Title: DS557 – Safety Requirements: Site Evaluation for Nuclear Installations – SSR-1 (Rev.1)

COMMENTS BY REVIEWER Reviewer: Alexey Ferapontov Page 1 of 2 Country/Organization: Russian Federation/ Rostechnadzor Date: 14.11.2025				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	Page 8	Propose deleting the bullet: “Application of graded approach: RIPB and alternatives”	Propose deleting the bullet as RIPB (Risk informed performance-based approach) is not defined or recommended in IAEA publications.	Yes	Actually the RIPB is defined in other SGs, such as SSG-67 (Subsection 1.2). For the sake of simplicity, the “PB” part has been deleted		
2	Page 8	Propose deleting the bullet: “Applicability to fusion reactor facilities”	Propose deleting the bullet as fusion reactor facilities are not yet reflected in IAEA Safety Standards. We suggest revisiting the discussion on the accounting method for fusion facilities in SSR-1 once the requirements for fusion installation design have been developed.	yes	The statement in the scope has been rephrased as: “In addition, although fusion facilities are not considered nuclear installations, the level of applicability		

					of this document to fusion facilities will be assessed"		
3	Page 1	**Propose to elaborate the text "The development of several technical documents by the IAEA (list available at the website) that consolidate Member States' experiences with recent events".**	Several technical documents are mentioned without naming them. We propose to elaborate the text and specifically name all the technical documents intended to be used as input for revising the Safety Requirements SSR-1. The phrase "list available at website" is not clear – such a list is not found. The reasons for revising SSR-1 do not appear to be adequately justified without referencing the documents mentioned above.	yes	Text modified as follows: "list available at the IAEA website under "Related Publications" to all the SGs referenced in chapt.6"		

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Alexey Ferapontov Page 2 of 2 Country/Organization: Russian Federation/ Rostechnadzor Date: 14.11.2025							
4	Page 7	Propose to rewrite the phrase: "All changes will consider compatibility with all recently reviewed SGs and Requirements in particular with SSR-2/1 (rev.1).	The sentence should be rewritten since: - Safety Requirements are not required to align with Safety Guides; rather, Safety Guides must be aligned with Safety Requirements. - SSR-2/1 (Rev. 1) was published in 2016. Therefore, there are no compatibility issues with SSR-1, which was published in 2019.			Yes	The review process for these documents is not strictly sequential, meaning we do not first review the Requirements and only then the relevant Safety Guides. Because the Safety Guides undergo continuous review, it may occur that new concepts are

							introduced in the Safety Guides before the corresponding Requirement is updated. Therefore, this is not an issue of ensuring that the Requirements comply with the Safety Guides, but rather one of updating the Requirements to incorporate concepts that have been anticipated in recently reviewed Safety Guides.

COMMENTS BY REVIEWER				RESOLUTION			
Page **1** of **1** Reviewer: Meir Markovits Country/Organization: ISRAEL - Nuclear Licensing and Safety Office, Israel Atomic Energy Commission			Date: November 16, 2025				
Comment No.	Paragraph No.	**Comment**	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/ Rejection
1.	Section 2 Background	Fusion facilities are mentioned in this Section 5 (Scope), as an example for emerging technologies. Fusion facilities are mentioned also in the Gap Analysis annexed to the present DPP. We would like to suggest considering adding fusion facilities to the diversified list of emerging novel technologies detailed in the Background (Section 2) even if this will necessitate an additional remark stating that fusion facilities are out of scope for this Guide.	Completeness	Yes	See above		
2	**General Remark** Section 7 (Overview)	**Section 7 mentions that the terminology used in the revision is expected to be consistent with the IAEA Nuclear Safety and Security Glossary (2022). We suggest adding an appropriate remark (or footnote) "acknowledging" that the present version of the 2022 Interim 2022 edition of the Glossary, for obvious reasons, does not include terms for Small Modular Reactors, Microreactors, Transportable Reactors and Floating Power Plants.**	Completeness			Yes	There is no need for that, as the Glossary does not necessarily include all definitions used in the Safety Guides and Requirements, but only a subset of them. In any case, the Glossary is updated

							periodically and not continuously to incorporate definitions newly introduced in the Safety Guides. When a definition is not included in the Glossary, it is provided as a footnote in the relevant Safety Guide.

