

NRR-PMDAPEm Resource

From: Sebrosky, Joseph
Sent: Monday, April 14, 2014 10:18 AM
To: NRR-PMDA-ECapture Resource; Burkhardt, Janet; George, Andrea
Subject: RE: phone call with NPPD to discussion comments on Cooper NFPA 805 safety evaluation (ME8551)

The purpose of this email is to capture background information for a phone call that was held on 4/10/14 between NRC representatives and Nebraska Public Power District (NPPD) representatives to discuss comments the NRC staff received on a draft of the Cooper safety evaluation associated with NPPD's license amendment request to transition to National Fire Protection Association 805 requirements. The agenda for the phone call can be found below.

The draft safety evaluation was provided to NPPD in an email dated March 27, 2014, and was provided to NPPD in accordance with NRC's Office of Nuclear Reactor Regulation Office Instruction COM-203, Revision 2, which states in part:

As another example, a Draft Safety Evaluation (SE) might be provided to a licensee or applicant to obtain agreement that it contains no proprietary information, in accordance with Office Instruction LIC-204. Similarly, draft SEs or selected portions thereof may be provided to a licensee or applicant to obtain agreement that factual information is accurate and complete. If these exchanges result in the discovery of new information needed for decision making, then this additional information must be appropriately submitted and preserved.

The staff binned the comments received by NPPD into three different files found below (i.e., administrative, editorial, and technical). The staff indicated that in some cases it would make changes to the safety evaluation based on NPPD's comments. The changes will be reflected in the final version of the documents.

Joe Sebrosky
Project Manager
Nuclear Regulatory Commission
Division of Operating Reactor Licensing
joseph.sebrosky@nrc.gov
301-415-1132

-----Original Appointment-----

From: Sebrosky, Joseph
Sent: Wednesday, April 09, 2014 2:37 PM
To: 'Victor,, William R.- Strategic Initiatives' (wrvicto@nppd.com); Van Der Kamp, David (dvwvande@nppd.com); George, Andrea; Barrett, Harold; Robinson, Jay; Wall, Scott
Cc: 'Meyer, Steve'; 'Shudak, Thomas G.'; 'Barker, Troy S.'; 'Ouellette, Paul'
Subject: phone call with NPPD to discussion comments on Cooper NFPA 805 safety evaluation
When: Thursday, April 10, 2014 12:00 PM-1:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: HQ-O-10B2

Purpose: To discuss comments received from NPPD on Cooper NFPA 805 safety evaluation, and to determine if the proposed disposition involves additional interactions

Outcome: Clear understanding of comment, disposition of comment, and path forward

Agenda:

I. Discussion of comment and proposed disposition



Draft Cooper SE
Administrative...



Draft Cooper SE
Editorial Comm...



Draft Cooper SE
Technical Comm...

II. Identification of areas for future interactions

III. Next steps

IV. wrapup

Hearing Identifier: NRR_PMDA
Email Number: 1223

Mail Envelope Properties (Joseph.Sebrosky@nrc.gov20140414101800)

Subject: RE: phone call with NPPD to discussion comments on Cooper NFPA 805 safety evaluation (ME8551)
Sent Date: 4/14/2014 10:18:29 AM
Received Date: 4/14/2014 10:18:00 AM
From: Sebrosky, Joseph

Created By: Joseph.Sebrosky@nrc.gov

Recipients:

"NRR-PMDA-ECapture Resource" <NRR-PMDA-ECapture.Resource@nrc.gov>
Tracking Status: None
"Burkhardt, Janet" <Janet.Burkhardt@nrc.gov>
Tracking Status: None
"George, Andrea" <Andrea.George@nrc.gov>
Tracking Status: None

Post Office:

Files	Size	Date & Time	
MESSAGE	2652	4/14/2014 10:18:00 AM	
Draft Cooper SE Administrative Comments from Licensee NRC addressed.docx			920569
Draft Cooper SE Editorial Comments from Licensee NRC Addressed.docx			
1425673			
Draft Cooper SE Technical Comments from Licensee NRC Addressed.docx			467807

Options

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

Draft SE Comment Sheet

Draft SE Administrative Comments

The following comments on the draft NFPA 805 Safety Evaluations relate to non-material accuracy and completeness issues, and certain other areas of administrative importance.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
1	Enclosure 1- Page 1/1.A.	The August 23, 2014, letter is characterized as a supplement to the LAR. In fact, this letter provided acknowledgement of the terms and conditions of the CNS NFPA 805 portal. The letter, of itself, contained no supplemental information relevant to the NRC review of the application.	Recommend deletion of the 8/23/2014 letter from paragraph 1.A.	
2	Enclosure 1- Page 1/1.A.	NPPD projects to be submitting a final letter on 4/11/2014 containing a requested change to the License Condition and providing clean/ retyped pages of the license.	Recommend inclusion of the 4/11/2014 letter in Paragraph 1.A if the 4/11/2014 submittal date is acceptable.	
3	Enclosure 1- Page 2/2.(4)	The 8/23/14 letter is characterized as a supplement to the LAR. In fact, this letter provided acknowledgement of the terms and conditions of the CNS NFPA 805 portal. The letter, of itself, contained no supplemental information relevant to the NRC review of the application.	Recommend deletion of the 8/23/2014 letter from paragraph 2.(4).	
4	Enclosure 1- Page 2/2.(4)	NPPD projects to be submitting a final letter on 4/11/2014 containing a requested change to the License Condition and providing clean/ retyped pages of the license.	Recommend inclusion of the 4/11/2014 letter in Paragraph 2.(4) if the 4/11/2014 submittal date is acceptable.	
5	Enclosure 1- Page 3	The instruction say to insert pages 3 through 8. Attachment 2 of the LAR projects that the License will only extend to Page 7.	Revise instructions to insert pages 3 through 7.	

