

Resolution Table DS441 Step 11 (NUSSC, NSGC Comments)

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Ricardo Waldman		Page.... of....					
Country/Organization: Argentina - ARN		Date: 23/9/13					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	Add a new paragraph after 2.5	The Design Authority is the organization responsible for approves design changes and for ensuring that the requisite knowledge is maintained /referenced to INSAG 19/.	The Design Authority should also be mentioned according to INSAG 19.	X			
2		Genera	For some Member States it will be interesting to find a section covering initiated construction projects but long-time delayed before its termination.			X	This has been covered in the Reference 24, Management of Delayed Nuclear Power Plant Project TECDOC-1110.
3	Section 3.9 third bullet	“the progress of research and development programs relating to demonstration of an acceptable design from the regulatory and safety viewpoint, if applicable”	Editorial	X			
COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: Canadian Nuclear Safety Commission		Date: Sep. 17, 2013					
Country/Organization: Canada							
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
4	Paragraphs 1.4, 2.5 and	... which will enable construction to process with high the required quality , consistent...	The use of 'high/highest' when describing 'quality' is subjective and it can		X		Change of “high quality” to “required quality”

	throughout		mean different thing to different people. It's qualitative rather than quantitative. Construction quality is defined by codes, standards, and engineering documents (such as drawings, P&IDs, bills of materials and specifications) and are therefore quantitative and measurable. Suggest using 'required quality' as used in paragraph 4.13 and to ensure consistency throughout the document.				in paragraph 1.10. As for other instance, they fit the context.
5	General	IAEA to develop, see reason.	Include provisions for the establishment of a safeguards program, and for the IAEA to have access to the site and information about site buildings and structures, operational parameters, and the flow and storage of nuclear material.			X	The content of safety guard will not be covered in this guide.
6	General	IAEA to develop, see reason.	Include provisions for the compatibility of electronic document management systems (EDMS) between the licensee, construction			X	The detailed requirement could be included in future TECDOC documents.

			organization and contractors (as defined in paragraph 2.3). Such compatibility will facilitate interface arrangements, (4.33 - 4.35) and the transfer of documents and records during construction, and to commissioning and operations for lifetime and non-permanent record keeping.				
COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: P. Contri (ENISS) Country/Organization: ENISS			Page 1 of 2 Date: 2013-09-23				
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
7	2.1	Remark that the Construction term as used in this document may be different of other uses of the word Construction, i.e. IAEA Tec Doc 1555.	For clarification			X	Relevant documents were reviewed and it was found compatible.
8	2.5	... well established safety culture in all involved parties; <ul style="list-style-type: none"> • completed site selection and evaluation process • accepted environmental plan and environmental report 	For clarification		X		It has been modified per other MS comments. The bullets are parallel.
9	2.11	The requirements for design and construction should take into consideration decommissioning	For clarification	X			Has been modified per MS comments. See revised 2.11.

		aspects as in Requirement 12 of reference 5. Special processes such as welding, weld heat treatment, non-destructive examinations, decontaminable epoxy painting should be based on certified processes documented by procedures. Moreover, processes related to civil structures, mechanical, electrical and instrumentation and control installation and testing should be documented by procedures.					
10	4.32	Add: The Licensee must ensure that the Construction organization implements a traceability procedure which is approved by the Licensee and it is flowed down to the contractors performing work.	For clarification	X			Covered in 4.33.
11	4.58	... in a systematic and timely manner should be put in place. The Licensee must ensure that the Design and the Construction organization have developed and implemented lessons learned procedures as part of their Integrated Management System. These procedures should be subject to review by the Licensee, and they should include the verification of experiences that could be applicable to the works to be performed, in such a way that successful achievements are promoted and that mistakes are prevented. Procedures should refer	For clarification		X		Paragraph 4.60 was modified. However, it is not appropriate to stipulate the requirement of establishing IMS for the vendor and design organization.

