

COMMENTS BY REVIEWER Reviewer: Marcus Grzechnik Country/Organization: ARPANSA, Australia Date: 9/10/18				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	General	The first three guides appropriately reference GSR Part 7, however consideration should be given to referencing GSR Part 7 in the remaining guides. This is particularly relevant where emergency plans are required (such as in NS-G-2.5 revision.		Ok Text modified			

COMMENTS BY REVIEWER Reviewer: B. Ahier Country/Organization: Health Canada Date: 28 Sept 2018				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	4.32 and 4.33	Add reference to GSR Part 7, Requirement 25 (Training) in 4.32, and ensure consistency between this requirement and the text in 4.33	Descriptions of training for emergencies should be consistent with GSR Part 7, Requirement 25: Training, drills and exercises for emergency preparedness and response	Ok NS-G-2.8 modified (2018 11 01) Ref. GSR Part 7 added in the para 4.32 Consistency checked in 4.33			

COMMENTS BY REVIEWER Reviewer: Mikko Lemmetty, Stéphanie NGUYEN, Laurence Oury Country/Organization: ENISS Date: 2018-09-26				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	NS-G-2.8, para 5.20	support the implementation of EOPs and SAMGs implement the EOPs and SAMGs outside the MCR	The field operators are not only "supporting" but their role in the implementation of EOPs and SAMGs outside the MCR is essential. Recognising this is just and also good for their morale.	Ok Text modified			
2.	NS-G-2.8, para 6.3	Simulators should be a replicas	The subject and predicative of the sentence should have the same number.			X	Words “should be a replica” removed

3.	NS-G-2.8, para 6.3	The simulator should have, when technically and financially reasonable,	The IAEA guides are used by some member states as binding regulations. The list is a list of the features of an ideal simulator facility which is only seldom fully realised. As such, the use of "should" is indeed meant to be "should", not "shall", but as some regulators read all IAEA "should" expressions as "shall", this sense should be conveyed also more clearly.			X	We cannot recommend MS to cope with some arrangements.
----	--------------------	---	--	--	--	---	--

COMMENTS BY REVIEWER Reviewer: M-L Järvinen Country/Organization: STUK Date: 9 th October 2018				RESOLUTION			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	2.7	Candidates from conventional power plants should be given due consideration for recruitment to direct operations and maintenance positions, because of their greater experience in routine operations and maintenance and their ability to cope with the needs of day to day operations.	Please clarify the paragraph the sentence is not clear. Is the intent of the paragraph to justify how candidates coming from conventional industry may use their earlier experience at a NPP.			X	Thanks, but it's not written "coming from conventional industry" BUT "coming from conventional power plants."

2.	2.18	—attitudes towards learning and own training;	Please clarify: Self-learning/-studies, own training is not clear.	Agree Text modified			
3.	2.20	Utilities planning to build a first nuclear power plant or the first of a new type of plant with significant technological differences should begin their recruitment and training programmes for the new plant relatively earlier than those who already have experience with such a plant and can call upon an existing pool of expertise.	Utilities planning to build a first nuclear power plant or the first of a new type of plant with significant technological differences should begin their recruitment and training programmes for the new plant relatively earlier than those who already have experience with such a plant and can call upon an existing pool of expertise. Relatively is not needed.	Agree Text modified			
4.	3.14	Educational requirements should be accorded great importance for all plant positions.	Please complete the sentence, clarify.			X	Sorry, I do not see how clarify the sentence. I already completed this para with a comment from ONR – UK; hope it's enough and clearer now.
5.	4.45 4.44	The documentation should include learning objectives, lesson and exercise plans, student reading material, OJT guides, instructor and assessor documentation.	Acronym OTJ should be written out. On-Job-Training	Agree Text modified			

6.	4.40 4.39	The transition from EOPs to SAMGs for severe accident conditions should be part of this training.	Acronyms EOP and SAMs should be written out in the document.	Ok for SAMGs	Ok for SAMGs not defined before but, EOP defined in para 4.36 for the first time.		
----	--------------	--	--	--------------	---	--	--