Comment Number	Location	Comment	Suggested Disposition	NRC Response
6	TOC-Page i/2.4.4	Section is entitled "Updated Final Safety Analysis Report." The CNS document is actually entitled "Updated Safety Analysis Report."	Revise section title to "Updated Safety Analysis Report."	Revised per comment.
7	TOC-Page ii	TOC is missing section 3.1.1.6.	Incorporate section 3.1.1.6, Compliance Strategy – Complies With Required Action, Page 37, into TOC.	Revised per comment.
8	TOC Page iii and SE Page 88	Section 3.4.2.3.2 identifies "Callaway"	Change to "Cooper"	Revised per comment.
9	TOC Page vi	Attachment A and B tables are mis-numbered.	Change "Table 3.8.3.2-1" to "Table 3.8-1," and "Table 3.8.3.2-2" to "Table 3.8-2."	Revised per comment.
10	SE Page 3/1.2-1 st paragraph	The August 23, 2014 letter is characterized as a supplement to the LAR. In fact, this letter provided acknowledgement of the terms and conditions of the CNS NFPA 805 portal. The letter, of itself, contained no supplemental information relevant to the NRC review of the application.	Recommend deletion of the 8/23/2014 letter from the requested licensing action.	
11	SE Page 3/1.2-1 st paragraph	NPPD projects to be submitting a final letter on 4/11/2014 containing a requested change to the License Condition and providing clean/ retyped pages of the license.	Recommend inclusion of the 4/11/2014 letter in first paragraph if the 4/11/2014 submittal date is acceptable.	
12	SE Page 3/1.2-1 st paragraph	The 2/18/2014 letter was made in response to an NRC 2/6/2014 letter that documented the onsite audit conducted 1/24/2014-1/25/2014. That letter is not referenced in the second sentence.	Recommend the 2/6/2014 letter be added to the second sentence of NRC letters that prompted RAI responses, and creation of a Reference for this letter.	

Comment Number	Location	Comment	Suggested Disposition	NRC Response
13	SE Page 3/1.2-1 st paragraph	The 7/12/2012 letter was made in response to an e-mail from Lynnea Wilkins to Ed McCutchen on 6/21/2012. This e-mail is not reflected in the second sentence or in the References. Note – the second sentence that addresses the prompts for the other responses include e-mails.	Recommend the 6/21/2012 e-mail be added to the second sentence of NRC letters that prompted RAI responses, and creation of a Reference for this communication.	
14	SE Page 4/1 st paragraph	First sentence of paragraph states “Updated Final Safety Analysis Report (UFSAR).” The CNS document is actually entitled “Updated Safety Analysis Report.”	Revise sentence to read “Updated Safety Analysis Report (USAR).”	Revised per comment.
15	SE Page 15	SE Section 3.2.7 should be added to FAQ 07-0038.	Make correction.	Revised per comment.
16	SE Page 20/2 nd paragraph	Section 2.4.4 Heading and body of section use Updated Final Safety Analysis Report (UFSAR). CNS has an Updated Safety Analysis Report (USAR) and not an UFSAR	Replace Updated Fire Safety Analysis Report (UFSAR) with Updates Safety Analysis Report (USAR)	Revised per comment.
17	SE Page 23/5 th paragraph	Last sentence of paragraph states “See LAR Attachment S for implementation items”. Attachment S has been updated in later RAI responses and supplements since LAR.	Revise to read “See LAR Attachment S, as supplemented, for implementation items.” Alternative, refer to the 2/18/2014 letter that provided the updated S-3 table.	Revised per comment.
18	SE Page 27/Section 2.7.1	The section title is "Modifications," but the subject matter includes both modifications and implementation items.	Recommend changing title to "Modifications and Implementation Items."	Revised per comment.
19	SE Page 31/Item 6	Item 6 has a cross-reference to Section 2.9 of the SE for implementation items. There is no Section 2.9 of the SE.	Revise to cross-reference Section 2.8.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
20	SE Page 33/Section 3.1.1.4, 1st paragraph	The last two sentences refer to the analysis and rescission of exemptions under the Section Compliance Strategy - Complies with Previous NRC Approval. However, none of these NFPA 805 elements on the B-1 table relied on the NRC exemptions to achieve NRC Approval. Rescission of exemptions is discussed in Section 2.5.	Delete last two sentences regarding the performance of RI/PB analysis on exemptions, and the request that they be rescinded.	Revised per comment.
21	SE Page 40/Section 3.1.4.1, 1st paragraph	First sentence makes a cross-reference to SE Section 3.1.1.6. Should be made to Section 3.1.1.5.	Correct cross-reference.	Revised to include SE Sections 3.1.1.5 and 3.1.1.6 as both are applicable.
22	SE Page 51 / last paragraph	The "corresponding NFPA 805, Section 3.3.5.2" is identified but should be "Section 3.6.1"	Correct NFPA 805 section.	Revised per comment.
23	SE Page 65 / last paragraph	Correct Fire Area "RBCF" to "RB-CF"	Correct typo.	Revised per comment.
24	SE Page 68/last paragraph	First sentence characterizes S-2.4 as an implementation item. Table S-2 items are modifications.	Revise sentence to read "modification S-2.4."	Revised per comment.
25	SE Page 81/top paragraph – first full sentence in this paragraph	The first full sentence on page 81 states "The licensee clarified that the fire-affected equipment list for several transients related to PRA RAI 13 and PRA RAI 14 were inappropriate and were revised;..." This is an incorrect reference to PRA RAI 14. It should be PRA RAI 15	Revise wording in this sentence from "PRA RAI 14" to "PRA RAI 15"	Revised per comment.
26	SE Page 83/1st full paragraph	Second sentence reads "The licensee determined via walkdowns that that sensitive equipment were located..." Should read "The licensee determined via walkdowns that sensitive equipment is located..."	Make corrections.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
27	SE Page 88 / 2 nd and 5 th paragraphs of bullet	Change fire zone "RB-3C" to "3C" as RB is the compartment ID.	Fix in both paragraphs on page.	Revised per comment.
28	SE Page 88 / 4 th paragraph of bullet	Move end parenthesis after foam insulation to end of sentence as both fire zones are part of i.e.	Make correction	Revised per comment.
29	SE Page 89 / 2 nd bullet on page	Change "fire areas" to "Fire Zones 13A and 20B" and change "fire area 13A" to "Fire Zone 13A" Last sentence change end to add "and therefore, <u>the</u> revised analysis is acceptable.	Make correction	Revised per comment.
30	SE page 99	Footnote (1) of Table 3.4.6-2 states: (1) LAR dated April 24, 2012, as supplemented by letter dated July 12, 2012 (References 6 and 7, respectively), and RAI response letter dated February 18, 2014 (Reference 15) Footnote (1) references RAI response letter 2/18/14. Fire Area RB-FN results were revised in PRA RAI 16e in letter dated 2/12/13 not in the response dated 2/18/14. The NRC appears to have referenced the wrong RAI response letter here.	The footnote should be corrected to state "...and PRA RAI 16e response in letter dated February 12, 2013 (Reference 10)"	Revised per comment.
31	SE Page 110 / 4 th bullet	The fourth bullet, "Fire area boundaries..." appears to be incomplete.	Revise to read " <u>The licensee's analysis appropriately identified</u> fire area boundaries..."	Revised per comment.
31	SE Page 121/ Section 3.6.8	Correct sections from "2.71 and 2.72" to "2.7.1 and 2.7.2"	Make correction	Revised to 2.7 and 2.8

