January 7, 2003

Mr. Alex Marion, Director Engineering Department Nuclear Generation Division Nuclear Energy Institute 1776 I Street, NW, Suite 400 Washington, D.C. 20006-3708

SUBJECT: NRC COMMENTS ON THE FIRE PROTECTION RULEMAKING IMPLEMENTATION GUIDANCE DOCUMENT

Dear Mr. Marion:

On May 15, 2003, you forwarded to me Revision D of the implementing guidance document for the risk-informed, performance-based fire protection rulemaking. Since then, you have had two pilot projects; one at the Farley facility to review the change control process, and the other at the McGuire facility to review the transition process. During our October 15, 2003 meeting, the staff discussed the NRC's high-level comments and we agreed to send more detailed comments, which are enclosed. The staff recognizes that the guidance may be changing significantly after the results of the pilots and our interactions. However, the staff wants to reemphasize two items within our comments: item C., Superseded Requirements; and item D., NFPA 805 Chapter 3.0, are critical to moving forward with an acceptable implementing guide. The staff is working towards having a draft regulatory guide by the end of next spring and acceptable guidance is critical to meeting this time frame. Therefore, your assistance in this endeavor is greatly appreciated.

If you have any questions on this matter, please feel free to contact either Paul Lain at 301-415-2345, pwl@nrc.gov, or Alex Klein at 301-415-3477, ark1@nrc.gov.

Sincerely,

/RA/

John N. Hannon, Chief Plant Systems Branch Division of Systems Safety and Analysis Office of Nuclear Reactor Regulation

Enclosure: As stated

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NRC COMMENTS ON THE FIRE PROTECTION RULEMAKING IMPLEMENTATION GUIDANCE DOCUMENT, REVISION D

The statements are high level comments with supporting information following.

A. LICENSING BASIS GUIDANCE

- **Statement**: The guide should provide the specific elements to include in a licensee's existing fire protection licensing basis as part of the transition and the specific elements needed to make up the National Fire Protection Association (NFPA) 805 licensing basis. Also, the NRC retains the right to review the acceptability of applying NFPA 805 methods and approaches relative to the existing license basis when used by licensees who do not transition to NFPA 805.
- 1. Elements carried over from the existing licensing basis should be re-evaluated to meet the quality and applicability of the NFPA 805 requirements. The guide should provide a description of the minimum elements needed from the licensee's existing licensing basis in order to efficiently and clearly transition to NFPA 805.
- 2. The guide describes current licensing basis elements (e.g., standard license condition, changes per 10 CFR 50.59; Generic Letter (GL) 86-10 evaluations; and exemptions) but should be made clear in describing what specific elements make up the final NFPA 805 licensing basis. The process of transitioning a plant's fire protection licensing basis to NFPA 805 should include establishing a clear, complete, and accurate new fire protection licensing basis that can be approved under 10 CFR 50.48(c)(3). In evaluating the acceptability of the new licensing basis, it's important that the reviewer/inspector clearly understand the original basis, those elements that transition, and the final NFPA 805 licensing basis. Chapters 4, 6 and 8 should provide guidance on the specific documentation that will be produced and maintained as part of the revised licensing basis.
- 3. Sections 3.0 and 4.7: The implementation guide should be revised to reflect that there are no provisions within the rule for the extension of "approved" NFPA 805 methods and analytical approaches to demonstrating compliance with the existing license basis outside the context of NFPA 805, including the use of these "tools" in support of GL 86-10 evaluations, or change evaluations under the standard license condition or 10 CFR 50.59. The NRC retains the ability to review the acceptability of applying these methods and approaches relative to the existing license basis when used by licensees who do not transition to NFPA 805. The use of NFPA 805 tools in such applications are at the risk of the licensee and are still subject to review.

ENCLOSURE

B. LICENSING BASIS - PREVIOUSLY APPROVED

- **Statement**: The implementation guide should be clarified and guidance provided to ensure that a licensee correctly identifies its licensing basis with respect to "previously approved". Individual evaluations that have not been subject to specific documented NRC review and approval should not be assumed as "previously approved" in the context of NFPA 805, Chapter 3 implementation. The Implementation Guide should be revised to reflect the need to validate existing licensing bases and conditions that are brought forward, regardless of previous review and approval, when demonstrating that the criteria and requirements of NFPA 805, Chapters 1, 2, and 4 are satisfied.
- 1. Various portions of the guidance document may be interpreted in a way that results in an overly broad description of the fire protection aspects of a plant's licensing basis (e.g., information in inspection reports or aspects of a plants configuration that may have existed at the time a Safety Evaluation Report (SER) was written, but that were not specifically "approved" by the NRC). For example, Section 6.1.2 is incorrect in the assertion that 10 CFR 50.59 and GL 86-10 evaluations are considered as meeting the criteria for "previously approved" because they are the result of an approved process. Individual evaluations that have not been subject to specific documented NRC review and approval should not be assumed as "previously approved" in the context of NFPA 805 implementation.
- 2. Clarifications should be made to guidance in Sections 4.4, 6.1 and 6.2 (for example) with regard to bringing forth, or standing on, existing deterministic methods without application of a documented process to validate the existing conditions or license basis meets the criteria and requirements of Chapter 1,2, and 4 of NFPA 805. See examples below.