		to recognized standards and codes (IAEA, INPO, ASME)					
COMMENTS BY REVIEWER				RESOLUTION			
Reviewer: GD of....		Page....					
Country/Organization : FRANCE/MEDDE			Date: 23-09-2013				
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
12		<p>Is is not clear whether “security” in this document refers to “nuclear security” or not. Considering the context and the use of the word it is assumed that it refers to “conventional security”. Thus, there is no detail comment on the document.</p> <p>A paragraph mentioning potential interfaces between nuclear safety and nuclear security during construction might be added. If so :</p> <ul style="list-style-type: none"> - it should be explicitly stated that the word used in the document refers to “conventional security” and not “nuclear security” <p>reference to NSS 13 would be necessary.</p>				X	It is clearly referenced in this document that security means nuclear security, rather than conventional security.

COMMENTS BY REVIEWER				RESOLUTION			
Reviewer:		F. Féron		Page			
Country/Organization:		France /ASN		Date:			
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
13	1.2	This Safety Guide sets out how the objective of “achievement of the design specification and required level of safety” is <u>can be</u> ensured in practice.	Be less affirmative	X			Paragraph modified in 1.3.
14	1.3	Therefore all construction activities may have a potential impact on safety, even though there may be no nuclear material may be present during the construction	Typo	X			
15	2.1	Hence it is difficult to define a precise ‘end of construction’ but the licensee must ensure that items have been installed, inspected and tested and, <u>if required</u> , obtain an authorization from the regulatory body before carrying out significant steps in the commissioning process	As significant steps in commissioning are not defined, there may not be systematically a regulatory authorization.			X	As per the graded approach, the regulatory should control the significant steps, which is to be defined by the RB in its commissioning oversight program.
16	Figure 1	In the right box : “contracted Construction <u>organization</u> ”	It seems the word “organization” is there but does not appear when printing (might be a MS Word compatibility problem)	X			Resolved.
17	2.5	2.5 To achieve the highest level of safety in the construction of nuclear installations needs , <u>it is expected that are in place</u> :	Alternative wording		X		Modified per comments from other MS.

18	2.10 p8	2.10 A design schedule, including acceptance criteria <u>verification</u> and engineering work commensurate with....	clarification	X			
19	2.10 p9	Changes to the forward action plan should only be agreed if safety is not compromised (<u>including</u> by time and cost pressures resulting from late completion of design work).	Clarification		X		Modified per comments from technical editor.
20	2.11	Make the last sentence (“The requirements for design and construction should take into consideration decommissioning aspects as in Requirement 12 of reference 5.”) a separate paragraph	The topic is not the same as the one addressed in previous sentences in the paragraph.			X	This sentence can be fitted into this paragraph.
21	2.15 p11	Make the last sentence (“To ensure adequate mitigation of potential environmental effects and waste generation related to construction activities at the site, environmental monitoring and protective measures and waste minimization processes should be in place.”) a separate paragraph, for example before 2.18	The topic is not the same as the one addressed in previous sentences in the paragraph.			X	This paragraph talks about hazard, environment, and the sentence fits into this.
22	2.18 p 12	In other cases, normal construction processes and equipment (<u>i.e. used in other hazardous industry or civil engineering and corresponding to the current state of the art for such construction</u>) can be used during the construction;	Clarification. It is important to use state of the art techniques, even if, for the “other cases”, they are not specific to nuclear business		X		Sentence modified, and normal construction processes covers the listed example.
23	2.18 p13	- Construction safety management manual including radiation source handling (<u>used for example for non destructive testing</u>);	clarification			X	Too many details then.