Comment Number	Location	Comment	Suggested Disposition	NRC Response
32	SE Page 131/ 2 nd paragraph under 1 st bullet	Change "contractor's System Failure Analysis Software (SAFE)" to "contractor's System Assurance and Fire Protection Engineering software (SAFE)"	Make correction	Revised per comment.
33	SE Page 137/1 st paragraph	The 8/23/14 letter is characterized as a supplement to the LAR. In fact, this letter provided acknowledgement of the terms and conditions of the CNS NFPA 805 portal. The letter, of itself, contained no supplemental information relevant to the NRC review of the application.	Recommend deletion of the 8/23/2014 letter from the list of LAR supplements.	
34	SE Page 137, Pg. 139, Pg. 138 (Ref. #73)	Replace highlighted text when SE report is complete and date is available.	Remove highlighted text.	
35	SE Attachment C (pg. C1)	Change "ASD Aspirating smoke detector" to "ASD - alternate shutdown."	Make correction	Revised per comment.
36	SE Attachment C (pg. C3)	Change "UFSAR" to "USAR Updated Safety Analysis Report"		Revised per comment.

Draft SE Editorial Comments

The following comments on the draft Safety Evaluation relates to editorial/grammatical enhancements.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
1	TOC Page iv/3.5.1.7 and SE Page 108	Section title "Defense in Depth" should read "Defense-In-Depth."	Include hyphens in section title.	Revised per comment.
2	SE Page 6/2 nd paragraph	Should have a colon instead or period after "in accordance with 10 CFR 50.48(c)(4)."	Make correction.	Revised per comment.
3	SE Page 6/3 rd paragraph	First sentence states "...require licensees to submit an LAR for NRC review..." The word "an" should be "a."	Revise typo.	Revised per comment.
4	SE Page 20/2 nd paragraph	Section 2.4.4 – Second sentence refers to "Table S-3, Item S3.26." The correct designator is "S-3.26."	Correct S-3 Table implementation item designator to "S-3.26."	Revised per comment.
5	SE Page 36 / 3.6.1 discussion bullet	Last word "dated" should be removed from the 3.6.1 discussion bullet	Remove extra word "dated"	Revised per comment.
6	SE Page 36 / 3.10.7 discussion bullet	Change "license requested approval" to " <u>licensee</u> requested approval"	Correct to licensee.	Revised per comment.
7	SE Page 42 / Section 3.1.4.3 and Reference 64	Change "E-136" to "E136."	Fix ASTM test ID.	Revised per comment.
8	SE Page 45/after 1 st paragraph	Correct line "Control Building – Computer Room (Fire Zone 10A)"	Correct fire zone number.	Revised per comment.
9	SE Page 50 / 3 rd paragraph	Middle of paragraph – "additional 50 feet of hose to the standard 100 feet of hose required by <u>the</u> NFPA 14 was"	Remove "the" before NFPA 14.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
10	SE Page 58 / 3 rd Paragraph	Correct hyphens in LAR Attachment B Table B-2 title in 3 rd paragraph	Fix title	Revised per comment.
11	SE Page 58 / Bullets (2) and (5)	Capitalize "Aligns with Intent" in bullet (2) and capitalize "Not in Alignment, but <u>No Adverse Consequences</u> " in bullet (5)	Capitalize categories to match B-2 Table	No change. Could not identify issue.
12	SE Page 59 / 1 st Paragraph	Second Sentence "In SSD RAI 01 November 14, 2012" needs to be revised to "In SSD RAI 01 <u>dated</u> November 14, 2012"	Add "dated"	Revised per comment.
13	SE Page 59 / 1 st Paragraph	Second Sentence "Section 3.2.1.2 for post-fire operation of <u>a</u> manual rising-stem valves that have..." Delete "a" before manual rising-stem valves	Delete "a".	Revised per comment.
14	SE page. 63 / 2 nd Paragraph	Last Sentence of 2 nd full paragraph "The expert panel...with experience in electrical engineering; PRA, SSA..." Replace semicolon (;) with comma (,)	Correct typo.	Revised per comment.
15	SE Page 65 / 1 st full paragraph	"equipment-from" should remove hyphen (-)	Correct typo.	Revised per comment.
16	SE Page. 70 / 1 st Paragraph	Last sentence of first paragraph, change "NRC endorsed" to "NRC-endorsed"	Correct typo.	Revised per comment.
17	SE Page 74 / 1 st full paragraph	Remove hyphen (-) in "PRA RAI-12" to "PRA RAI 12"	Correct typo.	Revised per comment.
18	SE Page 75 / 1 st full paragraph	Correct implementation item "3.24" to "S-3.24"	Correct typo.	Revised per comment.
19	SE Page 76/ 2 nd full paragraph	Remove hyphen (-) in "NFPA-805" to "NFPA 805"	Correct typo.	Revised per comment.
20	SE Page. 78 / 1 st full paragraph	3 rd to last sentence – "...the human failure events created for the FPRA was less <u>that</u> the 1E-6 floor..." Replace "that" with "than"	Correct typo.	Revised per comment.
