

Attached please find HNP-06-067, FAQs Requesting Additional Guidance or Clarification Regarding Transition to NFPA 805 "Performance Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants." If a hard copy is desired or if I can be of further assistance please contact Kelli Voelsing (VNET 751-3057).

<<HNP-06-067.pdf>>

Kelli Voelsing
Senior Engineering and Technical Support Specialist
Licensing and Regulatory Affairs
Harris Nuclear Plant
919-362-3057
Kelli.Voelsing@pgnmail.com

Mail Envelope Properties (4450D76A.BE3 : 15 : 11235)

Subject: HNP-06-067, FAQs for NFPA 805
Creation Date Thu, Apr 27, 2006 10:21 AM
From: "Voelsing, Kelli" <Kelli.Voelsing@pgnmail.com>

Created By: Kelli.Voelsing@pgnmail.com

Recipients

nrc.gov
TWGWPO02.HQGWDO01
SDW1 (Sunil Weerakkody)

nrc.gov
TWGWPO01.HQGWDO01
CPP (Chandu Patel)
PWL (Paul Lain)

pgnmail.com
Jeffery.Ertman CC (Jeffery Ertman)
ken.heffner CC (Ken Heffner)
mike.franklin CC (Mike Franklin)
Alan.Holder CC (Alan Holder)
michael.fletcher CC (Michael Fletcher)
robert.steele (Bob Steele)
eric.mccartney (Eric McCartney)
michael.janus (Michael Janus)
scotty.hinnant (Scotty Hinnant)
paul.fulford (Paul Fulford)
dave.conley (Dave Conley)
george.attarian (George Attarian)
NRC.Resident (HNP NRC Resident)

exchsmtp.cplc.com
HNPLicRegProg CC (HNP Lic Reg Prog)

duke-energy.com
dwhenneke CC
htbarret CC

msn.com
andy_ratchford CC

haifire.com
ekleinsorg CC

nei.org
btj
am

Post Office

Route

TWGWPO02.HQGWDO01
TWGWPO01.HQGWDO01

nrc.gov
nrc.gov
pgnmail.com

exchsmtp.cplc.com

energy.com

duke-

msn.com
haifire.com
nei.org

Files

MESSAGE
AM

TEXT.htm
HNP-06-067.pdf
Mime.822

Size

518
1340
1979274
2713613

Date & Time

Thursday, April 27, 2006 10:21

Options

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

Concealed Subject: No
Security: Standard

Attachment 1:



APR 27 2006

Serial: HNP-06-067
10 CFR 50.48

Mr. Sunil D. Weerakkody, Fire Protection Branch Chief
U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, Maryland 20852-2738

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. NPF-63

FREQUENTLY ASKED QUESTIONS (FAQS), REQUESTING ADDITIONAL
GUIDANCE OR CLARIFICATION REGARDING TRANSITION TO NFPA-805
"PERFORMANCE BASED STANDARD FOR FIRE PROTECTION FOR LIGHT
WATER REACTOR ELECTRIC GENERATING PLANTS"

Dear Mr. Weerakkody:

Attached please find the first of a series of Frequently Asked Questions (FAQs), requesting additional guidance or clarification regarding Transition to NFPA-805 "Performance Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants." The questions are submitted in the format discussed during the March 27-30, 2006 Pilot Plant status meeting in Raleigh, North Carolina with representatives of Progress Energy, Duke Energy and the NRC Staff. The FAQs represent a portion of the "Parking Lot" Issues identified during that meeting.

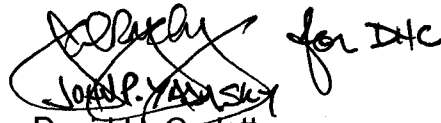
It should be noted these FAQs are not intended to be used for recommending changes to NFPA-805. They are only intended to be used for clarification of or changes to NEI 04-02, "Guidance For Implementing A Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)." Our understanding is that once approved, FAQs will be considered to be an extension of NEI 04-02 and will be incorporated at the next revision of that document.

Please review the attached FAQs, and advise on the acceptability of the proposed solutions. The guidance and clarifications sought are necessary to support further implementation of the NFPA-805 transition process for our pilot and fleet plants.

Progress Energy Carolinas, Inc.
Harris Nuclear Plant
P. O. Box 165
New Hill, NC 27562

Please refer any question regarding this submittal to Mr. Dave Corlett at (919) 362-3137.

