

Japan NUSSC Comments on DPP-DS511 “Use of a Graded Approach in the Application of the Safety Requirements for Research Reactors”

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Country/Organization: Japan NUSSC Member		Page.... of....1 Date: 17/10/2017					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	general	The current version of this standards is well developed and the substantial contents are seemed to be remained as it is in accordance with the proposal. Furthermore, this standard has not been so far since publication in 2012, and it is supposed that there are not so many experiences of applications accumulated. Therefore, even if this document is revised, it is sufficient to keep a consistency with other documents such as SSR-3, and the revised portion should be compiled as <u>an addendum</u> to the current safety guide.				X	We agree that the document is comprehensive but it refers to obsolete references and needs to be revised completely. MS have provided significant feedback on its application and use in research reactors organizations. It will be impractical to compile the revisions as an addendum to the current safety guide.

DS 511 DPP "Use of a Graded Approach in the Application of the Safety Requirements for Research Reactors",

Version 01/ Step 3, 2017-07-31

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany								
					Pages 5 Date: 16.10.2017			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
2	1	Page 1 / line 17	These Guides were <u>all published before SSR-3 was released in the period 2006-2012 (except SSG-37 which was published in 2015)</u> and represent the international consensus on the safety of research reactors <u>at the respective date of publication.</u>	The important message should be made clearer. The Guides need a revision because they were published before SSR-3. Specifying the period 2006-2012 leads only to questions why SSG-37 is mentioned separately.	X			
2	2	Page 2 / line 2	The analysis resulted in identification of eight Guides (<u>Group 1</u>) that largely remain valid in their technical content, but have outdated references and minor deviations from the requirements in SSR-3.	Addition of a reference to the list of guides adds clarity to the text.	X			
2	3	Page 2 / line 4	Two Guides were found to need more in-depth technical revisions mainly due to the new requirement in SSR-3 on design extension conditions (<u>Group 2</u>).	Addition of a reference to the list of guides adds clarity to the text.	X			
2	4	Page 2 / line 5	Finally, the analysis showed that IAEA Safety Standards Series No. SSG-22, Use of a Graded Approach	Addition of a reference to the list of guides adds clarity to the text.	X			

Relevanz: 1 – Essentials 2 – Clarification 3 – Wording/Editorial

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany					Pages 5 Date: 16.10.2017			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			in the Application of the Safety Requirements for Research Reactors (2012), needs to be revised in its entirety due to its heavy reliance on outdated references to individual paragraphs of NS-R-4 and a lack of guidance related to new requirements in SSR-3, particularly design extension conditions and interfaces between nuclear safety and nuclear security (<u>Group 3</u>).					
3	5	Page 2 / line 10	More detailed results of the analysis and the main revisions needed to the Guides <u>Guide</u> covered by this DPP are provided in the Annex.	DS511 covers only the revision of SSG-22	X			
3	6	Page 3 / line 2	The added value of the revised Guide will be to provide target users with comprehensive, consistent and up-to-date guidance for using a graded approach when implementing the safety requirements <u>listed</u> in SSR-3 and the General Safety Requirements as they apply to research reactors.	Clarification of wording	X			
1	7	Page 3 / line 39	The objective of SSG-22 is to provide research reactor operating organizations, regulatory bodies and other organizations involved in the	Section 8 of the proposed table of contents explicitly includes a chapter for applying a	X			

