

**From:** "JAMAR, Brandon" <btj@nei.org>  
**To:** "Charles Moulton" <CEM4@nrc.gov>, "Sunil Weerakkody" <SDW1@nrc.gov>, <RHG@nrc.gov>  
**Date:** Mon, Jun 4, 2007 8:34 PM  
**Subject:** FAQ 06-0017 Rev. 2 for submittal

Please find revision 2 to FAQ 06-0017 for submittal. Should you have any problems with this transmittal please contact me directly.

Thank you,

Brandon Jamar

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**CC:** "MARION, Alex" <am@nei.org>, "RILEY, Jim" <jhr@nei.org>

**Mail Envelope Properties** (4664AF88.A95 : 0 : 55957)

**Subject:** FAQ 06-0017 Rev. 2 for submittal  
**Creation Date** 6/4/2007 8:37:42 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>

**Created By:** btj@nei.org

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nrc.gov  
TWGWPO01.HQGWDO01  
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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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FAQ 06-0017 - Rev 2.pdf	19429	
Mime.822	33056	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling

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**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

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Attachment 1:

FAQ Number 06-0017

FAQ Revision 2

**FAQ Title Ignition Source Counting Guidance for High Energy Arching Faults**

Plant: Harris

Date: June 1, 2007

Contact: Dave Miskiewicz

Phone: 919.546.7588

Email: David.Miskiewicz@pgnmail.com

Distribution: (NEI Internal Use)

☒ 805 TF ☐ FPWG ☒ FPRATF ☐ RIRWG ☐ BWROG ☐ PWROG

---

**Purpose of FAQ:**

Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application.

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**Is this Interpretation of guidance?** ☒ Yes / No

**Proposed new guidance not in NEI 04-02?** ☒ Yes / No

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**Details:**

**NEI 04-02 guidance needing interpretation (include section, paragraph, and line numbers as applicable):**

New attachment on interpretation issues

**Circumstances requiring guidance interpretation or new guidance:**

The guidance provided in NUREG/CR-6850 for Task 6, Fire Ignition Frequency (Section 6.5.6, Bin 16), states:

Bin 16 – High-Energy Arcing Faults (Plant-Wide Components): High-energy arcing faults are associated with switchgear and load centers. Switchyard transformers and isolation phase buses are not part of this bin. For this bin, similar to electrical cabinets, the vertical segments of the switchgear and load centers should be counted. Additionally, to cover potential explosive failure of oil filled transformers (those transformers that are associated with 4.16 or 6.9kV switchgear and lower voltage load centers) may be included in vertical segment counts of the switchgear.

Pilot discussions and benchmarking of NUREG/CR-6850 for Task 6, Fire Ignition Frequency, has shown inconsistency in the treatment of High Energy Arcing Faults (Bin 16). Strict interpretation of the guidance is that the HEAF count should mimic the electrical cabinet counts for switchgear and load centers. The application of such a counting method is expected to result in reported High Energy Arcing Fault (HEAF) frequency values for an individual plant being inconsistent with industry experience. The industry experience and consequently the HEAF frequency is based on 3 events occurring on medium voltage

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**FAQ Title Ignition Source Counting Guidance for High Energy Arching Faults**

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switchgears and 1/2 event occurring on a 480 VAC Load Center. Because of the relative numbers of switchgears and load centers at an individual plant, it is expected that the resultant frequency may be inappropriately skewed. There is a concern that the occurrence of a HEAF frequency distribution that departs significantly from the 3 to 1/2 ratio would cause results to be challenged.

There is a need to resolve these issues to prevent future rework and to reduce burden associated with uncertainty treatment. This topic has impact on the NFPA-805 pilots, non-pilots and other users of NUREG/CR-6850.

**Detail contentious points if licensee and NRC have not reached consensus on the facts and circumstances:****Potentially relevant existing FAQ numbers:**

This guidance is specific to the characterization of electrical cabinets for Bin 16 HEAF determination. The characterization and counting of electrical cabinets for Bin 15 determination is addressed by FAQ 06-0016. FAQ 07-0035 addresses counting Bus Duct for HEAF.

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**Response Section:****Proposed resolution of FAQ and the basis for the proposal:**

Split fire ignition frequency Bin 16, HEAF, into two bins; namely, “16a – HEAF for low-voltage panels (480-1000V)” and “16b – HEAF for medium-voltage panels (greater than 1000V).” For each bin, the method of panel counting would remain consistent with the guidance for Bin 15 (see FAQ 06-0016). Additionally, MCCs with molded-case circuit breakers should not be counted as HEAF sources unless it is associated with switchgear that is used to directly operate equipment such as load centers.

The net result is a re-partitioning of the “higher-consequence” HEAF events between low and medium-to-high voltage equipment in accordance with the event data. The revised fire frequencies for these two new bins are as follows:

16a: HEAF for Low-Voltage Panels (480 – 1000V)

Mean = 4.8E-04

Variance = 1.4E-03

5% Lower Bound = 1.6E-05

50% (Median) = 2.0E-04

95% Upper Bound = 1.5E-03

16b: HEAF for Medium-Voltage Panels (greater than 1000V)

Mean = 1.4E-03

**FAQ Title Ignition Source Counting Guidance for High Energy Arching Faults**

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Variance = 1.2E-02

5% Lower Bound = 3.8E-05

50% (Median) = 6.2E-04

95% Upper Bound = 4.1E-03

**Basis:**

This FAQ revision includes the response proposed by the NRC and the NUREG/CR-6850 writing team.

**If appropriate, provide proposed rewording of guidance for inclusion in the next Revision:**

Thanks. We'll look it over. If OK, we'll incorporate into the close-out memo.

Any feedback on new FAQ 35 (bus ducts and junctions), particularly if the July 13th date is a go for the joint panel to resolve duct counting that I proposed at the last FAQ meeting? This date would enable Steve Nowlen to participate since he'll be in town.

>>> "JAMAR, Brandon" <[btj@nei.org](mailto:btj@nei.org)> 06/04/2007 8:37:42 PM >>>  
Please find revision 2 to FAQ 06-0017 for submittal. Should you have any problems with this transmittal please contact me directly.

Thank you,

Brandon Jamar

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**Subject:** Re: FAQ 06-0017 Rev. 2 for submittal  
**Creation Date** 6/5/2007 10:54:09 AM  
**From:** Ray Gallucci  
  
**Created By:** RHG@nrc.gov

**Recipients**

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<b>Return Notification:</b>	None

<b>Concealed Subject:</b>	No
<b>Security:</b>	Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling

Message is from an internal sender

**Junk Mail settings when this message was delivered**

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Chuck,

Please find revision 4 to FAQ 06-0012 for submittal. Should you have any problems with this transmittal please contact me directly.

Thank you,

Brandon Jamar

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**Mail Envelope Properties** (4665ED90.A3A : 2 : 23098)

**Subject:** FAQ 06-0012 Rev. 4 for submittal  
**Creation Date** 6/5/2007 7:13:12 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>

**Created By:** btj@nei.org

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<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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FAQ 06-0012 - Manual Actions - Rev 4.pdf		149184
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**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
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Junk Mail handling disabled by Administrator

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Attachment 1:

**FAQ Number**    06-0012 Revision 4

**FAQ Title**        Determining Manual Actions that Require a Change Evaluation during Transition

Plant:	<u>Harris Nuclear Plant</u>	Date:	<u>03/22/2007</u>
Contact:	<u>Elizabeth Kleinsorg</u>	Phone:	<u>704.651.5548</u>
		Email:	<u>ekleinsorg@haifire.com</u>

---

**Purpose of FAQ:**

Operator manual actions that are either not allowed under the current regulatory framework or for which there is no previous NRC approval are not compliant with current regulations. The acceptability of the continued use of the actions that are not compliant will be evaluated using the change process. The purpose of this FAQ is to clarify the operator manual actions that will require change evaluations during the transition to NFPA 805.

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**Is this Interpretation of guidance?**    ☒ Yes / No

**Proposed new guidance not in NEI 04-02?** ☒ Yes / No

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**Details:**

**NEI 04-02 guidance needing interpretation (include section, paragraph, and line numbers as applicable):**

Section B.2.2.4 Recovery Actions

**Circumstances requiring guidance interpretation or new guidance:**

Operator manual actions that are currently credited in Appendix R (NUREG 0800) analyses may be allowed under the current regulation/guidance or may have been approved via an exemption/deviation. These operator manual actions do not require a change evaluation during the transition process.

