

Comments on IAEA Document Preparation Profile
“Instrumentation and Control and Software Important to Safety for Research Reactors”
(DPP DS 436)

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Comments on IAEA Document Preparation Profile
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Germany

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) Page.1... of..1 Country/Organization: Germany							
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	General	Additional to Section 4, Justification of the Document Preparation Profil (DPP), the SG to be prepared should also be based on the paragraphs dealing with the issues of <ul style="list-style-type: none"> • Engineered safety features (6.32 to 6.34), • Provisions for inspection testing and maintenance (6.45 to 6.47) • and I&C (6.136-6.144) of the Safety Requirements of Research Reactors NS-R-4	These topics of NS-R-4, too, are relevant for the design of the I&C systems important to safety in research reactors.	Yes			
2	General	The SG to be prepared should rest as far as possible upon the already existing requirements for the design of I&C for NPPs (DS431).	In the design of I&C systems in NPPs and research reactors, this ensures a uniform level of safety at comparable risks. This also corresponds to the practice of applying the existing requirements for NPPs analogously to the I&C systems of	Yes	Both DS 431 and the present SG NS-G-1.3 are already included in the list of documents which have to be considered in the preparation of the safety Guide.		

			research reactors.				
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France

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: F. Féron		Page					
Country/Organization: France/ASN		Date: 4 sept 2009					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.			It's seems early to launch this project now. It is better to allow DS431 draft to be first established and see whether DS 436 is still needed.		Yes		The development of a separate Safety Guide for research reactors, which was approved by the Coordination Committee, will respond to Member States needs expressed during several safety review missions. The Safety Guide will be developed in a consistent manner with DS 431.
2.			France was not convinced that DS431 guidance would not, for the most part, be applicable to other nuclear installations. Scope of DS436 should be extended to cover nuclear installations except NPP.				See 1

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3.			<p>The DPP identifies interface with DS431 (under development) which deals of I&C for NPP. At the previous NUSSC, IAEA secretariat told that DS431 would be “very specific” to NPP.</p> <p>Are sections 2, 3 and 6 likely to be very different from the ones in DS431 ?</p> <ul style="list-style-type: none"> • If no, reference to DS431 would be enough and Secretariat explanation about the “specifics” of DS431 won’t be true anymore. • If yes, the DPP should be more precise on expected guidance. 				<p>The specificity of classification of safety systems, safety related systems and systems not important to safety for research reactors, is related to the need to apply a graded approach.</p> <p>The subjects of 3 and 6 will be the same but will differ in the graded approach which will result in different guidance for RRs</p>

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4.	2/7	Delete “and should be submitted for review, assessment, and approval by the regulatory body”	Superfluous			X	Refurbishment and modification projects of I&C systems of Research Reactors are regarded as modifications having major safety significance. According to the Safety requirements for research reactors NS-R-4 (para 7.88) these projects shall be subject to the same processes equivalent to those for the reactor itself
5.	2/9	Delete “new”	Superfluous.	Yes			
6.	2/10	Replace “those for” by “those with”	Clarification			X	
7.	3		There are not specific items for technologies used in I&C research reactors. The IEC standards provide the recurrent international good practices.				Will be taken into account in the safety guide
8.	6		Such a guide, if its writing is confirmed, <u>should be developed very closely with the DS431 especially for the chapters 3. , 4., 6.</u>	Yes			See 1

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9.	6/Design guidelines	Add a chapter on “reactor control system”	Clarification				The chapters have been chosen to be consistent with the terminology of NS-R-4. By this the reactor control system is part of the reactor protection system.
10.	/						
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Pakistan

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: PAKISTAN		Page 1 of 2					
Country/Organization: PNRA		Date: 16-09-2009					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	3-Objective	The objective of the proposed Safety Guide is to provide practical guidance and recommendations on the design, safety and operational aspects of I&C systems and software of research reactors and experimental facilities on the basis of the current international good practices...	The guidance on software would also be included in the proposed DPP. Therefore, it should be included in the objective.	Yes			

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United States of America

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: NUSCC Country/Organization: United States of America / NUSCC Date: September 21, 2009							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	General	Consider the inclusion of some guidance on cyber security and protection of digital systems	Operators making a decision to convert to digital instrumentation should be aware of the vulnerability associated with digital instrumentation and actions required to protect the facility when choosing to use digital systems.	Yes			Guidance on this subject will be developed in cooperation with NSNS-prevention section of the IAEA

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European Commission

COMMENTS BY REVIEWER				RESOLUTION			
Date: September 21 Country/Organization: EC							
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	p.2	It will be useful if the safety classification of I&C systems for RR is as close as possible to the one used for NPPs. Please check the consistency of Table of Contents (part 2) with DS 431.	Consistency within IAEA SS		X		The table of content is based on the table of content of DS 431 and the Safety Guide will be developed in a consistent manner with DS 431.