

From: Hanek, Olga <Olga.Hanek@fpl.com>
Sent: Friday, April 24, 2015 12:10 PM
To: Klett, Audrey; Robinson, Jay
Cc: Saba, Farideh
Subject: Turkey Point 3 and 4 - Request for NFPA 805 License Amendments Factual Accuracy Review (TAC Nos. ME8990 and ME8991)
Attachments: PTN SE Comment Form Master -combined final R1.pdf; PTN SE Comment Form Master -combined final R1.docx

FPL reviewed the DRAFT NRC Turkey Point 3 and 4 NFPA 805 license amendment package which included:

- DRAFT Technical Specifications page
- DRAFT license pages
- DRAFT SE

FPL performed the review of the DRAFT NRC Turkey Point 3 and 4 NFPA 805 license amendment package in accordance with NRC guidance. The review performed focused on factual accuracy/completeness and sensitive information.

The FPL comments followed NRC guidelines provided:

1. The basis for any proposed change was provided, including: (a) the date of the reference, (b) the ADAMS accession number if it is on the docket, and (c) the exact location in the SE where the licensee is proposing a change.
2. The comments are specific.
3. The response/comments were reviewed for duplicates, clear language, and internal discussions.
4. The comments are clearly numbered, SE sections cited, and page numbers and paragraphs identified.
5. The comments are documented in a Word – Table format. A pdf version of the Word file is also provided.
6. FPL comments are provided in a consolidated response.

FPL had no comments on the DRAFT Technical Specification page and DRAFT license pages

FPL comments on the DRAFT SE are attached.

FPL did not identify any proprietary or sensitive information.

Thank you,

Olga

**NextEra/Turkey Point Review Comments of
NRC NFFPA 805 Draft Safety Evaluation (dated 3/31/15)**

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Cover Letter – License Condition (Encl. 1 & 2)				
			No comments	
Section 1.0 Introduction				
1	3	1.2	<p>Last sentence of 1st paragraph states:</p> <p style="padding-left: 40px;">“The licensee’s supplemental letters dated April 4, June 6, July 18, September 12, November 5, and December 4, 2014; and February 18, 2015, provided additional information that clarified the application, but did not expand the overall scope of the application as originally noticed, and did not change the NRC staff’s original proposed no significant hazards consideration determination as published in the FR on February 4, 2014 (79 FR 6648).”</p> <p>The FRN 79 FR 6648 dated 2/4/14 was based on the LAR and LAR supplements up through 5/15/13. From 79 FR 6648:</p> <p style="padding-left: 40px;"><i>Date of amendment request:</i> June 28, 2012 (publicly available version is in ADAMS at Accession No. ML12191A048), as supplemented by letters dated September 19, 2012, March 18, 2013, April 16, 2013, and May 15, 2013 (ADAMS Accession Nos. ML12278A106, ML13099A441, ML13109A008, and ML13157A011, respectively).</p> <p>Since the FPL letter dated 1/7/14 was not included within the scope of the no significant hazards determination in the FRN, it is recommended that the letter dated 1/7/14 (Reference 13) be added to Section 1.2 of the SE.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
2	3	1.2	Referenced licensee letter dated December 4, 2014, should be December 2, 2014 Letter L-2014-343 (SE Reference 19).	Factual
3	4	1.2	Numbered item 2: typo – “NPFA” should be “NFPA”	Editorial
Section 2.0 Regulatory Evaluation				
4	11	2.2	<p>The information provided for NUREG/CR 6850 is incomplete. The lead-in on page 10 describes the use of NUREG/CR 6850 Volume 1, Volume 2, and Supplement 1. However, the summary sentences at the end of this section only describe the use of Volume 1 and Volume 2. Suggest that a sentence be added describing the use of Supplement 1 such as “Supplement 1 provides clarifications and additional information on recommended approach, methods, and data for conduct of a FPRA”</p> <p>It is suggested that the paragraph at the top of page 11 be changed to read:</p> <p>“Consensus was reached on all technical issues documented in NUREG/CR-6850. The methodology documented in this report reflects the current state-of-the-art in FPRA. These methods are expected to form a basis for RI analyses related to the plant FPP. Volume 1, the Executive Summary, provides general background and overview information, including both programmatic and technical and project insights and conclusions. Volume 2 provides the detailed discussion of the recommended approach, methods, data, and tools for conduct of an FPRA. Supplement 1 provides clarifications and additional information on recommended approach, methods, and data for conduct of a FPRA”</p>	Editorial
5	14	2.3	NFPA 805 FAQ 12-0064 (Reference 107) is referenced and discussed in Section 3.4.2.2 of the SE (p. 94 of the draft SE), but is not included in Table 2.3-1.	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
6	14	2.3	<p>Fire PRA FAQs (e.g., 13-0004 and 14-0009) are not referenced here or in any discussion of acceptable PRA methods. Recommend adding a brief discussion of the Fire PRA FAQ process to this section or to another appropriate section. Also reference to FAQ 13-0004 (p. 114) and FAQ 14-0009 (p. 98) should be preceded by "Fire PRA" since Fire PRA FAQs were developed under a different meeting and approval process from NFPA 805 FAQs.</p> <p>Not including these Fire PRA FAQs could lead to future misinterpretation of the acceptance of their use when compared to the FAQs referenced in Table 2.3-1.</p> <p>Suggest adding the following FAQs not listed in Table 2.3-1 but referenced in submittals in Table 2.3-1: FAQ 06-0008 Alternative Method for Fire Protection Engineering Analyses, FAQ 07-0032, Clarification of 10 CFR 50.48(c), 50.48(a), and GDC 3, FAQ 08-0056 Radioactive Release Transition, FAQ 08-0057 New Shutdown Strategy, FAQ 12-0061 NFPA 805 Change Process.</p>	Factual
7	14	2.3	<p>The PTN LAR was supplemented by an RAI response (SSD RAI 15) dated 3/18/13 (ML13099A441) (page 109 of Attachment 1). The RAI response states:</p> <p style="padding-left: 40px;">“After the approval of the LAR, in accordance with 10 CFR 50.71(e), the PTN UFSAR will be revised. The format and content will be consistent with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035).”</p> <p>Table 2.3-1 should be revised to include FAQ 12-0062 and a reference to its use in Section 2.4.4 of the SE.</p>	Factual
8	18	2.4.3	<p>2nd paragraph, 2nd sentence: Failure by the licensee to not establish FPP procedures would result in non-compliance.....</p>	Administrative
9	18	2.4.4	<p>The PTN LAR was supplemented by an RAI response (SSD RAI 15) dated</p>	Factual

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			<p>3/18/13 (ML13099A441) (page 109 of Attachment 1). The RAI response states:</p> <p style="padding-left: 40px;">“After the approval of the LAR, in accordance with 10 CFR 50.71(e), the PTN UFSAR will be revised. The format and content will be consistent with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035).”</p> <p>Therefore, it is recommended that Draft SE Section 2.4.4 be revised to incorporate the RAI response as follows:</p> <p>“The licensee further stated that after the approval of the LAR, in accordance with 10 CFR 50.71(e), the Turkey Point UFSAR will be revised and that the format and content will be consistent with NEI-04-02 with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035). The NRC staff concludes that the licensee’s method to update the UFSAR is acceptable because the licensee updates its UFSAR in accordance with 10 CFR 50.71(e) and has stated that the format and content of the update will be consistent with the guidance provided in NEI-04-02 FAQ 12-0062.”</p>	

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10	19	2.5	<p>Rescinded exemption "LA-06-19840327, Exemption from the Appendix R, Section III.J requirement for providing emergency lighting units in Units 3 and 4 containment." is included under the discussion of exemptions evaluated under RI/PB methods.</p> <p>The PTN LAR (Reference 8) page 23, Section 4.2.3 provides the following reason why LA-06-19840327 should be rescinded:</p> <p style="padding-left: 40px;">"This exemption is no longer required because NFPA 805 does not require 8 hour battery backed emergency lights."</p> <p>Recommend changing the lead in sentence on p. 19 of the SE to "The following exemptions are rescinded as requested by the LAR and the underlying condition <i>is either no longer required by NFPA 805 or</i> has been evaluated using RI/PB methods and found to be acceptable with no further actions because the philosophy of DID and sufficient safety margins are maintained (numbering scheme provided by the licensee)."</p>	Factual
11	19	2.5	<p>Disposition of Appendix R exemptions may follow two three different paths during transition to NFPA 805:</p> <p>Add the following bullet to be consistent with the comment #10 above</p> <p>The exemption was found to be no longer required by NFPA 805</p>	Factual

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12	20	2.5	<p>For Licensing action LA-20-19990505 - Based on the PTN LAR (Reference 8) page 23, Section 4.2.3 provides the following:</p> <p style="padding-left: 40px;">“LA-20-19990505, 10 CFR 50, Appendix R Exemption for Raceway Fire Barriers in the Open Turbine Building from III.G.2.a Using a Minimum 1-Hour Barrier between Column Lines A and E-1 (III.G.2.a Criteria)”</p> <p>Recommend changing:</p> <ul style="list-style-type: none"> • “LA-20-19990505, Exemption from the Appendix R, Section III.G.3 requirement for separation of raceway fire barriers in the open turbine building by a minimum 1-hour rated barrier between column lines A and E-1.” <p>To:</p> <ul style="list-style-type: none"> • LA-20-19990505, Exemption from the Appendix R, Section III.G.3 2.a requirement for separation of raceway fire barriers in the open turbine building by a minimum 1-hour rated barrier between column lines A and E-1.” 	Factual
13	20	2.5	Licensing Action LA-21-19990505 third line should read: “rated barrier between column lines E-1 and Jc and the turbine deck.” The Jc designator is with lower case “c”	Administrative
14	27	2.7.1	<p>2nd paragraph – For completeness, the NRC should acknowledge that LAR Table S-1 modifications are also the same as those identified in LAR Table B-3. The revised sentence would be:</p> <p>“The NRC staff confirmed that the modifications identified in LAR Table S-2 and Table S-1 are the same as those identified in LAR Table B-3, “</p>	Factual
15	27	2.7.1	This section states that Table S-1 of the LAR shows that 12 modifications are complete. This is correct. However, the updated Table S-2 referenced in this section shows an additional 17 modifications are complete. Recommend revising Section 2.7.1 to acknowledge the 29 the completed modifications in both Table S-1 and Table S-2.	Factual
16	28	2.7.2	The first paragraph of Section 2.7.2 on page 28 refers to Implementation Items in LAR Attachment S Table S-2. Implementation Items for PTN are identified	Administrative

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
			<p>in LAR Attachment S, Table S-3 vs. Table S-2. It is recommended that the sentence read:</p> <p>“Each implementation item will be completed prior to the deadline for implementation of the RI/PB FPP based on NFPA 805, as specified in the license conditions and the letter transmitting the amended license (i.e., implementation period), which states that the implementation items listed in LAR Attachment S, Table S-2, 3 with the exception of Items 12, 18, and 19, will be completed no later than 12 months after issuance of the license amendment.”</p>	
17			Intentionally blank	
Section 3.0 Technical Evaluation Section 3.1 NFPA 805 Fundamental FPP and Design Elements				
18	30	3.1	Last paragraph – change the reference number as follows “Furthermore, Section 3.1 of NFPA 805 specifically allows the use of alternatives to the NFPA 805, Chapter 3 fundamental FPP requirements that have been previously approved by the NRC (the AHJ as denoted in NFPA 805 (Reference 83), and RG 1.205, Revision 1 (Reference 4)), and are contained in the currently approved FPP for the facility.”	Administrative
19	31	3.1.1	<p>First paragraph after numbered list on p. 31:</p> <p>“The NEI 04-02 based approach was modified in regard to existing FPP elements that comply via previous approval, as described in the licensee’s supplemental letters dated March 21, 1979; December 12, 1980; November 8, 1981; and April 19, 1982.”</p> <p>The referenced letter dated 12/12/80 did not appear to match other referenced correspondence in the SE, LAR or RAI responses.</p>	Factual
20	33	3.1.1.1	3 rd paragraph, p. 33, last sentence, typo: “Attachment 5” should be “Attachment S”	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
21	36	3.1.1.1	The section discussing NFPA 805 Section 3.5.13 is not consistent with the response to FPE RAI 12. The RAI response states "PTN does not have seismically analyzed hose standpipe systems per Section 3.6.4 of NFPA 805 (See LAR Attachment A, Table B-1). Therefore, the ANSI B31.1 requirements for headers inside buildings are not applicable. However, a review of PTN piping specifications determined that Fire Protection piping, Service Number 11, may be Class F, G, H, or SL. Class F, G, H, and SL are all ANSI B31.1 classified." The draft SE states "The licensee further stated that a review of the piping specifications determined that other portions of the fire protection piping system are ANSI B31.1 classified." The response to the RAI shows that the piping including headers inside the buildings is classified to ANSI B31.1 not just "other portions". Recommend that the statement be changed to "The licensee further stated that a review of the piping specifications determined that other portions of the fire protection piping system are ANSI B31.1 classified."	Factual
22	36	3.1.1.1	Last paragraph on page 36: The reference to "LAR Attachment B, NEI 04-02, Table B-2, "Nuclear Safety Capability Assessment - Methodology Review,"" should be a reference to "LAR Attachment A, Table B-1"	Factual

