PMSTPCOL PEmails

From: Foster, Rocky
Sent: Tuesday, August 16, 2011 8:12 AM
To: Chappell, Coley; Head, Scott; wemookhoek@stpegs.com; Elton, Loree; Tai, Tom; Eudy, Michael; Chakrabarti, Samir; Morante, Richard J; jeprice@stpegs.com; Agles, James; Wei, Xing
Cc: Wunder, George; STPCOL
Subject: STP Open Items Telecom Agenda for August 17, 2011
Attachments: OI List_8-17-11.pdf; draft RAI 5987.docx; BNL Initial Feedback 06-23-11 RAI Responses - Updated on 081011 rjmRev1.docx

Good Morning,

NOTE to Bernie: Please enter the Open Items Master List file (OI List_8-17-11.pdf) into ADAMS and provide the ADAMS accession number to Cheri Nagel and myself so as to be included in the meeting summary for August 17, 2011.

The NINA/STP Open Items telecom is schedule for August 17, 2011. The morning session is from 09:00 am to 11:00 am and the Chapter 3 afternoon session is from 2:00 pm to 4:00 pm.

This is a standing bridge line available every Wednesday from 09:00 am to 11:00 am through December 28, 2011.

Conference Line - 888-455-2563
Pass Code - 84624

09:00 am – 11:00 am Agenda:

- Section 12.2.1.2.10, change from area radiation monitors to process radiation monitors
- Chapter 9 draft RAI 5987 (attached)
- Continuation of Chapter 9 fuel rack structural review RAI responses discussion
- OI Master List (attached)
- Comments/Questions

For the August 17, 2011, Wednesday afternoon call, it will start at 2:00 pm with EMB2, followed by SEB2 at 3:00 pm.

For those who are out of the office but want to participate on this call:
Conference Line - 866-803-2146
Pass Code - 7482641#

Agenda items:

From 2:00 pm to 3:00 pm – T-10C01:

1. New information on HCU spec in the virtual reading room
2. Staff feedback on “white-paper” related to ACSTIC2 V&V (RAI 5952)
3. Status of RAI 5870 response (FMCRD spec)

4. Schedule of revised responses on Chapter 3.9.2 to incorporate staff comments (6) on technical report and latest FSAR markup
5. Miscellaneous items

From 3:00 pm to 4:00 pm – T-10C01:

1. Ch 3.7/3.8 status
2. RAI 5919 – II/I
3. Location and information on the Radwaste tunnel
4. RAI 5991 on RWB-IIb supporting document
5. Update Table 3.2-1 to reflect RWB classification and removal of new fuel rack and possible typo regarding P8 and U20
6. Potential agenda item - NRC feedback on MSM vs SM confirmatory analysis
7. Miscellaneous items
8.

Thanks,

Rocky D. Foster
Project Manager
US Nuclear Regulatory Commission
Office of New Reactors
Division of New Reactor Licensing
BWR Projects Branch (NGE)
Mai Stop T6D38M
(301) 415-5787
rocky.foster@nrc.gov

Hearing Identifier: SouthTexas34Public_EX
Email Number: 2996

Mail Envelope Properties (26E42474DB238C408C94990815A02F0965A201382D)

Subject: STP Open Items Telecom Agenda for August 17, 2011
Sent Date: 8/16/2011 8:12:02 AM
Received Date: 8/16/2011 8:12:05 AM
From: Foster, Rocky

