

FAQ TEMPLATE

Plant: Harris Nuclear Plant (HNP) FAQ # 06-0005
Submittal Date: 07-21-06
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NRC Contact: _____ Tele/email _____

Distribution: Check all that apply (*NEI Internal Use*)

FPWG RIRWG NSSS OG X NFPA 805 TF

Subject:

Interpretation of guidance? *Yes*

Proposed new guidance not in NEI 04-02? *Yes*

Details:

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

Not currently in NEI 04-02

This is to address Parking Lot open items #19 and #23

Circumstances requiring guidance interpretation or new guidance:

Reg. Guide 1.205, Risk informed. Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants, section 3.2.6 Cumulative Risk of Changes, states that “Post-transition risk reductions for plant changes that are not related to the Fire Protection Program (FPP) may be used to offset the risk increases attributable to FPP-related changes in accordance with Section 2.1.2 of RG 1.174, but must be pre-approved by the NRC as required by the standard fire protection license condition. Risk reductions for changes related to the FPP may be used as offsets without pre-approval by the NRC.”

This guidance provides no insight as to what could 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 a violation, there should be some guidance as to what is considered a FPP-related change when NFPA-805 is implemented.

The implementation of FPP changes using risk insights as one of the inputs for determining the acceptability requires a fire PSA. This results in a question as to whether changes in the fire PSA would be considered a FPP-related change.

Detail contentious points if licensee and NRC have not reached agreement

The areas where agreement is required:

1. Reg Guide 1.205 requires NRC pre-approval post transition when using risk reductions not related to the FPP. The FPP program post transition needs to be clearly defined as to what changes are FPP-related and what are not FPP-related.

2. Additionally it needs to be clarified as to what is considered a plant change when using the PSA to determine the importance of FPP-related changes.

3. Whether changes in the fire PSA are considered a plant change or a FPP-related change.

Potentially relevant existing FAQ numbers:

None

Response Section

Proposed Resolution of FAQ and the basis for the proposal:

1. The FPP-related items post transition would be all of the FPP attributes required by Chapter 3 of NFPA 805 and those other FPP attributes used in Chapter 4. Examples include the fire detection, suppression, fire barriers and Electrical Raceway Fire Barrier Systems (ERFBS) ~~wrap~~ etc that are credited in reducing the risk of a fire. It would also include those fire protection programs such as fire brigade training or transient combustible control. It should also include the specific plant equipment, and fire procedures that are credited in the licensee fire safe shutdown analysis.

Basis:

These FPP attributes are part of the fire program licensing basis and are identified as such in the NFPA 805 License Amendment Request (LAR). What is not considered as FPP-related is the PSA model itself, which includes the documentation, data elements and associated logic. Additionally any plant equipment or procedures that is used in the fire PSA or the underlining Level I and Level II PSA, but is not specifically included as part of the safe shutdown analysis are not considered FPP-related. Some of these plant components or procedures could be used to reduce plant fire risk but are not included in the safe shutdown analysis. This provides a defined scope for FPP-related.

2. The term plant change is defined as a change to the physical plant systems structures or components (SSC) or plant operating, emergency or off-normal procedures.

Basis:

The changes to SSC that alter the facility or plant operating procedures are subject to 10 CFR 50.59 and thus easily understood as a plant change. With the scope of what is considered a FPP-related change defined, then changes that are not FPP-related, but offset the fire risk increase are also easily understood.

3. Changes in the fire PSA and the underlining Level I and Level II PSA are not FPP-related changes and also are not considered a plant change.

Basis:

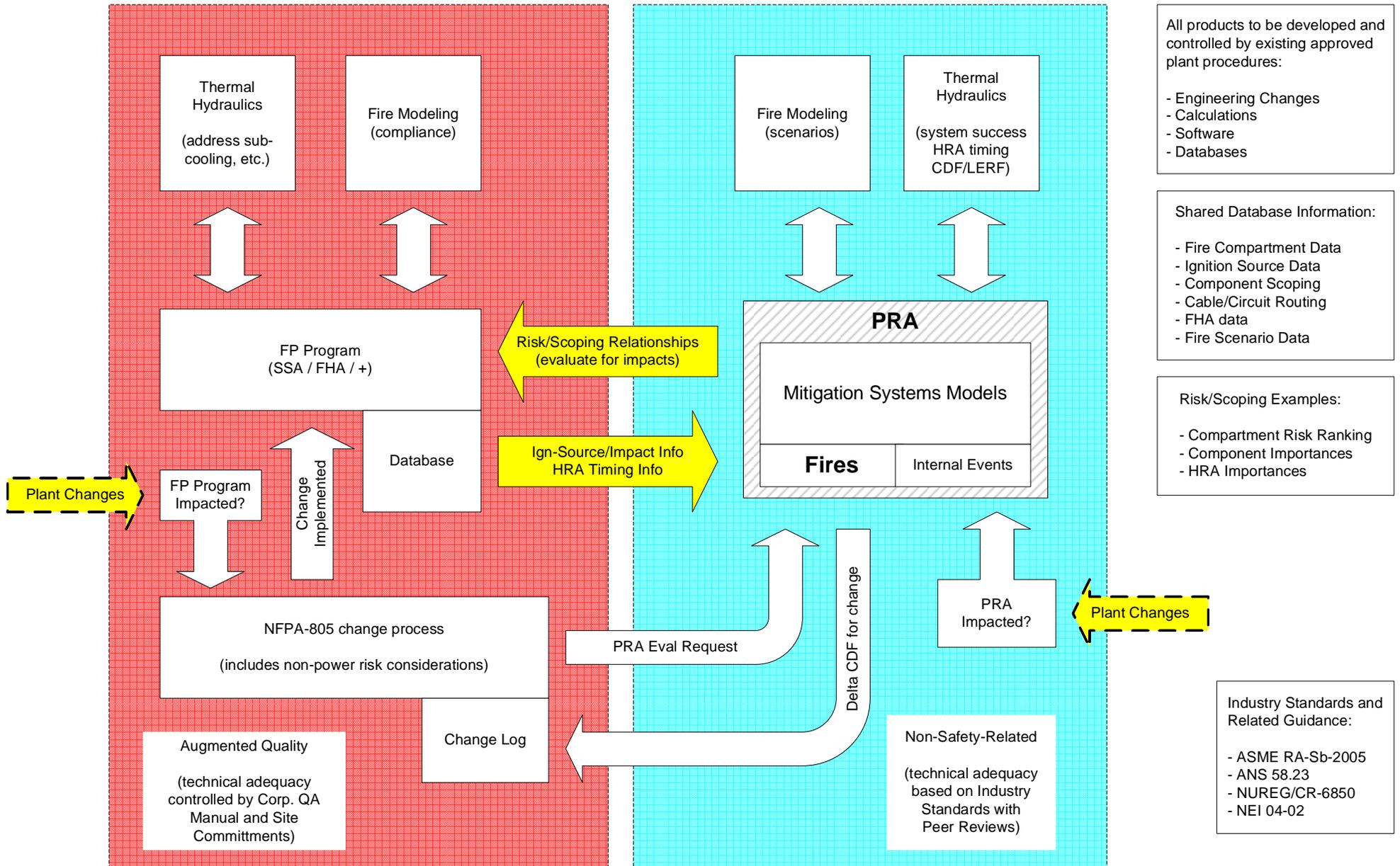
The PSA itself (data, logic, supporting documentation and analysis) is built to reflect the facility as designed and operated. Thus a change to the PSA itself cannot be a change to the SSC or plant procedures and is not a FPP related change. As an example of potential changes in the fire PSA would be equipment reliability rates or changing the PSA logic such that only one of two ventilation fans are required to allow the supported equipment to perform its function. Plant changes, such as adding an additional high pressure injection pump to the facility that is not in the fire SSA and the associated PSA revision is a plant change and as such would require the NRC pre-approval per the requirements of RG1.205, if used to offset a FPP-related change with an associated risk increase.

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

The FPP-related items post transition would be all of the FPP attributes required by Chapter 3 of NFPA 805 and those other FPP attributes used in Chapter 4. Examples include the fire detection, suppression, fire barriers and ERFBS etc that are credited in reducing the risk of a fire. It would also include those fire protection programs such as fire brigade training or transient combustible control. It should also include the specific plant equipment, and fire procedures that are credited in the licensee safe shutdown analysis.

Plant Change is defined as: The term plant change is defined as a change to the physical plant systems structures or components (SSC) or plant operating, emergency or off-normal procedures. Updates of the fire PSA and the underlining Level I and Level II PSA are not FPP-related changes and also are not considered a plant change.

The attached figure provides a visual explanation of the difference between FPP-related and not FPP-related.



Progress Energy Fire PRA / Fire Protection Program Interface