

DS462

TABLE OF COMMENTS RESOLUTION

Comments from Argentina, Germany NUSSC,
Germany WASSC, France, Finland, Poland, Japan
NUSSC, Japan WASSC, USA, Switzerland, Canada,
Ukraine, ENISS and WNA

Addenda to the IAEA Safety Requirements:

- GSR Part-1 on Governmental, Legal and Regulatory Framework for Safety
- NS-R-3 on Site Evaluation for Nuclear Installations
- SSR-2/1 on Safety of Nuclear Power plants: Design
- SSR-2/2 on Safety of Nuclear Power plants: Commissioning and Operation
- GSR Part 4 on Safety Assessment for Facilities and Activities

Status

STEP 7: first review by the Review
Committees (NUSSC, RASSC,
TRANSSC, WASSC)
Information of NSGC

Addendum to SSR-2/2

Lessons Learned	Current Text	Proposal to NUSSC	Proposed Resolution for the Committees Meetings	
Germany WASSC 1	1.3 Additional modification not initially proposed by the Secretariat	“The present publication reflects the safety principles of the Fundamental Safety Principles [1]. It has been harmonized with the IAEA Safety Standards Series publications No. GSR Part 2 on Leadership and Management for Safety [2], No. SSR-2/1 on Safety of Nuclear Power Plants: Design [4], No. GSR Part 7 on Preparedness and Response for a Nuclear or Radiological Emergency [5], No. GSR Part 5 on Predisposal Management of Radioactive Waste [7], and No. GSR Part 6 on Decommissioning of Facilities [9].”	Completion. See our related comments on <ul style="list-style-type: none"> • Req. 19, Paras 5.8, 5.9 and 7.3 (with respect to SSR-2/1), • Paras 5.7 and 5.8c (with respect to GSR Part 7), • Para 5.18 (with respect to GSR Part 5), • Req. 33, Paras 9.1 and 9.6 (with respect to GSR Part 6). 	X As in the draft DS462 posted for comments, the cross-references will be updated
Germany WASSC 2	3.2 (c) Additional modification not initially proposed by the Secretariat	“Operating functions, which include executive decision making and actions for the operation of a plant for all operational states and accident s conditions.”	Editorial.	X “Operating functions, which include executive decision making and actions for the operation of a plant for all operational states and accident s conditions.”
Germany WASSC 9	5.18 Additional modification not initially proposed by the Secretariat	“... The programme for the management of radioactive waste shall include the pretreatment , characterization, classification, processing (i.e. pretreatment, treatment, and conditioning) , transport, storage and disposal of radioactive waste, as well as regular updating of the inventory of radioactive waste. Treatment Processing and storage of radioactive waste shall be strictly controlled in a manner consistent with the requirements for the predisposal management of radioactive waste [7]. Records shall be maintained for waste generation and waste classification, as well as for the processing , storage, treatment and disposal of waste.”	Ensuring consistency with the General Safety Requirements No. GSR Part 5 “Predisposal Management of Radioactive Waste”, see Paras 1.2, 1.4 and 1.12. According to the IAEA Safety Glossary (2007 Edition), the term ‘processing’ includes ‘pretreatment’, ‘treatment’ and ‘conditioning’.	X At this stage we should not open issues other than the feedback from Fukushima. But if the Committees and the CSS give us the mandate to incorporate this change, we could implement