Sincerely,

Handwritten signature of David H. Corlett, written in black ink. The signature is stylized and includes the words "for DHC" written to the right of the main signature.

David H. Corlett

Supervisor – Licensing/Regulatory Programs

DHC/khv

Attachments:

1. FAQ 06-0001
2. FAQ 06-0002
3. FAQ 06-0003

c:

Mr. R. A. Musser, NRC Sr. Resident Inspector
Mr. C. P. Patel, NRC Project Manager
Dr. W. D. Travers, NRC Regional Administrator
Mr. P. W. Lain, Fire Protection Branch
Mr. A. Marion, NEI
Mr. B. T. Jamar, NEI

bc:

Mr. G. E. Attarian
Mr. H. T. Barnett
Mr. D. T. Conley
Mr. S. D. Ebnetter
Mr. D. G. Eisenhut
Mr. J. Ertman
Mr. D. M. Franklin
Mr. J. P. Fulford
Mr. D. W. Henneke
Mr. C. S. Hinnant
Mr. A. Holder

Mr. K. Heffner
Mr. E. D. Hux
Mr. M. T. Janus
Ms. E. K. Kleinsorg
Mr. R. D. Martin
Mr. E. A. McCartney
Mr. H. J. Miller
Mr. A. Ratchford
Mr. R. A. Steele
Licensing Files (2 copies)
Nuclear Records

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. NPF-63
FREQUENTLY ASKED QUESTIONS (FAQS), REQUESTING ADDITIONAL
GUIDANCE OR CLARIFICATION REGARDING TRANSITION TO NFPA-805
"PERFORMANCE BASED STANDARD FOR FIRE PROTECTION FOR LIGHT
WATER REACTOR ELECTRIC GENERATING PLANTS"

NFPA-805 Transition Pilot Plant

FAQ 06-0001

**NFPA-805 Transition Pilot Plant
Frequently Asked Questions
(Template)**

Plant:	<u>Harris Nuclear Plant (HNP)</u>	FAQ # <u>06-0001</u>
Submittal Date:	<u>04-25-06</u>	
Licensee Contact:	<u>Jeff Ertman</u>	Tele/email <u>919-546-3681</u>
NRC Contact:	<u></u>	Tele/email <u></u>

Subject

Interpretive Guidance? Yes / No

Proposed New Guidance not currently in NEI 04-02? Yes / No

Details

NEI 04-02 Guidance needing interpretation (include section, paragraph number, and line number as applicable):

Figure B-4 added to NEI 04-02 reflects the concept of III.G.1 (fire affected train) manual actions.

Circumstances requiring guidance interpretation or new guidance:

Clarify approved/unapproved manual actions for change analysis. Add additional discussion on actions associated with redundant trains/fire affected train/alternative shutdown.

Detail contentious points if licensee and NRC have not reached agreement:

NA

Potentially relevant existing FAQ numbers:

NA

Response Section

Proposed Resolution of FAQ and basis for the proposal:

Add new figures (B-4 & B-5) to NEI 04-02 to illustrate fire affected train operator manual actions (where credited train is protected in a fire area, e.g., 3-hour wrap, that includes the fire affected train operator manual action). Configurations shown are functionally equal for the fire affected train of equipment and as such would not require prior regulatory approval for change.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

As follows;

Appendix B-2 - Transition of Nuclear Safety Performance Criteria

The information for operator manual actions that should be included in the summary for the fire area is: 1) whether the operator manual actions were previously reviewed and approved by the NRC's Office of Nuclear Reactor Regulation (NRR), and 2) reference to documentation that demonstrates prior review and approval by the NRC. In some cases the previous approval may not be necessary or may not be obvious, yet should be allowed. Examples are:

- The operator manual action is currently credited in the Alternative Shutdown Procedure. Although this manual action was NOT specifically mentioned in the SER, the licensee submittal specifically discussed the methodology to be used to shutdown. The action(s) is/are feasible and meet the 10 CFR 50 Appendix R, Section III.L (or applicable sections of NUREG-0800) criteria. This can be considered previously approved.
- The operator manual action is currently credited in Non-Alternative 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.
- The operator manual action is currently credited in Non-Alternative Shutdown Procedure. The manual action was specifically discussed in the Licensee submittal however, it is not mentioned in the SER. 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 10 CFR 50, Appendix R (or applicable sections of NUREG-0800). See Figure B-4.
- Operation of fire affected equipment in fire areas that meet the separation requirements of Section III.G.2 of 10 CFR 50, Appendix R (or applicable sections of NUREG-0800) for redundant trains. See Figure B-5.
- Manual operation of normally operated manual switches and valves where 10 CFR 50, Appendix R, Section III.G.1 (or applicable sections of NUREG-0800) separation is provided for redundant safe-shutdown trains