Relevanz: 1 – Essentials 2 – Clarification 3 – Wording/Editorial

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany					Pages 5 Date: 16.10.2017			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			site evaluation, design, construction, and operation <u>and decommissioning</u> of research reactors with guidance on using a graded approach when implementing the requirements of SSR-3 and the General Safety Requirements as they apply to research reactors.	Graded Approach to Decommissioning. Therefore, the objective should also include this point.				
1	8	Page 4 / line 13	The revised SSG-22 will be facility-specific (i.e. research reactors <u>and subcritical assemblies</u>), support the application of SSR-3 and interface with all General Safety Requirements and General Safety Guides.	As SSR-3 takes subcritical assemblies explicitly into account the definition of facility-specific should include subcritical assemblies as well.	X			
1	9	Page 5, proposed structure of revised SSG-22	<ol style="list-style-type: none"> 1. Introduction <ul style="list-style-type: none"> Background Objective Scope Structure 2. Basic Elements of the Graded Approach <ul style="list-style-type: none"> General Considerations Regarding the Application of a Graded Approach Description of the Application of a Graded Approach 3. Regulatory Supervision 	<p>It is proposed to focus in SSG-22 more on the technical parts of SSR-3 to design and operate a research reactor.</p> <p>The following Section 3-4 addresses only a small excerpts from the following Safety Requirements applicable in general</p>		Section 5, Site Evaluation will be deleted. Section 3, Regulatory Supervision, and Section 4, Management and Verification of Safety, will be retained and modified according to the structure of SSR-3.		Section 3 and 4 of SSR-3 contain requirements related to regulatory supervision and management and verification of safety that need to be addressed in the revision to SSG-20. Addi-

Relevanz: 1 – Essentials 2 – Clarification 3 – Wording/Editorial

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany					Pages 5 Date: 16.10.2017			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
			<p>Application of a Graded Approach to Legal Infrastructure</p> <p>Application of a Graded Approach to the Regulatory Body</p> <p>Application of a Graded Approach to the Licensing Process</p> <p>Application of a Graded Approach to Inspection and Enforcement</p> <p>4. Management and Verification of Safety</p> <p>Application of a Graded Approach to the Management of Safety</p> <p>Application of a Graded Approach to the Verification of Safety</p> <p>5. Site Evaluation</p> <p>Application of a Graded Approach to Site Evaluation</p> <p>6. Design</p> <p>Application of a Graded Approach to Design</p>	<p>for all nuclear installations, including research reactors:</p> <ul style="list-style-type: none"> Section 3 is described in GSR-Part 1 “Governmental, Legal and Regulatory Framework for Safety”. Section 4 is addresses thoroughly in GSR-Part 2 “Leadership and Management for Safety” and GSR-Part 4 “Safety Assessment for Facilities and Activities”. Section 5 is comprehensively addressed in NS-R-3 “Site Evaluation for Nuclear Installations”. <p>To have a stronger focus on the technical</p>				<p>tionally, the information in Section 3 of SSG-20 is useful for grading regulatory supervision of research reactors and is not found in other IAEA Safety Guides, and needs to be retained in the revised guide. Section 5 will be deleted as other safety guides applicable to nuclear installations already provide guidance for grading various aspects of siting.</p>

Relevanz: 1 – Essentials 2 – Clarification 3 – Wording/Editorial

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany					Pages 5 Date: 16.10.2017			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
				aspects it is proposed to delete sections 3 to 5 in DS511.				
3	10	Page 6 Line 3	Application of a Graded Approach to Maintenance, Inspection, Periodic Testing and Maintenance <u>Inspection</u>	Change the sequence of the words for consistency with the title of NS-G-4.2.	X			
1	11	Page 8 Section 6.	Revise for consistency with SSR-3 Section 6, including general design requirements and specific design requirements. Address changes in SSR-3 Reqs. 16-29, especially design extension conditions and qualification of items important to safety. Add guidance on subcritical assemblies. <u>Add guidance on application of a graded approach to the interface between safety and security.</u>	Should be in Section 6, because it belongs to Reg.11 in Sec.6 of SSR-3	X			
1	12	Page 8 Section 7.	Revise for consistency with SSR-3 Section 7. Add guidance on application of a graded approach to the interface between safety and security. Add guidance on subcritical assemblies.	Should be in Section 6, because it belongs to Reg.11 in Sec.6 of SSR-3	X			

Relevanz: 1 – Essentials 2 – Clarification 3 – Wording/Editorial