

FIRE PROTECTION INITIATIVES PROJECT
PROJECT INSTRUCTION

FPIP-0127

NFPA 805
Nuclear Safety Capability Assessment
Transition Review

REVISION 0

Prepared By / Date

Reviewed By / Date

Approved By / Date



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1.0 PURPOSE

The purpose of this project instruction is to provide guidance for site specific reviews associated with Nuclear Safety Capability Assessment, under the NGG Fire Protection Improvement Initiatives Project. The reviews consist of the following:

1. Safe shutdown methodology review (Chapters 1 and 2 of NFPA 805)
2. Fire area by fire area review (Chapter 4 of NFPA 805). This review will also provide initial input to the transition Change Evaluations.

This instruction is intended to be used in conjunction with the guidance contained in Nuclear Energy Institute (NEI) 04-02, Guidance for Implementing a Risk-Informed, Performance-Based Program Under 10 CFR 50.48(c), Revision 1 (Sections 4.3 and Appendix B), as endorsed by Regulatory Guide 1.205, Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants, Revision 0. This instruction will also be used in conjunction with NEI 00-01, Guidance for Post-Fire Safe Shutdown Circuit Analysis, Revision 1. Appropriate guidance from these documents is included in this instruction.

This project instruction is intended for use under the Fire Protection Improvement Initiatives Project to support development of the NFPA 805 transition report and License Amendment Request (LAR). When this project is complete, the calculation documentation developed as a result of the instruction will be included in the overall NGG Fire Protection Improvement Initiatives Project report and applicable licensing documentation.

The non-power operational modes transition review (FPIP-0126 Non-Power Operational Modes Transition Review) and radioactive release transition reviews (FPIP-0121, Radiological Release Reviews During Fire Fighting Operations) are not within the scope of this project instruction.

2.0 REFERENCES

- 2.1 NGG Fire Protection Program Improvement Initiatives Project Plan
- 2.2 National Fire Protection Association (NFPA) Standard 805-2001, Performance Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants
- 2.3 Nuclear Energy Institute (NEI) 04-02, Revision 1, Guidance for Implementing a Risk-Informed, Performance-Based Program Under 10 CFR 50.48(c)
- 2.4 Regulatory Guide 1.205, Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants, May 2006
- 2.5 10 CFR 50, Appendix R, Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979
- 2.6 NUREG-0800, Standard Review Plan, Section 9.5.1 Fire Protection Program
- 2.7 EGR-NGGC-0017, Preparation and Control of Design Analysis and Calculations
- 2.8 FPIP-0100, Fire Protection Initiatives Project, Project Controls
- 2.9 NEI 00-01, Guidance for Post-Fire Safe Shutdown Circuit Analysis, Revision 1, January 2005

- 2.10 RIS 2006-10, Regulatory Expectations With Appendix R Paragraph III.G.2 Operator Manual Actions, June 30, 2006
- 2.11 FAQ 06-0004, Clarify NFPA 805 Chapter 4 and 3 relationship for 'required' FP systems/features (Refer to NEI Webboard for latest status)
- 2.12 FAQ 06-0006, High-low pressure interface definition and NEI 00-01/NFPA 805 discrepancies (Refer to NEI Webboard for latest status)
- 2.13 FAQ 06-0008, Alternate method for Engineering Evaluations (Refer to NEI Webboard for latest status)
- 2.14 FAQ 06-0011, Clarify III.G.3 Compliance Transition (Refer to NEI Webboard for latest status)
- 2.15 FAQ 06-0012, Clarify Manual Action Transition in Appendix B (Refer to NEI Webboard for latest status)

3.0 DEFINITIONS

- 3.1 Frequently Asked Question (FAQ) – Process established by the NEI to resolve questions and interpretations of NEI 04-02.
- 3.2 NEI Webboard – Website hosted by NEI that focuses on NFPA 805 transition items during the pilot process. It includes documentation tracking and supporting FAQs and their review and approval status (<http://webboard.nei.org/~NFPA805/>). Access to the NEI Webboard must be requested from NEI.
- 3.3 Transition Project Database – Database utilized for documenting the results of the activities of this project instruction (executable file located in N:\Programs\NFPA 805 Transition Tool and database file located in J:\Access Databases\Shared\NFPA 805 Transition Tool).

Note: Definitions shall be consistent with those found in section 1.6 of NFPA-805.

4.0 RESPONSIBILITIES

4.1 CES Fire Protection Initiatives Project Manager

- 4.1.1 Review and approval of project procedures issued for use on the Fire Protection Initiatives Project.
- 4.1.2 Overall responsibility for ensuring that personnel assigned to prepare and review Project documents under their direct control have the required training and/or experience to perform the role to which they are assigned.
- 4.1.3 Ensuring that work performed under their supervision is performed in accordance with this instruction.
- 4.1.4 Ensuring that status of FAQs are adequately communicated to the project personnel.

4.2 Site Fire Protection Initiatives Project Coordinator

- 4.2.1 Ensuring that work performed to update documents associated with their plant for this Project is performed in accordance with this procedure.
- 4.2.2 Ensure that personnel assigned to prepare and review Project documents for their plant have the required training and/or experience to perform the

role to which they are assigned, and have completed the necessary Progress Energy and/or site qualification guides.

4.3 Site Fire Protection Program Manager

Ensuring that Fire Protection Program tasks and deliverables associated with their plant is performed in accordance with this procedure.

4.4 Site Safe Shutdown Engineer

Ensuring that Safe Shutdown Program tasks and deliverables associated with their plant is performed in accordance with this procedure.

4.5 Fire Protection Engineers

Understanding the requirements of this procedure and perform work in accordance with this procedure.

4.6 Safe Shutdown Engineers

Understanding the requirements of this procedure and perform work in accordance with this procedure.

4.7 PRA Engineers

Understanding the requirements of this procedure and perform work in accordance with this procedure.

4.8 Single Point of Contact (SPOC)

4.8.1 A SPOC is assigned by either the CES Fire Protection Initiatives Project Manager or Site Fire Protection Initiatives Project Coordinator (as necessary) to be the Owner of a project document.