Subsequent to the submittal of FAQ 06-0001, the following documents were issued by the NRC:

- 2006-05-26 - Public Meeting Notice 20060609 on Manual Action Clarifications ML061390156
- 2006-05-26 - Draft NRC Response to 05-03-06 NEI letter - ML061440251
- 2006-05-26 - Draft NRC Response to 03-29-06 EPM letter - ML061440237

**FAQ Title Determining Manual Actions that Require a Change Evaluation during Transition**

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- 2006-06-30 - RIS 2006-10 Regulatory Expectations With Appendix R Paragraph III.G.2 Operator Manual Actions – ML061650389
- 2006-07-19 - NRC Meeting Summary of 06-09-06 OMA Meeting ML061950327
- 2006-07-19 - NRC Revision to Draft Response to EPM March 2006 letter - ML061980016
- 2006-07-19 - NRC Revision to Draft Response to NEI May 2006 letter - ML061980035

In addition the NRC letter to NEI, Use of Manual Actions to Achieve Safe Shutdown for Fire Events, dated 2002-05-16 (ML021410026) provides information not captured in the correspondence above.

These documents provide additional clarification with respect to the acceptability of existing operator manual actions.

**Detail contentious points if licensee and NRC have not reached consensus on the facts and circumstances:**

None.

**Potentially relevant existing FAQ numbers:**

This FAQ supersedes FAQ 06-0001.

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**Response Section:**

**Proposed resolution of FAQ and the basis for the proposal:**

The following information will be used as input for a revision to NEI 04-02:

- Allowed Operator Manual Actions  
*“With proper analysis, manual actions are allowed for fire safe shutdown activities under the following circumstances:*
  - *operation of equipment for which cables are located in fire areas that meet Section III.G.1 of Appendix R to 10 CFR Part 50, by having redundant cables and equipment in a completely different fire area*
  - *manual operation of normally operated manual switches and valves*
  - *staff-approved deviations and exemptions for specific manual actions in lieu of meeting the criteria of Section III.G.2 of Appendix R to 10 CFR Part 50*
  - *manual operation of equipment used to meet the requirements of Section III.G.3 for Alternative or Dedicated Shutdown of Appendix R to 10 CFR Part 50, where meeting performance criteria of Section III.L is required”*



FAQ Title Determining Manual Actions that Require a Change Evaluation during Transition

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(NRC Letter to NEI dated May 16, 2002, Use of Manual Actions to Achieve Safe Shutdown for Fire Events)

- Operator Manual Actions on 'Fire Affected Train'.  
*"As discussed during a March 1, 2006, public meeting, if one of the redundant trains in the same fire area is free of fire damage by one of the specified means in paragraph III.G.2, then the use of operator manual actions, or other means necessary, to mitigate fire-induced operation or maloperation to the second train may be considered in accordance with the licensee's fire protection program and license condition since paragraph III.G.2 has been satisfied."*(RIS 2006-10)

Additional clarification was provided at the June 9, 2006 Public Meeting and was summarized in a subsequent NRC Internal Memorandum (July, 19, 2006 ML061950327, ML061980016)

- Conversion of Compliance Strategy from III.G.2 to III.G.3.  
*"Paragraph III.G.2 allows the licensee to use the alternative shutdown method described in paragraph III.G.3 of Appendix R if the licensee cannot meet the requirements of paragraph III.G.2."*(RIS 2006-10)
- Exemptions from Paragraph III.G.2 for Plants Licensed to Operate Before January 1, 1979  
*"The regulations in 10 CFR Part 50.48(b) impose the requirements of paragraph III.G.2 of Appendix R on plants licensed to operate before January 1, 1979 (pre-1979 licensees). As originally issued, 10 CFR 50.48, "Fire Protection," allowed licensees to request an exemption from compliance with one or more of the provisions of Appendix R if the licensee justified the exemption on the basis that the required modifications would not enhance fire protection safety in the facility or that the modifications might be detrimental to overall facility safety.*

*The staff's current basis for approving an exemption is provided in 10 CFR 50.12 "Specific Exemptions." In order for the NRC to approve such an exemption request, a licensee would have to identify all relevant credited operator manual actions by fire area or fire scenario.*

*The NRC has reviewed and granted exemption requests for the use of operator manual actions in lieu of the separation criteria of paragraph III.G.2 where the exemption criteria were met. These exemptions are specific to the licensee and the situation discussed in the exemption. Exemptions granted for specific conditions cannot be applied under other conditions. Although the rationale for an exemption may appear to be applicable to a similar situation for a second licensee, the staff cautions that NRC review and approval by issuance of an exemption would be necessary for the second licensee.*

FAQ Title Determining Manual Actions that Require a Change Evaluation during Transition

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*The appropriate regulatory vehicle (in the absence of a rulemaking or plant-specific Order) to provide dispensation from compliance with fire protection requirements is the issuance of an exemption under 10 CFR Part 50.12. Inspection reports, meeting minutes, and letters from licensees are examples of documents that do not provide dispensation from compliance with applicable fire protection requirements.*

*For pre-1979 licensees, a staff decision in a safety evaluation report (SER) that approves the use of operator manual actions, in lieu of one of the means specified in paragraph III.G.2, does not eliminate the need for an exemption. Pre-1979 licensees who have SERs, but not a corresponding exemption, which approve manual actions should request an exemption under 10 CFR Part 50.12, citing the special circumstances of section 50.12(a)(2)(ii), citing the SER as the safety basis, and confirming that the safety basis established in the SER remains valid. The staff expects to grant the exemption on these bases without further review. "(RIS 2006-10)*

▪ Plants Licensed to Operate After January 1, 1979

*"Since plants licensed to operate on or after January 1, 1979 (post-1979 licensees), are not required to meet the requirements of paragraph III.G.2, a staff decision in an SER that approves the use of manual operator actions does not require exemption under 10 CFR 50.12. Post-1979 licensees may be requested to demonstrate, as part of the NRC Reactor Oversight Process, that the use of an operator manual action would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire consistent with their license." (RIS 2006-10)*

**If appropriate, provide proposed rewording of guidance for inclusion in the next Revision:**

Revise NEI 04-02 as shown in the attachment.

**Attachment to FAQ 06-0012 Revision 4**  
**Excerpt from NEI 04-02 Revision 1 with Changes Tracked**

[Fifth paragraph on page 29 of NEI 04-02 Revision 1]

### **4.3.2 Nuclear Safety Performance Criteria Transition Review**

...

Operator manual actions being transitioned to recovery actions that ~~are not allowed under the current regulatory framework or~~ do not have previous NRC approval should be evaluated using the change process. See Appendix B-2 of this document for additional guidance.

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#### B.2.2.4 Recovery Actions

Operator manual actions will be transitioned as “recovery actions” in the new NFPA 805 licensing bases. Repairs will also be transitioned as “recovery actions”.

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The following information for operator manual actions should be included in the fire area summaries (and referenced as appropriate in Table B-3 Fire Area Assessment Worksheet):

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- Whether the transitioning recovery action is allowed or was previously reviewed and approved by the NRC’s Office of Nuclear Reactor Regulation (NRR). Include reference to documentation that demonstrates prior review and approval by the NRC.
- Reference to the feasibility evaluation of the transitioning recovery action. See discussion below.
- Reference to the evaluation of additional risk associated with the use of recovery actions. See section discussion below.

Figure B-4 depicts this general process for determining whether a transitioning operator manual action to NFPA 805 recovery action requires a change evaluation. The ‘bin’ identifiers are for ease of reference.