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23	37	3.1.1.2	<p>The paragraph for 3.3.1.2(6) states: “NFPA 805, Section 3.3.1.2 (6) requires that controls on the use and storage of flammable gases be in accordance with applicable NFPA standards. The licensee identified a clarification to the stated requirement that indicates while procedures are in place to control flammable gases, upon examination of the pre-transition FPP, no other NFPA standards were determined to be applicable. The NRC staff concludes that the licensee’s statement of compliance is acceptable because the licensee indicated that no other standards are applicable to the storage and use of flammable gases that follow the guidance provided in NEI 04-02.”</p> <p>However, the LAR (Reference 8) in Attachment A (page 7 of 48) for 3.2.1.2(6) states “PTN is not committed to any flammable gas standards, and as such are not part of the CLB. Per FAQ 06-0020, the following guidance applies..... Flammable gases are controlled per 0-ADM-016 and 0-ADM-016.1.”</p> <p>The statement “no other NFPA standards were determined to be applicable” is not part of the LAR compliance statement for 3.3.1.2(6).</p> <p>Suggest that this be changed to:</p> <p>“NFPA 805, Section 3.3.1.2 (6) requires that controls on the use and storage of flammable gases be in accordance with applicable NFPA standards. The licensee identified a clarification to the stated requirement that indicates while procedures are in place to control flammable gases, upon examination of the pre-transition FPP, no other NFPA standards were determined to be applicable. The NRC staff concludes that the licensee’s statement of compliance is acceptable because the licensee indicated that no other standards are applicable to the storage and use of flammable gases that follow the guidance provided in NEI 04-02.”</p>	Factual

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24	39	3.1.1.2	1 st paragraph - 3.1.1.3(3) discussion does not reflect LAR Table B-1 compliance statement. PTN has both complies via engineering evaluation (LAR Table B-1 page 42 of 48) and Complies with Clarification. This should be listed in Section 3.1.1.3.	Factual
25	40	3.1.1.3	2 nd paragraph refers to LAR Table S-3 Implementation Items 24 and 26. The reference in the response to SSD RAI 05 (Reference 10) was to LAR Table S-2 "Committed Modifications", Items 24 and 26 (not implementation items). In addition, these modifications, Table S-2, Items 24 and 26 were deleted, as reflected in the final LAR Table S-2 (Reference 18). Reference to "implementation items" or modification items 24 and 26 should be removed.	Factual
26	40	3.1.1.4 (1.)	The first item in the list of complies with previous approval incorrectly refers to Turkey Point Units 1 and 2. This should be Turkey Point Units 3 and 4	Factual
27	40	3.1.1.4 (4.)	Item 4 has an "or" as the last word. This is an inclusive list and should not have an "or". Recommend this be changed to: 4. May 5, 1999 – Issuance of a Revised Exemption and its Supporting Safety Evaluation for Fire Barriers in the Turbine Building (Reference 41); or	Editorial

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28	43	3.1.1.7	<p>Last bulleted item of Section 3.1.1.7 of the SE states:</p> <p style="padding-left: 40px;">“In LAR Attachment A, Table B-1, for NFPA 805, Sections 3.4.1(a)(2) and 3.4.1(a)(3), the licensee stated that NFPA 600, “Standard on Industrial Fire Brigades” (Reference 86) applies in lieu of NFPA 1500, “Standard on Fire Department Occupational Safety and Health Program” (Reference 92).”</p> <p>LAR Attachment A, Table B-1 Section 3.4.1(a)(3) states that “NFPA 600 applies in lieu of NFPA 1582.” not NFPA 1500.</p> <p>Recommend changing this to:</p> <p style="padding-left: 40px;">“In LAR Attachment A, Table B-1, for NFPA 805, Sections 3.4.1(a)(2) and 3.4.1(a)(3), the licensee stated that NFPA 600, “Standard on Industrial Fire Brigades” (Reference 86) applies in lieu of NFPA 1500, “Standard on Fire Department Occupational Safety and Health Program” (Reference 92) (3.4.1(a)(2)) and NFPA 1582 , ” Standard on Medical Requirements for Fire Fighters and Information for Fire Department Physicians” (3.4.1(a)(3)).”</p>	Factual
29	46	3.1.3	Top of page 46. GL 2006-03 is Reference 62, not 54.	Administrative
30	64	3.1.4.8	<p>Last sentence on p. 64:</p> <p style="padding-left: 40px;">“Based on its review of the information submitted by the licensee, and in accordance with 10 CFR 50.48(c)(2)(vii), the NRC staff concludes that the proposed PB method is an acceptable alternative to the corresponding NFPA 805, Section 3.1.1.5 requirement...”</p> <p>The reference should be to NFPA 805, Section 3.2.3(1) (there is no Section 3.1.1.5 of NFPA 805).</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.2 Nuclear Safety Capability Assessment (NSCA) Methods				
31	65	3.2	<p>Sentence beginning "NFPA 805, Section 1.3.1, "Nuclear Safety Objectives," should be</p> <p>"NFPA 805, Section 1.4.1, "Nuclear Safety Objectives,"</p> <p>Section 1.3.1 of NFPA 805 is the "Nuclear Safety Goal"</p>	Factual
32	68	3.2.1	<p>The following:</p> <p>"Where these instances occurred, either modifications (to protect cables or to prevent the cable damage from affecting the overcurrent trip of the circuit) are being performed to eliminate the concern, or an FRE determined that the risk of the fire-induced loss of breaker coordination was not significant. As stated above, the licensee performed a gap analysis based on the review of the NSCA to the guidance of NEI 00-01, Revision 1 with respect to Revision 2 as endorsed by RG 1.205, Revision 1 and determined there were no impacts requiring inclusion in LAR Attachment B, Table B-2."</p> <p>Should be:</p> <p>"Where these instances occurred, either modifications (to protect cables or to prevent the cable damage from affecting the overcurrent trip of the circuit) are being performed to eliminate the concern, or an FRE determined that the risk of the fire-induced loss of breaker coordination was not significant.</p> <p>As stated above, the licensee performed a gap analysis based on the review of the NSCA to the guidance of NEI 00-01, Revision 1 with respect to Revision 2 as endorsed by RG 1.205, Revision 1 and determined there were no impacts requiring inclusion in LAR Attachment B, Table B-2."</p> <p>Since the concluding statement applies to the three previous bullets and not just the third bullet</p>	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
33	71	3.2.1.1	Paragraph 3.1.3.3 and 3.1.3.4 – “The licensee’s methodology develops SSD logics to show the.....”. FPL has decided to use ARC+ software program for NSCA analysis. FPL has developed fault tree diagrams from the SSD logic diagrams discussed in SSA RAI 17 (Draft SE Reference 13) response. Recommend the following change: “The licensee’s methodology develops SSD logics [converted to alternate logic diagrams as necessary for compatibility with NSCA software in use] to show the.....”.	Factual
34	72	3.2.1.2	Paragraph 3.3.3.1 – “The licensee further stated elementary wiring diagrams have block diagrams that provide all necessary cable information, and this was not mentioned in the guidance”. Per FPL response as provided in SSA RAI 17 [Reference 13 of the draft SE] recommend deleting “this was not mentioned in the guidance”.	Factual
35	72	3.2.1.2	2 nd paragraph: Missing comma between 8 and 15. “The licensee identified each of these outstanding work items in LAR Attachment S, Table S-2, as Modifications 1, 2, 5, 7, 8 15, 17, and 18.”	Editorial
36			Intentionally blank	
37	77	3.2.2	Second paragraph addressing SSD RAI 08 states: “...the licensee identified failure scenarios, required SSD positions, SSA logic alternative, and RAs for MOV-3/4-626 and MOV-3/4-716A in Fire Area HH...” There are no RAs associated with MOV-3/4-716A because this MOV is normally open with its breaker administratively maintained open.	Factual

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38	77	3.2.2	<p>Last sentence of paragraph addressing SSD RAI 08 states:</p> <p>“The NRC staff concludes that the licensee’s response to the RAI is acceptable because the licensee provided proper documentation changes to reflect the results of the analysis and also identified a required action that will incorporate the provisions of NFPA 805, Chapter 3 in the licensee’s FPP and included the action as an implementation item in LAR Attachment S, which would be required by the proposed license condition.”</p> <p>Since the paragraph is not applicable to NFPA 805 Chapter 3, it should be revised to remove reference to NFPA 805 Chapter 3.</p>	Factual

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39	83	3.2.5	<p>Bottom of p. 83 states:</p> <p>Some of these OMAs may not be required to demonstrate the “availability of a success path,” in accordance with NFPA 805, Section 4.2.3.1, but may still be required to be retained in the RI/PB FPP because of DID considerations described in NFPA 805, Section 1.2. Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID. In each instance, the licensee determined whether a transitioning OMA was an RA, a DID-RA, or not necessary for the post-transition RI/PB FPP.</p> <p>The source of “the licensee define a DID-RA as an action that it is not needed to meet the NSPC but has been retained to provide DID” could not be found and is inconsistent with the PTN treatment, where the additional risk of recovery actions relied upon for DID was conservatively modeled as the change in risk for the separation issues in the fire area, as discussed in the third paragraph of Section 3.4.4 of the SE. Recommend removing the sentence:</p> <p>“Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID.”</p> <p>Some of these OMAs may not be required to demonstrate the “availability of a success path,” in accordance with NFPA 805, Section 4.2.3.1, but may still be required to be retained in the RI/PB FPP because of DID considerations described in NFPA 805, Section 1.2. Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID. In each instance, the licensee determined whether a transitioning OMA was an RA, a DID-RA, or not necessary for the post-transition RI/PB FPP.</p>	Factual

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40	84	3.2.5	<p>Second paragraph addressing SSD RAI 13 summarizes the AFW FCVs based on FPL response to the RAI [Reference 11]. NRC's conclusion state that: "...the licensee demonstrated that the RA can be completed using alternate nitrogen bottles to modulate the AFW FCVs."</p> <p>This discussion should also include the last two paragraphs provided in the RAI SSA 13 response [Reference 11, Attachment to L-2013-107 page 33 of 91] that discusses local operation of the FCVs.</p>	Factual
41	85	3.2.6.1	<p>3rd paragraph of Section 3.2.6.1 – The statement:</p> <p style="padding-left: 40px;">"The licensee further stated that LAR Attachment S, Table S-2, Items 3 and 4, are to be changed with all references to "incipient detection" becoming "in cabinet detection" to reflect the current analysis."</p> <p>Was further amended by letter L-2014-071 dated 4/4/14 (Reference 14), by deleting the modification in LAR Attachment S, Table S-2, Items 3 and 4. This markup is discussed in the Attachment of Reference 14 in the response to RAI PRA 01.r.02.</p> <p>Recommend adding the following statement "Per Reference 14 the Licensee deleted items 3 and 4 from LAR Attachment S Table S-2."</p> <p style="padding-left: 40px;">"The licensee further stated that LAR Attachment S, Table S-2, Items 3 and 4, are to be changed with all references to "incipient detection" becoming "in cabinet detection" to reflect the current analysis. Per Reference 14 the Licensee deleted items 3 and 4 from LAR Attachment S Table S-2"</p>	Factual