4.8.2 Obtaining and resolving comments on project documents.

4.8.3 Ensuring that the project document is filed in the appropriate project file.

5.0 PREREQUISITES

5.1 The post-fire safe shutdown analysis methodology for systems and equipment selection, circuit analysis, equipment and cable location, and fire area analysis should be formally documented prior to performing the nuclear safety methodology review. If not, then the methodology reviews performed as part of this instruction should be used to formally document the analysis methods. Due to the recent reconstitution efforts, revised methodologies have been developed, primarily in the area of circuit failures. The reviews in this project instruction should be with the 'revised' methodology.

5.2 Summaries of compliance with deterministic requirements (i.e., 10 CFR 50, Appendix R/NUREG-0800) should be formally documented for each fire area prior to the fire area transition. If not, then the fire area reviews performed as part of this instruction should be used to formally document the summary of the fire area analysis.

6.0 PRECAUTIONS AND LIMITATIONS

6.1 Each step in the process involves the identification and documentation of open items. The open items are intended for project tracking and change evaluation

identification only and shall not be used in lieu of the corrective action process. All identified noncompliances with the current licensing basis shall be identified and communicated to the CES Fire Protection Initiatives Project Manager and Site Fire Protection Initiatives Project Coordinator in accordance with the Project Plan. This will ensure that that identified noncompliances are addressed by the appropriate process and that Progress Energy can effectively utilize the enforcement discretion that is available for NFPA 805 transition and resolution of other generic issues (i.e., operator manual actions and fire-induced circuit failures).

- 6.2 The processes outlined in this instruction rely upon NEI 04-02, Revision 1 and outstanding FAQs that are in the review process with the NRC. These processes are based upon eventual acceptance and approval of the FAQs by the NRC. Adjustments to the process will be necessary based upon changes to FAQs that are under review and comment, as well as the development of new unforeseen FAQs.

7.0 SPECIAL TOOLS AND EQUIPMENT

N/A

8.0 ACCEPTANCE CRITERIA

N/A

9.0 INSTRUCTIONS

9.1 General

Nuclear Safety Methodology Review

Sections 4.3.2 and B.2.1 of NEI 04-02, Revision 1 provide the background and bases for the Nuclear Safety Methodology Reviews. Section B.2.1 recommends that the 'pre-transitional safe shutdown analysis' be reviewed against the methodology of NEI 00-01, Guidance for Post-Fire Safe Shutdown Circuit Analysis, Revision 1. A summary of the steps to be performed in performing the Nuclear Safety Methodology Review are depicted in Figure 1.

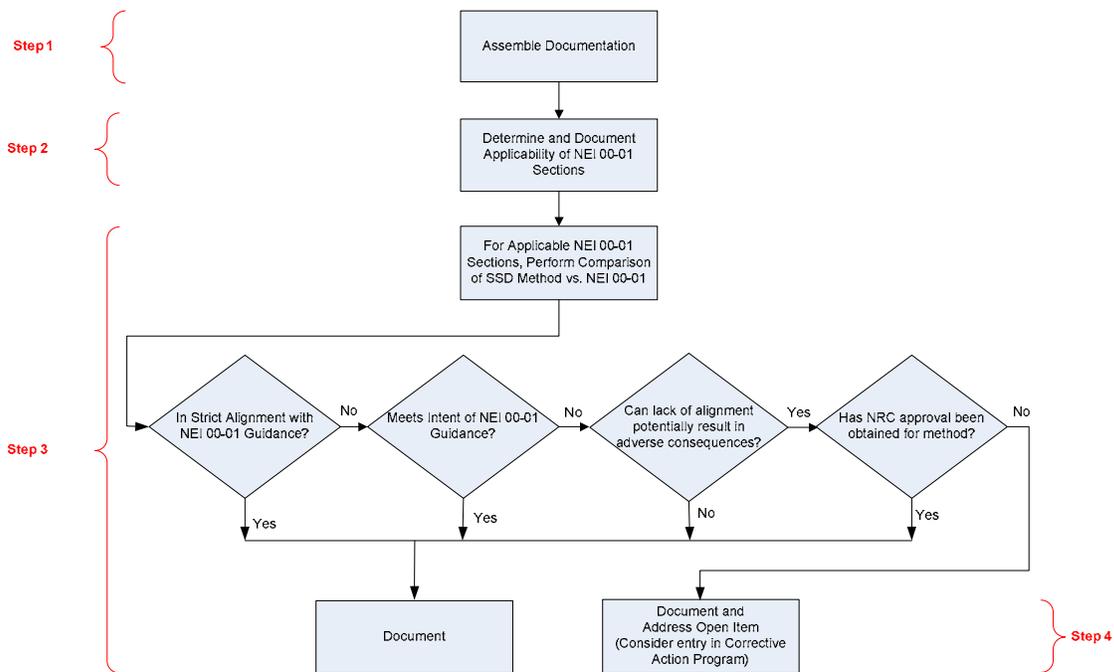


Figure 1 – Nuclear Safety Methodology Review Process

The review results are captured in a transition project database. A report from the database will be used to develop the NEI 04-02 B-2 Tables.

Fire Area-by-Fire Area Transition Review

A summary level diagram of the steps to be used in developing the Nuclear Safety Fire Area-by-Fire Area transition review is shown as Figure 2.