COMMENTS BY REVIEWER Reviewer: Japan NUSSC member Country/Organization: Japan/NRA Date: 09/10/2018				RESOLUTION			
No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	Para. 3.22	Move last parts of para to footnote; 3.22 The following practices in relation to educational requirements are common in most States, Ref. World Survey on Nuclear Power Plant Personnel Training, IAEA TECDOC 1063 [4]: <u>(footnote x) See “World Survey on Nuclear Power Plant Personnel Training”, IAEA-TECDOC-1063 [4]</u>	Non-consensus document should be referred in footnote. Only consensus document should be referred in main text, Same practice should be done in other paragraphs which same kind of documents are referred. For example; para. 4.13.			X	Non-consensus document? Difficult to understand the comment.

COMMENTS BY REVIEWER Reviewer: KINS Country/Organization: Republic of Korea/Korea Institute of Nuclear Safety Date: Nov. 5, 2018-10-01				RESOLUTION			
Comm ent No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	Page 15	In addition, specific safety culture related	The attributes of specific	Agree	consideration in		

	2.15	attributes such as a questioning attitude, a rigorous and prudent approach, and communication and learning abilities should be taken into consideration in selecting candidates for safety related positions personnel at a nuclear power plant.	safety culture are not only limited in selecting safety related position personnel.	Text modified as:	selecting candidates at a nuclear power plant		
2.	2.21 2.20	By participating in design and construction activities, personnel will acquire a better understanding of the design intents and the assumptions on which the safety criteria are based and the technical characteristics of the plant.	To provide clear meaning of the sentence	Ok Text modified			
3.	Page 32 4.22	In some States, Retraining is an alternative term for continuing training. In other States, Retraining specifically describes training in a different knowledge, skill or attitude, required because of a major modification to the existing plant or to plant operation, the installation of a new plant or a change of job.	Deleting inappropriate words	Ok Text modified as:	Retraining is an alternative term for continuing training. Retraining describes also training in a different knowledge		
4.	Page 50 6.3	Simulators should be a replica of the main control room and supplementary control room;	Deleting unnecessary words	Ok Text modified			

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: M Ryan Country/Organization: Office For Nuclear Regulation, UK Date: /							
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	1.3, line 3	Number of ' competent ' personnel	Key requirement is for	Yes			

			competence rather than just qualifications, which is one part of competence	Text modified			
2.	1.3 line 7	...was published in 2001. Together these elements constitute the systems which support the effective delivery of competent personnel.	Each of the factors identified in the guide is important, but it also how they come together in their totality which delivers competence	Ok Text modified			
3.	After 1.5	In using the guidance from each section it should be recognized that competence can be developed in different ways and that the balance and reliance placed on selection, education, experience and training may vary.	Competence does not require all elements all of the time, rather in some situations we may place greater reliance on experience, and in others education or selection may be key.	Ok Text modified	Interesting remark		
4.	2.2. line 3	From adoption of new technology, changes in life cycle stage , or from	Changes in life cycle stage can be particular challenging and can result in important changes in skill mix and expertise required to support the transition. This has significant implications for the staffing plan	Ok Text modified			
5.	2.8, line 6	Other organizations domestically and abroad.. Whilst recognising that this has many benefits for an organisation (eg diversity), where personnel are recruited in this way, the extent of training required should be systematically assessed, recognized and	There can be many benefits to an organisation in recruiting directly from schools and colleges, but the training burden can be significant. For areas which are already short of expertise this can be	Ok for the first part of the comment:	“Whilst recognizing that this has many benefits for an organization (e.g. diversity), where personnel are		Because out of the scope of the DS497

		understood. This should take account of the demand on existing personnel to support this, particularly in areas which are already short of resource	challenging particularly in the short term. This needs careful consideration in relation to the recruitment strategy		recruited in this way, the extent of training required should be systematically assessed.”		
6.	2.19, after last line	New paragraph... Where no candidate is found who meets the criteria, a structured process should be applied to determine appropriate temporary arrangements for covering vacant positions.	In technical areas where there are national shortages of suitably qualified and experienced staff it may not be possible to appoint. Temporary appointments or cover arrangements can have a significant impact on already stretched areas and there should be a systematic process in place to ensure this is done in a way that support nuclear safety	Ok Text modified			
7.	2.24 line 4	..fuel loading. This also provides a valuable opportunity for personnel to familiarize themselves with parts of the plant which will subsequently have limited or no access	For closed cells or areas with limited access, this early familiarization can be invaluable and promoted improved understanding and plant awareness	Ok Text modified			

