

Draft DPP Safety Guide
DS490 (Revision of NS-G-1.6 (2003)) “Seismic Design and Qualification for Nuclear Power Plants” – Version for CSS 37
Status: Approval of DPP for 37th CSS

COMMENTS BY REVIEWER					RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) (with comments of GRS) Country/Organization: Germany					Page 1 of 2 Date: March 04 th , 2015			
Relevanz	Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
2	1	Page 2, Sect. 3, Para. 3	The broader bases and generalized use of seismic experience <u>providing better input data</u> as a basis for seismic qualification of equipment;	The ‘generalized use’ itself is no good justification for the application of seismic experience to qualification. But the underlying reason for the ‘generalized use’, i.e. the better data basis, can be considered a sound justification.				
2	2	Page 3, Para. 3	Additionally, SSR-2/1 places now more emphasis on avoiding cliff edge effects and on the simultaneous impact of the earthquake on several units at the same site. These topics are both <u>issue of cliff edge effects is related with to</u> the achievement of a minimum (realistically computed) seismic margin over the design basis earthquake pointed out above and the revised Safety Guide NS-G-1.6 will address this point.	There is no obvious direct link between multi-unit sites and the need for seismic margins.				
2	3	Page 4, ‘Chapter 4’	[...] Specific Design Rules for Mechanical Equipment Items Specific Design Rules for Piping	The design of tanks and pools (such as the spent fuel pool) requires the consideration of slosh-				

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

			<p><u>Specific Design Rules for tanks and pools</u> Specific Design Rules for Underground Piping Specific Design Rules for Electrical Equipment Items [...]</p>	<p>ing effects (not only w.r.t. spillage but also w.r.t. mechanical stability). As sloshing effects are probably not covered in one of the other Sections, a separate discussion of these effects for tanks and pools would be beneficial.</p>				
2	4	Page 5, Para. 4	<p>After giving these general design rules, specific design rules are given in Chapter 3 for a number of component categories: building structures, earth structures, seismic base isolation, mechanical equipment, electrical equipment, piping, <u>tanks/pools</u>, cable trays and HVAC ducts. Each of these sections identifies the key seismic design issues and it gives what is considered now seismic good practice for each category of component.</p>	<p>The design of tanks and pools (such as the spent fuel pool) requires the consideration of sloshing effects (not only w.r.t. spillage but also w.r.t. mechanical stability). As sloshing effects are probably not covered in one of the other Sections, a separate discussion of these effects for tanks and pools would be beneficial (cf. Comment on Page 4, 'Chapter 4')</p>				