								it at the final stage when the draft will be submitted to the CSS		
43.1/ 43.2	Requirement 4.44: Safety reviews shall be carried out at regular intervals. Safety reviews shall address, in an appropriate manner, the consequences of the cumulative effects of plant ageing and plant modification, equipment requalification, operating experience, current standards, technical developments, and organizational and management issues, as well as siting aspects. Safety reviews shall be aimed at ensuring a high level of safety throughout the operating lifetime of the plant.	Requirement 4.44: Safety reviews shall be carried out at regular intervals. Safety reviews shall address, in an appropriate manner, the consequences of the cumulative effects of plant ageing and plant modification, equipment requalification, operating experience, current standards, technical developments, and organizational and management issues, as well as siting site related aspects. Safety reviews shall be aimed at ensuring a high level of safety throughout the operating lifetime of the plant.							NO CHANGE Requirement 4.44: Safety reviews shall be carried out at regular intervals. Safety reviews shall address, in an appropriate manner, the consequences of the cumulative effects of plant ageing and plant modification, equipment requalification, operating experience, current standards, technical developments, and organizational and management issues, as well as siting site related aspects. Safety reviews shall be aimed at ensuring a high level of safety throughout the operating lifetime of the plant.	
Argentina	4.44	Safety reviews shall be carried out at regular intervals. Safety reviews shall address, in an appropriate manner, the consequences of the cumulative effects of plant ageing and plant modification, equipment requalification, operating experience, current standards, technical developments, and organizational and management issues, as well as siting site re-evaluation related aspects. Safety reviews shall be aimed at ensuring a high level of safety throughout the operating lifetime of the plant.					X	"site related aspects" includes "re-evaluation" but could also include other aspects (e.g. changes in regulatory requirements).		
46.15	Requirement 4.47 On the basis of the results of the systematic safety assessment, the operating organization shall implement any necessary corrective actions and reasonably practicable modifications for compliance with applicable standards aiming at enhancing the safety of the plant.	Requirement 4.47: On the basis of the results of the systematic safety assessment, the operating organization shall implement any necessary corrective actions and reasonably practicable modifications for compliance with applicable standards aiming at enhancing the safety of the plant. <u>This shall include the goal of further reducing the likelihood and consequences of severe accidents.</u>							Requirement 4.47: On the basis of the results of the systematic safety assessment, the operating organization shall implement any necessary corrective actions and reasonably practicable modifications for compliance with applicable standards aiming at enhancing the safety of the plant. This shall include the goal of and further reducing the likelihood and consequences of severe accidents.	
Argentina	4.47	<u>... This shall include the goal of further reducing the likelihood and consequences of severe accidents on the plant or multi-unit plants on the same site.</u>					X	Para 5.8a addresses multiple unit sites.		
Japan	4.47	On the basis of the results of the systematic safety assessment, the operating organization shall implement any necessary corrective actions and reasonably practicable modifications for compliance with applicable standards aiming at enhancing the safety of the plant. This shall include the goal of and further reducing the likelihood and consequences of severe accidents.	Clarification. The goal is ambiguous. Additional statement should be combined with previous statement.	X						

DS462 Addenda to GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4 –
Comment resolution table draft 1, 7 June 2013

Canada	4.47 last sentence	This shall include the goal of further reducing the likelihood and consequences of design extension conditions, including severe accidents .	Since SSR-2/1 addresses reducing the likelihood and consequences of design extension conditions, and not just severe accident conditions, consistency with SSR-2/1 is needed.			X	DEC addressed in Footnote.	
ENISS	4.47 last sentence	This shall include the goal of further reducing the likelihood and consequences of severe accidents as far as reasonable practicable .	For clarification, that only reasonable practicable further improvements need to be implemented.			X	Not needed as sentence combined.	
WNA	4.47	On the basis of the results of the systematic, risk informed , safety assessment, the operating organization shall implement any necessary corrective...	Without the use of a Probabilistic Risk Assessment the effect of a plant modification on plant safety and core damage frequency will not be known and the effect on over all plant safety may be minimal at a significant cost....This requirement needs to be bounded.			X	"risk informed" addressed in para 4.46.	
44.1	Requirement 5.7: Facilities, instruments, tools, equipment, documentation and communication systems to be used in an emergency shall be kept available and shall be maintained in good operational condition in such a manner that they are unlikely to be affected by, or made unavailable by, accident conditions.	Requirement 5.7: Facilities, instruments, tools, equipment, documentation and communication systems to be used in an emergency, including for the accident management programme , shall be kept available and shall be maintained in good operational condition in such a manner that they are unlikely to be affected by, or made unavailable by, accident conditions. The operating organization shall ensure relevant safety parameter information is available in the emergency centre and technical support centre and communication is effective between the control rooms and these centres in accident conditions. These capabilities shall be tested periodically.	Requirement 5.7: Facilities, instruments, tools, equipment, documentation and communication systems to be used in an emergency, including those for the accident management programme, shall be kept available and shall be maintained in good operational condition in such a manner that they are unlikely to be affected by, or made unavailable by, accident conditions. The operating organization shall ensure that relevant safety parameter information is available in the emergency centre and technical support centre and that communication is effective between the control rooms and these centres in accident conditions. These capabilities shall be tested periodically.					
Poland 7	Addendum to SSR-2/2 Requirement 5.7	Requirement 5.7: ... The operating organization shall ensure that relevant safety parameter information is	Editorial correction ("that" was added).			X		