Created By: Rocky.Foster@nrc.gov

Recipients:
"Wunder, George" <George.Wunder@nrc.gov>
Tracking Status: None
"STPCOL" <STP.COL@nrc.gov>
Tracking Status: None
"Chappell, Coley" <ccchappell@STPEGS.COM>
Tracking Status: None
"Head, Scott" <smhead@STPEGS.COM>
Tracking Status: None
"wemookhoek@stpegs.com" <wemookhoek@stpegs.com>
Tracking Status: None
"Elton, Loree" <leelton@STPEGS.COM>
Tracking Status: None
"Tai, Tom" <Tom.Tai@nrc.gov>
Tracking Status: None
"Eudy, Michael" <Michael.Eudy@nrc.gov>
Tracking Status: None
"Chakrabarti, Samir" <Samir.Chakrabarti@nrc.gov>
Tracking Status: None
"Morante, Richard J" <morante@bnl.gov>
Tracking Status: None
"jeprice@stpegs.com" <jeprice@stpegs.com>
Tracking Status: None
"Agles, James" <jaagles@STPEGS.COM>
Tracking Status: None
"Wei, Xing" <weix@bnl.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	2418	8/16/2011 8:12:05 AM
OI List_8-17-11.pdf	279072	
draft RAI 5987.docx	20254	
BNL Initial Feedback 06-23-11 RAI Responses - Updated on 081011 rjmRev1.docx	26396	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal

Expiration Date:
Recipients Received:

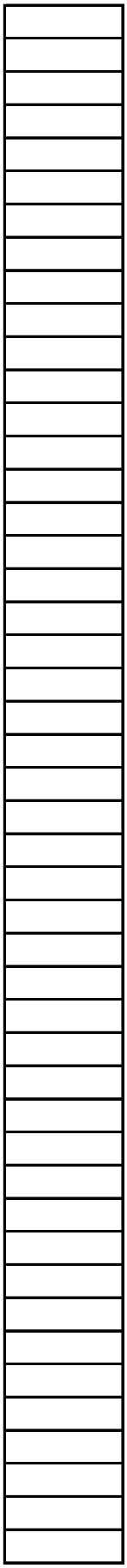
2011 NINA/STP COLA Item Status Counts

OPEN	**01/12/2011**	**01/19/2011**	**01/26/2011**	**02/09/2011**	**02/16/2011**	**02/23/2011**	**03/04/2011**
NRC action	45	34	37	34	31	36	22
STP action	20	25	22	22	20	28	37
	65	59	59	56	51	64	59
CONFIRMATORY	**01/12/2011**	**01/19/2011**	**01/26/2011**	**02/09/2011**	**02/16/2011**	**02/23/2011**	**03/04/2011**
NRC action	2	2	2	2	2	2	2
STP Action	81	138	154	152	154	155	147
	83	140	156	154	156	157	149
CLOSED	**01/12/2011**	**01/19/2011**	**01/26/2011**	**02/09/2011**	**02/16/2011**	**02/23/2011**	**03/04/2011**
	53	92	92	95	101	101	116
OPEN	**03/10/2011**	**03/16/2011**	**03/23/2011**	**03/30/2011**	**04/06/2011**	**04/13/2011**	**04/20/2011**
NRC action	52	31	31	35	38	37	35
STP action	13	25	24	22	20	17	17
	65	56	55	57	58	54	52
CONFIRMATORY	**03/10/2011**	**03/16/2011**	**03/23/2011**	**03/30/2011**	**04/13/2011**	**04/13/2011**	**04/20/2011**
NRC action	2	2	2	2	2	2	2
STP Action	82	83	84	84	84	84	86
	84	85	86	86	86	86	88
CLOSED	**03/10/2011**	**03/16/2011**	**03/23/2011**	**03/30/2011**	**04/06/2011**	**04/13/2011**	**04/20/2011**
	116	118	118	118	118	122	124
OPEN	**04/27/2011**	**05/04/2011**	**05/11/2011**	**05/18/2011**	**05/25/2011**	**06/01/2011**	**06/08/2011**
NRC action	28	29	6	6	11	11	11
STP action	24	23	8	16	11	11	11
	52	52	14	22	22	22	22
CONFIRMATORY	**04/27/2011**	**05/04/2011**	**05/11/2011**	**05/18/2011**	**05/25/2011**	**06/01/2011**	**06/08/2011**
NRC action	2	2	2	2	2	2	2
STP Action	86	90	95	95	95	96	96
	88	92	97	97	97	98	98
CLOSED	**04/27/2011**	**05/04/2011**	**05/11/2011**	**05/18/2011**	**05/25/2011**	**06/01/2011**	**06/08/2011**
	124	124	124	124	124	124	124
OPEN	**06/15/2011**	**06/22/2011**	**06/29/2011**	**07/06/2011**	**07/13/2011**	**07/20/2011**	**07/27/2011**
NRC action	11	11	11	11	19	19	19
STP action	11	11	11	11	6	8	8
	22	22	22	22	25	27	27
CONFIRMATORY	**06/15/2011**	**06/22/2011**	**06/29/2011**	**07/06/2011**	**07/13/2011**	**07/20/2011**	**07/27/2011**
NRC action	2	2	2	2	2	2	2
STP action	96	96	96	96	96	96	96
	98	98	98	98	98	98	98
CLOSED	**06/15/2011**	**06/22/2011**	**06/29/2011**	**07/06/2011**	**07/13/2011**	**07/20/2011**	**07/27/2011**
	124	124	124	124	125	125	125