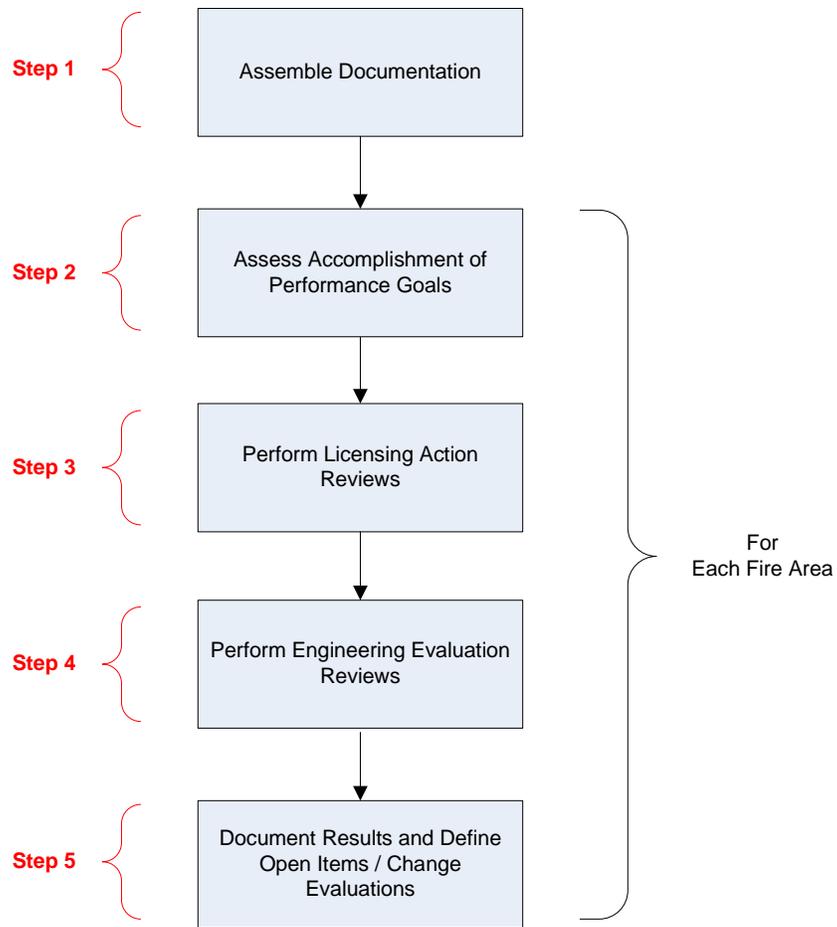


Figure 2 – Summary of Fire Area-by-Fire Area Review

Sections 4.3.2 and B.2.1 of NEI 04-02, Revision 1 provide the background and basis for the Fire Area-by-Fire Area Transition Reviews. Attachment 1 to this project instruction provides additional background and correlates the processes in this instruction to the guidance and figures in NEI 04-02.

In order to accurately define the scope of the transition change evaluations, specific attention should be paid to the operator manual actions relied upon for each fire area. This review should include operator manual action documentation (e.g., plant assessment of RIS 2006-10) to determine which actions have ‘prior NRC approval’ or are allowed based upon recent NRC interpretations. This review is intended to define the scope of “operator manual actions where redundant safe shutdown trains are in the same fire area in lieu of the means specified in paragraph III.G.2.”

Refer to FAQ 06-0012 and Appendix B of NEI 04-02 for additional clarification and guidance. Attachment 2 to this project instruction provides a sample process for determining if operator manual actions are allowed / approved for the purposes of the transition change evaluation. Note that operator manual actions that are determined to be unacceptable (i.e., not allowed, approved by the NRC, or feasible) must be addressed by the corrective action process (including compensatory measures) as part of ensuring enforcement discretion.

Fire areas governed by Section III.G.3 of 10 CFR 50, Appendix R (or NUREG-0800 equivalent) can be transitioned to NFPA 805. The areas crediting these alternative or dedicated shutdown compliance strategies (i.e., credited operator manual actions) will be reviewed to ensure that the bases for compliance are still valid. Refer to FAQ 06-0011 for additional guidance and clarification.

The review results are captured in a transition project database. A report from the database will be used to develop the NEI 04-02 B-3 Tables.

9.2 Documentation Requirements

The Nuclear Safety Capability Assessment reviews should be documented using NEI-04-02, Tables B-2 and B-3 as guidance. These reviews will be in the form of data collected in calculation format using EGR-NGGC-0017 as a vehicle to review and approve the data. The completed calculation data and sign-off cover pages will become a portion of the final NFPA 805 Transition Report for each site.

Open items shall be used to document issues identified during the reviews as discussed in Section 6.1 of this instruction.

9.3 Nuclear Safety Methodology Transition (Figure 1)

9.3.1 Step 1 - Assemble Documentation

Plant specific calculations/analyses for:

- Safe shutdown system and equipment selection (NFPA 805 Section 2.4.2.1)
- Safe shutdown cable identification (NFPA 805 Section 2.4.2.2)
- Safe shutdown equipment and cable location (NFPA 805 Section 2.4.2.3)
- Fire area assessment and supporting analyses (operator manual action feasibility) (NFPA 805 Section 2.4.2.4)

Other Documents:

- NFPA 805, 2001 edition
- NEI 00-01, Revision 1
- Outstanding Frequently Asked Questions (FAQs) related to the Nuclear Safety Methodology Transition (e.g., FAQ 06-0006, High-low pressure interface) and status documents such as NRC comments and comment resolutions.

Log these documents into the transition project database.

Basis Document List			
Document Detail	Doc Type	Comments	Link
▶ Hatchford test, 0, 10/30/2006	Dummy Test	testing only	
NFPA 805 (2001), 0, 1/1/2001	Codes and Standards	test of linked	C:\Program Files\Kleinsorg Group
HNP-E/ELEC-0001, 0, 5/15/2006	HNP Calculation		
NLS-86-315, N/A, 8/25/1986	Letter, HNP to NRC	addressed safe s	
NLS-86-137, N/A, 5/7/1986	Letter, HNP to NRC		
FSSPMD, R16.00 of software - CRTN: 00110759,	Controlled Software/Database	database	
NUREG-1038 Supplement 4, 0, 10/1/2006	Safety Evaluation Report	HNP SSER 4	
Test-Engeval-1, 0, 10/31/2006	Engineering Evaluation	for testing only	
NLS-86-040, N/A, 2/13/1986	Letter, HNP to NRC	Attachment 1 to I	
NUREG-1038 Supplement 3, 0, 5/1/2006	Safety Evaluation Report		
NLS-84-245, N/A, 6/12/1984	Letter, HNP to NRC	Provided respons	
NLS-86-219, N/A, 6/18/1986	Letter, HNP to NRC	Document not fo	

Figure 3 – Basis Document Screen (example)

9.3.2 Step 2 – Determine and Document NEI 00-01 Applicability of NEI 00-01 Sections

NEI 00-01 Reference: 1.3.2.2 Safe Shutdown System and Path Identification

NEI 00-01 Guidance:
Using the safe shutdown functions described above, the analyst identifies a system or combination of systems with the ability to perform each of these shutdown functions. The systems are combined to form safe shutdown paths.

Applicability: [Dropdown]

Comments:

Chapter 4 Reference:

- 2.4.2.1 Nuclear Safety Capability System and Equipment Selection
- 2.4.2.2 Nuclear Safety Capability Circuit Analysis
- 2.4.2.3 Nuclear Safety Equipment and Cable Location.
- 2.4.2.4 Fire Area Assessment.

