Draft Safety Requirements

DS452 *Decommissioning of Nuclear Power Plants, Research Reactors and Other Nuclear Fuel Cycle Facilities* (28. August 2015)

ENISS Comments

COMMENTS BY REVIEWER Reviewer: ENISS Country/Organization: ENISS			Pages 1 of 5 Date: 28.09.2015				
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	General	We appreciate that nearly all of our former comments have been accepted. The draft is in a well established form now. There are only minor remarks, which could improve the document further. Our proposed changes are the following (marked in red).		X			No action required.
2	5.6	Any transition period between permanent shutdown and approval of the final decommissioning plan should be as short as possible ~~such as 2 to 5 years~~, ~~However, care should be taken to ensure that decommissioning funds are not used to perform~~ ~~Former operational tasks (such as removal of operational waste, removal of spent fuel, disposition of excess equipment) may now become part of decommissioning.~~	To define the period by numbers is inadequate. Already the decay time for irradiated fuel is about 5 years before it is reasonable to remove them from the reactor. There may have gone several years before the real decommissioning can start. This will depend from a number of circumstances. It is up to each country to decide how the funds are set up. There is no logical line between past-operation and decommissioning. In forming a decommissioning fund it has to be		X		The idea accepted, please see the revised wording.

			determined which activities this fund will cover and which not.				
3	5.8	For ~~newer~~ facilities that have performed proper planning, a selection of a deferred dismantling strategy should not be solely the consequence of poor financial planning and lack of financial resources. As discussed in the Section 6 of this Safety Guide, the financial arrangements for decommissioning should be established early during the lifetime of the facility to enable safe decommissioning in a timely and efficient manner. When selecting a decommissioning strategy for ~~older~~ existing facilities, the lack of financial resources may be a real concern if the economic situation has changed significantly due to manifold reasons including decisions on a high political level or if proper financial planning was not performed. In this case deferred dismantling should be considered until funds can be accumulated or obtained.	The age of a facility is not the decisive factor in choosing the strategy. There may be unexpected changes in national policies as we have seen after FA which have a very important influence.	X			
4	5.9	When updating the decommissioning plan, the licensee should check ~~ensure~~ that the decommissioning strategy is still appropriate. Relevant updates of the final decommissioning plan and supporting safety documentation (e.g. safety assessment for decommissioning) during conduct of decommissioning should reflect the progress of the work, the continuous removal of the generated waste and the evolution of	The licensee alone cannot ensure things. Only updates that involve significant changes should be considered.	X			

		radiological and physical status of the facility, in order to demonstrate that a safe configuration is maintained at all times and that the decommissioning project is still aligned with the decommissioning strategy selected.					
5	5.31	Additionally, safety systems may be required depending on the outcome of the safety assessment process and the use of best available techniques not entailing excessive costs.	Especially for decommissioning activities the cost factor is rather important and needs to be taken into account.	X			
6	5.40	~~The environment around the facility may have changed since the building was constructed. An example might be the change in the population distribution surrounding the facility such that an analysis involving an accident during the transportation of decommissioning waste would have to be reconsidered.~~	This paragraph should be deleted as neither a recommendation nor good practice is proposed. The example on transportation is completely inappropriate as transport is one of the safest operation in the nuclear field.		X		Your point accepted, but the paragraph kept in a revised form. Example changed on the basis of a comment from Japan.
7	6.9	The occurrence of ~~a spill, leaks or~~ accidents should also prompt the updating of the cost estimate.	Spills or leaks are not such important to require such a measure.		X		Please see the revised text, which accommodates comments from Germany and Japan.
8	6.14	If spent fuel or radioactive waste storage facilities remain on site after the end of decommissioning, they should be licensed as ~~new~~ operating facilities. ~~The operational costs of such new facilities for waste or spent fuel management should not be covered by the decommissioning fund.~~	There may be a new license or it could be done under the existing license: the point is that there has to be a license. Waste and spent fuel management is an integral part of decommissioning and thus need to be taken into account when financial planning of decommissioning.			X	We speak about situation after the end of decommissioning, when the license for decommissioning is terminated. Costs of operation of new facilities which remain on site after the end of decommissioning

							can't be part of the decommissioning expenses.
9	7.4.	For many older existing facilities, decommissioning may not have been considered at the design stage or during construction and subsequent operation. For these facilities, planning for decommissioning should start as early as possible once the omission has been recognized~~, such as within 1 to 3 years~~.	Too sophisticated. The formulation "as early as possible" should be enough.	X			
10	7.41	A surveillance and maintenance plan for the safe enclosure period should be based on the outcomes of the safety assessment. ~~It should consider ageing and obsolescence aspects of the SSCs.~~ The safety assessment for the deferred dismantling strategy should be the basis for establishing the safety parameters (e.g. temperature, humidity, containment and discharges to the environment,) which should be maintained by means described in the surveillance and maintenance plan. Corrosion and brittle fracture of materials, as well as ageing and obsolescence of materials (spare parts) are typical issues to be considered carefully.	Sentence should be deleted to avoid repetition	X			
11	8.19	During decommissioning, radioactive and non-radioactive effluents will be generated. Discharge of radioactive effluents requires authorization from the regulatory body and control in compliance with appropriate national regulations. In general, the expected discharges of effluents ~~should be less~~	The law/regulations will define the criteria for discharges. There is no relation to the former operational phase.	X			

		~~than during operation of the facility but~~ may be in a different form and with a different radionuclide composition. It is typical for effluent discharges to vary through the different phases of decommissioning. For example, as decommissioning leads to a progressive removal of radiological hazards, radioactive discharges may reduce					
12	8.22	During decommissioning, records should be maintained of key decommissioning actions. For example~~, accurate and complete~~ information concerning the quantities and types of radionuclides remaining at the facility, their locations and distributions, and the volume of radioactive waste generated.	At the start of decommissioning, information can only be determined by conservative assumptions and therefore cannot be accurate and complete.	X			
13	Appendix, para 7	The likelihood and consequences of external events should be assessed, taking into account the decommissioning strategy and the site characteristics (e.g., seismic hazards, flooding, extreme temperatures, influence from or dependence on any neighbouring facilities, ~~and aircraft crashes~~) and the likelihood and consequences of potential initiating events for incident/accident scenarios. (e.g., human error, fire, flood, dropped loads, building/structure collapse/failure, and the release of hazardous chemicals).	A protection against air craft crash for a decommissioning project is simply impossible and on the other hand unnecessary.	X			
14	Annex 3	1. Conduct of the final radiological survey and the survey results a. Summary of the survey, including changes from the final radiological sur-	There might be no baseline radiological site survey as referred to in 7.8			X	Para 7.8 explains how to deal with a situation when a baseline survey had not been

		vey plan and comparison with the initial (baseline) radiological survey if available					performed: "If a site did not have a pre-construction background survey performed, survey data from an undisturbed area with similar characteristics or a survey of similar building material should be used." Anyway, the results of the final radiological survey should be compared with something that represents the "background" for that site.