		<u>available in the emergency centre and technical support centre and communication is effective between the control rooms and these centres in accident conditions. ...</u>						
Argentina	5.7	<u>... These capabilities and their effectiveness shall be tested periodically.</u>				X	“capabilities” includes “effectiveness”	
Japan	5.7	Facilities, instruments, tools, equipment, documentation and communication systems to be used in an emergency, including <u>those</u> for the accident management programme, shall be kept available and shall be maintained in good operational condition in such a manner that they are unlikely to be affected by, or made unavailable by, accident conditions. The operating organization shall ensure relevant safety parameter information is available in the emergency <u>response</u> centre and technical support centre and communication is effective between the control rooms and these centres in accident conditions. These capabilities shall be tested periodically.	Add the word for clarify. Editorial. Clarification for shared safety information in TSC and ERC.	X (“those”)		X	Terminology consistency with GS-R-2.	
USA 1	5.7	“...communication is effective between the control rooms and these centres in accident conditions.”	Comment: What about offsite communications? They should be considered.			X	Communications, including off-site, is addressed in first sentence.	
USA 2	5.7	Check consistency of requirements for emergency support centre and technical centre.	Consistency. The modifications to 5.7 add reference to both an emergency support centre and a technical support centre. But in the revision of SSR-2/1, the requirement for an emergency centre was replaced by a requirement for a			X	Terminology consistency with GS-R-2.	

			technical support centre. This inconsistency must be resolved.					
Germany WASSC	5.7	<p>“Facilities, instruments, tools, equipment, documentation and communication systems to be used in an emergency, including those for the accident management programme, shall be kept available and shall be maintained in good operational condition in such a manner that they are unlikely to be affected by, or made unavailable by, accident conditions. The operating organization shall ensure that relevant safety parameter information is available in the emergency centre, the operational support centre and the technical support centre, and that communication is effective between the control rooms and these centres in accident conditions. These capabilities shall be tested periodically.”</p>	<p>1.) Editorial (missing words).</p> <p>2.) Ensuring consistency with Para 6.28 of GSR Part 7 (revision of GS-R-2; draft version DS457 dated 3 May 2013) which states “For facilities in category I, emergency response facilities separate from the control room and supplementary control room shall be provided so that: technical support can be given to the control room operating personnel in emergency conditions (technical support centre); operational control by the personnel performing tasks within or near the</p>	X (“those”, “that”, “that”)		X	Emergency centre terminology consistency with GS-R-2.	

			<p>facility can be maintained (operational support centre); and the on-site emergency response is managed (emergency centre). These emergency response facilities shall operate as an integrated system in support of the control room, without interfering in each other's functions. ..."</p>				
46.1/ 21.2/ 46.17/ 46.2	<p>Requirement 5.8: An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents. The accident management programme shall be documented and periodically reviewed and revised as necessary. It shall include instructions for utilization of the available equipment — safety related equipment as far as possible, but also conventional equipment — and the technical and administrative measures to mitigate the consequences of an accident. The accident management programme shall also include organizational arrangements for accident management, communication networks and training necessary for the implementation of the programme.</p>	<p>Requirement 5.8 <u>5.8</u> An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents, <u>including for spent fuel storage</u>. The accident management programme shall be documented and periodically reviewed and revised as necessary. <u>5.8a For a site where several units are co-located, the accident management program shall consider concurrent severe accidents on multiple units due to, for example, external hazards. Resource in terms of trained and experienced personnel, equipment, supplies and external support shall be available to cope with the above.</u> <u>5.8b</u> It shall include instructions for utilization of the available equipment — safety related equipment as far as possible, but also conventional equipment. <u>5.8c It shall include alternative contingency measures such as supply of water, compressed air and mobile power to mitigate severe accidents, including any necessary equipment. This equipment shall be located and maintained so that it can withstand an accident.</u> <u>5.8d</u> It shall include the technical and administrative measures to mitigate the consequences of an accident, organizational arrangements for accident management, communication networks. <u>5.8e</u> It shall include training necessary for the implementation of the programme. <u>5.8f When developing the accident management programme and associated procedures, adverse working conditions (e.g. elevated radiation levels, lack of lighting) for operating staff, as well as degraded operating conditions for equipment shall be taken into account to ensure expected accident management actions will be feasible.</u></p>	<p>Requirement 5.8 <u>5.8</u> An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents*, <u>including for spent fuel storage</u>. The accident management programme shall be documented and periodically reviewed and revised as necessary. 5.8a For a site where several units are co-located, the accident management programme shall consider concurrent severe accidents on multiple units due to, for example, external hazards. Resource in terms of trained and experienced personnel, equipment, supplies and external support shall be available to cope with the above. 5.8b It shall include instructions for utilization of the available equipment — safety related equipment as far as possible, but also conventional equipment. 5.8c It shall include alternative contingency measures such as <u>alternative</u> supply of water, compressed air <u>or other gases</u> and mobile <u>electrical</u> power <u>sources</u> to mitigate severe accidents, including any necessary equipment. This equipment shall be located and maintained so that it can withstand an accident <u>and will be readily accessible in postulated emergency conditions</u>. 5.8d It shall include the technical and administrative measures to mitigate the consequences of an accident, organizational arrangements for accident management, communication networks. 5.8e It shall include training necessary for the implementation of the programme.</p>				