21	SE Page 78 / 2 nd full paragraph	Correct Item S3-19 – correct to match S-3 table ID of S-3.19.	Correct S-3 Table implementation item ID to S-3.19	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
22	SE Page 78 / 3 rd full paragraph	"RAI 18" should be identified as "PRA RAI 18"	Make correction.	Revised per comment.
23	SE Page 79 / 1 st partial paragraph	"RAI 40" should be identified as "PRA RAI 40" throughout. Correct "PRA RAI-02.f-01" to "PRA RAI 02.f.01" Correct Item S3-19 – correct to match S-3 table ID of S-3.19.	Make corrections	Revised per comment.
24	SE Page 80 / 1 st paragraph	"RAI 40" should be identified as "PRA RAI 40" throughout. "RAI 14" should be identified as "PRA RAI 14". "RAI 14.01" should be identified as "PRA RAI 14.01". Correct Item S3-19 – correct to match S-3 table ID of S-3.19.	Make corrections	Revised per comment.
25	SE Page 80 / 2 nd Paragraph	Remove hyphen (-) in "post-NFPA-805" to read "post-NFPA 805"	Make correction	Revised per comment.
26	SE Page 80 / 2 nd Paragraph	"RAI 36" should be identified as "PRA RAI 36".	Make correction	Revised per comment.
27	SE Page 81 / 1 st partial paragraph	Correct Item S3-19 – correct to match S-3 table ID of S-3.19. "RAI 40" should be identified as "PRA RAI 40" "RAI-36, RAI-11, and RAI-16e" should be "PRA RAI 36, PRA RAI 11, and PRA RAI 16.e"	Make corrections	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
28	SE Page 81 / 1 st full paragraph	<p>Add “the” before Auxiliary Relay Room in 1st sentence “...for modeling transient fires with Auxiliary Relay Room...”</p> <p>Remove hyphens (-) from RAI title PRA RAI-04 to PRA RAI 04</p> <p>Correct RAI 4.1 or PRA RAI 04-01 to read “PRA RAI 04.01” throughout</p> <p>Correct RAI-04-02 to “PRA RAI 04.02”</p> <p>“RAI 40” should be identified as “PRA RAI 40”</p> <p>Correct Item S3-19 – correct to match S-3 table ID of S-3.19.</p>		Revised per comment.
29	SE Page 82 / 1 st partial paragraph	<p>“RAI 40” should be identified as “PRA RAI 40”</p> <p>Correct Item S3-19 – correct to match S-3 table ID of S-3.19.</p>		Revised per comment.
30	SE page 82 / 1 st full paragraph	<p>“RAI 40” should be identified as “PRA RAI 40”</p> <p>Correct Item S3-19 – correct to match S-3 table ID of S-3.19.</p>		Revised per comment.
31	SE Page 82 / 2 nd full paragraph	Correct “PRA RAI-05” to “PRA RAI 05”		Revised per comment.
32	SE Page 82/ last paragraph	<p>“RAI 40” should be identified as “PRA RAI 40”</p> <p>Correct Item S3-19 – correct to match S-3 table ID of S-3.19.</p>		Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
33	SE Page 83 / 1 st partial paragraph	Remove “for” from sentence “For the critical switchgear rooms, the response notes that fire barriers exist <u>for</u> with a rating of 1.5 hours.”	Make correction	Revised per comment.
34	SE Page 83 / 1 st full paragraph	Lowercase “Fire Zones” in 1 st sentence. Add full title of “NUREG/CR” to “NUREG/CR-6850” Correct “PRA RAI-02f-01” to “PRA RAI 02.f.01” Item 2) revise from “abandonment conditions are reached” to “abandonment conditions being reached”	Make corrections	Revised per comment.
35	SE Page 83 / last paragraph	3 rd sentence revise to “The licensee also discussed <u>the</u> COP timing analysis as it related to HRA of containment isolation <u>and</u> all components associated with containment isolation pathways <u>were</u> selected and subsequently cable traced.”	Make corrections.	Revised per comment.
36	SE Page 84 / 2 nd paragraph	“RAI 40” should be identified as “PRA RAI 40” Correct Item S3-19 – correct to match S-3 table ID of S-3.19.	Make corrections	Revised per comment.
37	SE Page 86 / 1 st paragraph	Change “FDTS” to “FDT ^s ” Validation and Verification should be reversed to “Verification and Validation”	Make corrections	Revised per comment.
38	SE Page 86 / 2 nd group of bullets	Add comma (,) in reference - Sprinkler Activation Correlation (Reference 32, Chapter 10)	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
39	SE Page 87 / last bullet under CFAST	Change "HGL Study" to "HGL <u>study</u> "	Make correction	Revised per comment.
40	SE Page 88 / 4 th paragraph of bullet	Move end parenthesis after foam insulation to end of sentence as both fire zones are part of i.e.	Make correction	Revised per comment.
41	SE Page 93 / Section 3.4.2.4	1 st paragraph - Change "NFPA-805" to "NFPA 805" 2 nd paragraph - Correct Item S3-19 – correct to match S-3 table ID of S-3.19.	Make correction	Revised per comment.