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42	85	3.2.6.1	<p>The fourth paragraph on this page describes installation of incipient detection systems in the cabinets in the CSR and area wide in the switchgear rooms and acknowledges that the switchgear rooms are required for DID. Therefore it is recommended that the last sentence be revised to read</p> <p>“The systems in the Cable Spread Room are being credited to reduce risk contribution from the respective panels and provide risk benefits for CDF and LERF”.</p>	Factual
43	86	3.2.6.1	<p>The following statement should remove item 32:</p> <p>“The licensee stated that the panels in which the incipient detection system will be installed are identified in LAR Attachment S, Table S-2, Items 25 and 32 and that all panels are cabinets with metal walls on all four sides.”</p> <p>Table S-2 Item 32 is an area wide system and does not depend on cabinets with metal walls. In addition, Communication Cabinet C-600 is not an enclosed cabinet on all four sides. Panels 3C11 and 4C11 are currently open but will be enclosed. The enclosure will not be metal on all sides and there will not be a partition between 3C11 and 4C11.</p>	Factual
44	86	3.2.6.1	<p>The fourth bullet on page 86 states:</p> <p style="padding-left: 40px;">Each panel identified in LAR Attachment S, Table S-2, Items 25, will be installed with a sampling port. Multiple sampling ports will be installed inside the open back vertical boards identified in the response to FPE RAI 01.b.</p> <p>Consistent with comment 41 the statement “open back vertical boards” is no longer applicable.</p> <p>Recommended changing the fourth bullet as follows:</p> <p style="padding-left: 40px;">Each panel identified in LAR Attachment S, Table S-2, Items 25, will be installed with a sampling port. Multiple sampling ports will be installed inside the open back vertical boards identified in the response to FPE RAI 01.b.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.3 Fire Modeling				
			No Comments	
Section 3.4 Fire Risk Assessments				
45	89	3.4	Section 3.4 last sentence: typo: typo – “NPFA” should be “NFPA”	Editorial
46	91	3.4.1.2	<p>The 5th bullet includes the following:</p> <p>In its response to PRA RAI 09 (Reference 10), the licensee further described the methodology used to evaluate safety margins in the FREs to include the following evaluations and determinations:</p> <p>...</p> <ul style="list-style-type: none"> The PRA logic model was developed in accordance with the ASME/ANS RA-Sa-2009 PRA standard and RG 1.200, Revision 2 (Reference 44). <p>The response to PRA RAI 09 does not further describe the content of this bullet. Therefore, recommend deleting this bullet</p>	Factual
47	92	3.4.2	<p>The last sentence of Section 3.4.2:</p> <p>Based on this information, the NRC staff concludes that the FPRA represents the current, as-built, as-operated configuration.</p> <p>Recommend that this statement be changed as follows “The FPRA represents the as-built, as-operated plant as it will be configured after full implementation of NFPA 805.” Consistent with the Farley SE dated 3/10/15 (ML14308A048) Section 3.4.2.</p>	Factual
48	92	3.4.2.1	2 nd sentence of Section 3.4.2.1. Full scope of IEPRA peer review was performed in 2002, not 2000 (Reference: PTN LAR Attachment U, page U-2).	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
49	94	3.4.2.2	<p>2nd paragraph, 2nd sentence on p. 94:</p> <p style="padding-left: 40px;">“In its response to PRA RAI 29.a (Reference 14), the licensee also stated that it will apply the guidance in FAQ 12-0064 to update the PRA and the updated transient change-in-risk estimates will use the updated PRA.”</p> <p>“transient” should be “transition” to reflect the response to PRA RAI 29.a (Reference 14).</p>	Factual
50	94	3.4.2.2	<p>Last sentence 4th paragraph, page 94: Typo “in” should be removed from:</p> <p>“The NRC staff finds this issue to be resolved because the transition in change-in-risk estimates, ...”</p>	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
51	96	3.4.2.2	<p>The 3rd paragraph on p. 96:</p> <p>“In its response to PRA RAIs 01.r and 08 (Reference 12), the licensee removed the VEWFDs credit for all fire scenarios in the MCR. In its response to PRA RAI 01.r.02 (Reference 14), the licensee further explained that in-cabinet smoke detection would not be credited in lieu of incipient detection. In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that the PRA was updated to remove credit for in-panel fire detection in the MCR. The NRC staff finds this issue to be resolved because the PRA has been updated to remove all credit for in-panel detection in the MCR, and the transition change-in-risk estimates, submitted by the licensee on September 12, 2014 (Reference 17) do not include this detection.”</p> <p>The response to PRA RAI 01.r.02 (Reference 14), sub-part d, states</p> <p>“In-panel detection credit will be taken for scenarios associated with fire propagation between panels. In panel detection will not be credited for precluding damage in the panel in which it is installed.”</p> <p>It is recommended that the paragraph be revised as follows:</p> <p>“In its response to PRA RAIs 01.r and 08 (Reference 12), the licensee removed the VEWFDs credit for all fire scenarios in the MCR. In its response to PRA RAI 01.r.02 (Reference 14), the licensee further explained that in-cabinet smoke detection would not be credited in lieu of incipient detection to preclude damage in the panel in which installed. In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that the PRA was updated to remove credit for in-panel fire detection in the MCR. The NRC staff finds this issue to be resolved because the PRA has been updated to remove all credit for in-panel detection in the MCR, and the transition change-in-risk estimates, submitted by the licensee on September 12, 2014 (Reference 17) do not include this detection.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
52	97	3.4.2.2	Draft SE page 97, 3 rd paragraph uses the term "cable tray" in discussions about HEAF scenarios; whereas response to PRA RAI 01.u uses a generic term "raceway". Recommend SE use the generic term "raceway" as used in the RAI response.	Factual
53	98	3.4.2.2	2 nd paragraph on p. 98: <p style="text-align: center;">"In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that it will incorporate this updated treatment of MCR transient fire placement into the PRA, and the updated transient change-in-risk estimates will use the updated PRA.."</p> <p>"transient" should be "transition" to reflect the response to PRA RAI 29 (Reference 14).</p>	Factual
54	98	3.4.2.2	Last paragraph refers to FAQ 14-0009. This FAQ is not approved yet and is not in the list of FAQs. The information presented is sufficient to justify the results without referring to the FAQ. Suggest the reference to FAQ 14-0009 be deleted. However, consistent with comment #6 if FAQ 14-009 is retained it should be "FPRA FAQ 14-009"	Factual
55	99	3.4.2.2	p. 99 last paragraph states: <p style="text-align: center;">"In its response to PRA RAI 13.01.c.01 (Reference 17), the licensee stated that the CSR compliant risk was estimated assuming that the MCR was always abandoned (on loss of control) following any fire and using only equipment available at the ASP. The CCDP for failing to shutdown following MCR abandonment was reported to be 0.056."</p> <p>The response to PRA RAI 13.01.c.01 (Reference 17), Attachment, p. 7 last paragraph states:</p> <p>"The above methodology was applied and the compliant case CCDP was calculated as 0.0517. Using this CCDP and the above methodology, the delta risk for the cable spreading room was calculated as:..."</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
56	100	3.4.2.2	2 nd paragraph: typo “..complaint” should be “compliant”	Editorial
57	101	3.4.2.2	3 rd paragraph page 101 states: In PRA RAI 12 (Reference 22), the NRC staff notified the licensee that new information indicated the reduction in hot short probabilities for circuits protected by control power transformers (CPTs) identified in NUREG/CR-6850 was too high and should be reduced. “protected by” should be replaced with “provided with” since a CPT is not a protective device.	Factual
58	104	3.4.2.3.1	Second sentence “GFTMs” should be “GFMTs”. Typo	Editorial
59	104	3.4.2.3.1	The first bullet list. The primary radiation model is Shokri and Beyler Solid Flame Model. The Modak model (PSM) is used as a comparison check, and is rarely the most limiting model. Suggest replacing Modak’s Point Source Radiation Model with Shokri and Beyler Solid Flame Model and add sentence to indicate the Modak model (PSM) was used as a conservative check on the upper bounds: <ul style="list-style-type: none"> • Modak’s Point Source Radiation Model (Reference 112) • Shokri and Beyler Solid Flame Model (Reference 113) Modak’s Point Source Radiation Model (Reference 112) was used as a conservative upper bound check against the Shokri and Beyler Solid Flame Radiation Model.	Factual
60	104	3.4.2.3.1	Second bullet list, Shokri and Beyler flame radiation model belongs in the first bullet list. Suggest deleting this model reference from the bullet list. <ul style="list-style-type: none"> • Shokri and Beyler flame radiation model (Reference 113) 	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
61	104	3.4.2.3.1	<p>Fourth paragraph, the CFAST reference should be to NIST 1026, which is not currently in the reference list.</p> <p>“The Consolidated Model of Fire and Smoke Transport (CFAST) computational fire model, Version 6 (Reference 57129), was used to generate the HGL tables in the GFMT approach.”</p> <p>This should be added to the reference list.</p>	Admin
62	106	3.4.2.3.2	<p>FM RAI 01b, second paragraph, second sentence. The response to FM RAI 01b (ML13099A441) states the fifteen minute opening time for the door is a potential reason the doors open, not necessarily the only reason. Suggest providing clarification as follows:</p> <p>“...three natural ventilation conditions (door open from the start, door opens at 15 minutes, and door closed) and that the 15 minutes is <u>an intermediate time that accounts for</u> based on the assumed fire brigade arrival time.”</p>	Admin
63	106	3.4.2.3.2	<p>2nd bulleted item on p. 106, 2nd paragraph, states:</p> <p>“In its response to FM RAI 01.b (Reference 10), the licensee indicated that based on fire brigade drills, the response time is expected to be 12 - 13 minutes.”</p> <p>The response to FM RAI 01.b (Reference 10), page 144 of Attachment 1, states:</p> <p>Further, plant fire brigade response drill times performed under 0-ADM-016.2 indicate that the fire brigade is ready to engage between 12 – 23 minutes for fires on the Unit 3 turbine deck, which would be indicative of the response times at the control room entry.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
64	106	3.4.2.3.2	<p>FM RAI 01b, second paragraph, last sentence. The sensitivity analysis described in the RAI response applied to the version of the control room abandonment calculation originally reviewed by the NRC. The control room abandonment calculation was updated and the 50°C temperature threshold was eliminated (see REPT-0027-0067-002-005, Rev. 0). A comprehensive sensitivity analysis was instead used to show that the results are not sensitive to variations in the door opening time over a ten minute interval centered on fifteen minutes. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that a maximum immersion temperature of 50 °C was <u>originally</u> used as the tenability threshold, which is much lower than the recommended value in NUREG/CR-6850 (Reference 50), and a sensitivity analysis shows that this conservative assumption reduces the calculated abandonment times by up to 5 minutes.”</p>	Admin
65	107	3.4.2.3.2	<p>FM RAI 01c, second paragraph, last sentence. The conclusion described in this RAI response applies to the original version of the control room abandonment calculation. The control room abandonment calculation was updated and the 50°C temperature threshold was eliminated (see REPT-0027-0067-002-005, Rev. 0). However, as noted in the response to FM RAI 01c (ML13099A441), the transient growth rates recommended in FAQ 08-0052 were used instead of the ‘medium t^2’ fire. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that the sensitivity analysis also showed that the use of a maximum immersion temperature of 95°C, as recommended in NUREG/CR-6850, instead of the 50°C used in the <u>original</u> MCR abandonment time calculations, negates the effect of the fire growth rate assumption on the probability for abandonment.”</p>	Admin