								5.8f When developing the accident management programme and associated procedures, accessibility , adverse working conditions (e.g. elevated radiation levels, elevated temperatures , lack of lighting access to the plant from off-site) for operating staff, as well as degraded operating conditions for equipment shall be taken into account to ensure expected accident management actions will be feasible and reliable .
								<ul style="list-style-type: none"> New footnote added on BDBA versus DEC: “Safety of Nuclear Power Plants: Design” SSR-2/1 includes a definition of ‘plant states’ where accident conditions more severe than ‘design basis accidents’ are: ‘design extension conditions’ and ‘conditions practically eliminated’. ‘Design extension conditions’ are those considered in the design process of the facility in accordance with best estimate methodology. The associated requirements in SSR-2/1 related to these defined terms apply to the design of new plants. For existing nuclear power plants, conditions more severe than ‘design basis accidents’ were not necessarily considered in the design process of the facility in accordance with best estimate methodology, hence the defined term ‘design extension conditions’ cannot be directly applied. The definition of ‘plant states’ for existing nuclear power plants is in accordance with that given in the IAEA Safety Glossary where accident conditions more severe than ‘design basis accidents’ are ‘beyond design basis accidents’ and the requirements of SSR-2/2 relate to these defined terms.
France 16	5.8	<p>5.8 An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents, (including for spent fuel storage) or design extension conditions involving fuel melt. The accident management programme shall be documented and periodically reviewed and revised as necessary.</p> <p>...</p> <p>5.8c It shall include alternative contingency measures such as alternative supply of water, ...</p>	<p>Clarification to cover both operating plants (where BDBA is relevant) and new plants (where DEC is relevant)</p> <p>Clarification</p>	X (“alternative”)		X	DEC addressed in Footnote.	
Germany WASSC	5.8	<p>“An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents extension conditions, including for spent fuel storage as long as it remains a part of the operational activities of the reactor. ...”</p>	<p>1.) With regard to design extension conditions, see our related comment on Requirement 19.</p> <p>2.)</p>			X	DEC addressed in Footnote. Spent fuel storage addressed by hierarchy of General and Specific Safety Requirements.	

			The additional statement with respect to spent fuel storage is essential to be consistent with the scope of GSR Part 5 “Predisposal Management of Radioactive Waste” (see Paras 1.12, 1.13 and 1.17) and SSG-15 “Storage of Spent Fuel” (see Para 1.9). SSG-15 covers spent fuel storage facilities that may be either collocated with other nuclear facilities (such as a nuclear power plant) or located on their own sites. However, SSG-15 is not specifically intended to cover the storage of spent fuel as long as it remains a part of the operational activities of a nuclear power plant.				
Switzerland	5.8	An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents, including all plant states and the spent fuel storage.	The accident management programme should not be restricted to full power operation.			X	The accident management programme is not restricted to addressing accident only from full power operation.
Finland	5.8	An accident management programme shall be established that covers the preparatory measures and guidelines that are necessary for dealing with design extension conditions, including for spent fuel storage. The accident management programme shall be documented and periodically reviewed and revised as necessary.	delete beyond design basis, see new definition of plant states			X	For existing plants, the accident management should start for accidents that are beyond the DBA. This includes the