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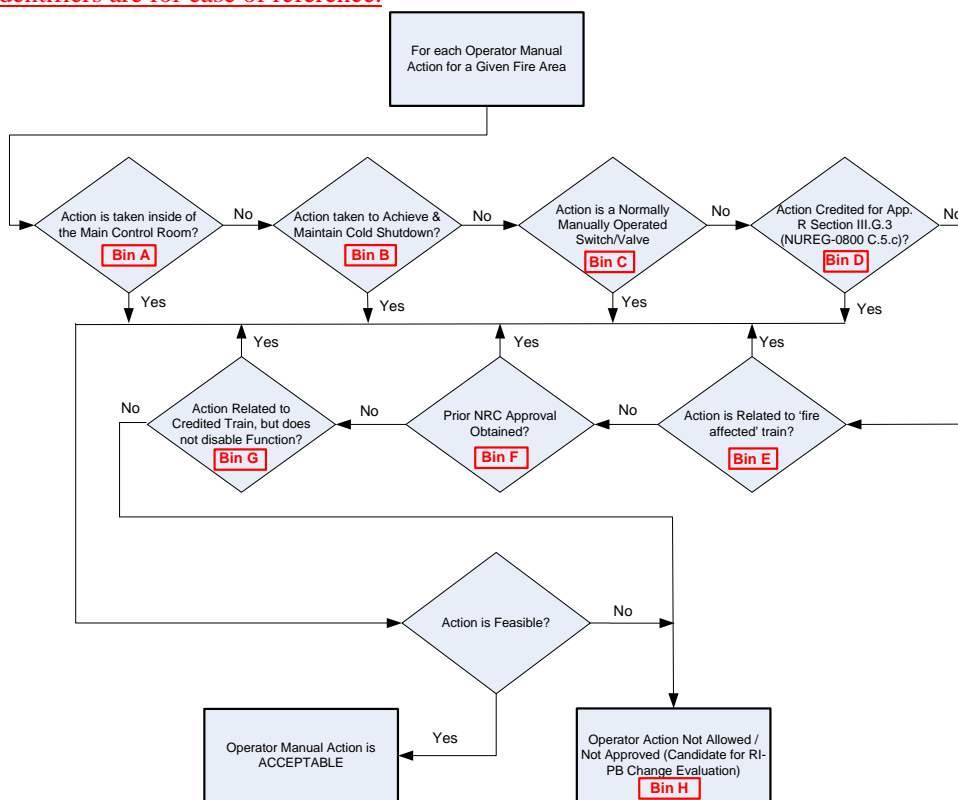


Figure B-4 General Process to Transition Operator Manual Actions

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**Determining If a Transitioning Operator Manual Action requires a Change Evaluation**

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Operator manual actions that are allowed and/or have been previously reviewed and approved by the NRC (as documented in an approved exemption/deviation/safety evaluation report) can be transitioned without the need to use the change evaluation process. Examples of allowed operator manual actions include:

- Operator manual operation from the control room or emergency control station(s) [Bin A]
- Repairs or operator manual actions credited either for transitioning to or maintaining cold shutdown equipment [Bin B]
- Manual operation of normally operated manual switches and valves where separation/protection is provided for redundant safe-shutdown trains in accordance with Section III.G.1 or III.G.2 of 10 CFR 50, Appendix R (or applicable sections of NUREG-0800) [Bin C]

Deleted: In some cases the previous approval may not be obvious, yet should be allowed.

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NRC Letter to NEI dated May 16, 2002 states: “With proper analysis, manual actions are allowed for fire safe shutdown activities under the following circumstances:

- manual operation of normally operated manual switches and valves”
- Operator manual actions credited for compliance with Section III.G.3 of 10 CFR 50, Appendix R (or Section C.5.c of NUREG-0800). [Bin D]

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NRC Letter to NEI dated May 16, 2002 states: “With proper analysis, manual actions are allowed for fire safe shutdown activities under the following circumstances:

- manual operation of equipment used to meet the requirements of Section III.G.3 for Alternative or Dedicated Shutdown of Appendix R to 10 CFR Part 50, where meeting performance criteria of Section III.L is required”

RIS 2006-10 states: “Paragraph III.G.2 allows the licensee to use the alternative shutdown method described in paragraph III.G.3 of Appendix R if the licensee cannot meet the requirements of paragraph III.G.2.”

- Operation of fire affected equipment for fire areas that meet the separation requirements of Section III.G.1 of 10 CFR 50, Appendix R (or applicable sections of NUREG-0800). See Figure B-5. [Bin E]

Deleted: <#>The operator manual action is currently credited in the Alternate Shutdown Procedure. Although this manual action was NOT specifically mentioned in the SER, the licensee submittal specifically discussed the operator action. This can be considered previously approved.¶  
<#>The operator manual action is currently credited in Non-Alternate Shutdown Procedure. The manual action was specifically discussed as acceptable in the SER however the NRC did not grant an exemption/deviation. This can be considered previously approved.¶  
<#>Operation of equipment for which cables and equipment for the redundant safe shutdown train are located in separate fire areas thus meeting Section III.G.1 of Appendix R to 10 CFR Part 50,¶  
<#>Manual operation of normally operated manual switches and valves where III.G.1 separation is provided for redundant safe-shutdown trains¶

NRC Letter to NEI dated May 16, 2002 states: “With proper analysis, manual actions are allowed for fire safe shutdown activities under the following circumstances:

- operation of equipment for which cables are located in fire areas that meet Section III.G.1 of Appendix R to 10 CFR Part 50, by having redundant cables and equipment in a completely different fire area”

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**Attachment to FAQ 06-0012 Revision 4**  
**Excerpt from NEI 04-02 Revision 1 with Changes Tracked**

- Operation of fire affected equipment for fire areas that meet the protection requirements of Section III.G.2 of 10 CFR 50, Appendix R (or applicable sections of NUREG-0800) for redundant trains. See Figure B-6. [Bin E]

RIS 2006-10 states: “As discussed during a March 1, 2006, public meeting, if one of the redundant trains in the same fire area is free of fire damage by one of the specified means in paragraph III.G.2, then the use of operator manual actions, or other means necessary, to mitigate fire-induced operation or maloperation to the second train may be considered in accordance with the licensee’s fire protection program and license condition since paragraph III.G.2 has been satisfied.”

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- Operator manual actions to address spurious actuations that affect the credited safe shutdown success path are allowed, as long as the spurious actuation is not directly in the protected train of the credited function (e.g., the main flowpath, as opposed to a diversionary flowpath) and the credited function does not become disabled during the time it takes to perform the operator manual action. See Figures B-7 and B-8 [Bin G]

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During the June 9, 2006 public meeting the following example was specifically discussed: Two redundant trains taking suction from a common tank. Provided the manual action can be accomplished prior to the tank volume going below the minimum required volume to support the credited function the action would be allowed and therefore not require a change evaluation. (Figure B-7)

A second example is the credited function is to inject water to the Steam Generator (reactor) and a spurious actuation causes a diversion from the credited flow path. Provided the minimum required injection flow can be maintained and the operator action can be accomplished prior to the function being disabled. (Figure B-8)

In addition to allowed operator manual actions some manual actions may have been previously reviewed and approved by the NRC [Bin F] (as documented in an approved exemptions/deviations/safety evaluation reports) and can also be transitioned without the need to use the change evaluation process. Guidance for determining previous approval is discussed in Section 2.3.1 and 4.3.2 of this document and in Regulatory Guide 1.205.

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In some instances the NRC may have reviewed and approved [Bin F] an operator manual action in an SER without granting an exemption/deviation request. In these cases, change evaluations would not be required based on the following guidance:

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- RIS 2006-10 states: “For pre-1979 licensees, a staff decision in a safety evaluation report (SER) that approves the use of operator manual actions, in lieu of one of the means specified in paragraph III.G.2, does not eliminate the need for an exemption. Pre-1979 licensees who have SERs, but not a corresponding exemption, which approve manual actions should request an exemption under 10 CFR Part 50.12, citing the special circumstances of section 50.12(a)(2)(ii), citing the SER as the safety basis, and confirming that the safety basis established in the SER remains valid. The staff expects to grant the exemption on these bases without further review.”

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During the transition, for pre-1979 licensees who have SERs, but not a corresponding exemption, which approves operator manual actions, should verify that the basis for

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**Attachment to FAQ 06-0012 Revision 4**  
**Excerpt from NEI 04-02 Revision 1 with Changes Tracked**

acceptability in the SER is still valid. If the basis for acceptability is still valid, then no change evaluation is required.