Deleted: operator action

Formatted: Bullets and Numbering

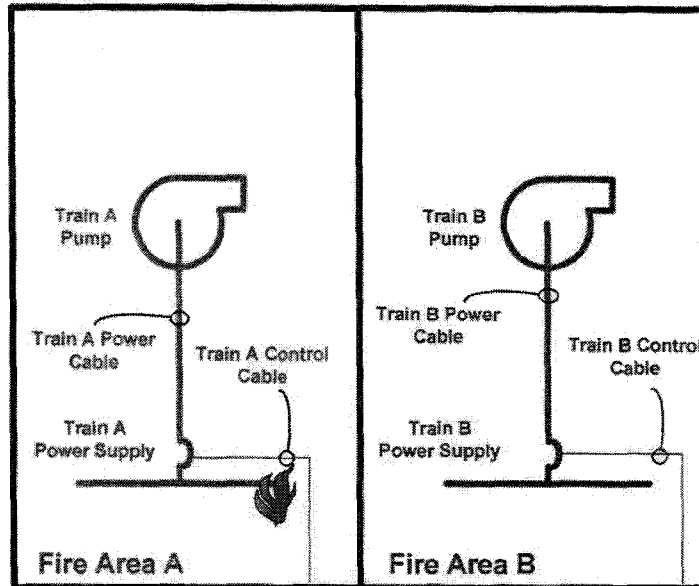
Deleted: 1

Deleted: to 10 CFR Part 50

Deleted: <#>1

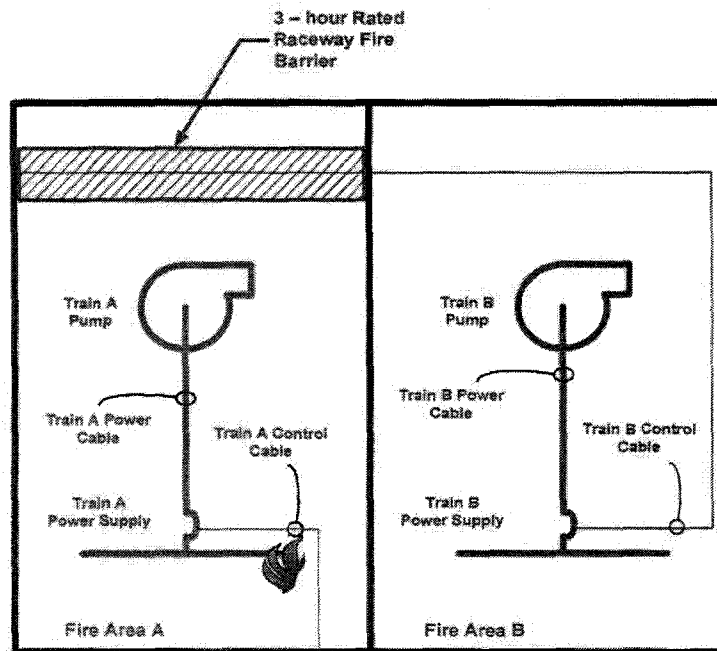
Repairs credited for cold shutdown equipment may also be transitioned on a fire area basis. Information that should be summarized includes reference to documentation that demonstrates the equipment necessary for the repair is staged, the repair is proceduralized, and the repair is achievable in the necessary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

Operator manual actions that have been previously reviewed and approved by the NRC can be transitioned without the need to use the change evaluation process. However, licensees may consider the 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.



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 a manual operator action to de-energize the Train A Power Supply to stop Pump A.

Figure B-4 Acceptable Manual Action in Fire Area Meeting 10 CFR 50, Appendix R, Section III.G.1 Separation Criteria



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 a manual operator action to de-energize the Train A Power Supply to stop Pump A. This is functionally equivalent to Case in Figure B-4.