DS462 Addenda to GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4 –
Comment resolution table draft 1, 7 June 2013

							DEC.	
Japan	5.8	An accident management programme for NPPs shall be established that covers the preparatory measures and guidelines that are necessary for dealing with beyond design basis accidents, including as well as for spent fuel storage. The accident management programme shall be documented and periodically reviewed and revised as necessary.	Clarification The accident management programme is also needed for spent fuel storage.			X	Unclear of necessity for “NPPs” as complete document relates to NPPs.	
USA 7	5.8 and 5.9	Replace the term “severe accident” and “beyond design basis accident” with “design extension conditions”	Consistency with the terminology change from SSR 2-1			X	DEC addressed in Footnote.	
Finland	Requirement 19	The operating organization shall establish an accident management programme for the management of <u>design extension conditions</u> .	As a result of the comments above on 5.8, delete beyond design basis, see new definition of plant states			X	As above (Finland 5.8)	
Japan	Requirement 19	The operating organization shall establish accident management programme of beyond design basis accidents and shall keep it available for using in emergency situation. This terminology of “beyond design basis accidents” should be defined in a DEFINITION in SSR-2/2 clearly.	Add for an available use of accident management programme. Clarification of the terminology. Beyond design basis accident includes the beyond design extension conditions. The same terminology exists in paragraphs 5.8, 5.9 and 7.3.			X	“Availability” is inherent in “establish”. Footnote related to BDBA/DEC added.	
Canada	Req. 19	Existing text in SSR-2/2 to be modified to: The operating organization shall establish an accident management programme for the management of beyond design basis accidents.	Consistency with SSR-2/1 is needed. All of SSR-2/2 should be checked to achieve consistency with SSR-2/1. It needs to be recognized that not all DEC’s will be managed under accident management. But rather the focus is that they must be managed. Their			X	DEC addressed in Footnote.	

		<p>The operating organization shall establish an accident management program for the management of design extension conditions that utilizes procedures and / or guidelines and transitions operator actions effectively to address event progression.</p>	<p>management needs to transition effectively into accident management.</p> <p>Points to consider.</p> <p>1) Operating procedures, including EOPs and SAMGs do not map directly onto plant states. Transitions between sets of procedures are based on measured plant condition, not on the perceived frequency of the accident.</p> <p>2) The SAMGs may not be written for beyond DEC but they will be applied by the operating staff to the best of their ability. This statement implies that, for an earthquake greater than the DEC level earthquake, there are no procedures and the operator will do nothing. Generally BDBA (the open-ended set of accidents) does apply to SAMG.</p>				
<p>Germany WASSC 3</p>	<p>Req. 19</p>	<p>“The operating organization shall establish an accident management programme for the management of beyond design basis accidents <u>extension conditions</u>.”</p>	<p>According to the new definitions introduced by the IAEA Safety Requirements SSR-2/1, the term ‘design extension conditions’ has superseded ‘beyond design basis accidents’. Design extension conditions</p>			<p>X DEC addressed in Footnote.</p>	

			could include severe accident conditions (see Section “Definitions” in SSR-2/1). For the sake of consistency, we recommend to harmonize the terminology used in SSR-2/1 and SSR-2/2.					
Germany WASSC 11	7.3 Additional modification	“Procedures shall be developed for use in the event of anticipated operational occurrences and design basis accidents. Emergency operating procedures and guidance for managing beyond design basis accidents extension conditions shall also be developed. ...”	See our related comment on Requirement 19.			X	DEC addressed in Footnote.	
Germany WASSC 6	5.8a	“For a site where several units are co-located, the accident management program me shall consider concurrent severe accidents on multiple units due to, for example, external hazards. ...”	Editorial (uniform spelling throughout the document).	X				
Canada	5.8a	Existing text in SSR-2/2 to be modified to: For a site where several units are co-located, the accident management program shall consider concurrent severe accidents on multiple units (including design extension conditions) due to, for example, external hazards. Resource in terms of trained and experienced personnel, equipment, supplies and external support shall be available to cope with the above.	This clause needs to consider a broader set of accidents such as: <ul style="list-style-type: none"> • All units in no core melt conditions • Some units in no core melt conditions and some units in severe accident conditions • All units in severe accident conditions 			X	DEC addressed in Footnote.	