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Figure 4 – Nuclear Safety Methodology – NEI 00-01 Screen (example)

1. Step 2.1 - Manually enter NEI 00-01 sections that will be reviewed (or verify data is pre-loaded). Ensure that the scope of NEI 00-01 to be reviewed is complete and accurate.

Select tab for the section of NFPA 805 that will undergo review:

- 2.4.2.1 - Nuclear Safety Capability System and Equipment Selection
- 2.4.2.2 - Nuclear Safety Capability Circuit Analysis
- 2.4.2.3 - Nuclear Safety Equipment and Cable Location
- 2.4.2.4 - Fire Area Assessment

Select a section of NEI 00-01 related to the corresponding section of the NFPA 805.

2. Step 2.2

Based upon the content of the NEI 00-01 methodology statements, determine if the section is applicable to the plant. Examples where a section may not be applicable include:

- For a PWR, guidance provided in NEI 00-01 specifically for BWRs.
- Specific references to equipment/component types/cable types that are not used at the plant under review.

Document the results of the applicability review.

9.3.3 Step 3 – Perform Comparison of Plant Specific Safe Shutdown Methodology to Applicable Sections of NEI 00-01

For each applicable NEI 00-01 section that is determined in Step 2 to be applicable, a comparison should be performed of the plant safe shutdown methodology against the applicable NEI 00-01 section.

Determine if failure to maintain strict alignment with the guidance in NEI 00-01 could have adverse consequences. Since NEI 00-01 is a guidance document, portions of its text could be interpreted as ‘good practice’ or intended as an example of an efficient means of performing the analyses. In some instances the commentary presents analytical preferences which can be performed in a number of different ways without impacting the validity of the results. These sections of NEI 00-01 can be dispositioned without further review. The basis for this determination should be documented.

For each applicable ‘Mapped NEI 00-01 Reference’ document the following information:

- Alignment Statement:
 - Aligns
 - Aligns with intent
 - Not in Alignment
 - Not in Alignment, but Prior NRC Approval
 - Not in alignment, but no adverse consequences
- Alignment Basis – A text description supporting the Alignment Statement. This basis may also include a discussion of the relevance of the step to transition (for NEI 00-01 sections that are not considered to be necessary for successful performance of a safe shutdown analysis).
- Basis Document - Select the appropriate ‘Basis Document’ from the pull down menu. Complete the Basis Document details such as page/section reference/comments.

- Comments and Other Details – Any clarification information to support the other statements.
- Unit Applicability - If particular review attribute is only applicable to a single unit, designate the applicability of the single unit.

Mapped NEI-00-01 Reference: 1.3.2.2 Safe Shutdown System and Path Identification

Applicability: Applicable

Comments:

Using the safe shutdown functions described above, the analyst identifies a system or combination of systems with the ability to perform each of these shutdown functions. The systems are combined to form safe shutdown paths.

Alignment | Comments and Other Details

Alignment Statement: Aligns with intent

Alignment Basis:

The safe shutdown paths are not identified individually, but are shown in an integrated fashion in the CAFTA fault tree. Assigning each component to a specific safe shutdown path can be a useful analytical tool, but is not specifically required.

Basis Document	Doc. Detail
E-5525, Safe Shutdown Analysis in Case of Fire, 15,	Sections V.C and VI.A.
FPIP-0104, Safe Shutdown Equipment List and Fault Tree Logics, 0,	Section 9.1

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OK Cancel

Figure 5 – Nuclear Safety Methodology – Level of Alignment Review Screen (example)

9.3.4 Step 4 - Document Open Items associated with the review of the NEI 00-01 guidance.

Non-conformances associated with the existing safe shutdown methodology that are considered non-compliances with 10 CFR 50, Appendix R or the approved fire protection licensing basis must be entered into the corrective action program and dispositioned appropriately to ensure enforcement discretion.

Document open items applicable to the methodology review. Refer to Appendix B.2.1 of NEI 04-02 for guidance on interpretation of licensing bases that are vague or silent (e.g., fire-induced circuit failure methodologies) and the need to establish a clear basis for transition.

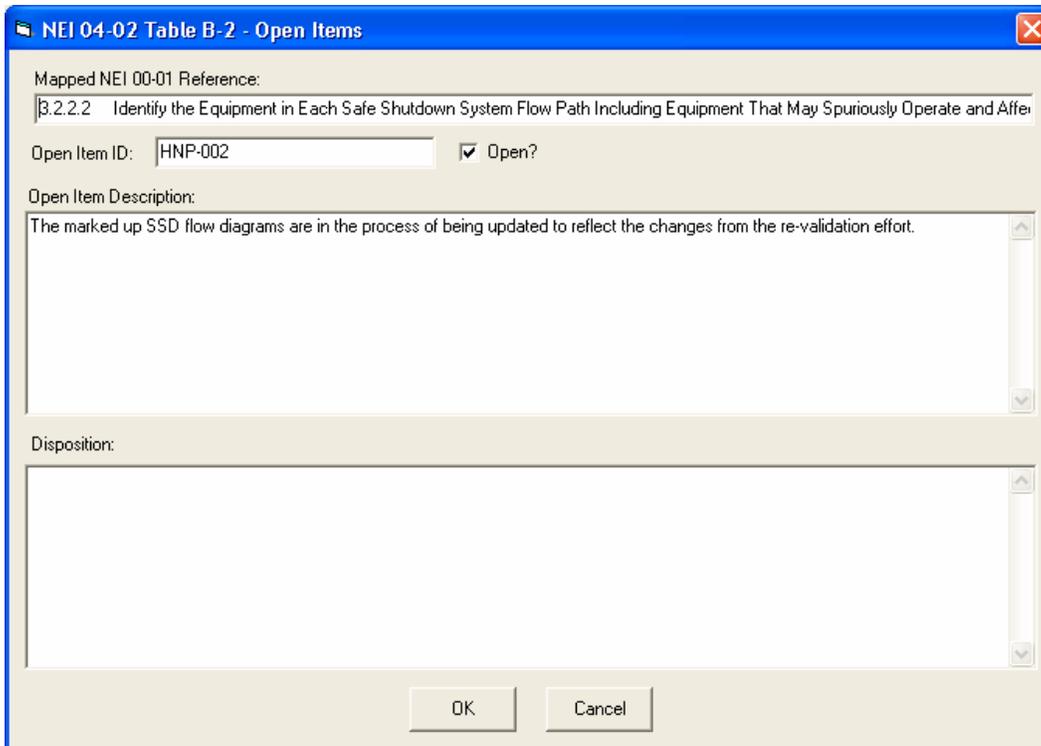


Figure 6 – Nuclear Safety Methodology – Open Items Screen (example)

9.4 Fire Area – by – Fire Area Transition (Figure 2)

9.4.1 Step 1 - Assemble Documentation

Gather industry and plant-specific core fire area analysis analytical and licensing basis documents. The documentation should be organized by fire area to the extent possible.

