Parks, Jazel

From:

Burke, John

Sent:

Friday, June 04, 2010 1:12 PM

To:

Lin, Bruce

Subject:

FW: RG 1.54 public comments

Attachments:

Staff Responses to Public Comments.docx

My input on comment resolution, without Brian's input below.

John Burke, PE Senior Engineer (301) 251-7628 john.burke@nrc.gov

From: Lin, Bruce

Sent: Thursday, June 03, 2010 11:26 AM

To: Burke, John **Cc:** Koshy, Thomas

Subject: RG 1.54 public comments

FYI, attached table contains all comments received plus Brian Sheron's comment below. I will prepare our responses in the next couple weeks.

Bruce

"This doesn't work for me. We should be saying that while the ASTM standard provides reasonable assurance that coatings left in service subsequent to a visual inspection will remain adhered under accident conditions, it does not provide conclusive assurance that degraded coatings will be detected by visual inspection. Therefore, the standard is acceptable for use in examine coating adhesion provided licensees also demonstrate that any degraded coating that might detach during accident conditions will be in a form (e.g. chips) such that they will not be transported to the sump."

Bruce Lin Mechanical Engineer Office of Nuclear Regulatory Research 301-251-7653 bruce.lin@nrc.gov



RG 1.54 Rev. 2 Comparison of ASTM standards

ASTM Std		Comments		Resolution of Differences
Rev 1	Rev 2	Section	Specific Comment / Differences	RES Resolution
D3843-00	D3843-00 (Reapproved 2008)		Reapproved for 08. No change has been made	N/R
D3911-95	D3911-08	2 3 4 5 7 7.2.4 9	D3911-08 added D1193, D4538 & D 5144 to the referenced documents D3911-08 added reference to D4538 for terminology Section 4.2 added to allow licenses develop appropriate acceptance criteria Sections 5.4, 5.5 & 5.6 added Minor changes in procedure Spray solution temp requirement (70-80 Deg F) is removed No acceptance criteria specified. The license holder is responsible for establishing acceptance criteria Section 11.3 regarding significant/nonsignificant areas deleted	Differences in references are acceptable Technical edits Add acceptance criteria similar to D3911-95 Technical edits Changes are acceptable OK, Add acceptance criteria similar to D3911-95 Acceptable
D5144-00	D5144-08	Intro 2.1 3 4.4 4.4.3 4.5 5.5.1 5.7.1 5.8 6 6.4 7 7 QA	Minor changes in last paragraph Several references added including D3911, D3912, D5163, D7167, D7230, D7234, D7491& E684 Section 3.2 of 00 version deleted Section 4.4.2.3 added for coating condition assessment Added D7167 & D7230 4.5.2 added Split 5.5.1.1 into two parts, steel & concrete Acceptance criteria changed from 3 tests to 4 of 5 tests Added reference to test method E684 Section 5.8 added Deleted section 6.1 Added reference to ASTM MNL8 Section 7 regarding thermal conductivity moved to 5.8 Section 7.2 added	Technical edits Differences in references are acceptable. Ok, definitions are in D4538 OK, consistent w/ANSI 5.12

D5139-96	D5139-10	2.1 2.2 3.2 4.3 7	Updated reference list Removed reference to SSPC standards New paragraph added to expand the usage of this standard Changed surface preparation requirements Changed section heading to "Surface Preparation", added instructions to specify surface preparation requirements	Changes are acceptable
D4082-95	D4082 -10	1.1 3 5 7.3 8 10	Scope changed to include Service Level III Added reference to D4538 for terminology Added "as approved by licensee" Paragraph revised Split examination and reporting into two separate sections Revised to allow licensee to specify acceptance criteria	
D4537 - 96	D4537 – 04a	1 2 3 4 5.3 6	1.2 and 1.3 are added together in 2004 version D 5144 added Added definitions for Level I, II, and III inspection and safety related coating system Section 4.5 added Added last sentence to provide more clarity Minor wording changes in several places, specifically section 6.4 added Level III shall have verifiable experience in the U.S. commercial nuclear power industry Minor wording changes	No change in intent of scope, therefore acceptable.
D5498 - 94	D5498 - 09	1 2 2.2 2.3 2 3 7	Section 1.3 added Added several standards to referenced document from D5163 to D7234 Section 2.2 added providing reference to ASME codes Added SP11 to SP15 and VIS 3 – VIS 5 Sections 2.5 & 2.6 added Wording changes in several places, no change in intent Section 7 of 09 version replaced Sections 7 & 8 of 94 version, Table 1 is deleted	Changes are acceptable
N/A	D7108-05	~	New standard added for establishing qualifications for nuclear coating specialist	Ok
D4227-95	D4227 -05		No change	N/R