DS462 Addenda to GSR Part 1, NS-R-3, SSR-2/1, SSR-2/2 and GSR Part 4 –
Comment resolution table draft 1, 7 June 2013

ENISS	5.8a	For a site where several units are co-located, the accident management program shall consider concurrent severe accidents <u>resulting from the same cause</u> on multiple units due to, for example, external hazards. Resource in terms of trained and experienced personnel, equipment, supplies and external support shall be available to cope with the above.	It should be clear, that accidents occur due to the same initiating event/hazard.			X	Wording related to “cause” may be restrictive (e.g. where causes on units are related are seismic, flooding, fire etc.),	
Japan	5.8c	It shall include alternative contingency measures such as supply of water, compressed air and mobile power to mitigate severe accidents, including any necessary equipment. This equipment shall be located and maintained so that it can withstand an accident.	Superfluous for ‘alternative’ and ‘contingency’.	X				
Finland	5.8c	Replace “compressed air” by “compressed gas”		X				
USA 3	5.8c	mobile electrical power sources		X				
Canada	5.8c	Existing text in SSR-2/2 to be modified to: It shall include alternative contingency measures such as supply of water, compressed air and mobile power to mitigate <u>design extension conditions (particularly to prevent severe accidents)</u> , including any necessary equipment. This equipment shall be located and maintained so that it can withstand an accident.	This clause needs to consider a broader set of accidents such as: • All units in no core melt conditions • Some units in no core melt conditions and some units in severe accident conditions • All units in severe accident conditions			X	DEC addressed in Footnote.	
Germany WASSC 7	5.8c	“It shall include alternative contingency measures such as supply of water, compressed air and mobile power to mitigate severe accidents, including any necessary equipment. This equipment shall be located and maintained so that it can withstand an accident <u>and will be readily accessible in postulated emergency conditions.</u> ”	1.) Dispensable word. 2.) Ensuring consistency with Para 6.26 of GSR Part 7 (revision	X				

			of GS-R-2; draft version DS457 dated 3 May 2013) which states “For facilities in category I, alternative supplies as contingency measures, such as the supply of water, compressed air and mobile electrical power, including any necessary equipment, that are necessary for mitigating severe emergency conditions shall be located and maintained in such a way that they can withstand and <u>will be readily accessible in postulated emergency conditions.</u> ”					
ENISS	5.8c	It shall include alternative contingency measures such as supply of water, compressed air and mobile power to mitigate severe accidents, including any necessary equipment. This equipment shall be located and maintained so that it can withstand an <u>the accident, for which it is needed.</u>	Needs clarification, that the equipment needs to withstand the postulated event, wherefore it is needed. 5.8c is also better placed after 5.8d	X				
Finland	5.8f	Add accessibility: ...” <u>accessibility and</u> adverse working conditions” ...		X				
Argentina	5.8f	<u>5.8f When developing the accident management programme and associated</u>		X				