24	3.10 p17	If there are non-conformances, an action plan to correct deficiencies may <u>is likely to</u> be required by the regulatory body (if not already <u>provided by the licensee, construction organization or contractor</u>) to allow progress beyond witness or hold points.	Clarification		X		Modified per technical editor comments.
25	4.1	Since construction work has significant impact on the future safety of nuclear installations, an integrated management system during covering construction ensures that safety matters are not dealt with in isolation but are considered within the context of all construction activities.	The management system is not dedicated to construction but addresses construction			X	NS-G-3.5 has specified the requirement for a construction IMS, and normally, construction phase IMS will be dedicated to construction.
26	4.16 (l)	(l) Through auditing of procedures and surveillance of work activities, ensuring that adequate documentation is being produced to demonstrate such things as due diligence, compliance, <u>non-conformance report filing</u> and corrective actions.	Ensuring non-conformance are identified and reported is one topic to address when audits or surveillance are performed...		X		Modified as per comments from other MS.
27	4.44	4.44 The licensee should be notified of the proposed contractors for supply or manufacture of items important to safety, or to <u>for providing</u> safety significant services.	Alternative wording	X			

28	4.48 p37	An initial kick-off meeting with the attendance of all parties, including the licensee and regulatory body , should be utilized to confirm all these issues.	The regulator does not have to attend to such meeting on a general basis. He might observe such meeting as part of inspection or review records of such meetings in inspections.	X			
29	4.51		Is “tool-box meeting” a term understandable for non native-English speakers ?	X			
30	4.55	The process for obtaining, <u>when required</u> , regulatory approval of safety significant corrective and preventative action should be in place.	Clarification (regulator approval may not be systematically needed)			X	As per the graded approach, significant step when defined by the RB should be controlled.
31	5.9	Special consideration should be given to the form of cast-in items and plant fixings as post-drilling of concrete for the installation of plant fixings may be unacceptable and undermine safety and should <u>therefore not be the preferred practice and should be done only in</u> an exceptional case after due considerations.	Referring to exceptional cases may be too strong.			X	This has been a weakness in the construction process and it is intend to emphasize here.

32	5.26	5.26 The licensee should specify, <u>whenever relevant</u> , the allowable environmental conditions, such as temperature, pressure, humidity, rain, snow, dust, dirt, airborne salt, wind, and electromagnetic conditions during construction work including manufacturing, assembly and transportation. The construction organization should periodically monitor the conditions to confirm that conditions they are within allowable limits. Such limits need only be developed for conditions applicable to the specific work location and work activity.	Alternative wording			X	The whole paragraph covers the proposed change.
33	Sentence before 5.46	Have the paragraph numbered	Typo	X			
34	5.47 p53	Other critical <u>hazardous</u> facilities may also be present such as those for spent fuel storage in fuel pools or dry cask storage.	“Critical” is a bit too strong....			X	Hazardous facilities refer to more conventional facilities.
35	5.47 p54	For instance, the consequences of potential contamination (<u>dust</u> , <u>chemical contamination</u> , <u>radioactive contamination...</u>) from a construction site to operating units as well as from operating site to construction site should be assessed and its contamination should be monitored, if necessary.	Needs clarification as a construction site is less likely to generate radioactive contamination...	X			

COMMENTS BY REVIEWER

Reviewer: **Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)** (with comments of GRS)

RESOLUTION

Country/Organization: Germany			Date: 2013-09-19					
Comment No.	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection	
36	General	The whole document should be checked with regard to harmonization of the notation of references. At the moment, different notations are used. It is proposed to put the title of the reference document in quotation marks and the reference number in square brackets, e.g.: Safety Requirements “The Safety of Nuclear Power Plants: Design” [5]. Candidates for harmonization can be found in the paragraphs 1.2, 2.11, 2.15, 3.1, 4.10, 4.13, 4.17, 4.26, 5.8 and 5.45.	Harmonization throughout the document is required.	X				
37	General	Please use uniform spelling in the whole document, i.e. either <ul style="list-style-type: none"> • ‘licence’ (Paras 2.7, 2.20, 5.2) or ‘license’ (Paras 2.7, 4.12); • ‘analysed’ (Para 2.14) or ‘analyzed’ (Para 5.43); • ‘as-built’ (Paras 2.10, 4.30, 4.39, 4.48, 5.13) or ‘as built’ (Paras 4.26, 4.31). 	Harmonization throughout the document is required.	X				
38	1.1	last sentence: “Appendix V of Ref. [3] provides some guidance on the specific processes to be developed <u>covered in the management system</u> for the construction stage.”	Clarification.		X		Modified per technical editor comments.	
39	1.2	last but one sentence: “... Requirement 11, Provision for construction says “Items important	Editorial (add quotation mark at the end of citation).	X				

