

PMVogleCOLNPEm Resource

From: Kelly, Glenn
Sent: Tuesday, March 16, 2010 2:51 PM
To: VogleCOL Resource
Subject: FW: LOLA Draft RAI information
Attachments: VEGP Draft LOLA RAIs_Binned for NRC Call_with Legend_SUBJECT LINE ONLY.doc

SUNSI

From: Mrowca, Lynn
Sent: Friday, September 18, 2009 5:18 PM
To: Kelly, Glenn; Powell, Eric; Segala, John; Andrukat, Dennis
Subject: FW: LOLA Draft RAI information

[For phone call 9/23...](#)

From: Neil Haggerty [mailto:neilhaggerty@comcast.net]
Sent: Friday, September 18, 2009 2:08 PM
To: Comar, Manny
Cc: Mrowca, Lynn; Caruso, Mark; WES SPARKMAN
Subject: LOLA Draft RAI information

Manny,

As we discussed yesterday, I have attached the table that bins the draft LOLA RAIs that we received. This information is provided in support of the phone call that is currently scheduled for this Wednesday, September 23, from 11:30 am to 1:00 pm (Eastern). Note also that in addition to binning the Draft RAIs, I also included whether the RAI responses are expected to be STANDARD or PLANT-SPECIFIC, and the expected due dates associated with this determination.

Sorry this took so long. I had to strip out all of the content so that it would not be SRI.

Note: I will be travelling on Monday and Tuesday, so you will need to call my cell phone if you need to contact me. On Tuesday, I will be in an SGI meeting, so my phone will be off most of the day (except breaks).

Thank you,
Neil Haggerty
NuStart AP1000 Licensing Support Engineer

neil.haggerty@excelservices.com

Hearing Identifier: Vogtle_COL_NonPublic
Email Number: 518

Mail Envelope Properties (94A2A4408AC65F42AC084527534CF4160880C8E61B)

Subject: FW: LOLA Draft RAI information
Sent Date: 3/16/2010 2:50:41 PM
Received Date: 3/16/2010 2:51:01 PM
From: Kelly, Glenn

Created By: Glenn.Kelly@nrc.gov

Recipients:
"VogtleCOL Resource" <VogtleCOL.Resource@nrc.gov>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	1366	3/16/2010 2:51:01 PM
VEGP Draft LOLA RAIs_Binned for NRC Call_with Legend_SUBJECT LINE ONLY.doc		
177218		

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

(U) Request for Additional Information No. XXXX Revision 0
 (U) XX./XX/09
 (U) Vogtle Electric Generating Plant Units 3 and 4 Combined License Application
 (U) Southern Nuclear Operating Company, Inc.
 (U) Docket Nos. 50-25 and 50-26
 (U) SRP Section: 19.0 — Probabilistic Risk Assessment and Severe Accidents
 (U) Application Section: Combined License Application Part 9

(U) QUESTIONS for PRA Licensing, Operations Support, and Maintenance Branch 2 (SPLB)

Legend

- (A) Response to this question requires detail that will be developed as the LOLA program is implemented. These details will be provided under post-COL, in accordance with the Final Rule – Security Requirements SOC. Response will reflect this approach.
- (B) Question is understood. Response under development.
- (C) Question asks for greater detail than that discussed in NEI 06-12, Rev. 3 and is inconsistent with B.5.b Plans approved by the NRC for the operating fleet.

STD: Standard 45-day response will be developed for AP1000 applicants.
 Due date = 10/23 + 45 days = 11/9/2009.

SS: Site-specific (30-day) response will be developed for VEGP.
 Due date = 10/23 + 30 days = 10/26/2009.

<u>RAI #</u>	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-10		X		SS	19-10. (SRI/LOLA) General — Site drawing/map showing areas referenced in response
19-11		X		STD	19-11. (SRI/LOLA) General – Descriptions of staging areas and equipment locations in procedures
19-12	X				19-12. (SRI/LOLA) General — Cooling tower basin functions
19-13		?		SS	19-13. (SRI/LOLA) General — Identify alternate water sources
19-14	X			STD	19-14. (SRI/LOLA) General — Capability of FPS to meet competing demands
19-15.		X		STD	19-15. (SRI/LOLA) Evaluation of strategies and procedures in relation to safety and security
19-16			X		19-16. (SRI/LOLA) Shutdown mode considerations
19-17	X				19-17. (SRI/LOLA) Labeling/tagging LOLA equipment
19-18			X		19-18. (SRI/LOLA) Discussion of simple modifications to implement/facilitate LOLA strategies