1. Industry Documentation:
 - NEI 04-02, Revision 1
 - Outstanding FAQs related to the Fire Area-by-Fire Area Transition (e.g., see below for list as of November 2006, for updated list, refer to NEI Webboard):

FAQ ID	Topic
06-0004	Clarify NFPA 805 Chapter 4 and 3 relationship for 'required' FP systems/features
06-0006	High-low pressure interface definition and NEI 00-01/NFPA 805 discrepancies
06-0008	Alternate method for Engineering Evaluations
06-0011	Clarify III.G.3 Compliance Transition

FAQ ID	Topic
06-0012	Clarify Manual Action Transition in Appendix B

2. Plant specific calculations/analyses
 - Fire area assessment and supporting analyses
 - Operator manual action feasibility assessments
 - Engineering evaluations related to the fire area (e.g., GL 86-10 evaluations)
 - Resolution of multiple spurious operations
3. Licensing basis/regulatory documents related to fire area compliance
 - Exemptions, Exemption Requests (or Deviations, Deviation Requests) and supporting correspondence
 - Safety evaluation reports
 - Inspection reports
 - Response to generic letters, etc.
4. Corrective action documents related to compliance with 10 CFR 50, Appendix R, such as:
 - Unapproved or 'not allowed' operator manual actions (including feasibility issues)
 - Cable separation/protection issues
 - Raceway fire barrier deficiencies
 - Concerns related to fire-induced spurious actuations

Log documents into the database using the 'Basis Document List' module.

Document Detail	Doc Type	Comments	Link
▶ Hatchford test, 0, 10/30/2006	Dummy Test	testing only	
NFPA 805 (2001), 0, 1/1/2001	Codes and Standards	test of linked	C:\Program Files\Kleinsorg Group
HNP-E/ELEC-0001, 0, 5/15/2006	HNP Calculation		
NLS-86-315, N/A, 8/25/1986	Letter, HNP to NRC	addressed safe s	
NLS-86-137, N/A, 5/7/1986	Letter, HNP to NRC		
FSSPMD, R16.00 of software - CRTN: 00110759,	Controlled Software/Database	database	
NUREG-1038 Supplement 4, 0, 10/1/2006	Safety Evaluation Report	HNP SSER 4	
Test-Engeval-1, 0, 10/31/2006	Engineering Evaluation	for testing only	
NLS-86-040, N/A, 2/13/1986	Letter, HNP to NRC	Attachment 1 to I	
NUREG-1038 Supplement 3, 0, 5/1/2006	Safety Evaluation Report		
NLS-84-245, N/A, 6/12/1984	Letter, HNP to NRC	Provided respons	
NLS-86-219, N/A, 6/18/1986	Letter, HNP to NRC	Document not fo	

Buttons: Edit... Delete Add New... Close

Figure 7 – Basis Document Screen (example)

9.4.2 Step 2 – Assess Accomplishment of Performance Goals

Use the 'NEI 04-02 Tables – View and Edit' and 'Table B-3 – Fire Area Transition' modules to begin the assessment of the nuclear safety performance goals.

Select the 'Performance Goals' tab to document the fulfillment of the NFPA 805 performance goals for the selected fire area. To complete the 'Performance Goals' documentation for the fire area:

- Select the appropriate 'Performance Goal' for evaluation. If the desired goal is not available for selection, a new one can be created.
- Document the 'Method of Accomplishment' in summary level form for the fire area. Attempt to use concise, consistent terminology that provides a high level summary of credited strategies. This consistency should be utilized for statements within a given fire area and for similar statements in different fire areas.
- Use the comments field for fire-area specific information or when additional information is needed.
- Select the appropriate 'Basis Document'. Complete the Basis Document details such as page/section reference/comments.
- Document open items related to the performance goal review.
- Document the pre-transition and post-transition regulatory basis for the fire area. Note that more than one regulatory basis may exist for the fire area.

NEI 04-02 B-3 Fire Area Transition

Fire Area: 1-A-SWGRA SWITCHGEAR ROOM A IN REACTOR AUXILIARY BUILDING

Fire Zone	Fire Zone Description	Regulatory Basis
1-A-SWGRA	SWITCHGEAR ROOM A IN REACTOR AUXILIARY BUI	NUREG-0800 C.5.b(2) with Deviations
		*

Performance Goals | FA Licensing Basis | Engineering Evaluations

Performance Goal	Method of Accomplishment	Comments
Decay Heat Removal - CSD	This function can be accomplish	These operator manual actions (recovery actions) are allowed and do not
Decay Heat Removal - HSB	Turbine Driven AFW Pump fec	1AF-149 provides water to steam generator C. Steam generator C is a so
RCS Inventory Control	Charging Pump CSIPB from the	Emergent issue related to spurious operation of valve that can drain RWS
RCS pressure control	This function can be accomplish	
Reactivity Control	This function can be accomplish	
Vital Auxiliaries	This function can be accomplish	Emergent issue related to loss of emergency lighting for the control room II

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Document Detail
FA 1-A-SWGRA information
Attachment 21

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Open Item ID	Open	Open Item	Disposition
B-3-EMERGENT-80	<input checked="" type="checkbox"/>	Emergent issue related to loss of emergency lighting for t	
B-3-EMERGENT-01	<input checked="" type="checkbox"/>	Emergent issue related to embedded conduit (FSSPMD	
B-3 - AFW1	<input checked="" type="checkbox"/>	The operator actions for 1AF-143 and 1AF-149 are cons	
B-3 - DMA-1	<input checked="" type="checkbox"/>	The relationship between Appendix 17 of HNP-E/ELEC-	
B-3-EMERGENT-Jar	<input checked="" type="checkbox"/>	Emergent issue related to spurious operation of valve 1C	

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Close

Figure 8 – Performance Goal Screen (example)

Performance Goals

Fire Area: 1-A-SWGRA Fire Area Description: SWITCHGEAR ROOM A IN REACTOR AUXILIARY BUILDING

Performance Goal: Decay Heat Removal - HSB

Method of Accomplishment:

Turbine Driven AFW Pump feeding steam generators B and C from the Control Room, with the exception of HSB operator manual actions for:

1AF-143
1AF-149

Comments:

1AF-149 provides water to steam generator C. Steam generator C is a source of steam for the Turbine Driven AFW pump.
The operator actions for 1AF-143 and 1AF-149 are considered to be Bin G.