		to safety ... and the required level of safety.” This Safety Guide ...”					
40	1.3	last sentence: “... even though there may be no nuclear material may be present during the construction.”	Grammar.	X			
41	1.5	1 st sentence: “This Safety Guide is applicable to the construction stage of a new nuclear installation and the major <u>design</u> modifications/refurbishments of an existing nuclear installation, ...”	Wording. Use of singular would imply that there can only be one major modification. Compare also with the statement in the first sentence of Para 1.2.		X		Modified.
42	1.7	5 th bullet point: “... in compliance with the licensee’s quality and safety requirements.”	Editorial.	X			
43	1.7	last sentence: “The contractors referred to above may be a construction organizations, technical support organizations and/or consultants ...”	Editorial (the other organizations in the list are also mentioned in the plural).	X			
44	1.8	“In this Safety Guide, it is considered that all relevant safety requirements must be complied with in accordance with all the graded approach.”	Editorial.	X			
45	1.9	2 nd sentence: “The IAEA’s Nuclear Security Series provides guidance on security issues and ...”	Grammar.			X	Plural
46	2.1	3 rd sentence: “Guidance on these tests can be found in <u>the</u> Annex of Ref. [12].”	Wording.	X			
47	Figure 1	Proposed title: “ <u>Typical organizational structures in</u>	The title of Figure 1 is missing in the document.		X		Modified per comments from

		the relationship between licensee, constructing organization and contractors.”	Our proposal is provided here.				other MS.
48	2.6	3 rd sentence: Assign a footnote to the term ‘long lead items’ with the following text of the footnote: “The term ‘long lead items’ refers to those components or equipment for which the times to design and manufacture are the longest throughout the construction project. In nuclear power plants, major equipment such as reactor pressure vessels, steam generators, reactor coolant pumps and turbine generators are long lead items. Their delivery typically requires 60 months [25]. Usually, the contracting process precedes the design and manufacturing and matches the lead time of the major equipment delivery.”	A short definition or explanation of the term ‘long lead items’ should be provided here because it is neither included in the IAEA Safety Glossary (2007 Edition) nor generally known. Our proposed text is partially taken from the IAEA Nuclear Energy Series No. NP-T-2.7 (see Section 2.4.3) in a slightly modified form.			X	The items with long-lead time is a common known industry word.
49	2.6	4 th sentence: “Such activity should be brought to the notice of agreed with the regulatory body in advance to implement an appropriate inspection programme for these items. ”	From a regulatory point of view, the current formulation is too weak. In fact, all long lead items are SSCs important to safety. The Safety Guide GS-G-1.3 recommends to implement a regulatory inspection programme in the design and construction of a nuclear installation in order to verify that construction activities		X		Such activity should be agreed by the regulatory body.....

			associated with manufacturing and installing SSCs and items are conducted in accordance with regulatory requirements and in conformity with general safety objectives (see Appendix A, para A.4). If the licensee starts to manufacture SSCs without prior agreement of the regulatory body, the latter will be deprived of the possibility to implement an appropriate inspection programme in due time.				
50	2.12	“... to ensure worker and public safety in the case of an accident occurring at or affecting the construction site.”	Wording.	X			
51	2.13	3 rd sentence: “Particular attention should be paid to security arrangements on sites with existing nuclear sites installations .”	Wording. Compare with the first sentence in Paras 2.14 and 2.17.	X			
52	2.14	last sentence: “Further guidance on interaction with existing facilities is provided in paras. 5.58 5.47 – 5.50 5.49 .”	Wrong paras are cited.	X			
53	2.17	“For sites with existing nuclear installations, emergency preparedness should take into account the followings: ...”	Editorial.	X			
54	2.18	last bullet point: “Plan for radiation safety of workers	Wording.	X			