For example, in Section 4.4: As shown in Figure 2.2 of NFPA 805 when transitioning to NFPA 805, licensees may "stand on" "existing plant licensing bases" (Appendix R/NUREG 0800 plant configurations and procedures, exemptions and deviations, and engineering evaluations). However, the licensee "stands on" the existing plant [fire protection] licensing basis through their active review against the criteria and requirements of Chapters 1, 2 and, 4 of NFPA 805, and subsequently, in some cases, the conduct of new engineering equivalency evaluations on existing fire protection configurations and procedures. The configurations which exist subsequent to the NFPA 805 analyses would be subject to inspection regarding the quality of the licensee's determination that NFPA 805 requirements are met, or that, as appropriate, engineering equivalency evaluations have shown that the existing configurations provide an equivalent level of fire protection compared to the Chapter 4 requirements.

Another example is Section 6.1.1: The fourth paragraph after the three bullets states: "... a plant's previously approved CLB [current licensing basis] for compliance with safe shutdown fire protection requirements satisfies the nuclear

safety requirements established by the amended regulation, 10 CFR 50.48 (c), ..." and "Therefore, a licensee's compliance with 10 CFR 50, Appendix R, Sections III.G. and III.L., or applicable sections of NUREG 0800, either as a requirement or as a licensing commitment, serves as a basis for transitioning to the new fire protection licensing basis [NFPA 805] without the need to demonstrate line-by-line compliance with the nuclear safety requirements in Chapter 2 and 4 of NFPA 805." See discussion above why this statement should be modified.

Another example is Section 6.1.2: In the last paragraph of the section, it is stated that "In summary, if all "attributes" of the fire protection program are approved, the licensee may transition to the "risk-informed licensing basis" without programmatic changes." See discussion above why this statement should be modified.

Another example is Section 6.2.2: The last sentence of the second paragraph of section 6.2.2 appears to say that the transition from Appendix R or NUREG 0800 to NFPA 805 is accomplished through simple collection, documentation and tabulation of information. See discussion above why this statement should be modified.

- 3. The example in Section 4.4 The statement in the first two sentences regarding an assumption of NRC acceptance of a deviation from requirements based on the absence of information in an SER is inaccurate and should be revised.
- 4. Section 6.1.1: The fourth paragraph after the three bullets ends with "Exemptions/deviations from the original licensing basis are part of a licensee's CLB, and are therefore considered acceptable as previously approved alternatives." NFPA 805 "previously approved alternatives" only exist in relation to Chapter 3 fundamental fire protection and design elements, and not all exemptions and deviations deal with the set of issues addressed in Chapter 3 of NFPA 805. This statement should be clarified.
- 5. Section 6.1.2 should be clarified because the logic related to "implicit approvals" (inspections, 50.59s, corrective action correspondence, etc) is inaccurate. If there is an explicit determination by the NRC that some aspect of fire protection is acceptable, then that determination should continue to hold-up in future, if the basis for the original determination remains valid. The fact that an NRC individual didn't observe a noncompliance, or decided that there were more significant issues to address at the time when a noncompliance was noted, does not indicate agency approval of a noncompliant situation.
- 6. Section 6.1.2: The second paragraph of section 6.1.2 states that GL 86-10 evaluations and 10 CFR 50.59 evaluations are "considered to be previously approved." Since the NRC may have never seen these evaluations, they are not "considered to be previously approved." Paragraph 6.1.2 should be clarified. [Note: this comment is not intended to say that GL 86-10 and 10 CFR 50.59 evaluations are not part of the "existing plant licensing basis" of Figure 2-2].

C. SUPERSEDED REQUIREMENTS

- **Statement**: The guide implies that compliance with aspects of General Design Criterion (GDC) 3 and 10 CFR 50.48(a) are superseded by 10 CFR 50.48(c). This is incorrect and such text should be removed from the guidance document.
- 1. Section 4.3.1 (for example) states or implies that compliance with aspects of GDC 3 and 10 CFR 50.48(a) is superseded by 10 CFR 50.48(c). This is incorrect and such text should be removed from the guidance document.
- 2. Section 4.3.1: 50.48(c) does not supersede anything and, in particular, does not impact the explicit requirements of 50.48(a). It establishes a voluntary alternative to certain specifically identified regulatory requirements, which do not include 50.48(a). If NFPA 805 is adopted, how certain 50.48(a) requirements are met may be affected by implementation of NFPA 805, but 50.48(a) stands.
- 3. Section 4.3.1: The first sentence of the second paragraph states that the proposed rule language "supersedes" the necessity of licensees to be in compliance with "certain requirements contained in 10 CFR 50.48(a)" and implies that the revised rule "supersedes compliance" with GDC 3. Neither is correct and the guide should be revised.