2011 NINA/STP COLA Item Status Counts

OPEN	**08/03/2011**	**08/10/2011**	**08/17/2011**	**08/24/2011**	**08/31/2011**		
NRC action	20	21	21				
STP action	7	6	6				
	27	27	27				
CONFIRMATORY	**08/03/2011**	**08/10/2011**	**08/17/2011**	**08/24/2011**	**08/31/2011**		
NRC action	2	2	2				
STP Action	96	96	96				
	98	98	98				
CLOSED	**08/03/2011**	**08/10/2011**	**08/17/2011**	**08/24/2011**	**08/31/2011**		
	125	125	125				

2011 NINA/STP COLA Item Status Counts



STP Phase 4 Open Items

Item #	Chp	OI #	RAI #	Description	Next Action	Next Action Completion Date	OI Closure Date	SER Completion Date	OI Status
1	1	1-1	n/a	Tier 1 Departure exemptions	NRC - exemption issuance (depends on completion of all other SER chapters and FEIS)(STP - To submit Technical Specification formal RAI response (16-71))	3rd Quarter 2011 and 8/30/2011		End of P4	open
5	1	1-5	(5856) 01-21	Financial Qualifications	NRC - RAI response review submitted on 8/4/11	09/04/2011		09/30/2011	open
6	1	1-6	3944 01-15	Parts 30, 40 and 70	STP - to update COL revision 6 w/ part 70 changes	08/30/2011		08/31/2011	open
39	3	3.7 and 3.8	3.7 and 3.8 RAIs	3.7 and 3.8 Open Items and RAIs being handled by Tom Tai during weekly breakout calls	STP/NRC				open
40A	3	03.09-01-1	03.09.01-1	ACSTIC2 V&V	**NINA - provide adequate V&V package for ACSTIC2 and clarify ACSTIC versus ACSTIC2**	08/18/2011			open
40	3	3.09.02-16	03.09.02-16 to -43 (5058)	Questions from the August 23-25, 2010 audit of WEC, SWE, Toshiba, and XGEN analyses	NRC - to review latest responses to RAI 5058 in 5/16/11	07/07/2011	07/07/2011		Closed
40B	3	03.09.02-21	03.09.02-21 (5058)	ACSTIC2 FSAR markup	NINA - include proposed FSAR changes in letter 110064 (4/13/2011) in next FSAR revision.				confirmatory
41	3	3.09.02-44	03.09.02-44 (5256)	Questions from the October 18-19 2010 audit of CVAP, including ACM methodology and license condition	NRC - to review latest response to 3.09.02-44 on 6/30/11	08/30/2011			Open
42	3	3.09.02-45	03.09.02-45 (5343)	Table 5.4 of FIV Stress Analysis Report of the Control Rod Guide Tube and Control Rod Drive Housing	NRC - to review responses to 3.09.02-45 on 2/28/11, and responses to RAI 5256 and 03.09.02-49 on 6/30/11	08/30/2011			confirmatory
43	3	3.09.02-46	03.09.02-46 (5343)	Tables 5.11 and 5.13 of FIV Stress Analysis Report of the High Pressure Core Flood Sparger and Coupling	NRC - to review responses to 3.09.02-46 on 2/28/11, and responses to RAI 5256 and 03.09.02-49 on 6/30/11	08/30/2011			confirmatory
44	3	3.09.02-47	03.09.02-47 (5343)	Section 2.2 of the FIV Stress Analysis Report of the Shroud	NRC - to review responses to 3.09.02-47 on 2/28/11, and responses to RAI 5256 and 03.09.02-49 on 6/30/11	08/30/2011			confirmatory
45	3	3.09.02-48	03.09.02-48 (5343)	STP steam dryer modal analysis and Japanese hammer test results	NRC - to review responses to 3.09.02-48 on 2/28/11, and responses to RAI 5256 and 03.09.02-49 on 6/30/11	08/30/2011			confirmatory