- RIS 2006-10 states: “Since plants licensed to operate on or after January 1, 1979 (post-1979 licensees), are not required to meet the requirements of paragraph III.G.2, a staff decision in an SER that approves the use of manual operator actions does not require exemption under 10 CFR 50.12. Post-1979 licensees may be requested to demonstrate, as part of the NRC Reactor Oversight Process, that the use of an operator manual action would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire consistent with their license.”

Operator manual actions that are not allowed or have not been previously reviewed and approved by the NRC should be addressed for acceptability using the change evaluation [Bin H] process outlined in Chapter 5.3 of this guidance. Examples of operator manual actions that are not allowed are provided in summary of the June 9, 2006 Public Meeting (ML061950327, ML061980016)

**Deleted:** operator

**Deleted:** Repairs credited for cold shutdown equipment will also be transitioned on a fire area basis. Information that should be summarized includes reference to documentation that demonstrates the equipment necessary for the repair is staged, the repair is proceduralized, and the repair is achievable in the necessary timeframe.¶

¶ Operator manual actions that have been previously reviewed and approved by the NRC (as documented in an approved SER) can be transitioned without the need to use the change evaluation process. However, licensees may consider use of the change evaluation process for previously reviewed and approved operator manual actions so that the evaluation is consistent with operator manual actions not previously reviewed and approved by the NRC.¶

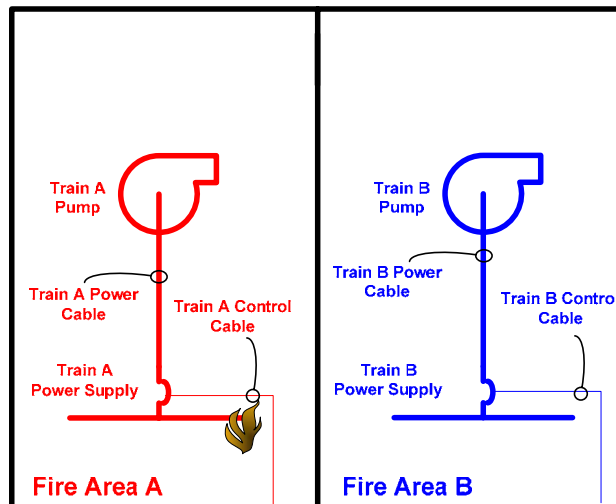
**Deleted:** (e.g., those credited for compliance with Appendix R sections III.G.2 and III.G.3)

**Deleted:** that

**Deleted:** July, 19, 2006

**Deleted:** The following methodology should be used to optimize this process:¶

**Attachment to FAQ 06-0012 Revision 4**  
**Excerpt from NEI 04-02 Revision 1 with Changes Tracked**

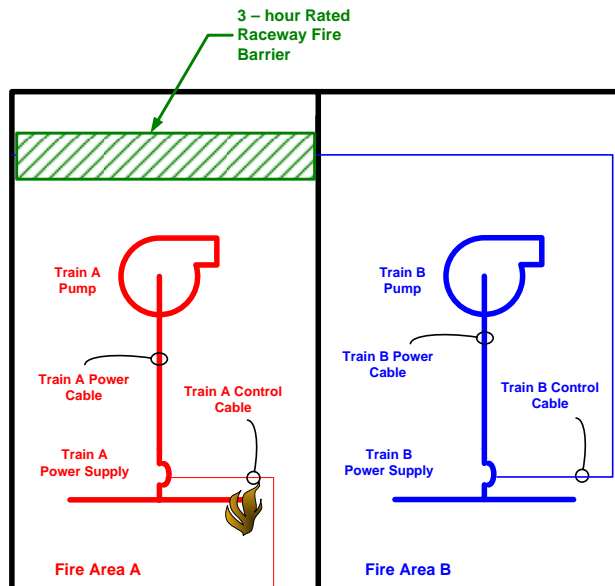


Fire Area A and B meet the separation criteria of 10 CFR 50 Appendix R Section III.G.1. A postulated fire in Fire Area A could result in the spurious starting of the Train A pump, which can be mitigated by an operator manual action to de-energize the Train A Power Supply to stop Pump A.

**Figure B-5 Allowed Operator Manual Action in Fire Area Meeting 10 CFR 50, Appendix R, Section III.G.1 Separation Criteria**

Deleted: 4

Deleted: Acceptable



Fire Area B meets the separation criteria of 10 CFR 50 Appendix R Section III.G.2.a. A postulated fire in Fire Area A could result in the spurious starting of the non-credited Train A pump, which can be mitigated by an operator manual action to de-energize the Train A Power Supply to stop Pump A. This is functionally equivalent to Case in Figure B-5.

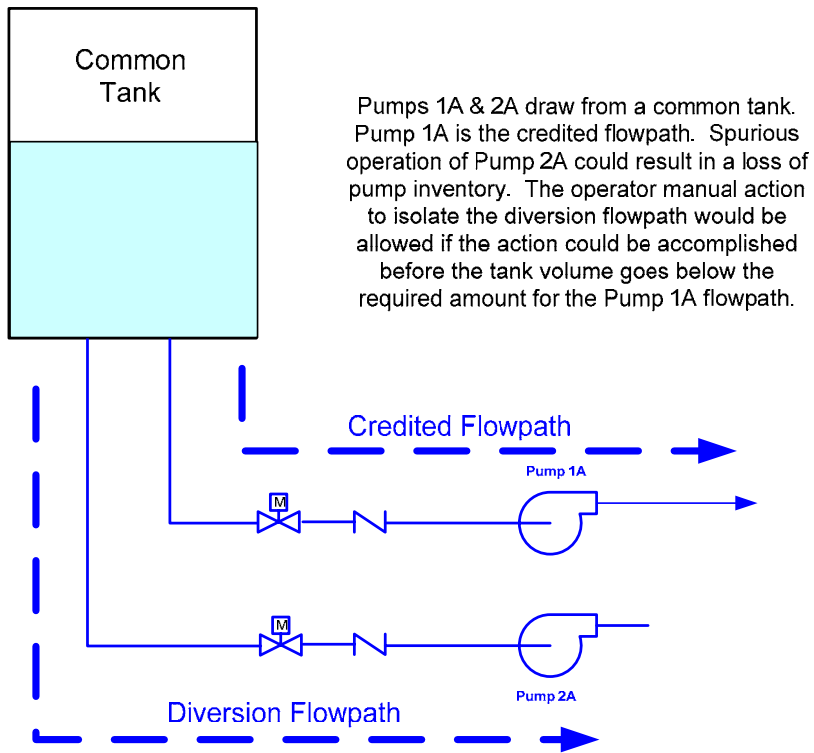
**Figure B-6 Allowed Operator Manual Action in Fire Area Meeting 10 CFR 50, Appendix R, Section III.G.2 Compliant – Operator Manual Action for Fire Affected Train**

Deleted: 5

Deleted: Acceptable



Attachment to FAQ 06-0012 Revision 4  
Excerpt from NEI 04-02 Revision 1 with Changes Tracked



**Figure B-7. Allowed Operator Manual Action – In Credited Success Path – Common Tank Suction**

Deleted: 6

Attachment to FAQ 06-0012 Revision 4  
Excerpt from NEI 04-02 Revision 1 with Changes Tracked

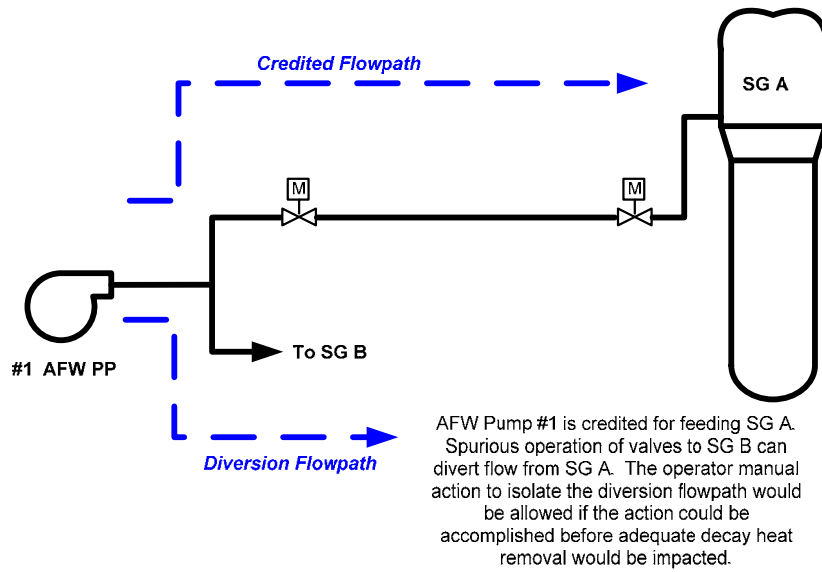


Figure B-8, Allowed Operator Manual Action – In Credited Success Path – Auxiliary Feedwater Flow Diversion

Deleted: 7

Ray,

We have created a new FAQ for bus ducts and it is with the task force. I think we should be able to get it to you before July. The FAQ as written does not contain a new solution to the counting question, but we plan to discuss it at the FPRA task force meeting on June 21. I believe we can support your meeting on July 13 although I am not sure who will be attending. We will have better input after our June meeting.