Figure B-5 Acceptable Manual Action in Fire Area Meeting 10 CFR 50, Appendix R, Section III.G.2 Compliant – Manual Action for Fire Affected Train

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. NPF-63
FREQUENTLY ASKED QUESTIONS (FAQS), REQUESTING ADDITIONAL
GUIDANCE OR CLARIFICATION REGARDING TRANSITION TO NFPA-805
"PERFORMANCE BASED STANDARD FOR FIRE PROTECTION FOR LIGHT
WATER REACTOR ELECTRIC GENERATING PLANTS"

NFPA-805 Transition Pilot Plant

FAQ 06-0002

**NFPA-805 Transition Pilot Plant
Frequently Asked Questions
(Template)**

Plant:	<u>Harris Nuclear Plant (HNP)</u>	FAQ # <u>06-0002</u>
Submittal Date:	<u>04-25-06</u>	
Licensee Contact:	<u>Jeff Ertman</u>	Tele/email <u>919-546-3681</u>
NRC Contact:	<u></u>	Tele/email <u></u>

Subject

Interpretive Guidance? Yes / No

Proposed New Guidance not currently in NEI 04-02? Yes / No

Details

NEI 04-02 Guidance needing interpretation (include section, paragraph number, and line number as applicable):

NEI 04-02, Section 5.3 and Appendix I

Circumstances requiring guidance interpretation or new guidance:

Recommend making nuclear safety questions first in screening reviews in order to determine necessity for Chapters features and systems. Related to FAQ #06-0003.

Detail contentious points if licensee and NRC have not reached agreement:

NA

Potentially relevant existing FAQ numbers:

Related to FAQ #06-0003.

Response Section

Proposed Resolution of FAQ and basis for the proposal:

NEI 04-02 Section 5.3 and Appendix I, to reflect the revised order of questions.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

As follows;

5.3.3 Preliminary Risk Screening

Once the definition of the change is established, a screening is then performed to identify and resolve minor changes to the fire protection program. This screening is consistent with fire protection regulatory review processes in place at nuclear plants under traditional licensing bases. This screening process is modeled after the NEI 02-03 process. This process will address most administrative changes (e.g., changes to the combustible control program, organizational changes, etc.).

The characteristics of an acceptable screening process that meets the "assessment of the acceptability of risk" requirement of Section 2.4.4 of NFPA 805 are:

- The quality of the screen is sufficient to ensure that greater than minimal risk increases receive detailed risk assessments appropriate to the level of risk.
- The screening process must be documented and be available for inspection by the NRC.
- The screening process does not pose undue evaluation or maintenance burden.

If any of the above is not met, proceed to Section 5.3.4 Risk Evaluation.

Appendix I contains an example of a screening process. The screening process is divided into assessing if the change is trivial (Sections 1.a, 2.a, 3.a) and performing a risk screen in Section 4.0. The risk screen identifies and documents the factors that contribute to the risk associated with the change. In general, these factors include changes in: a) frequency of all fire scenarios which are affected by the change, b) magnitude of expected fires, c) detection capability, d) suppression capability, and e) post-fire capability of plant systems to prevent damage to the core.

The impact of the plant change on each of these factors can be evaluated (either qualitatively or quantitatively) and categorized as: "no" impact, "minimal" impact or "potentially greater than minimal" impact. The nature of the change would enable a licensee to choose among the three categories. A licensee may refer to their IPEEE, the fire protection SDP, or other documents to determine whether the change could have "minimal" or "potentially greater than minimal" impact. The licensee should document the basis for the conclusion. For those changes that do not meet the screening criteria a more detailed Risk Evaluation is required.

If a plant change could cause a "potentially greater than minimal" impact with respect to more than one of the above factors, or could result in a common cause impact on more than one of the above factors (a) frequency of all fire scenarios which are affected by the change, b) magnitude of expected fires, c) detection capability, d) suppression capability, and e) post-fire capability of plant systems to prevent damage to the core), licensees are encouraged to perform risk assessments of the more detailed, quantitative variety.

The preliminary risk screening and risk evaluations should also identify decreases in risk that are associated with the change. Depending upon the nature and magnitude of the decrease, consideration should be given to updating the risk model to account for the decrease.