STP Phase 4 Open Items

Item #	Chp	OI #	RAI #	Description	Next Action	Next Action Completion Date	OI Closure Date	SER Completion Date	OI Status
46	3	3.09.02-49	03.09.02-49 (5343)	Sample pressure spectra on the sub-scale steam dryer	NRC - Review of revised technical reports submitted by STP on 6/30/11 to support review of FIV program (RAI 03.09.02-49 revised submittal on 6/30/11)	08/30/2011			open
47	3	3.09.02-50	03.09.02-50 (5343)	Sub-scale dryer pressure spectra compared to Japanese ABWR	NRC - to review responses to 3.09.02-50 on 2/28/11, and responses to RAI 5256 and 03.09.02-49 on 6/30/11	08/30/2011			confirmatory
48	3	03.09.04-1	03.09.04-1 (5870)	FMCRD spec load requirements	NINA - respond to RAI 5870				open
98	9	9.1.1-4	4561 (ltr 329), 09.01.01-4 RAI 5685 (ltr 377) issued with 8 supplemental questions	Basis for WCAP 17311 and 17331: Fuel rack structural analysis	STP - Supplemental RAI responses w/ final revision by 9/15/2011	09/15/2011			open
99	9	tbd	5685 (ltr 377) , 09.01.02-2	Descriptions of pools, racks and fuel-handling system	NRC - Review of RAI responses submitted on 6/23/11 (STP - Submit RAI response on Gaps & Tolerances topic on 9/15/11)	08/31/2011			open
100	9	tbd	5685 (ltr 377), 09.01.02-3	Fuel rack loads and load combinations	NRC - Review of RAI responses submitted on 6/23/11 (STP - Submit RAI response on NFR/SFR forces and stresses topic on 9/15/11)	08/31/2011			open
101	9	tbd	5685 (ltr 377), 09.01.02-4	Fuel drop analysis	NRC - Review of RAI responses submitted on 8/01/11	09/01/2011			open
102	9	tbd	5685 (ltr 377), 09.01.02-5	Fuel rack seismic modeling and analysis	NRC - Review of RAI responses submitted on 6/23/11 (STP - Submit RAI response items: c, g, l, j, m and n on 9/15/11)	08/31/2011			open
103	9	tbd	5685 (ltr 377), 09.01.02-6	Fuel rack design checks	NRC - Review of RAI responses submitted on 6/23/11 (STP - Submit RAI response items: b, c, d and e on 9/15/11)	08/31/2011			open
104	9	tbd	5685 (ltr 377), 09.01.02-7	Fuel rack qualtity assurance programs and quality control issues	NRC - Review of RAI responses submitted on 6/23/11	08/31/2011			open

STP Phase 4 Open Items

Item #	Chp	OI #	RAI #	Description	Next Action	Next Action Completion Date	OI Closure Date	SER Completion Date	OI Status
105	9	tbd	5685 (ltr 377), 09.01.02-8	Fuel rack thermal stress analysis	STP - RAI response on 9/15/2011	09/15/2011			open
106	9	tbd	5685 (ltr 377), 09.01.02-9	Fuel rack seismic loading	NRC - Review of RAI responses submitted on 6/23/11	08/31/2011			open
109	9	tbd	5540 (ltr 375), 09.04.03-2	Site Psecific ITAAC and Tier 1 exemption for 99% charcoal filter efficiency	NRC - Review 3/31/11 response and supporting white paper submitted on 6/15/11. Staff review extended to 8/15/11.	08/15/2011			open
110	9	tbd	5540 (ltr 375), 09,04.03-3	Standard or Site Specific departure regarding charcoal efficiency design change	NRC - Review 3/31/11 response and supporting white paper submitted on 6/15/11. Staff review extended to 8/15/11.	08/15/2011			open