D. NFPA 805 Chapter 3.0

- **Statement**: The staff considers all of the items in NFPA 805, Chapter 3.0 to be either a fundamental element or a minimum design criteria.
- 1. Section 6.4.1: In the second paragraph of section 6.4.1 it appears that change evaluations, specifically using the application of risk acceptance criteria, can be used "to demonstrate conformance with criteria in NFPA 805 Chapter 3 criteria (sic)." This is not consistent with Section 3.1 of NFPA 805, which states that "these fire protection program elements and minimum design requirements shall not be subject to the performance-based methods permitted elsewhere in this standard." The guide should be revised to recognize Section 10 CFR 50.48 (c) (4) of the proposed rule language, which states that a license amendment under 10 CFR 50.90 is required to make a change to the requirements of Chapter 3 of NFPA 805 for a specific reactor plant. Therefore, section 6.4.1 should be revised.
- 2. Section 6.2.1: The second paragraph states "Not everything in Chapter 3 [of NFPA 805] is either a fundamental element of the fire protection program or a minimum design requirement for fire protection systems and features." This is inaccurate. The entirety of Chapter 3 of NFPA 805 is comprised of these fire protection elements or requirements and therefore obviates the necessity for Table 6-1.

E. FIRE MODELING

Statement: Appendix D-3 of the guide discusses certain fire models and implies endorsement of these fire models. However, the NRC is reserving judgement on

the fire models discussed in Appendix D-3 of the guide until the staff establishes a pool of acceptable fire models for licensees to use in implementing NFPA 805. The pool of acceptable fire models will be established following expected conduct of verification and validation (V&V) of the models by the NRC. In the interim period, the staff expects a licensee to use and apply fire models prudently and within the limitations of the fire model. Appendix D-3 of the guide makes conclusions and statements with respect to fire modeling and safety factors that should be substantiated. The discussion of safety factors should include a basis for the values recommended.

FIRE MODELING: Appendix D-3 of the Nuclear Energy Institute (NEI) Guide describes, in general terms, the fire modeling methodologies that are currently available. It does not specify which methodologies are acceptable, but leaves it to the user to determine the validity and acceptability of a fire modeling methodology for a specific application. The NRC plans to establish a pool of acceptable fire models for licensees to use in implementing NFPA 805 following conduct of verification and validation (V&V) of these fire models using the consensus standard, ASTM-1355, "Evaluating the Predictive Capabilities of Fire Models." This process evaluates and establishes fire models to be valid for specific fire scenarios.

- 1. Appendix D-3 endorses specific models and guides which have not been reviewed and determined to be acceptable to the NRC. An example of such a guide is the Electric Power Research Institute (EPRI) Fire Modeling Guide for Nuclear Power Plant Applications (EPRI, 2002).
- Appendix D-3, Pg. 2, 3rd paragraph: Provide the basis for the following statement,
 "...closed form solutions, etc. may be more appropriate and more accurate than even the most sophisticated computer-based models available."
- 3. Appendix D-3, Pg. 3, 1st paragraph endorses methodologies in Fire-Induced Vulnerability Evaluation (FIVE) and the NRC spreadsheet calculations. Provide the basis and an indication of the accuracies of the methods.
- 4. Section 8.3.4.2, page 60-62, "Initial Fire Modeling," and Section 8.3.5.1, page 67-69, "Fire Modeling Analysis." The discussions on fire scenario development in both sections appear to be silent on consideration of room-to-room fire scenarios (i.e., fire propagation across adjacent rooms) in the fire modeling analysis portion of the change evaluation. Guidance should be provided to determine the possibility of room-to-room fire scenarios in the fire modeling analysis.

BASES: Appendix D-3 also includes conclusions and statements which are not substantiated in the document. An example of such a statement is "The use of CFAST [Consolidated Model of Fire Growth and Smoke Transport] within its range of validity and relevance to the problems under study has been well accepted." The following provides examples of conclusions and statements that should be substantiated in the guidance document.

1. Appendix D-3, Pg. 4, 4th paragraph: Provide the basis of the statement, "Screening calculation methods such as FIVE (EPRI, 1992, 2002), or those developed by the NRC

(Salley, Iqbal, etc.) are conservative in the assumptions made to simplify the calculations."