COMMENTS BY REVIEWER Reviewer: **Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN)** (with comments of GRS) Pages: 3 Country/Organization: **Germany** Date: 14.11.2025				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	Page 3 Section 3 Line 10	**Site characterization techniques: Updated requirements on site investigation techniques (and preliminary) guidance on the application of the graded approach are required for all phases of a plant's life, including site selection, site evaluation, construction, operation yes.**	Please put in line with DS535 – new version of SSG-25 "Periodic Safety Review for Nuclear Power Plants". It is usual for the decommissioning stage to be divided into a number of phases depending on the selected decommissioning strategy, with a systematic transition phase between operation and decommissioning, where defueling activities and preparations for decommissioning typically take place. In some cases, the transition phase might be considered as the last phase of the operational stage. However, some Member States consider this transition as part of decommissioning itself.	Yes			
2.	Page 8 Annex Line 21	**Application of graded approach, ~~:~~ Risk Informed Performance Based (RIPB) design principles and alternatives.**	Wording is confusing. Might be understood as if Risk Informed Performance Based (RIPB) design principles are alternatives to graded approach, although they have supporting	Yes			

			function.				
3.	Page 8 Annex Line 24	**2) Safety objectives for external event scenarios** • **Application of safety objectives ~~(usually expressed in terms of CDF and LERF)~~ to all safety related structures, systems and components (i.e. in the reactor island, access to the UHS, etc.) at the siting phase, supporting a site license application. Review current text with special reference to advanced reactors**	Mention of Core Damage Frequency (CDF) and Large Early Release Frequency (LERF) in this context is misleading, delete please.	yes			
4.	Page 8 Annex Line 32	• **Application of DID to the protection strategy against external events and safety assessment for all plant technologies~~, in particular level 4 and 5,~~ and for transportable nuclear power plants, especially for the assessment of the feasibility of emergency planning measures.**	Level 4 and Level 5 are cases of severe accidents and mitigation of the radiological consequences of significant releases, actually the case of DID failure. This is to be avoided by design. Hence please delete.			Yes	It is better that it remains, as the design of level 4 and 5 for external events is not straightforward.
5.	Page 9 Annex Line 5	• **Identification of beyond-design-basis-external-**	1) Identification of beyond-design-basis-external-event scenarios is required for	yes	Changed into "Monitoring needs and support to		

		event scenarios (BDBEE) to be used for design and the plant safety assessment; **…** • **Monitoring needs and interfaces with operator decision, ~~prevention, mitigation and restart~~.**	design (e.g. specification of design extension conditions), please add 2) what to understand under prevention, mitigation and restart in this context? Additional explanation / more precise formulation would be helpful. Alternative – to delete.		operator decision"		

COMMENTS BY REVIEWER Reviewer: Shane Turner Page 1 of 2 Country/Organization: UK / Office for Nuclear Regulation (ONR) Date: 17/11/2025				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	Page 4 Section 5 Line 5 Page 8 Annex List item 1) Bullet 9	Remove reference to fusion.	It is not considered appropriate to include fusion within scope of SSR-1. SSR-1 relates to nuclear installations. Fusion is not defined as a nuclear installation (based on the IAEA glossary). Fusion neither uses nor produces nuclear material. Therefore the DPP is inconsistent with the IAEA safety glossary. The UK supports the current approach of the IAEA Safety Assessment Section, as presented at the IAEA Technical Meeting on Fusion Safety and Regulation in Granada (2025), to build up specific fusion safety standards from the Safety Fundamentals and General Safety Requirements (which	yes	See above		

			apply to all uses of ionising radiation). A clear agreed plan across the IAEA and member states is needed to position fusion within the IAEA safety standards. This needs to be informed by the previous work of the IAEA Safety Assessment Section. Otherwise there is a high risk of inconsistencies being introduced across the safety standards. For example SSG-68 (Design of Nuclear Installations Against External Events (Excluding Earthquakes)) has included fusion within scope, but others undergoing revision have not, e.g. DS559 DPP Revision of Specific Safety Guide SSG-35, Site Survey and Site Selection for Nuclear Installations.				

COMMENTS BY REVIEWER Reviewer: Nuclear Regulatory Bureau Safety Standard Division Page 6 of 10 Country/Organization: Republic of Korea/ Nuclear Safety and Security Commission (NSSC) Date: Nov. 14, 2025				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	CONTENTS / Line No. 19	3.4 ~~Flooding~~ Hydrological hazards	According to the comment resolution table from the previous step 3, this review comment was accepted, but DS557 DPP for step 4 has not been modified.	yes			