Appendix I – Plant Change Evaluation Form

I. Plant Change Evaluation Form

Page 1 of _____					
LICENSEE NAME			UNIT(S)		
<input type="checkbox"/> SITE A	<input type="checkbox"/> SITE B	<input type="checkbox"/> SITE C	<input type="checkbox"/> Unit 1	<input type="checkbox"/> Unit 2	<input type="checkbox"/> Unit 3
ACTIVITY TITLE/DOCUMENT/REVISION _____					
Complete each section and summarize results below.					
CONCLUSIONS					
CHANGE EVALUATION SUMMARY			RISK EVALUATION SUMMARY		
<input type="checkbox"/> The change is editorial or trivial in nature. (Screening per Section 1.a, 2.a, or 3.a)			<input type="checkbox"/> The change can be evaluated using a PRELIMINARY RISK SCREEN (Section 4)		
<input type="checkbox"/> The change affects compliance with the Nuclear Safety Criteria of NFPA 805 as defined in [insert reference to the appropriate document] (Section 1). <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Yes <input type="checkbox"/> No		
<input type="checkbox"/> The change affects compliance with the Radioactive Release Criteria of NFPA 805 as defined in [insert reference to the appropriate document] (Section 2). <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> The RISK EVALUATION demonstrates that Δ CDF/LERF are acceptable and defense-in-depth / safety margin are maintained. Therefore, the change is acceptable.		
<input type="checkbox"/> The change affects compliance with a required Fundamental Elements / Minimum Design Requirements of NFPA 805 Chapter 3 (Section 3). License Amendment Required? <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> The RISK EVALUATION demonstrates that either the Δ CDF/LERF are unacceptable and/or defense-in-depth / safety margin are not maintained. Therefore, the change is NOT acceptable.		
SIGNOFFS					
Print Name		Signature		DATE	
SCREEN PREPARER ¹⁹		_____		_____	
Print Name		Signature		DATE	
SCREEN REVIEWER		_____		_____	

Deleted: UTILITY

Deleted: §

Deleted: 1

Deleted: The change affects compliance with the Nuclear Safety Criteria of NFPA 805 as defined in [insert reference to the appropriate document] (Section 1).§
 Yes No§
 The change affects compliance with the Radioactive Release Criteria of NFPA 805 as defined in [insert reference to the appropriate document] (Section 3).§
 Yes No

CHANGE DESCRIPTION

Provide a brief description of what is being changed and why.

REFERENCES

List applicable references. Include sufficient identifying detail to facilitate independent review and retrieval.

¹⁹ Signoffs should be consistent with the Licensee's processes. For example it may be necessary for a fire protection engineer, PRA engineer, or safe shutdown engineer to have signature authority on the Plant Change Evaluation.

Appendix I – Plant Change Evaluation Form

NUCLEAR SAFETY COMPLIANCE STRATEGY CHANGE QUESTIONS

Considering the proposed change, answer the following questions, including a reference to the applicable regulatory, licensing basis, or NFPA document(s), and a brief description of why the proposed change does or does not satisfy the referenced document(s).

1. Does the proposed change involve a Nuclear Safety Compliance Strategy requirement as defined in [Insert appropriate document reference]?

- Yes – Proceed to Question 1.a.
- No – Document basis and proceed to Question 2.

Deleted: 2

Deleted: 2

Deleted:

Deleted: 3

a. Is the change editorial or trivial in nature? (See Attachment 1)

- Yes Document basis and stop.
- No Proceed to Question 1.b.

Deleted: 2

b. Does the change meet the deterministic requirements of Chapter 4 of NFPA 805?

- Yes Document basis and complete remaining sections.
- No Proceed to Question 1.c.

Deleted: 2

c. Is the change equivalent to the NFPA 805 Chapter 4 compliance strategy as defined in [Insert appropriate document reference]? Ensure documentation for determination of equivalency is included and meets NEI 04-02 requirements for documentation.

- Yes Document basis and complete remaining sections.
- No Perform a Risk Evaluation.

Deleted: (See Attachment 2)

Changes to Fire Protection Program Fundamental element / minimum design requirements that are required to meet the Nuclear Safety Performance Criteria must be evaluated in Section 3.

Appendix I – Plant Change Evaluation Form

RADIOACTIVE RELEASE CHANGE QUESTIONS

Considering the proposed change, answer the following questions, including a reference to the applicable regulatory, licensing basis, or NFPA document(s), and a brief description of why the proposed change does or does not satisfy the referenced document(s).

2. Does the proposed change involve a **Radioactive Release** requirement as defined in [Insert appropriate document reference]?

Deleted: 3

- Yes – Proceed to Question 2.a.
- No – Document basis and proceed to risk screening.