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

<u>RAI</u> #	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-19			X		19-19. (SRI/LOLA) COLA markup to depict design features of mitigation strategies
19-20		X		STD	19-20. (SRI/LOLA) Commitment to walk through procedures and train responsible individuals
19-21	X			STD	19-21. (SRI/LOLA) Assurance that critical SSCs will survive LOLA event
19-22		X		SS	19-22. (SRI/LOLA) Differentiate between “commitments” and “strategies” in the MST
19-23		X		SS	19-23. (SRI/LOLA) Section 4.1 – Fire protection ring header feeds
19-24		?		STD	19-24. (SRI/LOLA) Section 4.2 – Communication enhancements for robust buildings
19-25		?		STD	19-25. (SRI/LOLA) Section 5.0 – Separation of fire water pumps
		X		STD	(a)
			X	STD	(b)
				STD	(c)
19-26		X		STD	19-26. (SRI/LOLA) Section 5.1.1 – Clarify if FPS isolation valves are external PIVs
19-27		X		STD	19-27. (SRI/LOLA) Section 5.1.2 - Pump redundancy clarifications re: blackout conditions and physical hookups to FPS
19-28		X		STD	19-28. (SRI/LOLA) Section 5.1.3 – Fire water storage tank refill capabilities
19-29		X		STD	19-29. (SRI/LOLA) Section 5.1.4 – Fire protection system management
19-30			X	STD	19-30. (SRI/LOLA) Section 6.2.1 – SFP mitigation strategies using a portable pump
19-31		X		STD	19-31. (SRI/LOLA) Section 6.1 – SFP makeup from cask washdown pit
19-32		X		STD	19-32. (SRI/LOLA) Section 6.1 – SFP makeup from PCCWST
19-33		X		STD	19-33. (SRI/LOLA) Section 6.2 – SFP Makeup through the PCCS

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

<u>RAI</u> #	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-34		X		STD	19-34. (SRI/LOLA) Section 6.2 – SFP makeup from fire ring header or yard hydrants
19-35			?	STD	19-35. (SRI/LOLA) Locations of SFP penetrations for make-up and spray
19-36			X	STD	19-36. (SRI/LOLA) Discuss ability to make-up and spray within the time available
19-37		X		STD	19-37. (SRI/LOLA) PWR design considerations for site response strategies
19-38		X		STD	19-38. (SRI/LOLA) Section 7.0 – Clarifications regarding Phase 3 mitigative strategies
19-39		X		STD	19-39. (SRI/LOLA) Section 7.8 – Portable spray clarifications
19-40		X		STD	19-40. (SRI/LOLA) Section 7.17 (MST, Phase 3, Item 17) – Additional details re: RCS makeup
19-41		X		STD	19-41. (SRI/LOLA) Section 7.18 (MST, Phase 3, Item 18) – Additional details re: Safety injection
19-42		X		STD	19-42. (SRI/LOLA) Section 7.19 (MST, Phase 3, Item 19) – Additional details re: Decay heat removal
19-43		X		STD	19-43. (SRI/LOLA) Section 7.20 (MST, Phase 3, Item 20) – Additional details re: Containment cooling
19-44		X		STD	19-44. (SRI/LOLA) Section 7.21 (MST, Phase 3, Item 21) – Additional details re: Containment isolation
19-45		X		SS	19-45. (SRI/LOLA) MST, Phase 1, Item 1 – Fire Fighting Response Strategy – fire brigade target and staging areas
19-46		X		SS	19-46. (SRI/LOLA) MST, Phase 1, Item 1 – Fire Fighting Response Strategy – fire brigade report locations
19-47.		X		SS	19-47. (SRI/LOLA) MST, Phase 1, Item 2 – Fire Fighting Response Strategy – procedural requirements for fire brigade dispersal
19-48		X		SS	19-48. (SRI/LOLA) MST, Phase 1, Item 3 – Fire Fighting Response Strategy – airlifted resources