David Miskiewicz  
Progress Energy, PSA  
919-546-7588

-----Original Message-----

From: Ray Gallucci [<mailto:RHG@nrc.gov>]  
Sent: Tuesday, June 05, 2007 10:54 AM  
To: Brandon JAMAR; Charles Moulton; Sunil Weerakkody  
Cc: Alex MARION; Jim RILEY; J S Hyslop; Thinh Dinh; Miskiewicz, David N  
Subject: Re: FAQ 06-0017 Rev. 2 for submittal

Thanks. We'll look it over. If OK, we'll incorporate into the close-out memo.

Any feedback on new FAQ 35 (bus ducts and junctions), particularly if the July 13th date is a go for the joint panel to resolve duct counting that I proposed at the last FAQ meeting? This date would enable Steve Nowlen to participate since he'll be in town.

>>> "JAMAR, Brandon" <[btj@nei.org](mailto:btj@nei.org)> 06/04/2007 8:37:42 PM >>>  
Please find revision 2 to FAQ 06-0017 for submittal. Should you have any problems with this transmittal please contact me directly.

Thank you,

Brandon Jamar

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**Mail Envelope Properties** (4667ED70.DC9 : 19 : 3529)

**Subject:** RE: FAQ 06-0017 Rev. 2 for submittal  
**Creation Date** 6/7/2007 7:34:49 AM  
**From:** "Miskiewicz, David N" <David.Miskiewicz@pgnmail.com>  
**Created By:** David.Miskiewicz@pgnmail.com

**Recipients**

nrc.gov  
OWGWPO02.HQGWDO01  
RHG (Ray Gallucci)

nrc.gov  
OWGWPO04.HQGWDO01  
JSH2 CC (J S Hyslop)

nrc.gov  
OWGWPO03.HQGWDO01  
TQD1 CC (Thinh Dinh)

nrc.gov  
TWGWPO01.HQGWDO01  
CEM4 CC (Charles Moulton)

nei.org  
reb CC (Biff BRADLEY)  
btj CC (Brandon JAMAR)  
jhr CC (Jim RILEY)  
am CC (Alex MARION)

pge.com  
axag CC

**Post Office**

OWGWPO02.HQGWDO01  
OWGWPO04.HQGWDO01  
OWGWPO03.HQGWDO01  
TWGWPO01.HQGWDO01

**Route**

nrc.gov  
nrc.gov  
nrc.gov  
nrc.gov  
nei.org  
pge.com

**Files**

MESSAGE  
Mime.822

**Size**

1929  
3903

**Date & Time**

6/7/2007 7:34:49 AM

**Options**

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<b>Priority:</b>	Standard
<b>ReplyRequested:</b>	No
<b>Return Notification:</b>	None

<b>Concealed Subject:</b>	No
<b>Security:</b>	Standard

**Junk Mail Handling Evaluation Results**

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**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk Mail handling disabled by Administrator  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

Please find FAQ 07-0035, Rev. 0 attached for submittal. If you should have any questions please contact me directly (via email).

Thank you,

Brandon T. Jamar

Project Manager, Engineering

Nuclear Energy Institute

1776 I Street NW, Suite 400

Washington, DC 20006

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**Mail Envelope Properties** (466F423B.D64 : 6 : 52580)

**Subject:** FAQ 07-0035  
**Creation Date** 6/12/2007 9:06:08 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>

**Created By:** btj@nei.org

**Recipients**

nrc.gov  
TWGWPO01.HQGWDO01  
CEM4 (Charles Moulton)

nrc.gov  
OWGWPO02.HQGWDO01  
RHG CC (Ray Gallucci)

nrc.gov  
TWGWPO04.HQGWDO01  
SDW1 (Sunil Weerakkody)

**Post Office**

TWGWPO01.HQGWDO01  
OWGWPO02.HQGWDO01  
TWGWPO04.HQGWDO01

**Route**

nrc.gov  
nrc.gov  
nrc.gov

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TEXT.htm	5991	
FAQ 07-0035 - Rev 0.pdf	15499	
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**Options**

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**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

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Junk Mail using personal address books is not enabled

Block List is not enabled

Attachment 1:

FAQ Number 07-0035

FAQ Revision 0

FAQ Title Bus Duct Counting Guidance for High Energy Arcing Faults

Plant: Harris

Date: June 1, 2007

Contact: Dave Miskiewicz

Phone: 919.546.7588

Email: David.Miskiewicz@pgnmail.com

Distribution: (NEI Internal Use)

☒ 805 TF ☐ FPWG ☒ FRATF ☐ RIRWG ☐ BWROG ☐ PWROG

---

**Purpose of FAQ:**

Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application.

---

Is this Interpretation of guidance? ☒ Yes / No

Proposed new guidance not in NEI 04-02? ☒ Yes / No

---

**Details:**

**NEI 04-02 guidance needing interpretation (include section, paragraph, and line numbers as applicable):**

New attachment on interpretation issues

**Circumstances requiring guidance interpretation or new guidance:**

Pilot discussions and benchmarking of NUREG/CR-6850 for Task 6, Fire Ignition Frequency, has shown inconsistency in the treatment of High Energy Arcing Faults (Bin 16). There is a need to resolve these issues to prevent future rework and to reduce burden associated with uncertainty treatment. This topic has impact on the NFPA-805 pilots, non-pilots and other users of NUREG/CR-6850.

The guidance provided in NUREG/CR-6850 for Task 6, Fire Ignition Frequency (Section 6.5.6, Bin 16), states:

Bin 16 – High-Energy Arcing Faults (Plant-Wide Components): High-energy arcing faults are associated with switchgear and load centers. Switchyard transformers and isolation phase buses are not part of this bin. For this bin, similar to electrical cabinets, the vertical segments of the switchgear and load centers should be counted. Additionally, to cover potential explosive failure of oil filled transformers (those transformers that are associated with 4.16 or 6.9kV switchgear and lower voltage load centers) may be included in vertical segment counts of the switchgear.

**FAQ Title Bus Duct Counting Guidance for High Energy Arching Faults**

---

The current guidance is silent regarding the treatment of bus duct. Preliminary discussions between the user community and the NUREG authors indicate that some specific guidance is needed to assure more consistent treatment of bus duct.

**Detail contentious points if licensee and NRC have not reached consensus on the facts and circumstances:**

**Potentially relevant existing FAQ numbers:**

This guidance is specific to the characterization of bus duct for Bin 16 HEAF determination. The characterization and counting of electrical cabinets for Bin 16 determination is addressed by FAQ 06-0017.

---

**Response Section:**

**Proposed resolution of FAQ and the basis for the proposal:**

Because bus duct terminates at electrical cabinets, the HEAF counted for the electrical cabinet would also include those bus duct events and no further counting is necessary.

**Basis:**

The response is consistent with the guidance currently provided in NUREG/CR-6850. Without additional guidance provided by the authors of NUREG/CR-6850, there is no basis for when or how to count bus duct.

**If appropriate, provide proposed rewording of guidance for inclusion in the next Revision:**

Sunil,

We had previously discussed hosting the September NFPA 805 FAQ meeting in coordination with this year's Fire Protection Information Forum in New Orleans, LA. We have made the accommodations available with the hotel for the proposed meeting date of September 20. Please let me know if this will be acceptable so I can finalize plans with the 805 task force and the hotel.