OK Cancel

Figure 9 – Performance Goal Detail Screen (example)

NEI 04-02 B-3 Fire Area Transition

Unit/Fire Area: 1 12-A-BAL REACTOR AUXILIARY BUILDING UNITS 1 AND 2 BALANCE

Fire Zone	Description	Regulatory Basis	Phase
12-A-BAL	REACTOR AUXILIARY BUILDING UNITS 1 AND 2 BAL	Appendix R Section III.G.2.b	Pre-Transition
		NFPA 805 Section 4.2.3.3.b	Pre-Transition

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Figure 10 – Regulatory Basis Screen (example)

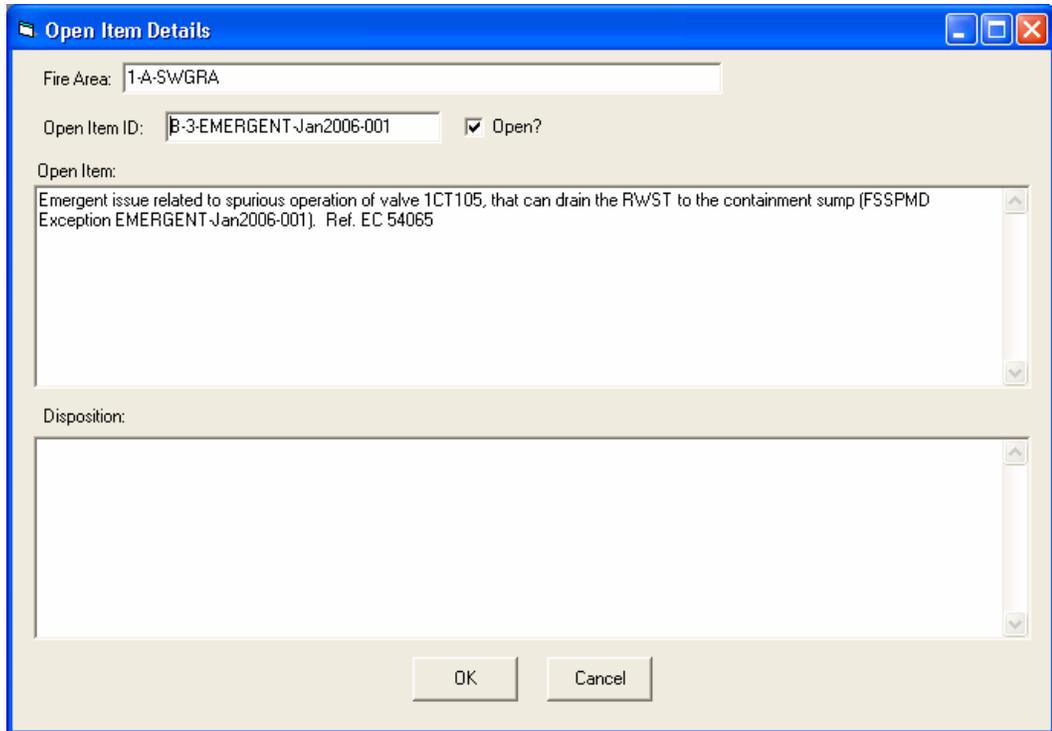


Figure 11 – Open Item Screen (typical, example)

Note: The information documented in the transition project database is intended to be summary level information that provides a concise summary of information, with references to specific supporting analyses and documents. For example, the documentation of items such as fire-induced circuit failures and disposition of operator manual actions that are not allowed/approved are not expected to be documented in detail in the transition database. For example, the results of the process depicted in Attachment 2 and the assessment of operator manual action feasibility (i.e., to be transitioned as “recovery actions” in a post-transition environment) is important in establishing the scope of the transition change evaluation. However, it is not practical to document the detailed results for each operator manual action in the transition database. However, the document that contains the results of this assessment should be referenced in the transition database and clear traceability should be provided in order to provide a clear transition change evaluation scope.

9.4.3 Step 3 – Fire Area Licensing Action Review

Figure 12 – Fire Area Licensing Basis Screen (example)

Perform a review of the licensing aspects of the selected fire area.

Using the Licensing Basis module, either add, delete, or edit the applicable ‘Licensing Action Description’. The name of the ‘Licensing Action Description’ is user defined and should provide a clear summary level text description of the licensing document (e.g., FA 12 Suppression Exemption 10-07-85’).

Select the appropriate ‘Basis Document’ associated with the licensing action (e.g., correspondence between licensee and the NRC that form the basis for the overall licensing action). Perform a review of the basis document to determine if the bases for acceptability is still true. Document the results of the review.

“Gray areas” may arise during the determination of previous NRC approval. Refer to Section 2.3 of NEI 04-02, Revision 1 and Section 2.4 of Regulatory Guide 1.205 for guidance on this determination of what constitutes previous NRC approval.

Licensing Evaluation

Fire Area: 1-A-SWGRA Fire Area Description: SWITCHGEAR ROOM A IN REACTOR AUXILIARY BUILDING

Licensing Action Description: NUREG-0800 Deviation from C.5.b(2) 1-A-SWGRA - Cable Date: 5/1/1986

Basis:

Deviation F request dated 2/13/86 provides the following justification.

1. Combustible loading is low in the area.
[Confirmation: Combustible loading is LOW per Section 5.4 of Att. 21 to HNP-E/ELEC/0001 rev. 0]
2. The cable is routed in a dedicated conduit.

Licensing Evaluation Documents		
Basis Document	DocDetail	Licensing Evaluation
▶ NUREG-1038 Supplement 4, 0, 10/1/2006	Section 9.5.1.4, page	SSER 3, Section 9.5.1.4 documents an acceptable deviation from lack of
NLS-86-040, N/A, 2/13/1986	Attachment 1 - Devia	Deviation F request dated 2/13/86 provides the following justification.
NLS-84-245, N/A, 6/12/1984	pages 26-27 of Enck	Pages 26 and 27 of Enclosure for Fire Area 1-A-SWGRA states that only T

Edit... Add New... Delete

Licensing Action Transitioned?