Request for Additional Information No. 5987 Revision 5

South Texas Project Units 3 and 4
South Texas Project Nuclear Operating Co
Docket No. 52-012 and 52-013
SRP Section: 09.01.02 - New and Spent Fuel Storage
Application Section: FSAR 9.1.2

QUESTIONS for Structural Engineering Branch 2 (ESBWR/ABWR Projects) (SEB2)

09.01.02-***

Spent Fuel Assembly Integrity

As indicated in Section I.3 of SRP 3.8.4, Appendix D, loads generated by the impact of fuel assemblies during a postulated seismic excitation should be considered for local as well as overall effects, and it should be demonstrated that the consequent loads on the fuel assembly do not lead to damage of the fuel. Section I.4 of SRP 3.8.4, Appendix D, specifies that the applicant demonstrate that the functional capability and/or the structural integrity of each component is maintained. Therefore, for a complete review of the structural analysis of the spent fuel storage racks, including the spent fuel assemblies, the staff requests that the applicant describe the technical basis for (1) establishing the functional capability and structural integrity of the spent fuel assemblies, and (2) ensuring no fuel damage, when subjected to impact loads resulting from the postulated seismic excitation of the spent fuel storage racks. Include this information in an appropriate section of the spent fuel racks technical report. The response should specifically address the following:

a. Describe how the seismic demand on the spent fuel assemblies was determined, including considering maximum impact force due to both in phase and out of phase movement of fuel assemblies during a seismic event.

b. Describe the methodology used to determine the maximum allowable impact force that spent fuel assemblies are capable of withstanding.

c. Define the acceptance criteria used for functional capability, structural integrity, and no fuel damage.

d. Describe how the effects of irradiation embrittlement of the fuel rods, at initial storage and long term, are considered in the evaluation.

e. Compare the calculated capacity to the calculated demand, to demonstrate that the spent fuel assemblies will maintain their integrity under seismic loading.

STP New and Spent Fuel Racks

RAI Responses Submitted 06/23/2011

Preliminary Review Comments/Requested Clarifications

(Prepared by R. Morante, X. Wei, BNL, 07/18/2011)

(Updated by R. Morante, X. Wei, BNL, 07/29/2011)

(Update by NRC, 08/10/2011)

On 06/23/2011, STP (the applicant) submitted responses to some of the staff's nine (9) RAIs submitted to the applicant on 05/09/2011. The applicant responded in accordance with the response schedule it had earlier submitted to the staff, with one (1) departure. The response to RAI 09.01.02-8 had been scheduled for 06/23/2011. In the applicant's 06/23/2011 response letter, the applicant deferred the response to RAI 09.01.02-8 until 09/15/2011.

Preliminary comments and requests for clarifications, related to the responses submitted, are noted below. Acceptance of a clarification does NOT constitute acceptance of the associated RAI response.

RAI 09.01.02-2 [NOTE: Response to part b. due on 09/15/2011.]

(1) Clarification for Sketch 7 was provided during telecom on 07/13/2011. ***(The two small vertical lines in the cell walls in Sketch 7 denote continuous butt welds to join the two pieces of channel cell walls together)***

(2) Height of the leveling pad was discussed during telecom on 07/13/2011. STP will provide the height. ***(Sketch 6, leveling Pad & Screw; the height of the leveling pad is 1.9")***

(3) Clarification of welding of tie joints to the corners of adjacent cells on Sketch 14 was provided during telecom on 07/13/2011. ***(The cell to cell welds are on one (either) side of the tie bar (joint). The tie bar (joint) is tapered to fit in the spacing between adjacent cells. Eccentricity of the welds is not considered in the calculation because it is small.)***

(4) Clarify the following related to Sketch 13:

a. What is the material type of the 1/2" plates? How will they be attached to the rack? (T***he 1/2" plates will be ASTM A240, TP304L. It is a continuous plate wrapping around the rack. It will be welded to the rack by 0.12" fillet welds, 4" long, on each cell, plate to be welded top & bottom, clarification to be provided in the WCAP update on 9/15/11)***

b. Have the loads from the linkage been considered in the fuel rack design? Are those loads treated as concentrated loads on cell walls? ***(Not done yet, due 9/15/11)***

c. Have the design checks on the 1/2" plates and linkage been done? ***(Not done yet, due 9/15/11)***

RAI 09.01.02-3 [NOTE: Response to part a. due on 09/15/2011.]