Deleted: 3

a. Is the change editorial or trivial in nature? (See Attachment 1)

- o Yes Document basis and stop.
- o No Proceed to Question 2.b.

Deleted: 3

b. Does the change meet the requirements of the Radioactive Release criteria?

- o Yes Document conclusions and proceed to risk screening.
- o No Proceed to Question 2.c.

Deleted: 3

c. Is the change equivalent to the Radioactive Release compliance strategy as defined in [Insert appropriate document reference]? Ensure documentation for determination of equivalency is included and meets NEI 04-02 requirements for documentation.

- o Yes Document conclusions and proceed to risk screening
- o No Perform a Risk Evaluation.

Deleted: (See Attachment 2)

Changes to Fire Protection Program Fundamental element / minimum design requirements that are required to meet the Radioactive Release Performance Criteria must be evaluated in Section 3.

Appendix I – Plant Change Evaluation Form

FIRE PROTECTION PROGRAM FUNDAMENTAL ELEMENT / MINIMUM DESIGN REQUIREMENT CHANGE QUESTIONS

Considering the proposed change, answer the following questions, including a reference to the applicable regulatory, licensing basis, or NFPA document(s), and a brief description of why the proposed change does or does not satisfy the referenced document(s).

3. Does the proposed change involve an NFPA 805 Chapter 3 requirement as defined in [Insert appropriate document reference]? For those fire protection program changes that involve a Nuclear Safety Compliance Strategy requirement or a Radioactive Release requirement, ensure the effect of the change is evaluated in Appendix I, Sections 1.0 and 2.0, respectively.

- Yes – Proceed to Question 3.a.
- No – Document basis.

a. Is the change editorial or trivial in nature? (See Attachment 1)

- o Yes Document basis and stop.
- o No Proceed to Question 3.b.

b. Does the change meet NFPA 805 Chapter 3 requirements or the previously approved alternative as defined in [Insert appropriate document reference]?

Changes that deviate from the NFPA standards referenced in NFPA 805 Chapter 3 can be made without NRC approval if allowed by the code of record (so long as the evaluated condition is in accordance with the terms of the code of record) or if the code does not dictate the specific issue (e.g., adequacy of coverage of suppression and detection systems). Ensure documentation for determination of acceptability is included and meets NEI 04-02 requirements for documentation. (See Attachment 2)

- o Yes Document conclusions, complete remaining sections.
- o No License Amendment Request must be processed for NRC approval. Complete remaining sections.

Appendix I – Plant Change Evaluation Form

PRELIMINARY RISK SCREENING

Considering the proposed change, answer the following questions. The nature of the change should enable you to choose among the three categories. Refer to the IPEEE, a plant-specific fire PRA, or other documents to determine whether the change could have “no”, “minimal” or “potentially greater than minimal” impact. Document the basis for the conclusion. The potential for common cause effects of a given plant change on the above factors should be considered. For example, an increase in combustible loading in an area can impact all of the factors. See Attachment 3 for examples.

4.0 Can the change be evaluated using a preliminary risk screen?

a. Does the proposed change impact the FIRE FREQUENCY of any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

b. Does the proposed change impact the MAGNITUDE OF THE EXPECTED FIRES for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

c. Does the proposed change impact the DETECTION CAPABILITY for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

d. Does the proposed change impact the SUPPRESSION CAPABILITY for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

Appendix I – Plant Change Evaluation Form

- e. Does the proposed change impact the POST-FIRE CAPABILITY OF PLANT SYSTEMS TO PREVENT CORE DAMAGE (including fire affected human actions) during any mode of operation for any fire scenarios affected by the change?
- No Impact
 - Minimal Impact
 - Potentially Greater than minimal

- f. Do any of the risk screening questions have "Potentially greater than minimal" impact, then a detailed quantitative risk evaluation may be required.
- No. The Fire Protection Program Plant change meets the risk-informed acceptance criteria of NFPA 805 Section 2.4.4.
 - Yes, a detailed quantitative risk evaluation is required.

Deleted: G

Note: Changes that clearly decrease risk should be identified during the review for potential updates to the risk model.