OK Cancel

Figure 13 – Fire Area Licensing Evaluation Screen (example)

Document the basis for the overall licensing action and assess for adequacy for transition.

If the Licensing Action is deemed to be adequate for transition, annotate this in the database and document the basis. Document any open items associated with the Licensing Action.

9.4.4 Step 4 – Perform Engineering Evaluation Review

From the 'Engineering Evaluations' module, either add, delete, or edit the applicable Engineering Evaluation.

Figure 14 – Engineering Evaluation Review Screen (example)

Select the appropriate engineering evaluation for review. Perform a review of the evaluation to determine if the bases are still valid. Document a summary in the ‘Summary’ field and detailed results of the review in the ‘Evaluation’ field.

The engineering evaluation should be evaluated using the criteria provided in FAQ 06-0008 for acceptability. If the Engineering Evaluation is deemed to be adequate for transition, annotate this in the database and document the basis. If the evaluation is not deemed necessary or adequate for transition, document the basis for this conclusion. Document any open items associated with the Engineering Evaluation.

9.4.5 Step 5 – Document Results and Define Open Items / Change Evaluations

Documenting the assessment of performance goal accomplishment for each fire area (Step 2, Section 9.4.2), reviewing fire area licensing actions (Step 3, Section 9.4.3), and reviewing engineering evaluations (Step 4, Section 9.4.4) all may result in the creation of open items that may need to be reviewed and assessed as part of the change evaluation process.

All open items should be reviewed and binned, by fire area (and topic), if appropriate, in order to gain an overall understanding of the magnitude and complexity of the individual issues, as well as their aggregate impact. Open items associated with other tasks (e.g., Task 2, Fundamental Fire Protection Program and Design Elements Review) should also be considered.

The output of step 5 (Section 9.4.5) will be input to the Change Evaluation task.

10.0 RECORDS

Calculations developed while using this instruction shall be maintained as records.

**Attachment 1
Sheet 1 of 2
Fire Area-by-Fire Area Review – Supplemental Information**

This figure is an annotated version of Figure 4-3 of NEI 04-02 delineating binning of compliance strategies as part of the fire area-by-fire area review. Individual compliance strategies utilized within a fire area are reviewed and 'binned' as depicted in the following flowchart

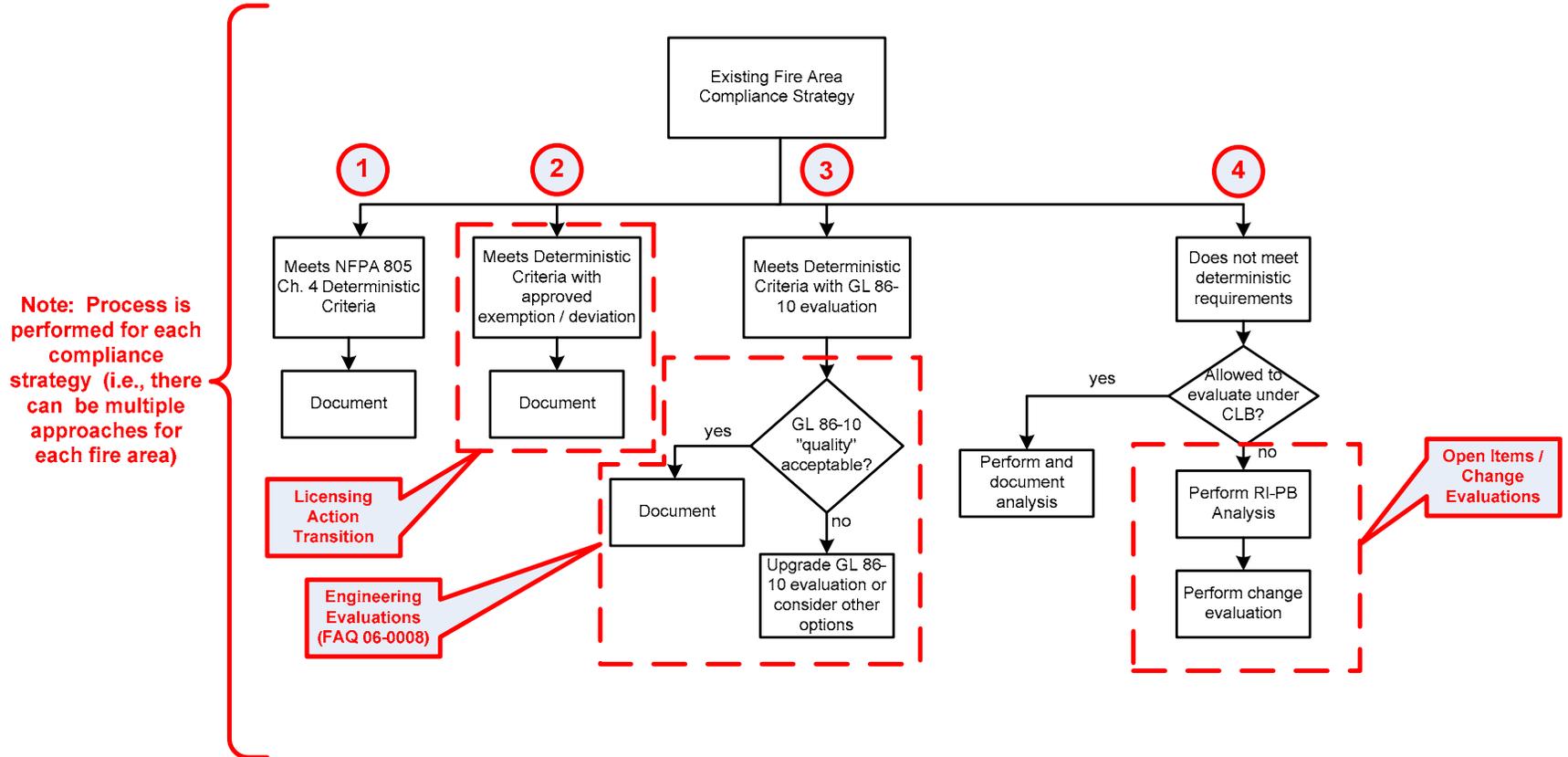


Figure 15 – Fire Area-by-Fire Area Review [based upon NEI 04-02 Figure 4-3]