		<u>procedures, adverse working conditions (e.g. elevated radiation levels, lack of lighting, limitations for accessing the plant from outside) for operating staff, as well as degraded operating conditions for equipment shall be taken into account to ensure expected accident management actions will be feasible.</u>						
USA 4	5.8f	(e.g. elevated radiation levels, <u>elevated temperatures</u> , lack of lighting)		X				
USA 5	5.8f	5.8f When developing the accident management programme and associated procedures, adverse working conditions (e.g. elevated radiation levels, lack of lighting) for operating staff, as well as degraded operating conditions for equipment shall be taken into account to ensure expected accident management actions will be feasible and reliable .	The additional wording is to have assurance that an action is not only possible (i.e., feasible) but that it can be implemented with some level of consistency (i.e., reliable).	X				
21.2	Requirement 5.9 Arrangements for accident management shall provide the operating staff with appropriate systems and technical support in relation to beyond design basis accidents. These arrangements and guidance shall be available before the commencement of fuel loading and they shall address the actions necessary following beyond design basis accidents, including severe accidents. In addition, arrangements shall be made, as part of the emergency plan, to expand the emergency response arrangements, where necessary, to include the responsibility for long term actions.	Requirement 5.9 Arrangements for accident management shall provide the operating staff with appropriate systems and technical support in relation to beyond design basis accidents. These arrangements and guidance shall be available before the commencement of fuel loading, <u>be tested in exercises</u> , and they shall address the actions necessary following beyond design basis accidents, including severe accidents. In addition, arrangements shall be made, as part of the emergency plan, to expand the emergency response arrangements, where necessary, to include the responsibility for long term actions.	Requirement 5.9 Arrangements for accident management shall provide the operating staff with appropriate systems and technical support in relation to beyond design basis accidents. These arrangements and guidance shall be available before the commencement of fuel loading, be tested validated in exercises <u>and then periodically tested to ensure that they support, and they shall address</u> the actions necessary following beyond design basis accidents, including severe accidents. In addition, arrangements shall be made, as part of the emergency plan, to expand the emergency response arrangements, where necessary, to include the responsibility for long term actions.					
Argentina	5.9	... These arrangements and guidance shall be available before the commencement of fuel loading, <u>be tested in periodical exercises, ...</u>		X				
Finland	5.9	Replace twice “beyond design basis accident” by “design extension conditions”	delete beyond design basis, see new definition of plant states			X	DEC addressed in Footnote.	
Germany WASSC 8	5.9	“Arrangements for accident management shall provide the operating staff with appropriate systems and technical support in relation to beyond design basis accidents <u>extension conditions</u> . These arrangements and guidance shall be available before the commencement of fuel loading, be <u>periodically</u> tested in exercises, and they shall address the actions necessary following beyond design basis accidents <u>extension conditions</u> ,	1.) With regard to design extension conditions, see our related comment on Requirement 19.			X	DEC addressed in Footnote.	

		including severe accidents. ...”	2.) Consistency with Paras 5.7 and 5.8. Arrangements for accident management require periodic or regular testing.					
Finland	Definitions	There is no need to add definition of the plant states	??					
USA 7	5.8 and 5.9	Replace the term “severe accident” and “beyond design basis accident” with “design extension conditions”	Consistency with the terminology change from SSR 2-1			X	DEC addressed in Footnote.	
USA 6	5.9	5.9.Arrangements for accident management shall provide the operating staff with appropriate systems and technical support in relation to beyond design basis accidents. These arrangements and guidance shall be available before the commencement of fuel loading, be validated through tested in exercises and then periodically tested, to ensure that they support and they shall address the actions necessary following beyond design basis accidents, including severe accidents. In addition, arrangements shall be made, as part of the emergency plan, to expand the emergency response arrangements, where necessary, to include the responsibility for long term actions.	The revision emphasizes that the systems and technical support for beyond design basis accidents should be validated through initial exercises to ensure the systems and support achieve the intended result and that subsequent testing is done to ensure that capabilities are maintained.	X				
(Proposal from Finland)	Requirement 5.24: The operating organization shall be responsible for ensuring that appropriate procedures are in place for effectively coordinating and cooperating with all firefighting services involved. Periodic joint fire drills and exercises shall be conducted to assess the effectiveness of the fire response capability.	Requirement 5.24: The operating organization shall be responsible for ensuring that appropriate procedures and competent staffing are in place for effectively coordinating and cooperating with all firefighting services involved. Periodic joint fire drills and exercises shall be conducted to assess the effectiveness of the fire response capability.						Initial proposal kept Requirement 5.24: The operating organization shall be responsible for ensuring that appropriate procedures and competent staffing are in place for effectively coordinating and cooperating with all firefighting services involved. Periodic joint fire drills and exercises shall be conducted to assess the effectiveness of the fire response capability.
Argentina	5.24	The operating organization shall be responsible for ensuring that appropriate procedures and competent staffing are in place for effectively coordinating ...		X				
45.1	Requirement 5.27: The operating organization shall establish and implement a programme to report, collect, screen, analyse, trend, document and communicate operating experience at the plant in a	Requirement 5.27: The operating organization shall establish and implement a programme to report, collect, screen, analyse, trend, document and communicate operating experience at the plant in a systematic way. It shall seek to obtain and evaluate information on relevant						Initial proposal kept Requirement 5.27: The operating organization shall establish and implement a

