. DEC);
    • Interface between nuclear safety and security.
  – “Preparation for decommissioning” replaced “decommissioning”;
  – Coherency and consistency with other safety standards is ensured;
  – Feedback from the use of documents is addressed;
  – References/cross-links updated.
Development Process

• The DPP approved by committees in 2017/2018 and by CSS (April, 2018).

• The first drafts developed in CSMs (April – November, 2018).

• The revised drafts were subjected to QA review within NSNI and NS; approved by Coordination Committee (March 2019).

• The revised drafts were submitted to all safety standards committees (RASSC, WASSC, NUSSC, EPReSC, TRANSSC and NSGC) for review (April 2019).
Committees Comments and Resolutions-DS510A (SSG-20)

• 212 comments from all committees – 12 members (Australia, Canada, Finland, France, Germany, Iran, Japan, Korea, Pakistan, UK, USA, and Vietnam).

• All comments were carefully considered; most accepted as proposed, or with modification. Resolution table and revised draft were posted on the webpage.

• Rejected comments were mainly to:
  – Avoid redundancies and inconsistencies with IAEA safety glossary/standards;
  – Their inappropriateness (e.g. significant revision to SAR format; revision of the drafting approach to cover subcritical assemblies compared to that was used in SSR-3).
Committees Comments and Resolutions-DS510A (SSG-20)

• Incorporating resolution for the comments resulted in several refinements:
  
  – Improving guidance in some areas (e.g. subcritical assemblies, safety/security interface);
  
  – Enhancing consistency with other safety standards (e.g. acceptance criteria for DEC);
  
  – Adding clarity to some areas;
  
  – Fixing some editorial issues.
Pakistan provided 06 comments — All accepted

There is no unresolved comments
Committees Comments and Resolutions-DS510B (SSG-24)

- 125 comments from all committees – 11 members
  (Australia, Canada, Finland, France, Germany, Iran, Japan, Korea, Pakistan, UK and USA)

- All comments were carefully considered; most accepted as proposed, or with modification. Resolution table and revised draft were posted on the webpage.

- Rejected comments were mainly on revision of the drafting approach to cover subcritical assemblies compared to that was used in SSR-3 (same as that on SSG-20), and on deleting some paragraphs on interface between safety and security.
Committees Comments and Resolutions-DS510A (SSG-24)

• Incorporating resolution for the comments resulted in several refinements:

  – Improving guidance in some areas (e.g. safety/security interface);

  – Adding clarity to some text/areas (e.g. wording clarity, link guidance on organizational change to the SSR-3 requirement, and improving the annex on safety report for experiments);

  – Fixing some editorial issues (e.g. reference NPP guides on modifications).
Pakistan provided 07 comments — All accepted

There is no unresolved comments
Action Requested

Approval to submit to Member States for comments
Thank you!