(1) Clarification needed for the stuck fuel assembly calculation. Explain the basis for the assumptions used in calculating the axial forces that resist the moment at the bottom of the rack, caused by the horizontal force at the top of the rack. (***The calculation of the welding stress due to the axial forces that resist the moment is based on the assumptions that 1) two adjacent cells resist the entire moment at the base (a conservative assumption); 2) the axial force is applied uniformly on the four sides of the cell-to-baseplate welds to simplify the calculation, since the first assumption is conservative. The staff did a simple hand calculation considering a trianglular stress distribution across the bottom of 2 adjacent cells. The results show that the maximum stress in the weld exceeds the allowable stress by 4%. Considering the conservative assumption noted in (1) above, the staff concludes that the stuck fuel assembly calculation is acceptable and the cell-to-baseplate weld is strong enough to resist the stuck fuel assembly loads.)***

RAI 09.01.02-4 [NOTE: STP provided response to NRC on 08/01/2011. 8/10/11 update. Preliminary review of response looks ok. Further discussion to be held if necessary]

RAI 09.01.02-5 [NOTE: Responses to parts c., g., j., k., m., n. due on 09/15/2011.]

(1) What criteria does ANSYS apply for “bi-section” of the input time step to a 0.0001 sec. time step. Did this occur in the analyses performed? ***(Clarified. The criterion is convergence failure after 25 iterations. This did not occur in the STP spent fuel storage rack analyses. Satisfactory explanation.)***

(2) Clarify Figure 8. The location of weld zones and sizes and locations of support plates shown in Figure 8 are inconsistent with the information provided in other locations of the RAI response document. For example, Figure 8 shows 8 grid weld locations and 12 support locations with same size support plates, while Sketch 14 of RAI response to RAI 09.01.02-2 shows 4-12" fillet welds for cell to cell weld, Sketch 16 of RAI response to RAI 09.01.02-2 shows 8 support plates with two sizes. ***(Clarified. Information in the figures reflect the analysis model; this is superseded by the information in the sketches. The latest design information will be used in the updated analysis and documented in the 9/15/11 update to the Technical Report.)***

(3) On Figure 10, is the "1/2" base plate" a typo? Should be 1-1/2" base plate? ***(Clarified. To be fixed in the 9/15/11 update to the Technical Report.)***

(4) How are the large support plate and leveling pad modeled? Figures 8 through 10 only show the small support plate and leveling screw. ***(Clarified. The leveling pad is not modeled explicitly, only the leveling screw is modeled. The size of the leveling pad will be taken into account in detailed hand calculations for loading on the spent fuel pool floor. The revised support plate configuration will be documented in the 9/15/11 update to the Technical Report.)***

RAI 09.01.02-6 [NOTE: Responses to parts b., c., d., e. due on 09/15/2011.]

(1) Clarify Cell-Cell weld calculation: The leg length of 0.12 inches used in the calculation is inconsistent with the 0.08 inches shown in Sketch 14 of the response to RAI 09.01.02-2. ***(Clarified. The correct leg length of the cell-cell weld is 0.08". The leg length is reduced because of the increase of weld length. Correct information will be in the 9/15/11 update to the Technical Report.)***

(2) In response to Item a, Level D allowable stress calculation, the value of Su used, 68 ksi, is the value at 140 ^{o}F, according to Table 4-2 of the spent fuel rack Technical Report. The value at 212 ^{o}F should be used. ***(Clarified. Data for 212 ^{o}F will be used in the 9/15/11 update to the Technical Report.)***