42	SE Section 3.4.3 Page 93/1 st Paragraph	The second sentence has a typo: "... acceptable alternative to comply..." Should be "... acceptable alternatives to comply..."	Make corrections	Revised per comment.
43	SE Section 3.4.4 Page 95/4 th Paragraph	The second sentence has a typo: "None of the RAs listed in LAR Table G-1 was found to have an adverse impact on the FPRA." Should be: "None of the RAs listed in LAR Table G-1 were found to have any adverse impacts on the FPRA."		Revised per comment.
44	SE Page 95 / 4 th full paragraph	1 st paragraph - Change "NFPA-805" to "NFPA 805" Delete stray period at end of paragraph.	Make correction	Revised per comment.
45	SE Section 3.4.4 Page 95/5 th Paragraph	Remove the second period at the end of this paragraph.	Make correction	Revised per comment.
46	SE Page 99 / 2 nd paragraph	Correct Item S-3-30 – correct to match S-3 table ID of S-3.30.	Make correction	Revised per comment.
47	SE Page 99 / 3 rd paragraph	Correct "PRA RAI-13" to "PRA RAI 13"	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
48	SE Page 100 / last bullet	Change "NFPA-805" to "NFPA 805"	Make correction	Revised per comment.
49	SE Page 101 / 1 st bullet	Change comma (,) to colon (:)	Make correction	Revised per comment.
50	SE Page 103 / 2 nd paragraph	Fix hyphen in Title of LAR Section 4.2.4 to "Fire Area – Transition"	Make correction	Revised per comment.
51	SE Page 104 / Table	Correct description of RB-M to (/) instead of (I) "Reactor Building North / East Side, RHR Heat Exchanger Room A"	Make correction	Revised per comment.
52	SE Page 107 / last paragraph	Remove stray character after "The NRC Staff's" in last sentence.	Make correction	Revised per comment.
53	SE Page 108 / last paragraph	Add missing "of" in second sentence between "installation" and "these fire protection features." Replace "addition" with "additional" in 3 rd sentence "including any <u>additional</u> fire protection systems"	Make correction	Revised per comment.
54	SE Page 109 / Section 3.5.1.10	Add space between "SSD RAI 08" and "dated"	Make correction	Revised per comment.
55	SE Page 114 / 1 st full paragraph	Change "(complete bum-out)" to "(complete burn-out)"	Make correction	Revised per comment.
56	SE Page 116/Section 3.6.1	Under NFPA 805 Section 1.4.2 (1) the parenthesis within the end bracket is not necessary.	Make correction	Revised per comment.
57	SE Page 117 / 1 st paragraph under indented text	Add "in" to text "the methodology given NEI 04-02" to read "the methodology given <u>in</u> NEI 04-02"	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
58	SE Page 117 / last paragraph	Change "dry well" to "drywell"	Make correction	Revised per comment.
59	SE Page 120 / 1 st paragraph under Section 3.6.7	Change "Enclosure E, Table E-1" to read "LAR Attachment E, Table E-1"	Make correction	Revised per comment.
60	SE Page 123 / 3 rd bullet	Revise to read "...exceeded in order <u>to</u> bring performance..."	Make correction	Revised per comment.
61	SE Page 123 / 1 st paragraph	Correct implementation items to "S-3.1 and S-3.23"	Make correction	Revised per comment.
62	SE Page 125 / Section 3.8.3	Add "of" in the following "...engineering analyses used to support transition <u>of</u> the CNS FPP..."	Make correction	Revised per comment.
63	SE Page 128 / 2 nd bullet	Remove space between "10" and "°C"	Make correction	Revised per comment.
64	SE Page 129 / 1 st partial sentence	Correct implementation item to "S-3.8"	Make correction	Revised per comment.
65	SE Page 130 / Section 3.8.3.3.3	Correct implementation items to "S-3.8 and S-3.27"	Make correction	Revised per comment.
66	SE Page 131 / Section 3.8.3.4.2	Add "FM" in front of RAI in "...clarify its responses to an <u>FM</u> RAI." Replace (.) with (:) at end of 1 st paragraph	Make correction	Revised per comment.
67	SE Page 133 / 1 st bullet	Delete extra "FM" in front of "FM RAI 05(a)"	Make correction	Revised per comment.
68	SE Page 134 and Pg. 135 / 2 nd paragraph under closed bullet	Change "NUREG 1824" to "NUREG-1824" Change "FDTs" to "FDT ^s " throughout open bullets on pages 134 and 135	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
69	SE Page 135 / Section 3.8.3.5.3	<p>Change last sentence to "...uncertainty analysis is in identified LAR Table S-3..." to "...uncertainty analysis is <u>identified in</u> LAR Table S-3..."</p> <p>Change "implementation item 8" to "implementation item S-3.8."</p>	Make correction	Revised per comment.