8.	3.3.3.4 and 3.3.35 3.4 3.5	The competence of plant personnel should include aspects which underpin safety culture such as a questioning attitude, a rigorous and prudent approach to safety, soft skills and necessary communication skills. Where appropriate to the tasks and activities undertaken by particular plant personnel, competence in management and supervision, leadership and analytical methods may also be required.	There is considerable overlap between paragraphs 3.3 3.4 and 3.5 3.5 and these could usefully be combined. Some elements of 3.3.3.4 will not be relevant to all staff, but rather where these elements are relevant to their tasks and activities, see suggested text change	Ok Text modified			
9.	3.14 last line	...knowledge, skills, attitudes and behaviours	Training programs should include elements to address the importance of attitudes and behaviours as well as knowledge and skills	Agree Text modified			
10.	3.18 line 7	Mechanical, electrical, Human Factors	Human Factors is an important engineering discipline which it would be useful to include within this list	Agree But...	... In order to be consistent with the next comment, scientific has been added		
11.	3.22 a, line 4	..graduates in scientific , engineering	This should include Human Factors which is a scientific discipline and important in understanding the human and organisational factors which underpin system performance.	Ok Text modified			
12.	4.5, line 2	...and relevant safety	Training should be clearly	Agree			

		requirements , plant procedures	informed by the safety case and its requirements	Text modified			
13.	4.7, last line	to be performed and include a clear focus on safety related requirements	Training should be clearly informed by the safety case and its requirements and this should be a key focus of the training	Agree Text modified			
14.	4.8, addition after first bullet	That training needs analysis gives priority to safety related requirements	Training should be clearly informed by the safety case and its requirements and this should be a key focus of the training	OK Text modified			
15.	4.12, last line	... these changes. This may require a greater focus on structured fault finding and decision making	Situational awareness and support to fault finding and decision making are key for systems with a greater reliance on automation	Agree Text modified			
16.	4.25, second third bullet	...safety principles, and requirements eg	Worth broadening this from principles to include requirements	Ok Text modified			
17.	5.1, second page, 4 th line	Position, and duties particularly those relating to safety	There can be a risk of having high volumes of training, and key safety related training be lost or no sufficient prioritised.	Ok Text modified			
18.	5.3 line 3	... human and organisational factors	Many events are underpinned by organisational factors and useful to reflect that here	Agree Text modified			
19.	5.12, line 4	... paid to the importance of excellent operational standards and to gaining the benefits of	It's important that senior operations and mgt staff know understand and	Agree Text			

			what good conduct of operations looks like and convey the importance of this to personnel	modified			
20.	5.23, line 4	... surveillance, fault finding , and inspection	Structured training in fault finding for maintenance staff can have significant benefits but is often missed from training needs analyses for these positions	Ok Text modified			
21.	7.5, line 4	... and the knowledge, skills, attributes and behaviours necessary	It is more than just the knowledge and skills	Ok Text modified			
22.	7.10, first bullet	Established safety requirements , rules	It would be useful to broaden this to requirements	Ok Text modified			

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: ? Country/Organization: United States of America/NRC Date: 10-11-2018							
Comment No.	Para/Line No.	Proposed new text/comments	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1.	General	Comment 7 in NS-G-2.2 above also applies to NS-G-2.3 through NS-G-2.8, namely, that these guides cite references and documents that were revised and published several years ago. The updated versions should be referenced.	Completeness and update.	Agree	This action will be implemented at the end of the process of revision (before publication)		