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-400/LICENSE NO. NPF-63
FREQUENTLY ASKED QUESTIONS (FAQS), REQUESTING ADDITIONAL
GUIDANCE OR CLARIFICATION REGARDING TRANSITION TO NFPA-805
"PERFORMANCE BASED STANDARD FOR FIRE PROTECTION FOR LIGHT
WATER REACTOR ELECTRIC GENERATING PLANTS"

NFPA-805 Transition Pilot Plant

FAQ 06-0003

**NFPA-805 Transition Pilot Plant
Frequently Asked Questions
(Template)**

Plant:	<u>Harris Nuclear Plant (HNP)</u>	FAQ # <u>06-0003</u>
Submittal Date:	<u>04-25-06</u>	
Licensee Contact:	<u>Jeff Ertman</u>	Tele/email <u>919-546-3681</u>
NRC Contact:	<u></u>	Tele/email <u></u>

Subject

Interpretive Guidance? Yes / No

Proposed New Guidance not currently in NEI 04-02? Yes / No

Details

NEI 04-02 Guidance needing interpretation (include section, paragraph number, and line number as applicable):

NEI 04-02 Section 5.3 and Appendix I.

Circumstances requiring guidance interpretation or new guidance:

Change Question 4.f to "potentially greater than minimal" vs. "greater than minimal" in the change process sheets in Appendix I of NEI 04-02. Also factor risk decreases in to the processes.

Detail contentious points if licensee and NRC have not reached agreement:

NA

Potentially relevant existing FAQ numbers:

NA

Response Section

Proposed Resolution of FAQ and basis for the proposal:

Updated NEI 04-02 Section 5.3 and Appendix I.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

As follows;

Appendix I contains an example of a screening process. The screening process is divided into assessing if the change is trivial (Sections 1.a, 2.a, 3.a) and performing a risk screen in Section 4.0. The risk screen identifies and documents the factors that contribute to the risk associated with the change. In general, these factors include changes in: a) frequency of all fire scenarios which are affected by the change, b) magnitude of expected fires, c) detection capability, d) suppression capability, and e) post-fire capability of plant systems to prevent damage to the core.

The impact of the plant change on each of these factors can be evaluated (either qualitatively or quantitatively) and categorized as: "no" impact, "minimal" impact or "potentially greater than minimal" impact. The nature of the change would enable a licensee to choose among the three categories. A licensee may refer to their IPEEE, the fire protection SDP, or other documents to determine whether the change could have "minimal" or "potentially greater than minimal" impact. The licensee should document the basis for the conclusion. For those changes that do not meet the screening criteria a more detailed Risk Evaluation is required.

If a plant change could cause a "potentially greater than minimal" impact with respect to more than one of the above factors, or could result in a common cause impact on more than one of the above factors (a) frequency of all fire scenarios which are affected by the change, b) magnitude of expected fires, c) detection capability, d) suppression capability, and e) post-fire capability of plant systems to prevent damage to the core), licensees are encouraged to perform risk assessments of the more detailed, quantitative variety.

The preliminary risk screening and risk evaluations should also identify decreases in risk that are associated with the change. Depending upon the nature and magnitude of the decrease, consideration should be given to updating the risk model to account for the decrease.

PRELIMINARY RISK SCREENING

Considering the proposed change, answer the following questions. The nature of the change should enable you to choose among the three categories. Refer to the IPEEE, a plant-specific fire PRA, or other documents to determine whether the change could have "no", "minimal" or "potentially greater than minimal" impact. Document the basis for the conclusion. The potential for common cause effects of a given plant change on the above factors should be considered. For example, an increase in combustible loading in an area can impact all of the factors. See Attachment 3 for examples.

4.0 Can the change be evaluated using a preliminary risk screen?

a. Does the proposed change impact the FIRE FREQUENCY of any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

b. Does the proposed change impact the MAGNITUDE OF THE EXPECTED FIRES for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

c. Does the proposed change impact the DETECTION CAPABILITY for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

d. Does the proposed change impact the SUPPRESSION CAPABILITY for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

e. Does the proposed change impact the POST-FIRE CAPABILITY OF PLANT SYSTEMS TO PREVENT CORE DAMAGE (including fire affected human actions) during any mode of operation for any fire scenarios affected by the change?

- No Impact
- Minimal Impact
- Potentially Greater than minimal

f. Do any of the risk screening questions have "Potentially greater than minimal" impact, then a detailed quantitative risk evaluation may be required.

Deleted: G

- No. The Fire Protection Program Plant change meets the risk-informed acceptance criteria of NFPA 805 Section 2.4.4.
- Yes, a detailed quantitative risk evaluation is required.

Note: Changes that clearly decrease risk should be identified during the review for potential updates to the risk model.