Attachment 1
Sheet 2 of 2
Fire Area-by-Fire Area Review – Supplemental Information

The review is intended to identify and document how compliance strategies for each fire area:

1. Align with the NFPA 805 Chapter 4 deterministic methods for meeting the nuclear safety performance criteria in NFPA 805 Section 1.5; or
2. Align with the NFPA 805 Chapter 4 deterministic methods for meeting the nuclear safety performance criteria in NFPA 805 Section 1.5 with approved exemptions or deviations from 10 CFR 50 Appendix R (allowed during transition based upon NFPA 805 Figure 2.2); or
3. Align with the NFPA 805 Chapter 4 deterministic methods for meeting the nuclear safety performance criteria in NFPA 805 Section 1.5 with correctly implemented supporting engineering evaluations (i.e., Generic Letter 86-10 evaluations or calculations) (allowed during transition based upon NFPA 805 Figure 2.2); or
4. Do not align with the NFPA 805 Chapter 4 methods for meeting the nuclear safety performance criteria in NFPA 805 Section 1.5 and either can or cannot be evaluated under the current licensing basis (CLB). Items outside the CLB would be evaluated using risk-informed, performance-based methods as part of the transition review.

The figure above is simplified and is intended to show the options available for 'binning' compliance strategies (and rolling up the strategies into a summary for the fire area). Multiple compliance strategies can and will be used for a given fire area and the associated performance goals. For example, certain functions (even for a given performance goal) may meet deterministic criteria, while engineering evaluations may be relied upon to support other functions credited in the fire area.

Clarifications and notes:

1. The chart is intended to primarily depict analytical processes. Any item that does not conform with NFPA 805 deterministic requirements or is found to be unacceptable as part of the review of the current licensing basis will be reviewed for resolution options, which include plant modifications.
2. Options that are considered "compliant" with NFPA 805 deterministic requirements or the current licensing basis may be changed as part of the transition. For example, in order to reduce reliance on an 'approved/allowed' operator manual action, a modification may be proposed to reduce this reliance. Likewise, a risk-informed performance-based approach could be used to reduce the need for a 'compliant' raceway fire barrier system.
3. Certain items that do not meet the NFPA 805 deterministic requirements may be evaluated under the current licensing basis prior to transition, without the need for a risk-informed, performance-based change evaluation. Examples include:
 - Identification of a configuration during the transition review that would need a Generic Letter 86-10 engineering evaluation (e.g., partial suppression coverage in an area requiring suppression), but does not have one in place. An appropriate evaluation could be performed prior to transition under the current licensing basis, without the need for a risk-informed, performance-based change evaluation.
 - Operator manual actions (recovery actions) do not meet the NFPA 805 deterministic requirements. Therefore, allowed or approved operator manual actions (recovery actions) that have been evaluated for acceptability under the current licensing basis could be transitioned without the need for a risk-informed, performance-based change evaluation.

Attachment 2
Sheet 1 of 1
Operator Manual Action Review – Sample Process

Sample Process for determination of whether pre-transition operator manual actions are allowable or have prior approval (based upon NEI 04-02 Appendix B, Section B.2.2.4 and FAQ 06-0012). This assessment is made to determine if the transitioning operator manual actions are acceptable or candidates for the risk-informed, performance-based change evaluation.

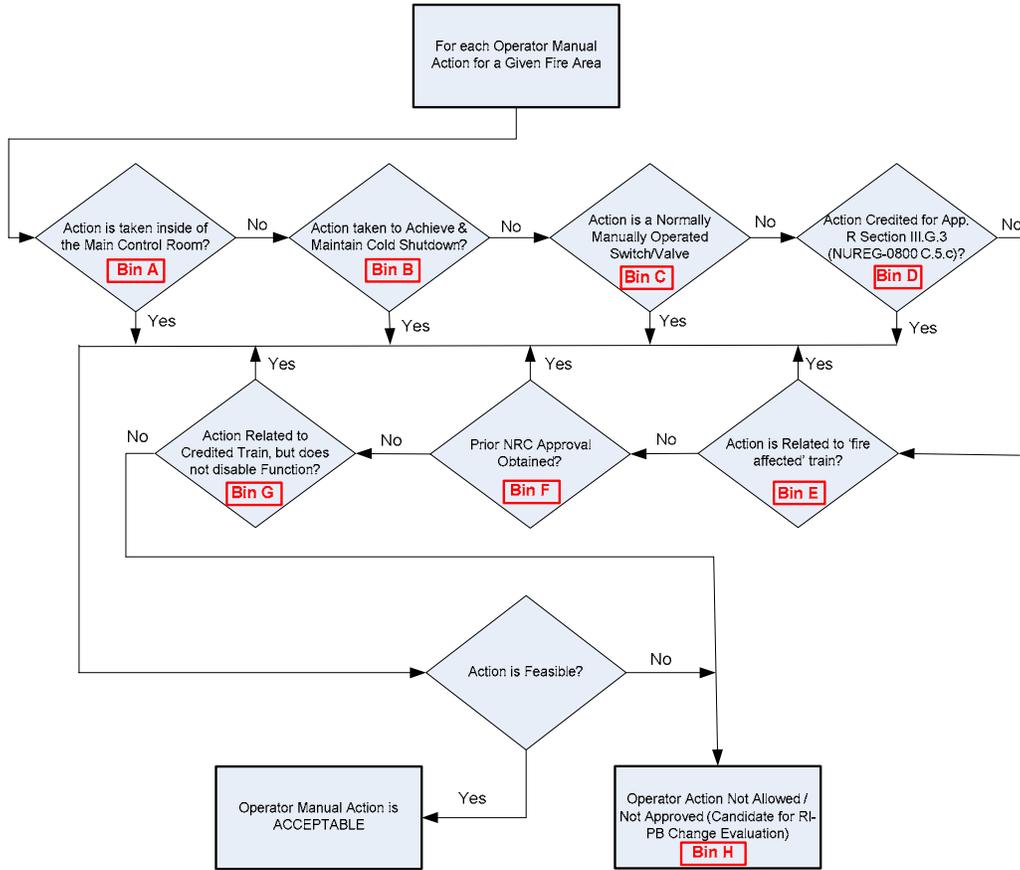


Figure 16 – Sample Operator Manual Action Review Process (FAQ 06-0012)

REVISION SUMMARY

Initial Issue