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
66	108	3.4.2.3.2	<p>FM RAI 01e, second paragraph, last sentence. The sentence applies to the original report. As noted in the response to FM 01e (ML13099A441), the control room abandonment report was updated (see REPT-0027-0067-002-005, Rev. 0) and the sensitivity analysis was revised so that it is used to demonstrate the baseline scenarios are conservative or do not affect the total probability of abandonment by a factor greater than fifteen percent. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further demonstrated that the <u>original</u> baseline parameter selection is either conservative or does not have a significant effect on the probability for MCR abandonment.”</p>	Admin
67	108	3.4.2.3.2	<p>FM RAI 01.g, second paragraph, 3rd sentence. The use of the conservative 50°C criteria applies to the original control room calculation. The calculation was updated as noted in the draft SE to include scenarios with secondary combustibles, but the 50°C criterion was eliminated. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that the sensitivity analysis also showed the use of a maximum immersion temperature of 95°C, as recommended in NUREG/CR-6850, instead of 50°C used in the <u>original</u> MCR abandonment time calculations, negates the effect of including scenarios with intervening combustibles on the probability for abandonment.”</p>	Admin
99	114	3.4.2.3.2	<p>The last bullet refers to FAQ 13-0004. Consistent with comment # 6 this should be changed to FPRA FAQ 13-0009</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
68	115	3.4.2.4	<p data-bbox="590 294 982 327">3rd paragraph of Section 3.4.2:</p> <p data-bbox="684 365 1587 596">The NRC staff concludes that the PRA approach, methods, and data are acceptable, and that NFPA 805, Section 2.4.3.3 is satisfied for transition to NFPA 805. The NRC staff based this conclusion on the findings that (1) the PRA model meets the criteria in that it adequately represents the current, as-built, as-operated configuration, and is, therefore, capable of being adapted to model both the post-transition and compliant plant as needed;</p> <p data-bbox="590 637 1598 766">Recommend that this statement be changed as follows “the PRA model meets the criteria in that it adequately represents the as-built, as-operated plant as it will be configured after full implementation of NFPA 805.” Consistent with the Farley SE dated 3/10/15 (ML14308A048) Section 3.4.2.</p>	Factual
69	117	3.4.4	2 nd sentence 3 rd paragraph: “PSC” should be “PCS” (typo)	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
70	117	3.4.4	<p>Last sentence of 3rd paragraph:</p> <p>“As indicated in LAR Attachment W, Tables W-6 and W-7, the total additional risk of RAs and additional risk of RAs for each fire area with either risk-reduction or DID RAs are conservatively assumed to be equal to the total delta risk and delta risk for each fire area, respectively.”</p> <p>The 12/2/14 FPL to NRC submittal (Reference 19) Enclosure 1, Note 1 for Tables W-6 and W-7 clarified the treatment of recovery action additional risk and stated:</p> <p>“1 – The total delta risk includes the risk of recovery actions. The risk of recovery actions presented above is conservatively represented as the total delta risk or the total risk associated with cutsets containing recovery actions. The sum of these cutsets is a bounding value for the risk reduction associated with the elimination of the recovery actions.”</p> <p>Suggesting changing the final sentence of paragraph 3 as follows:</p> <p>“As indicated in LAR Attachment W, Tables W-6 and W-7, the total additional risk of RAs and additional risk of RAs for each fire area represented as the total delta risk or the total risk associated with cutsets containing recovery actions. The sum of these cutsets is a bounding value for the risk reduction associated with the elimination of the recovery actions”</p>	Factual
71	117	3.4.4	<p>The reference in the following statement should be changed to Reference 19. “The updated LAR Attachment W (Reference 19 47), provides the additional risk of RAs for Units 3 and 4 as 7.42E-07/year and 5.33E-06/year for CDF, respectively, and 3.64E-07/year and 1.17E-07/year for LERF, respectively.”</p>	Factual
72	117	3.4.4	<p>4th paragraph refers to “RG 1.205 Position 2.4.2.5”. The Licensee is unaware of any such position. Suggest revising the cited reference.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
73	118	3.4.6	<p>3rd paragraph of Section 3.4.6 states:</p> <p>“...In LAR Attachment W, Tables W-6 and W-7, the licensee reported change-in-risk values for each fire area, and a total change-in-risk value of 3.23E-05/year and 1.50E-06/year for CDF and LERF, respectively, for Unit 3, and 12E-05/year and 2.210E-06/year for CDF and LERF, respectively, for Unit 4...”</p> <p>Per Reference 17 suggest changing this to:</p> <p>“...In LAR Attachment W, Tables W-6 and W-7, the licensee reported change-in-risk values for each fire area, and a total change-in-risk value of 3.23E-05/year and 1.50E-06/year 4.12E-05/year/ and 2.21E-06/year for CDF and LERF, respectively, for Unit 3, and 12E-05/year and 2.210E-06/year 3.2.3E-05/year and 1.50E-06/year for CDF and LERF, respectively, for Unit 4</p>	Factual
74	118	3.4.6,	<p>3rd paragraph “The reported values are -2.13E-04/year and -9.27E-6/year for CDF and LERF, respectively, for Unit 3, and -1.94E-04/year and -6.56-06/year for CDF and LERF, respectively, for Unit 4.” should be</p> <p>“The reported values are -2.13E-04/year and -9.33E-6/year for CDF and LERF, respectively, for Unit 3, and -1.94E-04/year and -6.51-06/year for CDF and LERF, respectively, for Unit 4.” Per Reference 17</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
75	118	3.4.6	<p>The sentence:</p> <p style="padding-left: 40px;">“Therefore, the NRC staff concludes that the licensee’s LAR to transition to an RI/PB FPP is a combined change request per RG 1.174, Revision 2, Section 2.1.1.”</p> <p>Per Reference 43 this should read</p> <p style="padding-left: 40px;">“Therefore, the NRC staff concludes that the licensee’s LAR to transition to an RI/PB FPP is a combined change request per RG 1.174, Revision 2, Section 2.1.1 Regulatory Position 1.1. (Reference 43)”</p>	Factual
76	119	3.4.7	<p>3rd paragraph SE indicates that 6850 IGFs were used. The Licensee used NUREG/CR Supplement 1 ignition frequencies per the response to RAI PRA 01.t (Reference 12)</p>	Factual
77	121	3.4.8	<p>2nd sentence at top of page 121:</p> <p style="padding-left: 40px;">“The licensee satisfied the guidance contained in RG 1.205, Revision 1, RG 1.174, Section 2.2.4, and NUREG-0800, Section 19.2 regarding acceptable risk.”</p> <p>Suggest change this to read:</p> <p style="padding-left: 40px;">“The licensee satisfied the guidance contained in RG 1.205, Revision 1, RG 1.174, Section 2.2.4, and NUREG-0800, Section 19.2 regarding acceptable risk.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.5 Nuclear Safety Capability Assessment Results				
78	123	3.5.1	1 ST paragraph should be clarified as highlighted below: "Based on the information provided by the licensee in the LAR, as supplemented, the licensee performed the NSCA on a fire area basis [on fire zone basis for outside areas identified as Fire Area OD as show in LAR Attachment C] for each unit."	Factual
79	123	3.5.1	Table 3.5-1: Fire Area U3-1 and U3-11 should be U3-I and U3-II (letter "I" vs. Number "1"). Reference LAR Table C-1	Editorial
80	126	3.5.1	Table 3.5-1: Fire Area U4-1 and 43-11 should be U4-I and U4-II (letter "I" vs. Number "1"). Reference LAR Table C-1	Editorial
81	132	3.5.1.5	1 st paragraph Section 3.5.1.5: "Documented VFDRs were all represented as separate issues." "separate" should be "separation" to reflect the VFDR definition (see page 116 of the SE)	Editorial
82	133	3.5.1.6	"...for the use RAs per NFPA 805." should be "...for the use of RAs per NFPA 805."	Editorial
83	142	3.5.4	Second bullet on p. 142 – no closing parenthesis	Editorial
Section 3.6 Radioactive Release Performance Criteria				
			No Comments	
Section 3.7 NFPA 805 Monitoring Program				
			No Comments	

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.8 Program Documentation, Configuration Control, and Quality Assurance				
84	143	3.8.3.3.2	<p>Second bullet on page. The word ratio is missing. Suggest following revision:</p> <p>“Application of the generic HGL data for fires in compartment with a length to width <u>ratio</u> exceeding five.”</p>	Admin
85	151	3.8.3.2.1	<p>3rd paragraph, references should be 111 – 124.</p> <p>“...national research laboratory reports (References 111 – 124 104—115).”</p>	Factual
86	152	3.2.3.2.2	<p>The discussion on the fire Froude Number for the transient fuel packages relates to the original version of the control room abandonment report reviewed by the NRC. The report was updated (see REPT-0027-0067-002-005, Rev. 0) and the conservative 50°C criteria was removed. The updated control room abandonment report includes a discussion of the fire Froude Number for transient fuel packages and shows that the applications fall within the NUREG-1824 validation range or would produce a conservative result relative to a scenario that falls within this range. Suggest revising the paragraph as follows:</p> <p>“The licensee explained that this potential non-conservatism is offset by the lower HGL temperature limit (50°C) that was used <u>in the original control room abandonment analysis</u> instead of the tenability limit recommended in NUREG/CR-6850 (95°C). The licensee’s calculations show that the Froude number is below the validated range for cable tray fires, which implies that conditions associated with cable tray fire scenarios are bounded by the CFAST results in the GFMTs approach.”</p>	Factual
87	154	3.8.3.3.2	<p>Second bullet “Application of the generic HGL data for fires in compartment with a length to width exceeding five” should be revised based on the response to FM RAI 06.a in Reference 11</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
88	155	3.8.3.4.1	<p>The 1st bullet states:</p> <p>“The licensee further stated that the GFMTs approach and MCR abandonment time calculations were performed by a member of the SFPE with undergraduate and graduate degrees in FPE.”</p> <p>The response to FM RAI 05.a (Reference 10), Attachment 1, p. 174, indicates that the primary developer of the GFMTs has a BS in civil engineering and an MS in FPE.</p>	Factual
89	159	3.8.3.5.2	<p>“in its response to FM RAI 06.a (Reference 11), the licensee stated that the uncertainty associated with the fire model input parameters was implicitly accounted for through the use of a conservative and bounding analysis.”</p> <p>Based on Reference 11 suggest changing this to:</p> <p>“in its response to FM RAI 06.a (Reference 11), the licensee stated that the uncertainty associated with the fire model input parameters was implicitly accounted for through the use of a conservative and bounding analysis. Fire model uncertainty associated with the fire model input parameters was not explicitly accounted for in the fire modeling analyses conducted at PTN in support of the fire PRA. However, the uncertainty associated with specific fire modeling parameters is addressed through the use of a conservative and bounding analysis.” ...</p>	Factual
90	159	3.8.3.5.2	Response to FM RAI 06.b (Reference 10) should read: (Reference 11)	Factual
91	160	3.8.4	<p>Regarding the statement:</p> <p>The licensee established its Fire Protection QA Program in accordance with the guidelines of NUREG-0800, Section 9.5.1, Position C.4, “Quality Assurance Program” (Reference 97).</p> <p>Was not included in the PTN LAR or RAI responses. Recommend removing the sentence as was done for the Farley SE dated 3/10/15 (ML14308A048).</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 4.0 Fire Protection License Condition				
			No Comments	
Section 5.0 Summary				
			No Comments	
Section 6.0 State Consultation				
			No Comments	
Section 7.0 Environmental Consideration				
			No Comments	
Section 8.0 Conclusion				
			No Comments	
Section 9.0 References				
92	165, 173	9.0	References 3 and 83 are duplicate references (i.e., NFPA 805, 2001 edition)	Administrative
93	174	9.0	Recommend adding "Revision 2" to RG 1.174 (ML100910006). Renumbering of sections between Rev. 1 and Rev. 2 of RG 1.174 has led to erroneous cross references to RG 1.174 acceptance criteria and guidance in the SE.	Administrative
94	176	9.0	FPL LAR Reference 3 under Other industry Documents refers to EPRI Report 1010068, December 2005 whereas Draft SE has no such reference.	Administrative
95	176	9.0	Add the following reference: <u>"129 NIST-SP-1026, "CFAST – Consolidated Model of Fire Growth and Smoke Transport (Version 6) Technical Reference Guide," Jones, W. W., Peacock, R. D., Forney, G. P., and Reneke, P. A., National Institute of Standards and Technology, Gaithersburg, MD, April, 2009."</u>	Admin