		if relevant (for construction at sites with existing nuclear installations);”					
55	2.21	“It is recognized as good practice that the interaction with stakeholders of all sorts kinds is continued ... by both the regulatory body and the licensee [19].”	Wording.	X			
56	3.1	1 st sentence: “Four interrelated IAEA Safety Guides provide recommendations on satisfying the requirements in Ref. [9] [10] concerning particular responsibilities and functions of the regulatory body in the regulation of nuclear facilities.”	Wrong reference is cited. Text refers to GSR Part 1.	X			
57	3.9	“During construction, the regulatory body should review, assess and inspect as appropriate; ...”	Editorial.	X			
58	4.16 (g)	“Ensuring that work that it carries out and that carried out by themselves or by its contractors is in accordance with procedures, specifications and drawings, ...”	Grammar.		X		Partly modified.
59	4.17	“... provided in paragraphs 5.43–5.60 of the Safety Guide “The Management System for Nuclear Installations” [3] and in the Technical Report “Project Management in Nuclear Power Plant Construction: Guidelines and Experience” Ref. [25].”	Consistency with the notation of references in other parts of the document.	X			
60	4.29	2 nd sentence: “If the proposal has an implication for safety or ; security during commissioning, operation or decommissioning, its resolution	Clarification. The terms ‘safety’, ‘security’ and ‘decommissioning’ cannot be grouped together	X			

		should involve ...”	because they do not belong to the same category of terms. In the context of this sentence, ‘safety’ and ‘security’ relate to subsequent stages in the lifetime of a nuclear installation.				
61	4.31	“... (g) Design change and non-conformances documentation; (h) Equipment qualification details.”	Editorial.	X			
62	4.46	last sentence: “... the effective management of the interfaces between the licensee; the construction organization and its contractors; ...”	Clarification. It is understood that there is only one licensee for the nuclear installation to be constructed, and that the interfaces between the licensee, the construction organization and its contractors need to be addressed.	X			
63	4.47	“The extent of oversight of the contractor’s activities by the licensee and/or the construction organization should be proportionate and based on the graded approach. The choice It will depend on: ...”	Clarification. The subsequent bullet points and the last sentence of this paragraph make clear that the introductory statement in the second sentence refers to the extent of oversight, not to the choice/selection of the contractors.		X		Modified per other MS comments.
64	4.48 (d)	“... evidence that the ‘as-built’ items meets the safety and quality requirements;”	Grammar.	X			

65	5.8	1 st sentence: “The designer should ensure that the design can be constructed using established processes [see Ref. [5] [4] Requirement_11].”	Wrong reference is cited. Text refers to SSR-2/1.	X			
66	5.27 – 5.30	Proposed heading of the subsection: “Cleanliness and Foreign Material Control and Exclusion ”	In paragraphs 5.27 – 5.30, there is no statement on the exclusion of material at all. Consequently, the words “and exclusion” should either be deleted in the heading or some guidance should be included in this subsection.		X		Partly modified per comments from technical editor.
67	5.47	5 th sentence: “For instance, the consequences of potential contamination from a construction site to operating units facilities as well as from an operating site facility to the construction site should be assessed and its contamination level should be monitored, if necessary, to ensure the protection of workers, the public and the environment. ”	Clarification. The term ‘operating unit’ is usually associated with nuclear power plants. It is understood that the recommendations provided in this paragraph also apply to other nuclear facilities.		X		Partly modified per comments from technical editor.
68	5.49	1 st sentence: “For nuclear installations adjacent to each other or those that share common buildings or services, ...”	Harmonization with the wording used in the second sentence of this paragraph.	X			
69	5.49	2 nd sentence: “In utilizing resources of existing nuclear installations such as water, electric power, compressed air , fire protection, emergency medical services and security, clear interfaces should be defined ...”	For the sake of completeness. Compressed air systems serve items important for safety, too.	X			