Thank you,

Brandon T. Jamar

Project Manager, Engineering

Nuclear Energy Institute

1776 I Street NW, Suite 400

Washington, DC 20006

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F: 202-533-0185

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**Mail Envelope Properties** (467096BB.F05 : 20 : 16133)

**Subject:** NFPA 805 FAQ meeting - September 2007  
**Creation Date** 6/13/2007 9:19:22 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>  
**Created By:** btj@nei.org

**Recipients**

nrc.gov  
TWGWPO01.HQGWDO01  
CEM4 CC (Charles Moulton)  
PWL CC (Paul Lain)

nrc.gov  
TWGWPO04.HQGWDO01  
SDW1 (Sunil Weerakkody)

**Post Office**

TWGWPO01.HQGWDO01  
TWGWPO04.HQGWDO01

**Route**

nrc.gov  
nrc.gov

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**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk Mail handling disabled by Administrator  
Junk List is not enabled  
Junk Mail using personal address books is not enabled



Block List is not enabled

Chuck,

Do you have any FAQ updates (comments, approvals, etc.) you're prepared to share prior to the call tomorrow?

Thanks,

Brandon

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**Mail Envelope Properties** (4679C613.BDD : 3 : 7133)

**Subject:** FAQ Monthly Call - June 21  
**Creation Date** Wed, Jun 20, 2007 8:31 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>

**Created By:** btj@nei.org

**Recipients**

nrc.gov  
CEM4 (Charles Moulton)

nrc.gov  
SDW1 CC (Sunil Weerakkody)

nei.org  
jhr CC (Jim RILEY)

**Post Office**

**Route**

nrc.gov  
nrc.gov  
nei.org

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**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk Mail handling disabled by Administrator

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled

Brandon,

It looks like we are going to have relatively little for today...

We have no comments ready, but I think we are going to suggest closure of four FAQs today (7, 12, 17, and 28)

I am attaching two handouts that detail updated ADAMS numbers of FAQs and meeting notices/summaries. Please distribute them to the task force.

Thanks,

Chuck

Charles Moulton  
Fire Protection Engineer  
NRR/DRA/AFPB  
Phone: 415-2751  
Mailstop: O11A11

>>> "JAMAR, Brandon" <[btj@nei.org](mailto:btj@nei.org)> 6/20/2007 8:31 PM >>>  
Chuck,

Do you have any FAQ updates (comments, approvals, etc.) you're prepared to share prior to the call tomorrow?

Thanks,

Brandon

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**Mail Envelope Properties** (467A99AE.7BD : 12 : 9706)

**Subject:** Re: FAQ Monthly Call - June 21  
**Creation Date** 6/21/2007 11:30:54 AM  
**From:** Charles Moulton

**Created By:** CEM4@nrc.gov

<b>Recipients</b>	<b>Action</b>	<b>Date &amp; Time</b>
nei.org	Transferred	6/21/2007
11:31:12 AM		
btj (Brandon JAMAR)		

<b>Post Office</b>	<b>Delivered</b>	<b>Route</b>
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11:23:12 AM		

**Options**

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<b>Security:</b>	Standard

<b>To Be Delivered:</b>	Immediate
<b>Status Tracking:</b>	Delivered & Opened

Attachment 1:



## FAQs

FAQ #	Rev.	ADAMS #
06-0001	0	ML061440419
06-0002	0	ML061440420
	1	ML063170357
	2	ML063350515
06-0003	0	ML061440422
	1	ML063170355
06-0004	0	ML061440430
06-0005	0	ML062350095
	1	ML063180544
06-0006	0	ML062350109
	1	ML063170360
	2	ML063540308
06-0007	0	ML062350121
	1	ML070030325
	2	ML070510442
	3	ML071550408
06-0008	0	ML062860250
	1	ML070510499
	2	ML070800007
	3	ML071020160
	Att.	ML071020169
	4	ML071080099
	5	ML071340180
06-0011	0	ML062890271
	1	ML070510505
06-0012	0	ML062860255
	1	ML063170362
	2	ML070850610
	3	ML071380228
	4	ML071570260
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06-0017	0	ML070030383
	1	ML071350432
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06-0026	0	ML070030480
06-0027	0	ML071380236
06-0028	0	ML070030489
	1	ML071340195
	2	ML071550415
07-0031	0	ML071380238
07-0035	0	ML071650151

Attachment 2:

## FAQ Meeting Notices and Summaries

Month	Doc.	ADAMS #
July	MN	ML061870560
	MS	ML062080126
August	MN	ML062200116
	MS	ML062400278
September	MN	ML062510281
	MS	ML062900031
October	MN	ML062850488
	MS	ML063350031
November	MN	ML063120170
	MS	ML063410377
December	MN	ML063390132
	MS	ML070220420
January	MN	ML070040380
	MS	ML070360630
February	MN	ML070290267
	MS	ML070640531
March	MN	ML070640417
	MS	ML071090164
April	MN	ML070920255
	MS	ML071420174
May	MN	ML071220176
	MS	ML071510425
June	MN	ML071440064

Chuck,

Please find the attached FAQ Log updated per today's meeting. If you have any questions please let me know.

Thanks,

Brandon

Brandon T. Jamar

Project Manager, Engineering

Nuclear Energy Institute

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Washington, DC 20006

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**Mail Envelope Properties** (467B2007.8AA : 23 : 43178)

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**Creation Date** 6/21/2007 9:07:41 PM  
**From:** "JAMAR, Brandon" <btj@nei.org>

**Created By:** btj@nei.org

**Recipients**

nrc.gov  
TWGWPO01.HQGWDO01  
CEM4 (Charles Moulton)

nrc.gov  
TWGWPO04.HQGWDO01  
SDW1 CC (Sunil Weerakkody)

nei.org  
jhr CC (Jim RILEY)

**Post Office**

TWGWPO01.HQGWDO01  
TWGWPO04.HQGWDO01

**Route**

nrc.gov  
nrc.gov  
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**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

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Attachment 1:



