

**THE STATE ATOMIC ENERGY
CORPORATION
"ROSATOM"**

24, Bolshaya Ordynka Str.,
Moscow, 119017, Russia

29.04.2015 № 1-4.1/16225

To № _____

Mr. Vladan Ljubenov

Division of Radiation, Transport and
Waste Safety
Department of Nuclear Safety and
Security
IAEA

Ref: DS452

Dear Mr. Ljubenov,

Please find attached Russian comments to the draft Safety Guide
“Decommissioning of Nuclear Power Plants, Research Reactors and Other Nuclear Fuel
Cycle Facilities” (DS452).

Attachment: 6 p.

Alexander Usoltsev

Acting Director
Department of International Cooperation
State Atomic Energy Corporation “ROSATOM”



Form for Comments

Decommissioning of Nuclear Power Plants, Research Reactors and Other Nuclear Fuel Cycle Facilities (DS452)

COMMENTS BY REVIEWER			RESOLUTION				
Reviewers:							
Country/Organization: Russian Federation, Moscow / Scientific and Engineering Centre for Nuclear and Radiation Safety			Page of Date: 13.04.2015				
Comment No	Para/line No	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/ rejection
1	1.1	With the maturing of the nuclear industry in the past decades, many States have constructed and commissioned facilities that use nuclear and radioactive materials or sources in a variety of applications	A small clarification of the text				
2	1.3	These actions are carried out to achieve a progressive and systematic reduction in radiological hazards during at completion of decommissioning stages and...	The hazard can be increased during decommissioning temporarily, e.g. the concentration of airborne radionuclides can be increased due to removal of contaminations or barriers during dismantling.				
3	1.14	1.14. Decommissioning considerations and actions addressed in this Safety Guide take place from siting and design of a facility until termination of licence for decommissioning.	A remark: DS452 does not consider planning aspects of decommissioning during siting stage.				
4	2.8	In addition to protection of workers and the public, licensees are required to consider and plan (if necessary) protection of the environment during planning and implementing decommissioning.	A small clarification of the text				

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5	3.24	The licensee is responsible for ensuring that trained and qualified workers are available to safely conduct decommissioning actions, for the overall safety performance, for demonstrating that the end state of the facility decommissioning ensures compliance with...	A small clarification of the text				
6	4.29	Security and safeguard concerns can will be reduced as decommissioning occurs since nuclear and radioactive material is being removed from the facility.	Security and safeguard concerns can be kept the same for a multi-facility site (in case when only part of the site is being decommissioned).				
7	5.7	We propose to remove the whole para	Para 5.7 repeats para 7.17.				

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8	7.6	<p>Relevant features and aspects, which should be considered during the design and construction stages of a facility to facilitate decommissioning, and which should not reduce but may also enhance the safe operation and maintenance of the facility, include the following:</p> <p>...</p> <p>(g) Use materials that are resistant to activation, that are resistant to degradation by chemicals and that have sufficient wear resistance to minimize the spread of activated corrosion products;</p> <p>...</p>	<p>The list (a) - (k) of para 7.6 concerns the design stage only. The statement (k) should be controlled, not considered, during the construction stage.</p> <p>It is important to place emphasis on the fact that the measures of future decommissioning should not reduce the safe operation of the facility.</p>			
9	7.6	(l) reservation (if necessary) of free on-site areas for new waste management facilities constructed during transition or decommission phases	We propose to add a new bullet (l)			

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10	7.8	A baseline radiological site survey should be planned and performed for the proposed site of the planned facility and its surrounding area to establish background concentration levels of natural and man-made radionuclides for use in assessing the future impact of the facility. The licensee should identify the key radionuclides and the media (e.g., soil and sediment or surface and groundwater) to be sampled and measured, so the results could be used for: ... (b) Determining the acceptability of proposed decommissioning options (e.g., strategy, initial decommissioning plan); or ...	A remark. Para 7.8 states: <i>the results /of baseline radiological site survey/ could be used for:</i> ... <i>(b) Determining the acceptability of proposed decommissioning options (e.g., strategy, initial decommissioning plan).</i> This suggestion was not included explicitly as factor in section 'FACTORS INFLUENCING THE SELECTION OF A DECOMMISSIONING STRATEGY' Clarification of the statement (b) of para 7.8 in the section 'Factors' should be given.				
11	7.10	... This initial decommissioning plan is required to be submitted by the licensee to the regulatory body in support of the licence application or authorization for decommissioning and/or operating the facility.	GSR-6, Para 7.4: 7.4. The licensee shall prepare and submit to the regulatory body an initial decommissioning plan together with the application for authorization to operate the facility .				

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12	7.10	... This plan: ... (b) Should include a generic feasibility study of decommissioning, based on the selected decommissioning strategy, considering design provisions and operational experience for facilitating decommissioning, including the proposed end state (preferably release without restrictions), related key decommissioning actions and their planned time , and basic safety issues; ...	Planned dates of the beginning of key works are important for justification of decommissioning strategy.				
13	8.12	... The main objectives of decontamination include: - Reducing workers' internal intake and external exposure during decommissioning actions; ...	Internal exposure of workers will be continued after decommissioning (for intake of Pu, Am and so on).				
14	8.30	In cases when emergency and security -plans from operation is intended to be used during decommissioning, ...	Security plan is not one of the goals of section 'EMERGENCY RESPONSE ARRANGEMENTS'.				

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15	9.7	The criteria for release of the facility from regulatory control, established by the regulatory body, <i>should be convertible into terms of measurable quantities</i> that can readily be compared with the results of the field measurements.	A remark for <i>Italic</i> . This statement should be used with caution for hot spots. In addition, it can limit the application of new approaches to the interpretation of the final survey results. (e.g. section 11.4.1 from Eric W. Abelquist. Decommissioning Health Physics: A Handbook for MARSSIM Users, Second Edition. CRC Press. 2013)				