70	5.49	last sentence: “Procedures shall <u>should</u> be put in place to ensure that the licensee(s) of existing facilities nuclear <u>installations</u> endorse(s) a change of status for those common buildings or services before implementation by the construction organization.”	1.) In Safety Guides usually recommendations (or “should” statements) are provided, while “shall” statements are restricted to Safety Requirements. 2.) Harmonization with the wording used in the second sentence of this paragraph. In some cases, multiple licensees on the same or nearby site may exist, as stated in the Footnote No. 3 to Para 2.14.	X			
71	Ref. [5]	“... Safety of Nuclear Power Plants: Design, IAEA Safety Standards Series No. SSR-2/1, IAEA, Vienna (2012).”	Missing year of publication.	X			
72	Ref. [10]	“... Governmental, Legal and Regulatory Framework for Safety, IAEA Safety Standards Series No. GS-R <u>GSR</u> Part 1, IAEA, Vienna (2010).”	Wrong series number.	X			
73	Ref. [11]	“... IAEA Safety Glossary, Terminology Used in Nuclear Safety and Radiation Protection, 2007 Edition, IAEA, Vienna (2007).”	Editorial.	X			
74	Ref. [24]	“... <u>Use of External Experts by</u> Support for the Regulatory Body, GSG-4 Safety Standards Series No. GS-G-1.4 <u>GSG-4</u> , IAEA, Vienna (2013).”	Wrong title and series number.	X			
75	Ref. [25]	“... Project Management in Nuclear Power Plant Construction; <u>Guidelines and Experience, IAEA</u>	Complete title; add publication series.	X			

		Nuclear Energy Series No. NP-T-2.7, IAEA, Vienna (2012).					
<p style="text-align: center;">COMMENTS BY REVIEWER</p> Reviewer: Pageof Country Organization; Japan/NRA Date 2013/ 9/20				<p style="text-align: center;">RESOLUTION</p>			
Comment No.	Para./Line No.	Proposed new text	Reason	Accepted	Accepted but modified as follows	Rejected	Reason for modify/rejection
76	5.51	Waste materials and remaining consumables used or generated on site during construction work should be removed and <u>disposed in an appropriate way</u> by the contractors after the work is complete.	Collecting, removal and disposal of waste material should be performed consistently here.	X			
<p style="text-align: center;">COMMENTS BY REVIEWER</p> Reviewers: United States of America Country/Organization: U.S. Nuclear Regulatory Commission Date: 24 September 2013				<p style="text-align: center;">RESOLUTION</p>			
Comment No. / Reviewer	Para/Line No.	Proposed new text	Reason	Accepted	Accepted, but modified as follows	Rejected	Reason for modification/rejection
1	2.1	Tab error in section 2.1; fix spacing.	Editorial	X			
77	2.2, Sent. 4	The licensee should retains prime responsibility for safety and the use of contractors does not allow this responsibility to be delegated [14].	The use of ‘should’ in the first part of the sentence appears weaker than the intent conveyed in the second part of the sentence.	X	Note: This change is already included in the edited draft posted 9/24/13.		
78	2.5, bullet 2	including <u>a-an independent</u> regulatory body	An independent regulatory body is essential. There have been international examples where the lack	X			