(3) In response to Item a, Cover plate Weld, it states that "The cover plate weld is evaluated over a length of 5 inches, even though it is a continuous fillet weld." This statement is inconsistent with Sketches 9 through 11 of response to RAI 09.01.02-2, which shows 4-15" fillet weld for cover plate weld. ***(Clarified. The weld sizes have been changed to 4" long on 15" center. STP will re-analyze and include in the 9/15/11 update to the Technical Report. An RAI response revision was recommended by the staff, because of the significance of the change. Applicant considering this.)***
Also, explain whether a finer element mesh, comparable to the element mesh for cell to cell weld, is used for cover plate weld. ***(8/10/11 update. STP stated that a finer element mesh was not used which will be a change from the validation model, update to be provided on 9/15/11.)***

RAI 09.01.02-7

(1) The staff acknowledges that spent fuel storage racks are not included in the RG 1.26 Quality Group classifications. However, as noted in FSAR Section 9.1.2.1.3, the spent fuel racks are Seismic Category I, in accordance with RG 1.29. As such, all of the QA provisions of 10 CFR 50 Appendix B would appear to be applicable. Clarify what aspects of Appendix B are deemed to be not applicable to spent fuel storages racks, and the basis for this determination. ***(Applicant stated that a similar question had been asked and answered during the original DCD review. According to the applicant, the response to Question 210.15 indicated that the QA provisions of 10 CFR 50 Appendix B do not apply to spent fuel racks. In addition, the applicant stated that RG 1.29 provides relief from App. B for certain conditions, which the applicant claims apply to the spent fuel storage racks. NRC & BNL staff to review DCD Chapter 20, question 210.15, DCD Table 3.2-1, and NUREG 1503, Vol. 1, p. 3-12 [ABWR FSER]. STP to evaluate a possible revised response to provide clarification. 8/3/11 update, NRC to review original submittal, RAI response & supporting/referenced documents. 8/10/11 update. STP to provide ML# for the QAPD, NRC to discuss internally.)***

(2) The staff concurs that the regulatory requirements for periodic ISI of spent fuel storage racks originates from 10 CFR 50.65 "Maintenance Rule". RG 1.160 clarifies acceptable procedures for implementation of the Maintenance Rule, and includes special guidance specifically for structures. Clarify how the guidance provided in RG 1.160 for structures will be implemented for spent fuel storage racks. ***(On-going discussion. Question whether DRAP program applies. The peer review group considered Fuel Racks***

under the DRAP program and determined that the fuel racks not to be included as SSC. STP adopted NEI Maintenance Rule template 0702A, Revision 0, dated 3/08 such that 30 days prior to fuel load the Maintenance Rule goes into effect. STP indicated that "A" at the end designates NRC acceptance. Staff to review the FSAR and NEI Maintenance Rule template. Samir to Contact Todd Hilsmeier to discuss requirements under the DRAP program. STP to evaluate a possible revised response to provide clarification. STP provided input on fuel rack structural integrity inspection routine at Units 1 & 2 on August 8, 2011. 8/10/11 update, NRC to discuss internally.)

RAI 09.01.02-8 [NOTE: Response has been deferred to 09/15/2011.]

RAI 09.01.02-9

The response discusses an alternate formulation that produced synthetic time histories that do not require peak clipping and baseline correction. However, no quantitative information is provided for the alternate formulation. Eliminating the need for baseline correction and peak clipping would appear to have definite advantages. The alternate time histories may also eliminate the staff's questions (part f.) about the peculiar characteristics of the baseline-corrected displacement time histories presented in the Technical Report. These were NOT addressed in the response. Therefore,

(1) Clarify the basis for retaining the initial synthetic time histories, even though several difficulties are overcome by the alternate formulation; and

(2) Provide answers to the staff's questions in part f. of the RAI, including comparison to the displacement time histories obtained by the alternate formulation.

(8/3/11 update, NINA to submit revised RAI response utilizing & justifying use of original synthetic time history addressing clarifying questions. Further discussion to be held after NRC staff receives and reviews revised RAI response. NINA provided draft revised RAI response to NRC on 8/5/11. 8/10/11 update, STP to provide revised RAI response by 8/16/11. Digital time histories analysis information to be provided by STP for BNL review)