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Attachment A: Table 3.8-1, V&V Basis for Fire Modeling Correlations Used at Turkey Point				
			No Comments	
Attachment B: Table 3.8-2, V&V Basis for Other Fire Models and Related Correlations Used at Turkey Point				
96	(B-1)	Attachment B	There are no page numbers in Attachment B. Suggest adding page numbers to Attachment B.	Editorial
97	(B-1)	Attachment B	Table 3.8-2, for CFAST "Application at Turkey Point: the statement: "....to determine the maximum fire size for plant-specific target damage time calculations in switchgear rooms, and in the exposed structural steel analysis to estimate the temperature rise of a column in a lube oil pool fire" does not for Turkey Point.	Factual
98	(B-1)	Attachment B	Table 3.8-2, Third Row. The response to FM RAI 01.01 provides verification of the FLASH-CAT correlation coding as appendices to the referenced reports. Suggest providing the following clarification: <u>The licensee provided verification of the coding of this model in the reports for which this model is used</u> (Response to FM RAI 01.01, (Reference 13)).	Factual
Attachment C: Abbreviations and Acronyms				
			No Comments	

**NextEra/Turkey Point Review Comments of
NRC NFPA 805 Draft Safety Evaluation (dated 3/31/15)**

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Cover Letter – License Condition (Encl. 1 & 2)				
			No comments	
Section 1.0 Introduction				
1	3	1.2	<p>Last sentence of 1st paragraph states:</p> <p style="padding-left: 40px;">“The licensee’s supplemental letters dated April 4, June 6, July 18, September 12, November 5, and December 4, 2014; and February 18, 2015, provided additional information that clarified the application, but did not expand the overall scope of the application as originally noticed, and did not change the NRC staff’s original proposed no significant hazards consideration determination as published in the FR on February 4, 2014 (79 FR 6648).”</p> <p>The FRN 79 FR 6648 dated 2/4/14 was based on the LAR and LAR supplements up through 5/15/13. From 79 FR 6648:</p> <p style="padding-left: 40px;"><i>Date of amendment request:</i> June 28, 2012 (publicly available version is in ADAMS at Accession No. ML12191A048), as supplemented by letters dated September 19, 2012, March 18, 2013, April 16, 2013, and May 15, 2013 (ADAMS Accession Nos. ML12278A106, ML13099A441, ML13109A008, and ML13157A011, respectively).</p> <p>Since the FPL letter dated 1/7/14 was not included within the scope of the no significant hazards determination in the FRN, it is recommended that the letter dated 1/7/14 (Reference 13) be added to Section 1.2 of the SE.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
2	3	1.2	Referenced licensee letter dated December 4, 2014, should be December 2, 2014 Letter L-2014-343 (SE Reference 19).	Factual
3	4	1.2	Numbered item 2: typo – “NPFA” should be “NFPA”	Editorial
Section 2.0 Regulatory Evaluation				
4	11	2.2	<p>The information provided for NUREG/CR 6850 is incomplete. The lead-in on page 10 describes the use of NUREG/CR 6850 Volume 1, Volume 2, and Supplement 1. However, the summary sentences at the end of this section only describe the use of Volume 1 and Volume 2. Suggest that a sentence be added describing the use of Supplement 1 such as “Supplement 1 provides clarifications and additional information on recommended approach, methods, and data for conduct of a FPRA”</p> <p>It is suggested that the paragraph at the top of page 11 be changed to read:</p> <p>“Consensus was reached on all technical issues documented in NUREG/CR-6850. The methodology documented in this report reflects the current state-of-the-art in FPRA. These methods are expected to form a basis for RI analyses related to the plant FPP. Volume 1, the Executive Summary, provides general background and overview information, including both programmatic and technical and project insights and conclusions. Volume 2 provides the detailed discussion of the recommended approach, methods, data, and tools for conduct of an FPRA. Supplement 1 provides clarifications and additional information on recommended approach, methods, and data for conduct of a FPRA”</p>	Editorial
5	14	2.3	NFPA 805 FAQ 12-0064 (Reference 107) is referenced and discussed in Section 3.4.2.2 of the SE (p. 94 of the draft SE), but is not included in Table 2.3-1.	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
6	14	2.3	<p>Fire PRA FAQs (e.g., 13-0004 and 14-0009) are not referenced here or in any discussion of acceptable PRA methods. Recommend adding a brief discussion of the Fire PRA FAQ process to this section or to another appropriate section. Also reference to FAQ 13-0004 (p. 114) and FAQ 14-0009 (p. 98) should be preceded by "Fire PRA" since Fire PRA FAQs were developed under a different meeting and approval process from NFPA 805 FAQs.</p> <p>Not including these Fire PRA FAQs could lead to future misinterpretation of the acceptance of their use when compared to the FAQs referenced in Table 2.3-1.</p> <p>Suggest adding the following FAQs not listed in Table 2.3-1 but referenced in submittals in Table 2.3-1: FAQ 06-0008 Alternative Method for Fire Protection Engineering Analyses, FAQ 07-0032, Clarification of 10 CFR 50.48(c), 50.48(a), and GDC 3, FAQ 08-0056 Radioactive Release Transition, FAQ 08-0057 New Shutdown Strategy, FAQ 12-0061 NFPA 805 Change Process.</p>	Factual
7	14	2.3	<p>The PTN LAR was supplemented by an RAI response (SSD RAI 15) dated 3/18/13 (ML13099A441) (page 109 of Attachment 1). The RAI response states:</p> <p style="padding-left: 40px;">“After the approval of the LAR, in accordance with 10 CFR 50.71(e), the PTN UFSAR will be revised. The format and content will be consistent with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035).”</p> <p>Table 2.3-1 should be revised to include FAQ 12-0062 and a reference to its use in Section 2.4.4 of the SE.</p>	Factual
8	18	2.4.3	<p>2nd paragraph, 2nd sentence: Failure by the licensee to not establish FPP procedures would result in non-compliance.....</p>	Administrative