Draft SE Technical Comments

The following comments on the draft NFPA 805 Safety Evaluations relate to material accuracy and completeness issues, and certain other areas of higher importance.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
1	SE Pages 13 and 34	On these pages the NRC cites the use of NFPA 101, "Life Safety Code." NPPD is not committed to that standard, except to the degree it is reflected in NFPA 805 requirements, as evaluated in the B-1 table. NPPD is concerned that the wording in the SE could be construed in the future to constitute a commitment in total to that standard. It is additionally noted that the NRC has not endorsed this standard, as part of NFPA 805, as it does not have a nexus to nuclear safety.	Add note or clarification in Section 3.1.1.5, bullet 3.3.3 that provides a disclaimer that NFPA 101 is not an endorsed standard for NFPA 805.	No change. The referenced standard is listed in Section 2.2 of the SE which is titled: "Applicable Staff Guidance". There is no wording in the SE that indicates the licensee is committed to the use of this standard or that the NRC requires compliance with this standard.
2	SE Page 14/Table 2.3-1	FAQ 07-0030 references SE Sections 3.2.2 and 3.4.3. There is no reference to FAQ 07-0030 in these sections. Also, SE Section 3.2.5 references this FAQ, but it not an SE Section cited in Table 2.3-1.	Delete reference in FAQ 07-0030 to SE Section 3.2.2 and 3.4.3. Add 3.2.5 to SE Table 2.3-1	Revised per comment.
3	SE Page 17/Table 2.3-1	FAQ 12-0062, regarding USAR updates was used in the LAR (S-3.26 Implementation Item) and is discussed in the SE, but missing from the FAQ table	Add FAQ 12-0062 to the FAQ table.	Revised per comment. Note that FAQ 12-0062 was not included in LAR Attachment H.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
4	SE Page 17/Table 2.3-1	FAQ 12-0064, "Hot Work/Transient Fire Frequency Influence Factors," is included in the table. However, this FAQ was finalized after submittal of the LAR, and thus, the LAR did not include any reference to FAQ 12-0064. SE Sections 3.4.2.2 and 3.4.7 referenced in the table do not mention it.	Delete of FAQ 12-0064 from Table.	Revised per comment.
5	SE Page 21	The 5th bulleted exemption describes the Control Building Basement as being at 903'-6". The actual elevation is below the grade level of 903'-6". The 9/21/83 Safety Evaluation does not include any elevation information. Page 23 of the LAR erroneously included this elevation information, and will be deleted in the follow-up 4/11/2014 letter.	Delete elevation of the Control Building Basement.	Revised per comment.
6	SE Page 22/3rd paragraph	Section 2.6.1, second sentence, states: "The license developed a change process that is based on ..." This change process has not been developed yet.	Revise to read: "The licensee developed <u>will develop</u> a change process that is based on..."	Revised per comment.
7	SE Page 22/Section 2.6.1, 3rd paragraph	The paragraph does not discuss the specific bullets from the NPPD LAR specific to screening. Without these bullets this SE appears to only apply screening to address changes that are only administrative in nature. This would not recognize the other purposes of screening that include screening for changes that would have less than minimal impacts to risk.	Include discussion of bullets on page 48 of the NPPD LAR such that screening is also recognized as a process that is used to identify changes that have less than minimal impacts to risk.	Revised per comment.
8	SE Section 2.6.1	Response to RAIs (Ref. NLS2013011 response to Programmatic RAI 05) is not included in the discussion for the plant change evaluation process.	Include discussions to recognize that NPPD will incorporate the change evaluation process detailed in FAQ 12-0061.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
9	SE Page 22/last full paragraph	SE states that the screening process was modeled after NEI 02-03 Rev. 0. Revision 1 to NEI 02-03 was actually used. No reference to a revision number was made in the LAR.	Reword to reflect use of NEI 02-03 Rev. 1 and revise Reference 52.	Revised per comment.
10	SE Page 22/Section 2.6.1, last paragraph	The safety evaluation states "The licensee stated that the screening is followed by engineering evaluations...". This statement could be interpreted as all change evaluations would include an engineering evaluation. However, some changes may not require engineering evaluations in that the change would be screened as trivial or having a less than minor risk impact.	Revise statement to read "The licensee stated that the screening <u>will identify when a change will require additional</u> is followed by engineering evaluations."	No change. SE states what was stated in the LAR.
11	SE Page 23/5th paragraph	First sentence makes reference to "Non-Power Mode NSCA Treatment." CNS does not have a document of this type.	Revise to read "Non-Power Mode reviews, etc.."	Revised per comment and per LAR.
12	SE Page 27/1 st paragraph	Excerpt "...may be used after transition to NFPA 805 as a part of the FREs conducted to determine the change in risk associated with proposed plant changes. " details that Cooper Nuclear Station will continue to perform FREs after transition. However, FREs were used to evaluate VFDRs and therefore will not be used after transition.	Revise excerpt to the following: "... may be used after transition to NFPA 805 as a part of the <u>FREs Plant change Evaluations</u> conducted to determine the change in risk associated with proposed plant changes.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
13	SE Page 27/last paragraph	Section 2.7.1 – Item S-3.30 states “will be in place 6 months after completion of modifications”. This does not match the proposed licensee implementation period of “implementation by May 31, 2017.” The basis for the May 31, 2017, date was to allow six months after the projected end of Refueling Outage RE29, but that does not subsume that committed implementation date.	Revise statement indicate that S-3.30 will be completed by May 31, 2017..	Revised per comment.