			of independence of the regulatory body adversely affected construction oversight.				
79	2.12		Suggest clarifying that this refers to industrial safety, not radiological emergency planning.			X	The adjacent operating facilities may have risks associated with radiological emergency planning aspect.
80	2.20	Site preparation activities, such as ground <u>geologic</u> investigation,	There are numerous examples that can be used, but the term “ground investigation” is not appropriate.	X			
81	3.2	The R regulatory oversight <u>program</u> should satisfy verify to the regulatory body that the licensee is in compliance with the conditions set out, for example, in <u>of</u> the <u>license/authorization</u> or <u>and</u> regulations.	The term “satisfy” is very arbitrary. It implies a flexibility of some sort. Regulators “verify compliance” with regulations.		X		Modified per comments from other MS.
82	3.5	“The regulatory body should develop requirements or guidelines governing its oversight of construction activities according to a graded approach.”	The term “graded approach” is used without discussion or reference. Either footnote a discussion, reference another document, or reference 4.8 of this document, if 4.8 is revised as suggested - see comment 10.	X			
83	3.6	“The regulatory body should implement an oversight program consistent with the construction program provided by the licensee as	Recommend deleting this paragraph or adding more detail. The meaning of, “an oversight program		X		Modified per comments from other MS.

		part of its application for construction authorization.”	that is consistent with a construction program” is unclear.				
84	3.10, Sent. 2	These should be identified and communicated to the licensee as early as possible to allow consideration in planning and scheduling activities. <u>If hold points are used, the regulatory body should take care to maintain its independence from the construction project.</u>	The real concern with hold points is that they make the regulator part of the construction process. By signing off on certain hold points, the regulator becomes a quality assurance organization instead of an independent regulator. Hold points can be used by a regulator, but they should be used sparingly and should probably be tied to the license, such as adding a license condition for critical construction aspects.			X	This is a common practice in the industry.
85	3.13, Sent. 2	The regulatory body should establish a process to Arrangements should be made for the dissemination of the lessons learned within the regulatory body and to authorized parties and other relevant stakeholders.	“Process” is more of a regulatory term than “arrangements.”	X			
86	4.8	“A graded approach based on the relative importance to safety of each item...”	“Graded approach” needs some discussion or reference. A definition of graded approach needs to be added to the text, a footnote, or a reference.	X			
87	4.13 bullet 3	Taking and maintaining ownership of the safety ease <u>basis</u> ...	It seems that what is meant here is “safety	X			

			basis.” Safety basis is the more commonly used term.				
88	4.39 j	“(j) All temporary devices should be identified.”	This statement needs some elaboration. It is not clear what it means.	X			All temporary devices used during construction should be identified.
89	4.41, Sent. 1	The licensee and construction organization should ensure that sufficient suitably qualified and experienced people are available as required by the construction program. <u>the construction staff are properly trained and qualified to perform the work they are assigned.</u>	The sentence, as written in the document was not correct.		X		Modified per comments from technical editor.
90	4.51	Each contractor should implement schedule-regular tool box meetings to discuss work process...	The term “tool-box meetings” is a slang term and should not be used in a regulatory guide.	X			
91	4.54, Sent. 1	A system which collects all identified non-conformances, records and processes them should be implemented. <u>The construction organization (licensee) should have a system in place which will record and track all non-conformances to ensure they are corrected.</u>	The sentence as written does not clearly identify who should have the system and why it is important. The importance is tracking, to ensure correction.		X		A system should be established by the licensee
92	4.55, Sent. 1	Non-conformances of safety significance should be treated as events by the licensee, and resolved via a corrective and preventative action program in a graded manner.	The existing sentence has some challenging aspects. First, the industry term is “corrective action program.” I am not aware of a “preventative action program.”	X			

			Also, for items of safety significance, I don't believe a graded approach is appropriate. A graded approach would be used for evaluating a non-conformance related to a non-safety significant issue. All issues with a safety significance attached to them should be handled in a similar manner.				
93	4.57, Sent. 2 & 3	“Implementation of <u>preventative corrective</u> actions...” “These pending non-conformances and <u>preventative corrective</u> actions...”	The term is “corrective actions.” The phrase “preventative actions” is not commonly used in the nuclear industry.	X			
94	General comment	Concerning use of the term, “construction organization/licensee”	The terms “construction organization” and “licensee” are used throughout the document but should be discussed early on in more detail. The construction organization could be the licensee or a contracted company. In the end, the licensee has all of the responsibility, regardless of who builds the plant.			X	It is detailed in the paragraph 2.2.