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
9	18	2.4.4	<p>The PTN LAR was supplemented by an RAI response (SSD RAI 15) dated 3/18/13 (ML13099A441) (page 109 of Attachment 1). The RAI response states:</p> <p style="padding-left: 40px;">“After the approval of the LAR, in accordance with 10 CFR 50.71(e), the PTN UFSAR will be revised. The format and content will be consistent with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035).”</p> <p>Therefore, it is recommended that Draft SE Section 2.4.4 be revised to incorporate the RAI response as follows:</p> <p>“The licensee further stated that after the approval of the LAR, in accordance with 10 CFR 50.71(e), the Turkey Point UFSAR will be revised and that the format and content will be consistent with NEI-04-02 with FAQ 12-0062, UFSAR Content, Revision 1, dated May 21, 2012 (ADAMS Accession No. ML121430035). The NRC staff concludes that the licensee’s method to update the UFSAR is acceptable because the licensee updates its UFSAR in accordance with 10 CFR 50.71(e) and has stated that the format and content of the update will be consistent with the guidance provided in NEI-04-02 FAQ 12-0062.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
10	19	2.5	<p>Rescinded exemption “LA-06-19840327, Exemption from the Appendix R, Section III.J requirement for providing emergency lighting units in Units 3 and 4 containment.” is included under the discussion of exemptions evaluated under RI/PB methods.</p> <p>The PTN LAR (Reference 8) page 23, Section 4.2.3 provides the following reason why LA-06-19840327 should be rescinded:</p> <p style="padding-left: 40px;">“This exemption is no longer required because NFPA 805 does not require 8 hour battery backed emergency lights.”</p> <p>Recommend changing the lead in sentence on p. 19 of the SE to “The following exemptions are rescinded as requested by the LAR and the underlying condition is either no longer required by NFPA 805 or has been evaluated using RI/PB methods and found to be acceptable with no further actions because the philosophy of DID and sufficient safety margins are maintained (numbering scheme provided by the licensee):”</p>	Factual
11	19	2.5	<p>Disposition of Appendix R exemptions may follow two three different paths during transition to NFPA 805:</p> <p>Add the following bullet to be consistent with the comment #10 above</p> <p>The exemption was found to be no longer required by NFPA 805</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
12	20	2.5	<p>For Licensing action LA-20-19990505 - Based on the PTN LAR (Reference 8) page 23, Section 4.2.3 provides the following:</p> <p style="padding-left: 40px;">“LA-20-19990505, 10 CFR 50, Appendix R Exemption for Raceway Fire Barriers in the Open Turbine Building from III.G.2.a Using a Minimum 1-Hour Barrier between Column Lines A and E-1 (III.G.2.a Criteria)”</p> <p>Recommend changing:</p> <ul style="list-style-type: none"> • “LA-20-19990505, Exemption from the Appendix R, Section III.G.3 requirement for separation of raceway fire barriers in the open turbine building by a minimum 1-hour rated barrier between column lines A and E-1.” <p>To:</p> <ul style="list-style-type: none"> • LA-20-19990505, Exemption from the Appendix R, Section III.G.3 2.a requirement for separation of raceway fire barriers in the open turbine building by a minimum 1-hour rated barrier between column lines A and E-1.” 	Factual
13	20	2.5	Licensing Action LA-21-19990505 third line should read: “rated barrier between column lines E-1 and Jc and the turbine deck.” The Jc designator is with lower case “c”	Administrative
14	27	2.7.1	<p>2nd paragraph – For completeness, the NRC should acknowledge that LAR Table S-1 modifications are also the same as those identified in LAR Table B-3. The revised sentence would be:</p> <p>“The NRC staff confirmed that the modifications identified in LAR Table S-2 and Table S-1 are the same as those identified in LAR Table B-3, “</p>	Factual
15	27	2.7.1	This section states that Table S-1 of the LAR shows that 12 modifications are complete. This is correct. However, the updated Table S-2 referenced in this section shows an additional 17 modifications are complete. Recommend revising Section 2.7.1 to acknowledge the 29 the completed modifications in both Table S-1 and Table S-2.	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
16	28	2.7.2	<p>The first paragraph of Section 2.7.2 on page 28 refers to Implementation Items in LAR Attachment S Table S-2. Implementation Items for PTN are identified in LAR Attachment S, Table S-3 vs. Table S-2.</p> <p>It is recommended that the sentence read:</p> <p>“Each implementation item will be completed prior to the deadline for implementation of the RI/PB FPP based on NFPA 805, as specified in the license conditions and the letter transmitting the amended license (i.e., implementation period), which states that the implementation items listed in LAR Attachment S, Table S-2, 3 with the exception of Items 12, 18, and 19, will be completed no later than 12 months after issuance of the license amendment.”</p>	Administrative
17			Intentionally blank	
<p>Section 3.0 Technical Evaluation Section 3.1 NFPA 805 Fundamental FPP and Design Elements</p>				
18	30	3.1	Last paragraph – change the reference number as follows “Furthermore, Section 3.1 of NFPA 805 specifically allows the use of alternatives to the NFPA 805, Chapter 3 fundamental FPP requirements that have been previously approved by the NRC (the AHJ as denoted in NFPA 805 (Reference 3), and RG 1.205, Revision 1 (Reference 4)), and are contained in the currently approved FPP for the facility.”	Administrative
19	31	3.1.1	<p>First paragraph after numbered list on p. 31:</p> <p>“The NEI 04-02 based approach was modified in regard to existing FPP elements that comply via previous approval, as described in the licensee’s supplemental letters dated March 21, 1979; December 12, 1980; November 8, 1981; and April 19, 1982.”</p> <p>The referenced letter dated 12/12/80 did not appear to match other referenced correspondence in the SE, LAR or RAI responses.</p>	Factual
20	33	3.1.1.1	3 rd paragraph, p. 33, last sentence, typo: “Attachment 5” should be “Attachment S”	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
21	36	3.1.1.1	<p>The section discussing NFPA 805 Section 3.5.13 is not consistent with the response to FPE RAI 12. The RAI response states “PTN does not have seismically analyzed hose standpipe systems per Section 3.6.4 of NFPA 805 (See LAR Attachment A, Table B-1). Therefore, the ANSI B31.1 requirements for headers inside buildings are not applicable. However, a review of PTN piping specifications determined that Fire Protection piping, Service Number 11, may be Class F, G, H, or SL. Class F, G, H, and SL are all ANSI B31.1 classified.” The draft SE states “The licensee further stated that a review of the piping specifications determined that other portions of the fire protection piping system are ANSI B31.1 classified.” The response to the RAI shows that the piping including headers inside the buildings is classified to ANSI B31.1 not just “other portions”. Recommend that the statement be changed to “The licensee further stated that a review of the piping specifications determined that other portions of the fire protection piping system are ANSI B31.1 classified.”</p>	Factual
22	36	3.1.1.1	<p>Last paragraph on page 36: The reference to “LAR Attachment B, NEI 04-02, Table B-2, “Nuclear Safety Capability Assessment - Methodology Review,”” should be a reference to “LAR Attachment A, Table B-1”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
23	37	3.1.1.2	<p>The paragraph for 3.3.1.2(6) states: “NFPA 805, Section 3.3.1.2 (6) requires that controls on the use and storage of flammable gases be in accordance with applicable NFPA standards. The licensee identified a clarification to the stated requirement that indicates while procedures are in place to control flammable gases, upon examination of the pre-transition FPP, no other NFPA standards were determined to be applicable. The NRC staff concludes that the licensee’s statement of compliance is acceptable because the licensee indicated that no other standards are applicable to the storage and use of flammable gases that follow the guidance provided in NEI 04-02.”</p> <p>However, the LAR (Reference 8) in Attachment A (page 7 of 48) for 3.2.1.2(6) states “PTN is not committed to any flammable gas standards, and as such are not part of the CLB. Per FAQ 06-0020, the following guidance applies.....Flammable gases are controlled per 0-ADM-016 and 0-ADM-016.1.”</p> <p>The statement “no other NFPA standards were determined to be applicable” is not part of the LAR compliance statement for 3.3.1.2(6).</p> <p>Suggest that this be changed to:</p> <p>“NFPA 805, Section 3.3.1.2 (6) requires that controls on the use and storage of flammable gases be in accordance with applicable NFPA standards. The licensee identified a clarification to the stated requirement that indicates while procedures are in place to control flammable gases, upon examination of the pre-transition FPP, no other NFPA standards were determined to be applicable. The NRC staff concludes that the licensee’s statement of compliance is acceptable because the licensee indicated that no other standards are applicable to the storage and use of flammable gases that follow the guidance provided in NEI 04-02.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
24	39	3.1.1.2	1 st paragraph - 3.1.1.3(3) discussion does not reflect LAR Table B-1 compliance statement. PTN has both complies via engineering evaluation (LAR Table B-1 page 42 of 48) and Complies with Clarification. This should be listed in Section 3.1.1.3.	Factual
25	40	3.1.1.3	2 nd paragraph refers to LAR Table S-3 Implementation Items 24 and 26. The reference in the response to SSD RAI 05 (Reference 10) was to LAR Table S-2 "Committed Modifications", Items 24 and 26 (not implementation items). In addition, these modifications, Table S-2, Items 24 and 26 were deleted, as reflected in the final LAR Table S-2 (Reference 18). Reference to "implementation items" or modification items 24 and 26 should be removed.	Factual
26	40	3.1.1.4 (1.)	The first item in the list of complies with previous approval incorrectly refers to Turkey Point Units 1 and 2. This should be Turkey Point Units 3 and 4	Factual
27	40	3.1.1.4 (4.)	Item 4 has an "or" as the last word. This is an inclusive list and should not have an "or". Recommend this be changed to: 4. May 5, 1999 – Issuance of a Revised Exemption and its Supporting Safety Evaluation for Fire Barriers in the Turbine Building (Reference 41); or	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
28	43	3.1.1.7	<p>Last bulleted item of Section 3.1.1.7 of the SE states:</p> <p style="padding-left: 40px;">“In LAR Attachment A, Table B-1, for NFPA 805, Sections 3.4.1(a)(2) and 3.4.1(a)(3), the licensee stated that NFPA 600, “Standard on Industrial Fire Brigades” (Reference 86) applies in lieu of NFPA 1500, “Standard on Fire Department Occupational Safety and Health Program” (Reference 92).”</p> <p>LAR Attachment A, Table B-1 Section 3.4.1(a)(3) states that “NFPA 600 applies in lieu of NFPA 1582.” not NFPA 1500.</p> <p>Recommend changing this to:</p> <p>“In LAR Attachment A, Table B-1, for NFPA 805, Sections 3.4.1(a)(2) and 3.4.1(a)(3), the licensee stated that NFPA 600, “Standard on Industrial Fire Brigades” (Reference 86) applies in lieu of NFPA 1500, “Standard on Fire Department Occupational Safety and Health Program” (Reference 92) (3.4.1(a)(2)) and NFPA 1582 , “ Standard on Medical Requirements for Fire Fighters and Information for Fire Department Physicians” (3.4.1(a)(3)).”</p>	Factual
29	46	3.1.3	Top of page 46. GL 2006-03 is Reference 62, not 54.	Administrative
30	64	3.1.4.8	<p>Last sentence on p. 64:</p> <p style="padding-left: 40px;">“Based on its review of the information submitted by the licensee, and in accordance with 10 CFR 50.48(c)(2)(vii), the NRC staff concludes that the proposed PB method is an acceptable alternative to the corresponding NFPA 805, Section 3.1.1.5 requirement...”</p> <p>The reference should be to NFPA 805, Section 3.2.3(1) (there is no Section 3.1.1.5 of NFPA 805).</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.2 Nuclear Safety Capability Assessment (NSCA) Methods				
31	65	3.2	<p>Sentence beginning “NFPA 805, Section 1.3.1, “Nuclear Safety Objectives,” should be</p> <p>“NFPA 805, Section 1.4.1, “Nuclear Safety Objectives,”</p> <p>Section 1.3.1 of NFPA 805 is the “Nuclear Safety Goal”</p>	Factual
32	68	3.2.1	<p>The following:</p> <p>“Where these instances occurred, either modifications (to protect cables or to prevent the cable damage from affecting the overcurrent trip of the circuit) are being performed to eliminate the concern, or an FRE determined that the risk of the fire-induced loss of breaker coordination was not significant. As stated above, the licensee performed a gap analysis based on the review of the NSCA to the guidance of NEI 00-01, Revision 1 with respect to Revision 2 as endorsed by RG 1.205, Revision 1 and determined there were no impacts requiring inclusion in LAR Attachment B, Table B-2.”</p> <p>Should be:</p> <p>“Where these instances occurred, either modifications (to protect cables or to prevent the cable damage from affecting the overcurrent trip of the circuit) are being performed to eliminate the concern, or an FRE determined that the risk of the fire-induced loss of breaker coordination was not significant.</p> <p>As stated above, the licensee performed a gap analysis based on the review of the NSCA to the guidance of NEI 00-01, Revision 1 with respect to Revision 2 as endorsed by RG 1.205, Revision 1 and determined there were no impacts requiring inclusion in LAR Attachment B, Table B-2.”</p> <p>Since the concluding statement applies to the three previous bullets and not just the third bullet</p>	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
33	71	3.2.1.1	Paragraph 3.1.3.3 and 3.1.3.4 – “The licensee’s methodology develops SSD logics to show the.....”. FPL has decided to use ARC+ software program for NSCA analysis. FPL has developed fault tree diagrams from the SSD logic diagrams discussed in SSA RAI 17 (Draft SE Reference 13) response. Recommend the following change: “The licensee’s methodology develops SSD logics [converted to alternate logic diagrams as necessary for compatibility with NSCA software in use] to show the.....”.	Factual
34	72	3.2.1.2	Paragraph 3.3.3.1 – “The licensee further stated elementary wiring diagrams have block diagrams that provide all necessary cable information, and this was not mentioned in the guidance”. Per FPL response as provided in SSA RAI 17 [Reference 13 of the draft SE] recommend deleting “this was not mentioned in the guidance”.	Factual
35	72	3.2.1.2	2 nd paragraph: Missing comma between 8 and 15. “The licensee identified each of these outstanding work items in LAR Attachment S, Table S-2, as Modifications 1, 2, 5, 7, 8 15, 17, and 18.”	Editorial
36			Intentionally blank	
37	77	3.2.2	Second paragraph addressing SSD RAI 08 states: “...the licensee identified failure scenarios, required SSD positions, SSA logic alternative, and RAs for MOV-3/4-626 and MOV-3/4-716A in Fire Area HH....” There are no RAs associated with MOV-3/4-716A because this MOV is normally open with its breaker administratively maintained open.	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
38	77	3.2.2	<p>Last sentence of paragraph addressing SSD RAI 08 states:</p> <p style="padding-left: 40px;">“The NRC staff concludes that the licensee’s response to the RAI is acceptable because the licensee provided proper documentation changes to reflect the results of the analysis and also identified a required action that will incorporate the provisions of NFPA 805, Chapter 3 in the licensee’s FPP and included the action as an implementation item in LAR Attachment S, which would be required by the proposed license condition.”</p> <p>Since the paragraph is not applicable to NFPA 805 Chapter 3, it should be revised to remove reference to NFPA 805 Chapter 3.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
39	83	3.2.5	<p>Bottom of p. 83 states:</p> <p>Some of these OMAs may not be required to demonstrate the “availability of a success path,” in accordance with NFPA 805, Section 4.2.3.1, but may still be required to be retained in the RI/PB FPP because of DID considerations described in NFPA 805, Section 1.2. Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID. In each instance, the licensee determined whether a transitioning OMA was an RA, a DID-RA, or not necessary for the post-transition RI/PB FPP.</p> <p>The source of “the licensee define a DID-RA as an action that it is not needed to meet the NSPC but has been retained to provide DID” could not be found and is inconsistent with the PTN treatment, where the additional risk of recovery actions relied upon for DID was conservatively modeled as the change in risk for the separation issues in the fire area, as discussed in the third paragraph of Section 3.4.4 of the SE. Recommend removing the sentence:</p> <p>“Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID.”</p> <p>Some of these OMAs may not be required to demonstrate the “availability of a success path,” in accordance with NFPA 805, Section 4.2.3.1, but may still be required to be retained in the RI/PB FPP because of DID considerations described in NFPA 805, Section 1.2. Accordingly, the licensee defined a DID-RA as an action that is not needed to meet the NSPC but has been retained to provide DID. In each instance, the licensee determined whether a transitioning OMA was an RA, a DID-RA, or not necessary for the post-transition RI/PB FPP.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
40	84	3.2.5	<p>Second paragraph addressing SSD RAI 13 summarizes the AFW FCVs based on FPL response to the RAI [Reference 11]. NRC’s conclusion state that: “...the licensee demonstrated that the RA can be completed using alternate nitrogen bottles to modulate the AFW FCVs.”</p> <p>This discussion should also include the last two paragraphs provided in the RAI SSA 13 response [Reference 11, Attachment to L-2013-107 page 33 of 91] that discusses local operation of the FCVs.</p>	Factual
41	85	3.2.6.1	<p>3rd paragraph of Section 3.2.6.1 – The statement:</p> <p style="padding-left: 40px;">“The licensee further stated that LAR Attachment S, Table S-2, Items 3 and 4, are to be changed with all references to “incipient detection” becoming “in cabinet detection” to reflect the current analysis.”</p> <p>Was further amended by letter L-2014-071 dated 4/4/14 (Reference 14), by deleting the modification in LAR Attachment S, Table S-2, Items 3 and 4. This markup is discussed in the Attachment of Reference 14 in the response to RAI PRA 01.r.02.</p> <p>Recommend adding the following statement “Per Reference 14 the Licensee deleted items 3 and 4 from LAR Attachment S Table S-2.”</p> <p style="padding-left: 40px;">“The licensee further stated that LAR Attachment S, Table S-2, Items 3 and 4, are to be changed with all references to “incipient detection” becoming “in cabinet detection” to reflect the current analysis. Per Reference 14 the Licensee deleted items 3 and 4 from LAR Attachment S Table S-2”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
42	85	3.2.6.1	<p>The fourth paragraph on this page describes installation of incipient detection systems in the cabinets in the CSR and area wide in the switchgear rooms and acknowledges that the switchgear rooms are required for DID. Therefore it is recommended that the last sentence be revised to read</p> <p>“The systems in the Cable Spread Room are being credited to reduce risk contribution from the respective panels and provide risk benefits for CDF and LERF”.</p>	Factual
43	86	3.2.6.1	<p>The following statement should remove item 32:</p> <p>“The licensee stated that the panels in which the incipient detection system will be installed are identified in LAR Attachment S, Table S-2, Items 25 and 32 and that all panels are cabinets with metal walls on all four sides.”</p> <p>Table S-2 Item 32 is an area wide system and does not depend on cabinets with metal walls. In addition, Communication Cabinet C-600 is not an enclosed cabinet on all four sides. Panels 3C11 and 4C11 are currently open but will be enclosed. The enclosure will not be metal on all sides and there will not be a partition between 3C11 and 4C11.</p>	Factual
44	86	3.2.6.1	<p>The fourth bullet on page 86 states:</p> <p style="padding-left: 40px;">Each panel identified in LAR Attachment S, Table S-2, Items 25, will be installed with a sampling port. Multiple sampling ports will be installed inside the open back vertical boards identified in the response to FPE RAI 01.b.</p> <p>Consistent with comment 41 the statement “open back vertical boards” is no longer applicable.</p> <p>Recommended changing the fourth bullet as follows:</p> <p style="padding-left: 40px;">Each panel identified in LAR Attachment S, Table S-2, Items 25, will be installed with a sampling port. Multiple sampling ports will be installed inside the open back vertical boards identified in the response to FPE RAI 01.b.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.3 Fire Modeling				
			No Comments	
Section 3.4 Fire Risk Assessments				
45	89	3.4	Section 3.4 last sentence: typo: typo – “NPFA” should be “NFPA”	Editorial
46	91	3.4.1.2	<p>The 5th bullet includes the following:</p> <p style="padding-left: 40px;">In its response to PRA RAI 09 (Reference 10), the licensee further described the methodology used to evaluate safety margins in the FREs to include the following evaluations and determinations:</p> <p style="padding-left: 40px;">...</p> <ul style="list-style-type: none"> • The PRA logic model was developed in accordance with the ASME/ANS RA-Sa-2009 PRA standard and RG 1.200, Revision 2 (Reference 44). <p>The response to PRA RAI 09 does not further describe the content of this bullet. Therefore, recommend deleting this bullet</p>	Factual
47	92	3.4.2	<p>The last sentence of Section 3.4.2:</p> <p style="padding-left: 40px;">Based on this information, the NRC staff concludes that the FPRA represents the current, as-built, as-operated configuration.</p> <p>Recommend that this statement be changed as follows “The FPRA represents the as-built, as-operated plant as it will be configured after full implementation of NFPA 805.” Consistent with the Farley SE dated 3/10/15 (ML14308A048) Section 3.4.2.</p>	Factual
48	92	3.4.2.1	2 nd sentence of Section 3.4.2.1. Full scope of IEPRA peer review was performed in 2002, not 2000 (Reference: PTN LAR Attachment U, page U-2).	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
49	94	3.4.2.2	<p>2nd paragraph, 2nd sentence on p. 94:</p> <p style="padding-left: 40px;">“In its response to PRA RAI 29.a (Reference 14), the licensee also stated that it will apply the guidance in FAQ 12-0064 to update the PRA and the updated transient change-in-risk estimates will use the updated PRA.”</p> <p>“transient” should be “transition” to reflect the response to PRA RAI 29.a (Reference 14).</p>	Factual
50	94	3.4.2.2	<p>Last sentence 4th paragraph, page 94: Typo “in” should be removed from:</p> <p>“The NRC staff finds this issue to be resolved because the transition in change-in-risk estimates, ...”</p>	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
51	96	3.4.2.2	<p>The 3rd paragraph on p. 96:</p> <p>“In its response to PRA RAIs 01.r and 08 (Reference 12), the licensee removed the VEWFDS credit for all fire scenarios in the MCR. In its response to PRA RAI 01.r.02 (Reference 14), the licensee further explained that in-cabinet smoke detection would not be credited in lieu of incipient detection. In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that the PRA was updated to remove credit for in-panel fire detection in the MCR. The NRC staff finds this issue to be resolved because the PRA has been updated to remove all credit for in-panel detection in the MCR, and the transition change-in-risk estimates, submitted by the licensee on September 12, 2014 (Reference 17) do not include this detection.”</p> <p>The response to PRA RAI 01.r.02 (Reference 14), sub-part d, states</p> <p>“In-panel detection credit will be taken for scenarios associated with fire propagation between panels. In panel detection will not be credited for precluding damage in the panel in which it is installed.”</p> <p>It is recommended that the paragraph be revised as follows:</p> <p>“In its response to PRA RAIs 01.r and 08 (Reference 12), the licensee removed the VEWFDS credit for all fire scenarios in the MCR. In its response to PRA RAI 01.r.02 (Reference 14), the licensee further explained that in-cabinet smoke detection would not be credited in lieu of incipient detection to preclude damage in the panel in which installed. In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that the PRA was updated to remove credit for in-panel fire detection in the MCR. The NRC staff finds this issue to be resolved because the PRA has been updated to remove all credit for in-panel detection in the MCR, and the transition change-in-risk estimates, submitted by the licensee on September 12, 2014 (Reference 17) do not include this detection.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
52	97	3.4.2.2	Draft SE page 97, 3 rd paragraph uses the term “cable tray” in discussions about HEAF scenarios; whereas response to PRA RAI 01.u uses a generic term “raceway”. Recommend SE use the generic term “raceway” as used in the RAI response.	Factual
53	98	3.4.2.2	2 nd paragraph on p. 98: <p>“In its response to PRA RAI 29 (Reference 14) and (Reference 17), the licensee stated that it will incorporate this updated treatment of MCR transient fire placement into the PRA, and the updated transient change-in-risk estimates will use the updated PRA..”</p> <p>“transient” should be “transition” to reflect the response to PRA RAI 29 (Reference 14).</p>	Factual
54	98	3.4.2.2	Last paragraph refers to FAQ 14-0009. This FAQ is not approved yet and is not in the list of FAQs. The information presented is sufficient to justify the results without referring to the FAQ. Suggest the reference to FAQ 14-0009 be deleted. However, consistent with comment #6 if FAQ 14-009 is retained it should be “FPRA FAQ 14-009”	Factual
55	99	3.4.2.2	p. 99 last paragraph states: <p>“In its response to PRA RAI 13.01.c.01 (Reference 17), the licensee stated that the CSR compliant risk was estimated assuming that the MCR was always abandoned (on loss of control) following any fire and using only equipment available at the ASP. The CCDP for failing to shutdown following MCR abandonment was reported to be 0.056.”</p> <p>The response to PRA RAI 13.01.c.01 (Reference 17), Attachment, p. 7 last paragraph states:</p> <p>“The above methodology was applied and the compliant case CCDP was calculated as 0.0517. Using this CCDP and the above methodology, the delta risk for the cable spreading room was calculated as:...”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
56	100	3.4.2.2	2 nd paragraph: typo “..complaint” should be “compliant”	Editorial
57	101	3.4.2.2	3 rd paragraph page 101 states: In PRA RAI 12 (Reference 22), the NRC staff notified the licensee that new information indicated the reduction in hot short probabilities for circuits protected by control power transformers (CPTs) identified in NUREG/CR-6850 was too high and should be reduced. “protected by” should be replaced with “provided with” since a CPT is not a protective device.	Factual
58	104	3.4.2.3.1	Second sentence “GFTMs” should be “GFMTs”. Typo	Editorial
59	104	3.4.2.3.1	The first bullet list. The primary radiation model is Shokri and Beyler Solid Flame Model. The Modak model (PSM) is used as a comparison check, and is rarely the most limiting model. Suggest replacing Modak’s Point Source Radiation Model with Shokri and Beyler Solid Flame Model and add sentence to indicate the Modak model (PSM) was used as a conservative check on the upper bounds: <ul style="list-style-type: none"> • Modak’s Point Source Radiation Model (Reference 112) • Shokri and Beyler Solid Flame Model (Reference 113) Modak’s Point Source Radiation Model (Reference 112) was used as a conservative upper bound check against the Shokri and Beyler Solid Flame Radiation Model.	Factual
60	104	3.4.2.3.1	Second bullet list, Shokri and Beyler flame radiation model belongs in the first bullet list. Suggest deleting this model reference from the bullet list. <ul style="list-style-type: none"> • Shokri and Beyler flame radiation model (Reference 113) 	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
61	104	3.4.2.3.1	<p>Fourth paragraph, the CFAST reference should be to NIST 1026, which is not currently in the reference list.</p> <p>“The Consolidated Model of Fire and Smoke Transport (CFAST) computational fire model, Version 6 (Reference 57129), was used to generate the HGL tables in the GFMT approach.”</p> <p>This should be added to the reference list.</p>	Admin
62	106	3.4.2.3.2	<p>FM RAI 01b, second paragraph, second sentence. The response to FM RAI 01b (ML13099A441) states the fifteen minute opening time for the door is a potential reason the doors open, not necessarily the only reason. Suggest providing clarification as follows:</p> <p>“...three natural ventilation conditions (door open from the start, door opens at 15 minutes, and door closed) and that the 15 minutes is <u>an intermediate time that accounts for</u> based on the assumed fire brigade arrival time.”</p>	Admin
63	106	3.4.2.3.2	<p>2nd bulleted item on p. 106, 2nd paragraph, states:</p> <p>“In its response to FM RAI 01.b (Reference 10), the licensee indicated that based on fire brigade drills, the response time is expected to be 12 - 13 minutes.”</p> <p>The response to FM RAI 01.b (Reference 10), page 144 of Attachment 1, states:</p> <p>Further, plant fire brigade response drill times performed under 0-ADM-016.2 indicate that the fire brigade is ready to engage between 12 – 23 minutes for fires on the Unit 3 turbine deck, which would be indicative of the response times at the control room entry.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
64	106	3.4.2.3.2	<p>FM RAI 01b, second paragraph, last sentence. The sensitivity analysis described in the RAI response applied to the version of the control room abandonment calculation originally reviewed by the NRC. The control room abandonment calculation was updated and the 50°C temperature threshold was eliminated (see REPT-0027-0067-002-005, Rev. 0). A comprehensive sensitivity analysis was instead used to show that the results are not sensitive to variations in the door opening time over a ten minute interval centered on fifteen minutes. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that a maximum immersion temperature of 50 °C was originally used as the tenability threshold, which is much lower than the recommended value in NUREG/CR-6850 (Reference 50), and a sensitivity analysis shows that this conservative assumption reduces the calculated abandonment times by up to 5 minutes.”</p>	Admin
65	107	3.4.2.3.2	<p>FM RAI 01c, second paragraph, last sentence. The conclusion described in this RAI response applies to the original version of the control room abandonment calculation. The control room abandonment calculation was updated and the 50°C temperature threshold was eliminated (see REPT-0027-0067-002-005, Rev. 0). However, as noted in the response to FM RAI 01c (ML13099A441), the transient growth rates recommended in FAQ 08-0052 were used instead of the ‘medium t²’ fire. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that the sensitivity analysis also showed that the use of a maximum immersion temperature of 95°C, as recommended in NUREG/CR-6850, instead of the 50°C used in the original MCR abandonment time calculations, negates the effect of the fire growth rate assumption on the probability for abandonment.”</p>	Admin