14	SE Page 28/Section 2.7.1	The wording in the License Condition could legally be construed that once the S-2 and S-3 are complete, no further changes to these configurations or processes could be made without violating the license condition. NPPD proposed to add words to the license condition to make it clear that once compliance was achieved, future changes could be made utilizing the protocols of the license condition, but was told by the NRC via e-mail that was unnecessary.	Add a statement at the end of Section 2.7.1 stating: "Once compliance has been achieved with the Table S-2 Modifications and Table S-3 Implementation Items, future changes to those affected configurations, processes, and procedures may be made using the self-approval process of the Fire Protection license condition."	No change. Upon completion of part c of the license condition, changes are made in accordance with parts a and b of the license condition.
15	SE Page 28/Section 2.7.2, 1 st paragraph	The second sentence describes Implementation Item S-30 as being completed within 6 months after completion of the modifications described in the S-2 table. This does not match the proposed licensee implementation period of “implementation by May 31, 2017.” The basis for the May 31, 2017, date was to allow six months after the projected end of Refueling Outage RE29, but that does not subsume that date.	Revise statement indicate that S-3.30 will be completed by May 31, 2017..	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
16	SE Page 61/first bullet	The bullet states that the plant staff will endeavor to achieve a hot standby condition. This is not applicable to BWR Technical Specifications. "hot standby" should be "hot shutdown (Mode 3)" for consistency with CNS Technical Specifications, and consistency with the later words "...cold shutdown (MODE 4) if necessary."	Make correction.	Revised per comment.
17	SE Page 68/2nd full paragraph	First sentence indicates that the post-transition period commences with the issuance of the Safety Evaluation. This is not NPPD's understanding. For purposes of the response to FPE RAI 10, the post-transition period was intended to mean after the 12-month implementation period after receiving the SE.	Revise to read "... compensatory measures necessary in the period between transition(<u>12 months after</u> issuance of this SE) and completion of the modification."	No change. The licensee's understanding is not correct. The post transition period begins upon issuance of the license amendment.
18	SE Page 69/1st paragraph	First sentence implies that a continuous fire watch will be in place until the modifications are in place. The fire watch will be put in place after the 12-month implementation period. See Comment 17.	Revise the sentence to read "The licensee further stated that compensatory measures during times when the incipient detection is out of service, including prior to completion of the modification, plant procedures will provide a continuous fire watch with hand-held incipient detection in the Auxiliary Relay Room <u>after the 12-month implementation period.</u> "	No change. See response to Comment 17. The post transition period begins upon issuance of the license amendment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
19	SE Page 72 last paragraph	Excerpt "In PRA RAI 12, the licensee quantitatively defines the term: 'potentially risk significant fire scenarios.' Potentially risk significant" fire scenarios for the purpose of evaluating the need for DID are defined as..." requires further clarification to detail its application as detailed in PRA RAI 12. Also, it is recommended that the specific threshold be excluded from the SE as these are guidelines developed by Cooper Nuclear Station and not mandated by NFPA 805 requirements.	Delete the three bullets following the excerpt. Replace the excerpt with "In PRA RAI 12, it is recognized that during some DID evaluations, it may become necessary to consider the potential for risk significant fire scenarios to impact VFDRs. In these cases, the licensee provide quantitative results from the FPRA for the purpose of evaluating the DID for VFDRs."	Revised. The three bullets with quantitative guidelines were not deleted as they form an integral part of the SE and are consistent with past SEs.
20	SE Page 74/Section 3.4.1.2 last paragraph	The excerpt "Also, CNS has removed unacceptable methods or committed to updating the FPRA." does not provide the required specificity to define what is meant by "updating" the FPRA.	A reference to the documents (i.e., as described in PRA RAI 40) that specify actions required for updating the FPRA should be provided in this paragraph.	Revised. The identified sentence was deleted.
21	SE Page 75/Section 3.4.2 last paragraph	The excerpt "Therefore, the NRC staff concludes that the PRA should be capable of supporting post-transition FREs to support,..." use of the term FRE is incorrect. Cooper's risk based evaluations after transition to NFPA 805 will not include FREs as these were done to evaluate transition.	Recommend replacing "FRE" with "Plant Change Evaluations".	Revised per comment.
23	SE Page 81/1 st full paragraph	Paragraph lists Fire Zones 8B, 8C, 8E, 8G, and 8H from PRA-RAI 04.02, but does not include Fire Zone 8F, as described in PRA RAI 04.02.	Add Fire Zone 8F.	Revised per comment.
24	SE Page 83/1 st full paragraph	To better reflect the response to PRA RAI 02f.01, Item 3) needs to be revised to "3) MCB cabinet walls protect sensitive equipment for a sufficient period such that the likelihood of not suppressing the fire prior to damage is low."	Make revision.	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