FAQ #	Revision		Name	Summary	Actions and Notes	Priority	Submitter		Reviewer	Status			Approval	
	Submitted	Working					NRC	NEI TF	NRC	Submittal Date	Tentative	Final		
06-0001	0	0	Alternate method for Engineering Evaluations	Add in clarification that fire affected train manual actions are 'allowed' and therefore do not require evaluation.	NRC rejected the statements regarding SER approval without Exemptions  Tentatively approved.  Superceded by FAQ 06-0012.	Closed	Harris Nuclear Plant	Ertman		Submitted to NRC	Closed	4/25/2006	Closed ML063480169	Closed ML063480169
06-0002	1c	1c	NEI 04-02 Section 5.3.3 and App. I, Order of Questions for Change Analysis Screening	Change Figure 5-1, text, and Appendix I to ask the Chapter 4 questions before Chapter 3 questions.	NRC agreed in principle, however wanted wording clarified to "make clear the distinction between Chapter 3 requirements that are subject to Chapter 4 evaluations versus the Chapter 3 requirement that are independent of Chapter 4" added clarification to 'boxes' at end of Questions 1 and 2 in Change Analysis Form  NRC added 'included required recovery actions to text of 5.3.3 and added 'including Human actions' to Question 4.e of Change Analysis Form  Task Force agrees to first request. Task force is evaluating the addition of NRC rejected the statements regarding SER approval without Exemptions  Committed to revise based on RIS 2006-10 and NRC Public Meeting June 9, 2006. See RIS 2006 12 'human actions' to the risk screening questions. - tentatively approved - will resubmit 10/26/06	Closed	Harris Nuclear Plant	Ertman	Gallucci	Submitted to NRC	Closed	4/25/2006 10/26/2006	10/26/2006	Closed
06-0003	1b	1b	Change Analysis Screening	Change 'greater than minimal' to 'potentially greater than minimal'		Closed	Harris Nuclear Plant	Ertman	Gallucci	Submitted to NRC	Closed	4/25/2006 10/26/2006	10/26/2006	Closed
06-0004	0	1	Clarify NFPA 805 Chapter 4 and 3 relationship for 'required' FP systems/features	How fire protection systems and features transition is highly dependent on how they are 'required' to meet the nuclear safety criteria of Chapter 4.	Note NRC was using NEI 04-02 Revision 2H figures and not figures in FAQ 06-0004  NRC to re-review in appropriate context & provide status on 10/26/06  Received NRC comments 11/29/06. Resubmitted to NRC and returned with comments. Currently under TF review.	M	HNP	Ertman	Frumkin	TF to resubmit July 2007 in conjunction w/ B.3 tables	Comments provided on R0	5/12/2006		
06-0005	1	1	Guidance on FPP-related changes	NEI 04-02 does not provide guidance what should be considered a FPP-related change or not. Since failure to obtain NRC pre-approval for using risk reductions from a non-FPP related change would be contrary to the guidance in RG 1.205, additional guidance should be provided to clarify what is considered a FPP-related change once NFPA-805 is implemented.	FAQ has been revised.  Resubmit to NRC 11/30/06 - waiting for NRC response as of June 07  NRC tentatively scheduling comments for July meeting	H	HNP	Ertman	Frumkin	TF waiting for NRC comments	Plan to comment	8/24/2006 11/30/2006		
06-0006	2	2	High-low pressure interface definition and NEI 00-01/NFPA 805 discrepancies	Definition of High-Low Pressure interface is not consistent between NFPA 805 and NEI 00-01. Need to provide clarification.	Received NRC comments on R1, R2  Resubmit 12/19/06 - Definition change per NRC request.  Closure process has begun. Draft closure letter was commented on by TF.  NRC accepted TF clarification.	M	Duke	Barrett	Dinh		Draft closure letter issued	8/24/2006 12/19/2006	1/18/2007	
06-0007	3	3	NFPA 805 Chapter 3 Requirements for Fire Brigades	Need clarification on when NFPA 600 or NFPA 1500 apply. Also clarify if requirements apply to interior structural fire fighting brigade.	FAQ to be revised to mark up NEI 04-02 to show the addition of an appendix for NFPA 805 clarifications.  NRC R2 comments by May 07	M	HNP	Holder	Lain	R3 submitted to NRC	Comments provided on R2	2/15/2007 5/21/2007	6/21/2007	
06-0008	5	5	Alternate method for Engineering Evaluations	Many Generic Letter 86-10 evaluations exist at facilities today. Transition of these existing evaluations is essential for the success of the Pilot Plants. In addition the use of engineering evaluations for Chapter 3 issues post transition needs to be clarified.	Presented 9/28/06  Comments received from NRC on 11/29/06. Clarification call scheduled. Resubmit to NRC by 02/07 R4a comments received and will incorporate NRC recommendations. R5 by early May.  NRC stated at last meeting they would be submitting additional comments. Awaiting NRC comments.	H1	NEI	Ratchford	Frumkin	R6 planned	Comments provided on R5	2/15/2007 3/20/2007 3/30/2007 5/8/2007		

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06-0009			NEI 04-02 Typo Corrections	Editorial changes to NEI 04-02	Will submit with overall revision at end of year.	L	NEI	Kleinsorg						
06-0010			Incorporate Regulatory Guide 1.205 Baseline concept into NEI 04-02	Based on changes to Regulatory Guide 1.205, NEI 04-02 needs to reflect the baseline risk	Projected submittal 3Q 2007	L	HNP	Ertman						
06-0011	1b	1b	Clarify III.G.3 Compliance Transition	Alternative Shutdown is not specifically addressed in NFPA 805.	Approved by Task Force Reviewers. Submitted to NRC 9/28/06. Under NRC review.  Comments received from NRC on 11/29/06. Need time for TF review. Rewrite w/consideration for NRC comment #2 - Resubmit Feb. '07.  Awaiting NRC closure.	H	NEI	Jutras	Frumkin	TF waiting for NRC comments on R1b	Comments provided on R0	2/15/2007		
06-0012	4	4	Clarify Manual Action Transition in Appendix B	Some manual actions are either allowed by the current regulation or have been	Submitted to NRC 9/28/06. Resubmit 10/26/06 as combined with FAQ 06-0001  Comments received from NRC on 11/30/06. With TF for review. Revision by May '07. NRC comments on R2b warrant R3. Will have by May 07  Additional internal comments to be included in new FAQ  Awaiting NRC final comments/closure.	H	NEI	Kleinsorg	Barbadaro	R4 submitted to NRC	Comments provided on R2b	9/28/2006 10/26/2006 3/22/07 5/17/07 6/5/07	6/21/2007	
06-0013			Clarify Chapter 4 Methodology Transition Process Bases on Pilot Plant Results		Will be presented at 2007 HNP Pilot meeting.  Duke to submit end of Second Quarter 2007  See FAQ 07-0039	L	HNP	Ertman						
06-0014		0	Cumulative Risk	Regulatory Guide 1.205 requires tracking of changes to assess cumulative risk. NEI 04-02 does not provide guidance on this issue	With FPRA TF for comment - 12/14/06  FAQ by 4Q 2007	L	HNP	Miskiewicz		FPRA TF has action				
06-0015		0	Guidance on not-red determination	Process for determining if non-compliances found during the transition process are 'not red' needs to be simplified.	Sent to Task Force for review 11/30/06  With FPRA TF for review 12/14/06  Ken Heffner to provide regulatory input to this FAQ by 12/14/06  Amir Afzali to provide PRA screening criteria for 'not red' determination by 12/14/06  Amir Afzali to discuss with PRA Task Force to increase focus  Provide FAQ by 1st week in July 2007	H	NEI	Afzali		FPRA TF has action				
06-0016	1	1	Ignition Source counting guidance for Electrical Cabinets	Clarification/enhancement of Ignition Source counting guidance for Electrical Cabinets in NUREG/CR-6850, supporting NFPA-805 Fire PRA application.	Presented at November 2006 pilot meeting  Submitted to Task Force 11/30/06.  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC. Potential disagreement on the examples provided in the FAQ were discussed by Ray Gallucci of the NRC.  Kiang Zee provided feedback that the examples were intended to be taken collectively and were intended to be drawn to scale.	H	HNP	Miskiewicz	Gallucci	Submitted R1 to NRC	R1 accepted. Closed	12/19/2006		

06-0017	2	2	Ignition Source counting guidance for High Energy Arcing Faults (HEAF)	Clarification/enhancement of Ignition Source counting guidance for High Energy Arcing Faults (HEAF) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application.	Presented at November 2006 pilot meeting Submitted to Task Force 11/30/06.  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC.  Preliminary comments indicated a recommending splitting of HEAFs into a low voltage and high voltage bins. In addition, a new frequency is being considered for bus ducts.	H	HNP	Miskiewicz	Reviewer	Submitted R2 to NRC	Comments provided on R1	12/19/2006 05/15/2007 6/4/2007	6/21/2007	
06-0018	1	1	Ignition Source counting guidance for Main Control Board (MCB)	Clarification/enhancement of Ignition Source counting guidance for Main Control Board (MCB) in NUREG/CR-6850, supporting NFPA-805 Fire PRA application	Presented at November 2006 pilot meeting Submitted to Task Force 11/30/06.  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC.  Preliminary comments indicated more focus on counting just "horseshoe" cabinets as MCBs.	H	HNP	Miskiewicz	Gallucci	Submitted R1 to NRC	R1 accepted. Closed	12/19/2006		
06-0019	1	1	Define "power block" and "plant"	Define where used in Chapter 3, "power block" and "plant" are intended to mean "areas in which a fire could jeopardize the ability to meet the performance criteria described in section 1.5."  3.3.1.2 Control of Combustible Materials (1)Wood used within the power block shall be listed pressure-impregnated or coated with a listed fire-retardant application. Exception: Cribbing timbers 6 in. by 6 in. (15.2 cm by 15.2 cm) or larger shall not be required to be fire-retardant treated.	Presented to Task Force 11/30/06  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Comments to be provided by NRC prior to Feb. 2007 meeting.  TF will submit new revision by May 2007  Awaiting NRC Final Review and Comments - estimate July meeting	H	HNP	Holder	Dinh	R1 submitted to NRC	Comments provided on R0	12/19/2006 5/8/2007		
06-0020	1	1	Definition of "applicable"	(6) Controls on use and storage of flammable gases shall be in accordance with applicable NFPA standards.	Presented to Task Force 11/30/06  CLOSED 5/17/07	H	HNP	Holder	Dinh	R1 submitted to NRC	Comments provided on R0	12/19/2006 5/8/2007		
06-0021	1a	1a	Clarify that air drops are acceptable.	3.3.5.2 - Only metal tray and metal conduits shall be used for electrical raceways. Thin wall metallic tubing shall not be used for power, instrumentation, or control cables. Flexible metallic conduits shall only be used in short lengths to connect components.  HNP as well as other plants have exposed cable drops ~ 3' in length.	Presented to Task Force 11/30/06  CLOSED 5/17/07	LL	HNP	Holder	Dinh	R1 submitted to NRC	Comments provided on R0	12/19/2006 5/8/2007		
06-0022	0	0a	Identify a list of typical flame propagation tests which are considered acceptable.	3.3.5.3 - Electric cable construction shall comply with a flame propagation test as acceptable to the AHJ.	Presented to Task Force 11/30/06  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC.  Additional info on applicability of test requested by NRC.	M	ANO	Puckett	Moulton	TF waiting for NRC comments	Plan to comment	12/19/2006		
06-0023	0	0	Grant exception for Diesel Generator Day Tanks located within Diesel Generator Buildings.	3.3.8 Bulk Storage of Flammable and Combustible Liquids - Bulk storage of flammable and combustible liquids shall not be permitted inside structures containing systems, equipment, or components important to nuclear safety. As a minimum, storage and use shall comply with NFPA 30, Flammable and Combustible Liquids Code.	Presented to Task Force 11/30/06  Submitted to NRC 12/19/06  NRC questioned if issue warranted a FAQ since it is part of plant systems  WITHDRAWN 5/17/07	LL	HNP	Holder	Lain	WITHDRAWN 5/17/07	Proposed withdraw	12/19/2006		