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
66	108	3.4.2.3.2	<p>FM RAI 01e, second paragraph, last sentence. The sentence applies to the original report. As noted in the response to FM 01e (ML13099A441), the control room abandonment report was updated (see REPT-0027-0067-002-005, Rev. 0) and the sensitivity analysis was revised so that it is used to demonstrate the baseline scenarios are conservative or do not affect the total probability of abandonment by a factor greater than fifteen percent. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further demonstrated that the original baseline parameter selection is either conservative or does not have a significant effect on the probability for MCR abandonment.”</p>	Admin
67	108	3.4.2.3.2	<p>FM RAI 01.g, second paragraph, 3rd sentence. The use of the conservative 50°C criteria applies to the original control room calculation. The calculation was updated as noted in the draft SE to include scenarios with secondary combustibles, but the 50°C criterion was eliminated. Suggest revising the paragraph in the SE as follows:</p> <p>“The licensee further stated that the sensitivity analysis also showed the use of a maximum immersion temperature of 95°C, as recommended in NUREG/CR-6850, instead of 50°C used in the original MCR abandonment time calculations, negates the effect of including scenarios with intervening combustibles on the probability for abandonment.”</p>	Admin
99	114	3.4.2.3.2	The last bullet refers to FAQ 13-0004. Consistent with comment # 6 this should be changed to FPRA FAQ 13-0009	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
68	115	3.4.2.4	<p>3rd paragraph of Section 3.4.2:</p> <p>The NRC staff concludes that the PRA approach, methods, and data are acceptable, and that NFPA 805, Section 2.4.3.3 is satisfied for transition to NFPA 805. The NRC staff based this conclusion on the findings that (1) the PRA model meets the criteria in that it adequately represents the current, as-built, as-operated configuration, and is, therefore, capable of being adapted to model both the post-transition and compliant plant as needed;</p> <p>Recommend that this statement be changed as follows “the PRA model meets the criteria in that it adequately represents the as-built, as-operated plant as it will be configured after full implementation of NFPA 805.” Consistent with the Farley SE dated 3/10/15 (ML14308A048) Section 3.4.2.</p>	Factual
69	117	3.4.4	2 nd sentence 3 rd paragraph: “PSC” should be “PCS” (typo)	Editorial