		systematic way. It shall obtain and evaluate information on relevant operating experience at other nuclear installations to draw lessons for its own operations. It shall also encourage the exchange of experience within national and international systems for the feedback of operating experience. Relevant lessons from other industries shall also be taken into consideration, as necessary.	operating experience at other nuclear installations to draw incorporate lessons for its own operations <u>including emergency related arrangements</u> . It shall also encourage the exchange of experience within national and international systems for the feedback of operating experience. Relevant lessons from other industries shall also be taken into consideration, as necessary.					programme to report, collect, screen, analyse, trend, document and communicate operating experience at the plant in a systematic way. It shall seek to obtain and evaluate information on relevant operating experience at other nuclear installations to draw incorporate lessons for its own operations including emergency related arrangements. It shall also encourage the exchange of experience within national and international systems for the feedback of operating experience. Relevant lessons from other industries shall also be taken into consideration, as necessary.
Argentina	5.27	The operating organization shall establish and implement a programme to report, collect and screen, analyse, trend, document and communicate operating experience at the plant in a systematic way...				X	Not necessary to group "collect and screen"	
Germany WASSC 12	Section 9 Additional comment not initially proposed by the Secretariat	General note: The paras in this Section dealing with preparation for decommissioning should be rearranged to follow a logical order. Proposal for new sequence of paras: 9.1, 9.2, 9.5, 9.4, 9.3, 9.6.	For consistency. The statements in Paras 9.4, 9.3 and 9.6 should be placed at the end since they are in particular relevant for the transitional phase prior to the commencement of decommissioning (i.e. between the permanent shutdown of operations and approval of the final decommissioning plan).		We may implement this "editorial" change at the very end of the process if we have a mandate from the Committees and the CSS			
Germany WASSC 13	Req. 33 Additional comment not initially proposed by the Secretariat	"The operating organization shall prepare a decommissioning plan and shall maintain it throughout the lifetime of the plant, unless otherwise approved by <u>according to the requirements of</u> the regulatory body, to demonstrate that decommissioning can be accomplished safely and in such a way as to meet the specified end state."	Ensuring consistency with the General Safety Requirements No. GSR Part 6 "Decommissioning of Facilities" (revision of WS-R-5; draft version DS450 dated 14 March 2013). Requirement 10 of GSR Part 6 states "The licensee shall prepare a decommissioning plan and maintain it throughout the lifetime		We may implement this "editorial" change at the very end of the process if we have a mandate from the Committees and the CSS			

			<p>of the facility, according to the requirements of the regulatory body, in order to show that decommissioning can be accomplished safely to meet the defined end state.”</p> <p>The current text in Requirement 33 is adopted from Para 5.1 of WS-R-5. Compared to this, Requirement 10 of GSR Part 6 establishes a more stringent approach.</p>				
Germany WASSC 14	9.1 Additional comment not initially proposed by the Secretariat	<p>“The decommissioning plan shall be updated in accordance with changes in regulatory requirements, modifications to the plant, advances in technology, changes in the need for decommissioning activities and changes in national policies [9]. The decommissioning plan shall also be updated as necessary in the light of operational experience gained and lessons learned from the decommissioning of similar facilities.”</p>	<p>Ensuring consistency with Para 7.5 of GSR Part 6 which states</p> <p>“... The initial plan shall be updated as necessary in the light of operational experience gained, lessons learned from the decommissioning of similar facilities, new or revised safety requirements, or technological developments relevant to the selected decommissioning strategy. If an incident occurs or a situation arises with consequences relevant for decommissioning, the initial decommissioning plan shall be updated by the licensee as soon as possible ...”</p>			<p>It is not necessary and even not recommended to duplicate the GSRs in the SSRs.</p> <p>The GSR are applicable and are then complemented by the SSRs</p>	

<p>Germany WASSC 15</p>	<p>9.6 Additional comment not initially proposed by the Secretariat</p>	<p>“The implications for safety of the activities in the transitional phase prior to the commencement of decommissioning shall be assessed and shall be managed so as to avoid undue hazards and to ensure safety. <u>During this transitional phase, operational authorization shall remain in place unless the regulatory body has approved modifications of the authorization on the basis of a reduction in the hazards associated with the plant.</u>”</p>	<p>Ensuring consistency with Para 7.8 of GSR Part 6 which states “... During the transition to decommissioning, operational authorization shall remain in place unless the regulatory body has approved modifications of the authorization on the basis of a reduction in the hazards associated with the facility.”</p>			<p>It is not necessary and even not recommended to duplicate the GSRs in the SSRs. The GSR are applicable and are then complemented by the SSRs</p>	
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