06-0024	0	1	Define what "adequate clearance" is.	3.3.11 Electrical Equipment - Adequate clearance, free of combustible material, shall be maintained around energized electrical equipment.  Need to provide a clearer definition of 'adequate clearance'. Could be based on OSHA 3ft requirement.	Presented to Task Force 11/30/06  Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC.  Initiator resubmitted to Task Force planned submittal to NRC first week of July	M	HNP	Holder	Oudinot	TF reviewing R1, planned submittal	Comments provided on R0	12/19/2006		
06-0025	1b	1b	Define minimum acceptable pre-plan scope.	3.4 Industrial Fire Brigade - 3.4.2.1 - The plans shall detail the fire area configuration and fire hazards to be encountered in the fire area, along with any nuclear safety components and fire protection systems and features that are present.  Suggest define more clearly what the minimum acceptable pre-plan scope is. Consider use of existing guidance.	Presented to Task Force 11/30/06 R1b updated 4/19  Awaiting NRC Review and comments - by July meeting	M	HNP	Holder	Barbadaro	R1 submitted to NRC	Comments provided on R0	12/19/2006 5/8/2007		
06-0026	0	0	Clarify NFPA code requirements for gear maintenance	3.4.4 Fire-Fighting Equipment - Protective clothing, respiratory protective equipment, radiation monitoring equipment, personal dosimeters, and fire suppression equipment such as hoses, nozzles, fire extinguishers, and other needed equipment shall be provided for the industrial fire brigade. This equipment shall conform with the applicable NFPA standards.  Clarify that intent is for design and purchase of equipment. NFPA code requirements for gear maintenance is not applicable.	Presented to Task Force 11/30/06  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Preliminary verbal comments provided by NRC.  WITHDRAWN 5/17/07	M	HNP	Holder	Oudinot	WITHDRAWN 5/17/07	Proposed withdraw	12/19/2006		
06-0027	0	0	Clarify the "where provided" statement.	3.7 Fire Extinguishers - Where provided, fire extinguishers of the appropriate number, size, and type shall be provided in accordance with NFPA 10, Standard for Portable Fire Extinguishers. Extinguishers shall be permitted to be positioned outside of fire areas due to radiological conditions.  Part of NFPA 10 is placement / travel distances for extinguishers. The 'where provided' statement needs clarification.	To TF by Feb 07  Not discussed on 1/18/07  Rev 0 sent to NRC on 5/17/07  Awaiting NRC Review and comments	M	ANO	Puckett		Submitted R0 to NRC		5/17/2007		
06-0028	2	2	Clarify intent of "familiarization with plant fire prevention procedures, fire reporting, and plant emergency alarms" regarding scope of or depth of the training.	3.3.1.1 General Fire Prevention Activities - (1) Training on fire safety information for all employees and contractors including, as a minimum, familiarization with plant fire prevention procedures, fire reporting, and plant emergency alarms  Clarify the intent of 'familiarization'.	Presented to Task Force 11/30/06  Comments from Task Force to initiator by 12/14/06 Submitted to NRC 12/19/06  Not discussed on 1/18/07  Submitted to NRC 5/21/07	M	HNP	Holder	Oudinot	R2 submitted to NRC	Comments provided on R1	12/19/2006 5/8/2007 5/21/2007	6/21/2007	
06-0029		0a	Clarify zone of influence for NUREG 6850 Task 8.	FDT spreadsheets are used to provide a zone of influence.	Submitted to the task force: 12/19/06  Discuss at January 24, 2007 FPRA meeting  Not discussed on 1/18/07  WITHDRAWN 6/21/07	L	HNP	Thompson		WITHDRAWN 6/21/07				
07-0030			Risk of recovery actions	4.2.4 Clarification of risk impact of recovery actions, to include extension of existing HRA scenarios	FAQ by 3Q 2007	M	HNP	Ertman						
07-0031	0	0	Misc Binning Issues	Miscellaneous ignition frequency binning issues. Questions arise during ignition frequency counting, such as: MOV motors, Hydraulic actuators for valves, Transformers	Draft to NEI TF for April 2007.  Awaiting NRC review and comments - been sent to Research	M	HNP	Miskiewicz		Submitted R0 to NRC		5/17/2007		
07-0032		0	10CFR 50.48(a) and GDC 3 clarification	Clarify that satisfying 10 CFR 50.48(c) will satisfy 10 CFR 50.48(a) and GDC3	Draft to NEI TF for May 2007.  FAQ to be submitted by June	M	HNP	Holder		TF reviewing				

<b>07-0033</b>		<b>0</b>	Review of Existing Engineering Equivalency Evaluations	Discuss how EEEE will be reviewed and summarized for transition	Draft to NEI TF for May 2007.	M	HNP	Holder		TF reviewing				
<b>07-0034</b>		<b>0</b>	Determination of non-vented Cabinets	Clarification of guidance for determining if an electrical cabinet can be dispositioned as non-vented	Draft to NEI TF for May 2007. FAQ submitted by June	M	HNP	Miskiewicz		TF reviewing				
<b>07-0035</b>	<b>0</b>	<b>0</b>	Bus Duct counting guidance for High Energy Arcing Faults	Split from FAQ 06-0017 - Bus duct	July 13 meeting between industry (PRA Task Force) and NRC Task Force	M	HNP	Miskiewicz		Submitted R0 to NRC		6/12/2007		
<b>07-0036</b>			Define compliance categories for Table B-1	NEI 04-02 update to include lessons learned on Table B-1 process	Draft FAQ for June 2007 TF Meeting	H	HNP	Holder						
<b>07-0037</b>			Environmental considerations for equipment	Provide guidance regarding environmental considerations of other equipment in the fire affected area	Draft FAQ for August 2007 TF Meeting	M	HNP	Holder						
<b>07-0038</b>			Lessons learned for OMA, MSO and FPRA	Incorporate pilot lessons learned for preemptive manual actions, MSO expert panel and Fire PRA processes into NEI 04-02	Draft FAQ for July 2007 TF Meeting	H	HNP	Ertman						
<b>07-0039</b>			Provide update of NEI 04-02 B-2 and B-3 Processes	NEI 04-02 update to include lessons learned on Table B-2 and B-3 processes	Draft FAQ for July 2007 TF Meeting	H	HNP	Ertman						