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
70	117	3.4.4	<p>Last sentence of 3rd paragraph:</p> <p>“As indicated in LAR Attachment W, Tables W-6 and W-7, the total additional risk of RAs and additional risk of RAs for each fire area with either risk-reduction or DID RAs are conservatively assumed to be equal to the total delta risk and delta risk for each fire area, respectively.”</p> <p>The 12/2/14 FPL to NRC submittal (Reference 19) Enclosure 1, Note 1 for Tables W-6 and W-7 clarified the treatment of recovery action additional risk and stated:</p> <p>“1 – The total delta risk includes the risk of recovery actions. The risk of recovery actions presented above is conservatively represented as the total delta risk or the total risk associated with cutsets containing recovery actions. The sum of these cutsets is a bounding value for the risk reduction associated with the elimination of the recovery actions.”</p> <p>Suggesting changing the final sentence of paragraph 3 as follows:</p> <p>“As indicated in LAR Attachment W, Tables W-6 and W-7, the total additional risk of RAs and additional risk of RAs for each fire area represented as the total delta risk or the total risk associated with cutsets containing recovery actions. The sum of these cutsets is a bounding value for the risk reduction associated with the elimination of the recovery actions”</p>	Factual
71	117	3.4.4	<p>The reference in the following statement should be changed to Reference 19. “The updated LAR Attachment W (Reference 19 17), provides the additional risk of RAs for Units 3 and 4 as 7.42E-07/year and 5.33E-06/year for CDF, respectively, and 3.64E-07/year and 1.17E-07/year for LERF, respectively.”</p>	Factual
72	117	3.4.4	<p>4th paragraph refers to “RG 1.205 Position 2.4.2.5”. The Licensee is unaware of any such position. Suggest revising the cited reference.</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
73	118	3.4.6	<p>3rd paragraph of Section 3.4.6 states:</p> <p>“...In LAR Attachment W, Tables W-6 and W-7, the licensee reported change-in-risk values for each fire area, and a total change-in-risk value of 3.23E-05/year and 1.50E-06/year for CDF and LERF, respectively, for Unit 3, and 12E-05/year and 2.210E-06/year for CDF and LERF, respectively, for Unit 4...”</p> <p>Per Reference 17 suggest changing this to:</p> <p>“...In LAR Attachment W, Tables W-6 and W-7, the licensee reported change-in-risk values for each fire area, and a total change-in-risk value of 3.23E-05/year and 1.50E-06/year 4.12E-05/year/ and 2.21E-06/year for CDF and LERF, respectively, for Unit 3, and 12E-05/year and 2.210E-06/year 3.2.3E-05/year and 1.50E-06/year for CDF and LERF, respectively, for Unit 4</p>	Factual
74	118	3.4.6,	<p>3rd paragraph “The reported values are -2.13E-04/year and -9.27E-6/year for CDF and LERF, respectively, for Unit 3, and -1.94E-04/year and -6.56-06/year for CDF and LERF, respectively, for Unit 4.” should be</p> <p>“The reported values are -2.13E-04/year and -9.33E-6/year for CDF and LERF, respectively, for Unit 3, and -1.94E-04/year and -6.51-06/year for CDF and LERF, respectively, for Unit 4.” Per Reference 17</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
75	118	3.4.6	<p>The sentence:</p> <p style="padding-left: 40px;">“Therefore, the NRC staff concludes that the licensee’s LAR to transition to an RI/PB FPP is a combined change request per RG 1.174, Revision 2, Section 2.1.1.”</p> <p>Per Reference 43 this should read</p> <p>“Therefore, the NRC staff concludes that the licensee’s LAR to transition to an RI/PB FPP is a combined change request per RG 1.174, Revision 2, Section 2.1.1 Regulatory Position 1.1. (Reference 43)”</p>	Factual
76	119	3.4.7	<p>3rd paragraph SE indicates that 6850 IGFs were used. The Licensee used NUREG/CR Supplement 1 ignition frequencies per the response to RAI PRA 01.t (Reference 12)</p>	Factual
77	121	3.4.8	<p>2nd sentence at top of page 121:</p> <p style="padding-left: 40px;">“The licensee satisfied the guidance contained in RG 1.205, Revision 1, RG 1.174, Section 2.2.4, and NUREG-0800, Section 19.2 regarding acceptable risk.”</p> <p>Suggest change this to read:</p> <p style="padding-left: 40px;">“The licensee satisfied the guidance contained in RG 1.205, Revision 1, RG 1.174, Section 2.2.4, and NUREG-0800, Section 19.2 regarding acceptable risk.”</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.5 Nuclear Safety Capability Assessment Results				
78	123	3.5.1	1 ST paragraph should be clarified as highlighted below: “Based on the information provided by the licensee in the LAR, as supplemented, the licensee performed the NSCA on a fire area basis [on fire zone basis for outside areas identified as Fire Area OD as show in LAR Attachment C] for each unit.”	Factual
79	123	3.5.1	Table 3.5-1: Fire Area U3-1 and U3-11 should be U3-I and U3-II (letter “I” vs. Number “1”). Reference LAR Table C-1	Editorial
80	126	3.5.1	Table 3.5-1: Fire Area U4-1 and 43-11 should be U4-I and U4-II (letter “I” vs. Number “1”). Reference LAR Table C-1	Editorial
81	132	3.5.1.5	1 st paragraph Section 3.5.1.5: “Documented VFDRs were all represented as separate issues.” “separate” should be “separation” to reflect the VFDR definition (see page 116 of the SE)	Editorial
82	133	3.5.1.6	“...for the use RAs per NFPA 805.” should be “...for the use of RAs per NFPA 805.”	Editorial
83	142	3.5.4	Second bullet on p. 142 – no closing parenthesis	Editorial
Section 3.6 Radioactive Release Performance Criteria				
			No Comments	
Section 3.7 NFPA 805 Monitoring Program				
			No Comments	

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 3.8 Program Documentation, Configuration Control, and Quality Assurance				
84	143	3.8.3.3.2	<p>Second bullet on page. The word ratio is missing. Suggest following revision:</p> <p>“Application of the generic HGL data for fires in compartment with a length to width ratio exceeding five.”</p>	Admin
85	151	3.8.3.2.1	<p>3rd paragraph, references should be 111 – 124.</p> <p>“...national research laboratory reports (References 111 – 124 104 – 115).”</p>	Factual
86	152	3.2.3.2.2	<p>The discussion on the fire Froude Number for the transient fuel packages relates to the original version of the control room abandonment report reviewed by the NRC. The report was updated (see REPT-0027-0067-002-005, Rev. 0) and the conservative 50°C criteria was removed. The updated control room abandonment report includes a discussion of the fire Froude Number for transient fuel packages and shows that the applications fall within the NUREG-1824 validation range or would produce a conservative result relative to a scenario that falls within this range. Suggest revising the paragraph as follows:</p> <p>“The licensee explained that this potential non-conservatism is offset by the lower HGL temperature limit (50°C) that was used in the original control room abandonment analysis instead of the tenability limit recommended in NUREG/CR-6850 (95°C). The licensee’s calculations show that the Froude number is below the validated range for cable tray fires, which implies that conditions associated with cable tray fire scenarios are bounded by the CFAST results in the GFMTs approach.”</p>	Factual
87	154	3.8.3.3.2	<p>Second bullet “Application of the generic HGL data for fires in compartment with a length to width exceeding five” should be revised based on the response to FM RAI 06.a in Reference 11</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
88	155	3.8.3.4.1	<p>The 1st bullet states:</p> <p>“The licensee further stated that the GFMTs approach and MCR abandonment time calculations were performed by a member of the SFPE with undergraduate and graduate degrees in FPE.”</p> <p>The response to FM RAI 05.a (Reference 10), Attachment 1, p. 174, indicates that the primary developer of the GFMTs has a BS in civil engineering and an MS in FPE.</p>	Factual
89	159	3.8.3.5.2	<p>“in its response to FM RAI 06.a (Reference 11), the licensee stated that the uncertainty associated with the fire model input parameters was implicitly accounted for through the use of a conservative and bounding analysis.”</p> <p>Based on Reference 11 suggest changing this to:</p> <p>“in its response to FM RAI 06.a (Reference 11), the licensee stated that the uncertainty associated with the fire model input parameters was implicitly accounted for through the use of a conservative and bounding analysis. Fire model uncertainty associated with the fire model input parameters was not explicitly accounted for in the fire modeling analyses conducted at PTN in support of the fire PRA. However, the uncertainty associated with specific fire modeling parameters is addressed through the use of a conservative and bounding analysis.” ...</p>	Factual
90	159	3.8.3.5.2	Response to FM RAI 06.b (Reference 10) should read: (Reference 11)	Factual
91	160	3.8.4	<p>Regarding the statement:</p> <p>The licensee established its Fire Protection QA Program in accordance with the guidelines of NUREG-0800, Section 9.5.1, Position C.4, “Quality Assurance Program” (Reference 97).</p> <p>Was not included in the PTN LAR or RAI responses. Recommend removing the sentence as was done for the Farley SE dated 3/10/15 (ML14308A048).</p>	Factual

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Section 4.0 Fire Protection License Condition				
			No Comments	
Section 5.0 Summary				
			No Comments	
Section 6.0 State Consultation				
			No Comments	
Section 7.0 Environmental Consideration				
			No Comments	
Section 8.0 Conclusion				
			No Comments	
Section 9.0 References				
92	165, 173	9.0	References 3 and 83 are duplicate references (i.e., NFPA 805, 2001 edition)	Administrative
93	174	9.0	Recommend adding "Revision 2" to RG 1.174 (ML100910006). Renumbering of sections between Rev. 1 and Rev. 2 of RG 1.174 has led to erroneous cross references to RG 1.174 acceptance criteria and guidance in the SE.	Administrative
94	176	9.0	FPL LAR Reference 3 under Other industry Documents refers to EPRI Report 1010068, December 2005 whereas Draft SE has no such reference.	Administrative
95	176	9.0	Add the following reference: <u>"129 NIST-SP-1026, "CFAST – Consolidated Model of Fire Growth and Smoke Transport (Version 6) Technical Reference Guide," Jones, W. W., Peacock, R. D., Forney, G. P., and Reneke, P. A., National Institute of Standards and Technology, Gaithersburg, MD, April, 2009."</u>	Admin

#	SE Page	SE Section	Comment	Factual / Admin / Editorial
Attachment A: Table 3.8-1, V&V Basis for Fire Modeling Correlations Used at Turkey Point				
			No Comments	
Attachment B: Table 3.8-2, V&V Basis for Other Fire Models and Related Correlations Used at Turkey Point				
96	(B-1)	Attachment B	There are no page numbers in Attachment B. Suggest adding page numbers to Attachment B.	Editorial
97	(B-1)	Attachment B	Table 3.8-2, for CFAST “Application at Turkey Point: the statement: “...to determine the maximum fire size for plant-specific target damage time calculations in switchgear rooms, and in the exposed structural steel analysis to estimate the temperature rise of a column in a lube oil pool fire” does not for Turkey Point.	Factual
98	(B-1)	Attachment B	Table 3.8-2, Third Row. The response to FM RAI 01.01 provides verification of the FLASH-CAT correlation coding as appendices to the referenced reports. Suggest providing the following clarification: The licensee provided verification of the coding of this model in the reports for which this model is used (Response to FM RAI 01.01, (Reference 13)).	Factual
Attachment C: Abbreviations and Acronyms				
			No Comments	