D4228-95	D4228-05		No Change	N/R
D4286-96	D4286 - 08	2.2 3.1.4	Added NQA-1 to referenced document Added reference to NQA-1	Changes acceptable
D5163-91	D5163 – 08	Title 1.2 1.3	Title changed Last sentence, Level II changed to Level III Added for 08 version	
		2	Several changes in referenced document. For example: 08 version does not have F1130 – F1133. D4121 is not in 08 version SSPC-VIS2 is in 05 version and not in 91 version. 2.4 NACE Standard is in 91 version and not in 08 version.	Differences in references are acceptable.
		3	In '08 version 3 is terminology, in 91 version 3 is significance of use.	Does not affect technical content.
		5 8	Minor wording change and Section 5.5 was added Section 8 is monitoring procedure instead of premonitoring procedure in previous version.	Technical edit
		9	Personnel qualifications and requirement changed significantly from previous version.	Do we agree with changes?
		10.3 10.4	Reference to F1130 – F1133 and D4121 deleted Added D6677 as an acceptable adhesion test method Deleted continuity testing (NACE RP0188-88) Section 11 (Evaluation) of 91 version was deleted	
	D7167-05		New standard added for performance monitoring of SL III linings	Ok
D4541 - 95	D4541 – 09	1.1 1.2 2 6.5 6.7	Scope changed to metal only Added reference to D7234 Added para 1.2 and Note 2 Added D7234 & D691 to referenced document Note 4 is included after 6.5 Added discussion on scoring for thicker film coating and	All changes are acceptable
		7.1 8 10	note 5 Added test methods E & F, test method A eliminated Added 8.5 This section has been revised significantly.	

		Annexes		
D3359-95	D6677-07		Test by adhesive tape is being replaced by knife test based on input from NRR & NUCC.	D6677 Knife test is considered more repeatable/reliable than the tape test.
•	D7234-05		New standard added for pull-off adhesion strength on concrete	Ok .
D3912-95	D3912-10	Title 1.1 1.2 & 1.3 2 3 6 7 Fig. 1	Added linings to the title Changed to reflect coatings use in Service Level 1 & II Sections 1.2 and 1.3 added to clarify this test method is intended to be a screening test and it addresses two exposure intervals (short term and long term). Added D7230 Section revised Section revised. New section included procedures for short term tests and long term tests New section divided into short term tests and long term tests Fig 1 deleted	
D5962-96	D7491-08			
D4538-95	D4538 - 05		05 version included scope, referenced document and terminology. Added/deleted definitions as appropriated.	OK
EPRI- 109937 April 1998	EPRI-1019157 Dec. 2009 "Guideline on Nuclear Safety- Related Coatings" Revision 2, (Formerly TR- 109937 and 1003102)	Scope Chap 1 Chap 2 Chap 3 Chap 4	Scope of both reports is the same. Entire Section 1.4 added to discuss Implementation of the 10 CFR 50, Appendix B Quality Assurance (QA) Program for Coatings. No technical differences identified New section added that discusses structural restoration Section 4.1.2.4 "Interpretation of Test Reports" added.	No concerns/comments with Chapter 1& 2 Do not agree. This provides acceptable guidance for content of a test report.

	Section 4.1.4.1 "Thermal Conductivity was deleted.	Appropriate information is in Section 4.1.2.2
	No significant technical changes were identified in the remainder of chapter 4.	
Chap 5	No concerns identified. EPRI NP-5652 is endorsed by GL 89-02.	
Chap 6,	No concerns identified.	
Chap 8	Section 8.13 was added to discuss life extension and the GALL. No concerns with this new section.	
Chap 9	No concerns identified	
Chap 10	No concerns identified.	