25	SE Page 86 / 2 nd paragraph	“Fire Modeling Database” should be replaced with “Fire Modeling Workbook” throughout and “FMDB” replaced with “FMWB” throughout SE.	Correct throughout SE	Revised per comment.
26	SE Page 87 / bullets under FDS	The bullet “Suppression activation time calculation in specific fire areas” was not used at Cooper.	Remove bullet “Suppression activation time calculation in specific fire areas”	Revised per comment.
27	SE Page 91 / last paragraph of page	Change transient height to “2 feet” based on SDP guidance.	Make correction	Revised per comment.
28	SE Page 99/Table 3.4.6-2	Fire Area TB-A “Description” contains buildings (Off Gas Building and Optimum Water Chemistry) that are considered part of Fire Area YD, as described in the LAR B-3 Table for these Fire Areas.	Remove Off Gas Building and Optimum Water Chemistry from the TB-A description as these buildings are considered part of the YD. A revision to Attachment I of the LAR will be made to provide this clarification.	Revised per comment.
29	SE Page 104/ table 3.5-1	Fire Area TB-A “Area Description” contains buildings (Off Gas Building and Optimum Water Chemistry) that are considered part of Fire Area YD, consistent with the LAR B-3 table.	Remove Off Gas Building and Optimum Water Chemistry from the TB-A description as these buildings are considered part of the YD. A revision to Attachment I of the LAR will be made to provide this clarification.	Revised per comment.
30	SE Page 109/1 st partial paragraph	First sentence indicates shielding for Fire Areas CB-D and RB-m is for transient fires assumed in these fire areas. In Fire Area CB-D, the shielding that has been installed is for fixed sources (electrical panels). This is currently being installed.	Correct sentence to include fixed sources as “...adequate for the fire duration of the transient <u>and fixed source</u> fires assumed...”	Revised per comment.
31	SE Page 122/2 nd paragraph under indented text	For consistency with FAQ 10-0059, under discussion of the scope of the monitoring program add “FPRA equipment.”	Make addition	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
32	SE Page 126/bullet at end of page	CNS does not use a Fire Modeling Database. "Fire Modeling Database" should be replaced with "Fire Modeling Workbook."	Revise to read: "...were implemented in a database and workbook referred to as the Fire Modeling <u>Workbook Database</u> (FMDBFMWB). Replace "FMDB" with "FMWB" throughout SE.	Revised per comment.
33	SE Attachments A and B	"Fire Modeling Database" should be replaced with "Fire Modeling Workbook" throughout and "FMDB."	Needs to be corrected throughout both Attachments A and B.	Revised per comment.
34	SE Attachment A (pg. A2) Radiant Heat Flux	Application at CNS - Second sentence does not read correctly. Revise to read "The correlation was used to <u>determine</u> the horizontal separation distance..." V&V Basis for NUREG-1805 is "Chapter 5" not Chapter 3	Make corrections	Revised per comment.
35	SE Attachment A (pg. A2) Hot Gas Layer MQH	V&V Basis for NUREG-1805 is "Chapter 2" not Chapter 3	Make correction	Revised per comment.
36	SE Attachment A (pg. A3) Hot Gas Layer Beyler	V&V Basis for NUREG-1805 is "Chapter 2" not Chapter 3	Make correction	Revised per comment.
37	SE Attachment A (pg. A3) Hot Gas Layer FPA	V&V Basis for NUREG-1805 is "Chapter 2" not Chapter 3	Make correction	Revised per comment.
38	SE Attachment A (Pg. A4) Ceiling Jet Temperature	V&V Basis for NUREG-1824 is "Volume 4" not Volume 3	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
39	SE Attachment A (Pg. A4) Sprinkler Activation Correlation	V&V Basis for NUREG-1805 is "Chapter 10" not Chapter 3	Make correction	Revised per comment.
40	SE Attachment A (Pg. A5) Heat Detector Actuation Correlation	<p>V&V Basis for NUREG-1805 is "Chapter 11" not Chapter 3</p> <p>V&V Basis for NUREG-1824 is "Volume 4" not Volume 3</p> <p>Remove SFPE Handbook discussion from the V&V Basis as this is related to smoke detector actuation.</p> <p>Revise NRC Staff Evaluation 2nd bullet to "The correlation is validated in authoritative publication of the NFPA Handbook."</p>	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
41	SE Attachment A (pg. A6) Smoke Detector Actuation	<p>The smoke detector correlation is based on the ceiling jet correlation of Alpert and the 10°C rise is the Method of Heskestad and Delichatsios. This correlation needs to be revised to include discussion of the Alpert Ceiling Jet correlation.</p> <p>V&V Basis for NUREG-1805 is “Chapter 11” not Chapter 3</p> <p>V&V Basis for NUREG-1824 is “Volume 4” not Volume 3</p> <p>Add SFPE Handbook Chapter 4-1 to the V&V Basis for Smoke Detector Actuation.</p> <p>Revise NRC Staff Evaluation 2nd bullet to “The correlation is validated in authoritative <u>publications of the NFPA and SFPE Handbooks.</u>”</p>	Make correction	Revised per comment.
42	SE Attachment B (pg. B1) FDS for MCR	<p>V&V Basis for NUREG-1824 is “Volume 7” not Volume 3</p> <p>NRC Staff Evaluation – Add “is” between “...abandonment time calculations” and “acceptable.” in last sentence.</p>	Make correction	Revised per comment.
43	SE Attachment B (pg. B2) Temperature Sensitive Equipment ZOI	V&V Basis for NUREG-1824 is “Volume 7” not Volume 3	Make correction	Revised per comment.

Comment Number	Location	Comment	Suggested Disposition	NRC Response
44	SE Attachment B (pg. B3) Plume/Hot Gas Layer Interaction	V&V Basis for NUREG-1824 is "Volume 7" not Volume 3	Make correction	Revised per comment.
45	SE Attachment B (pg. B3) Hot Gas Layer CFAST	V&V Basis for NUREG-1824 is "Volume 5" not Volume 3	Make correction	Revised per comment.
46	SE Attachment B (pg. B4) Temperature sensitive hot gas layer	V&V Basis for NUREG-1824 is "Volume 5" not Volume 3 Application at CNS – Change "equipments" to "equipment".	Make correction	Revised per comment.
47	SE Attachment C	CNS does not use a Fire Modeling Database (FMDB) (see Comments 32 and 33)	Replace duplicated FMDB acronyms with FMWB (Fire Modeling Workbook).	Revised per comment.