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

<u>RAI</u> #	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-49		X		SS	19-49. (SRI/LOLA) MST, Phase 1, Item 4 – Fire Fighting Response Strategy – technical direction to offsite responders
19-50	X			SS	19-50. (SRI/LOLA) MST, Phase 1, Item 5 – Fire Fighting Response Strategy – Agreement for use of outside organizations with specific knowledge or abilities for LOLA response
19-51	X			SS	19-51. (SRI/LOLA) MST, Phase 1, Item 6 – Fire Fighting Response Strategy – Identification and acquisition of equipment needed to fight large fires
19-52	X			SS	19-52. (SRI/LOLA) MST, Phase 1, Item 7 – Fire Fighting Response Strategy – Appropriate locations for pre-staging on-site fire fighting equipment
19-53		X		SS	19-53. (SRI/LOLA) MST, Phase 1, Item 8 – Fire Fighting Response Strategy – Coordination with local fire departments and other regional fire firefighting aid
19-54	X			SS	19-54. (SRI/LOLA) MST, Phase 1, Item 9 – Fire Fighting Response Strategy – Staging areas for emergency response vehicles
19-55	X X X	X X		SS	19-55. (SRI/LOLA) MST, Phase 1, Item 10 – Fire Fighting Response Strategy – Communication enhancements related to radios (a) (b) (c) (d) (e)
19-56	X			SS	19-56. (SRI/LOLA) MST, Phase 1, Item 11 – Fire Fighting Response Strategy – Triage areas for treatment of mass casualties
19-57		X		SS	19-57. (SRI/LOLA) MST, Phase 1, Item 12 – Fire Fighting Response Strategy – Plant personnel assembly areas
19-58		X		SS	19-58. (SRI/LOLA) MST, Phase 1, Item 13 – Fire Fighting Response Strategy – Fire brigade training
19-59		X		SS	19-59. (SRI/LOLA) Protocols and procedures to mobilize additional organizations

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

<u>RAI</u> #	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-60		X		SS	19-60. (SRI/LOLA) Requirements for necessary equipment in MOUs
19-61			X	SS	19-61. (SRI/LOLA) Anti-radiation shields/blankets for fire fighters
19-62		X		STD	19-62. (SRI/LOLA) Actions to Minimize Releases, Phase 1, Item 3 – Dose rates in PRA used in projection models
19-63	X	X X		SS	19-63. (SRI/LOLA) MST, Phase 1, Item 1 – Plant Operations to Mitigate Fuel Damage – pre-defined positioning and dispersal of personnel (a) (b) (c)
19-64	X X X	X		SS	19-64. (SRI/LOLA) MST, Phase 1, Item 2 – Plant Operations to Mitigate Fuel Damage – Communications capabilities (a) (b) (c) (d)
19-65		X		STD	19-65. (SRI/LOLA) MST, Phase 1, Item 8 – Plant Operations to Mitigate Fuel Damage – Plant area compartmentalization
19-66		X		STD	19-66. (SRI/LOLA) MST, Phase 1, Item 6 – Plant Operations to Mitigate Fuel Damage – equipment requirements related to LOLA compensatory functions
19-67		X		STD	19-67. (SRI/LOLA) MST, Phase 1, Item 7 – Plant Operations to Mitigate Fuel Damage – Mitigation equipment requirements related to loss of both ac and dc power
19-68		X		STD	19-68. (SRI/LOLA) MST, Phase 1, Item 9 – Plant Operations to Mitigate Fuel Damage – Equipment survivability in plant areas affected by fire or explosion
19-69		X		STD	19-69. (SRI/LOLA) MST, Phase 1, Item 13 – Plant Operations to Mitigate Fuel Damage – SFP loss of inventory and spent fuel loading patterns

OFFICIAL USE ONLY — SECURITY-RELATED INFORMATION

<u>RAI</u> #	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>STD</u> <u>SS</u>	<u>RAI Text</u>
19-70	X	X X X	?	STD	19-70. (SRI/LOLA) MST, Phase 1, Item 14 – Plant Operations to Mitigate Fuel Damage – Training of emergency response organization (ERO) personnel and potential responders (a) (b) (c) (d) (e)
19-71	X			SS	19-71. (SRI/LOLA) MST, Phase 2, Item 4 – Onsite resources to reduce or stop SFP leakage
19-72		X		STD	19-72. (SRI/LOLA) SFP fuel rack design improvements
19-73	X			STD	19-73. (SRI/LOLA) Interface between SAMGs, EDMGs, and EOPs
19-74	X				19-74. (SRI/LOLA) Plans for post-LOLA restoration of communications
19-75	X				19-75. (SRI/LOLA) Command and control structure if control staff is substantially affected
19-76	X				19-76. (SRI/LOLA) Offsite notifications and ERO callout if control room is lost
19-77	X				19-77. (SRI/LOLA) Initial damage assessment by ERO
19-78		X		STD	19-78. (SRI/LOLA) MST, Phase 3, Item 1 – Boundary conditions for development of EDMGs
19-79	X	X X X X ?		STD STD SS STD STD STD	19-79. (SRI/LOLA) MST, Phase 3, Item 8 – Use of portable sprays to provide additional capabilities to scrub fission product release and charge the FPS fire header (a) (b) (c) (d) (e) (f)