- 2. Appendix D-3, Pg. 12, Selection of Zone Model includes the statement, "The use of CFAST within its range of validity and relevance to the problem under study has been well accepted." Provide the basis of this statement?
- 3. Appendix D-3, Pg. 13, 1st paragraph states "FDS [Fire Dynamics Simulator] is a largeeddy simulation (LES) of the plume and ceiling jet flows which has been demonstrated to be the most effective way of dealing with fire-induced flows." Provide the basis of this statement?
- 4. Appendix D-3, Pg. 31, last line states "A value of 0.35 is conservatively assumed in the following analysis." Provide the basis of this statement?
- 5. Appendix D-3, Pg. 40, 5th paragraph states, "This will result in slightly over-predicted temperatures." Provide the basis of this statement?
- 6. Appendix D-3, Pg. 40, 6th paragraph states, "Both CFAST and MAGIC are sufficient for this purpose." Discuss what determines if the models are sufficient for the purpose.
- 7. Appendix D-3, Pg. 40, last paragraph states, "FDS should not be used where detailed flame radiation calculations are important." What evaluation and analysis is this statement based on? Also, see Pg. 46, 1st paragraph, "The implementation of certain physical phenomena, notably radiation, is a weak point in these codes, particularly flame radiation in the case of FDS.
- 8. Appendix D-3, Pg. 45, Zone Models states, "Zone type fire models have been extensively "validated....." The basis of this statement with references should be included.
- 9. Appendix D-3, Pg. 45, Zone Models states, "CFAST has been subject to many varied validation studies primarily due to its wide application, non-proprietary nature and long history of development." The basis of this statement with more detail and references should be included.

SAFETY FACTORS: Appendix D-3 includes a discussion of safety factors and recommends specific values for the safety factors to be used in fire safety analysis. Although some discussion on the basis of the recommended values is provided for calculations of radiative fluxes based on hand calculation methods, there is no basis provided for the values to be used in other fire modeling analysis.

- 10. Appendix D-3, Pg. 4, 2nd paragraph: Provide the basis of specifying that a substantial safety factor is > 2.
- 11. Appendix D-3, Pg. 5, 1st paragraph, Criterion No. 8 states "Results with a minimum safety factor (in the range of 2-3)." Provide the basis of this criterion?

12. Appendix D-3, Pgs. 16 and 17, 2.4.7, Factor of Safety, contains several general and vague statements on the factors of safety to be applied, e.g., "...a factor of safety of 2 relative to expected fire size is adequate," "where a realistic result is required, no factor of safety should be applied," "While no specific requirement has been established, it can be stated that a factor of safety of two on the critical heat release rate is certainly adequate for most cases and may be unnecessarily high in others." The basis for these recommended values should be included.

CLARIFICATIONS

- 13. Appendix D-3, Pg. 5, 2nd paragraph states, "The successful use of fire modeling in such conditions is therefore highly sensitive to the problem under evaluation." This statement requires more elaboration and guidance.
- 14. Appendix D-3, Pg. 6, Section 2.4.2 provides a general outline that should be supplemented with more detailed guidance.
- 15. Appendix D-3, Pg. 10, 3rd paragraph, the statement "In many analysis cases some combination of engineering calculations and zone or CFD [Computational Fluid Dynamics] modeling is appropriate," is general and should be supplemented with more detailed guidance.
- 16. Appendix D-3, Pg. 11, Section 2.4.3.2 endorses the COMPBRN IIIe code. This model has not been maintained or updated in the last 17 years and is outdated. Endorsement of this model should be deleted.
- 17. Appendix D-3, Pg. 12, Selection of Zone Model includes the statement, "There is, in general, no fundamental reason to select one code over another. All share the same inherent limitations of zone model codes." This statement is not completely accurate and should be modified and more detailed guidance included.
- 18. Appendix D-3, Pg. 13, Selection of a CFD Code states "For most typical applications of fire modeling, FDS or an equivalent code possess the features necessary for successful application." What are these features and how are they sufficient for successful application?
- 19. Appendix D-3, Pg. 32, 1st paragraph: What is meant by "bay and cell spaces"?
- 20. Appendix D-3, Pg. 40, 4th paragraph states, "In any given analysis some of these effects may not be important or can be readily treated." This is a broad statement which should be supplemented with more guidance.
- 21. Appendix D-3, Pg. 42, 1st paragraph. Provide a reference for the HEATING code.
- 22. Appendix D-3, Pg. 43, 3rd paragraph. What is the uncertainty of Schifilti's smoke detector model?

- 23. Appendix D-3, Pg. 44, 4.5 Suppression Effects and 4.6 Flashover Calculations. The discussion in these two sections is very brief. The discussion should be expanded if these topics are included in the Guide.
- 24. Appendix D-3, Pg. 45, Engineering Calculations states "These correlations are based on full-scale test data and can be expected to give reasonable results within the limits of the mathematical models on which they are based." The basis of this broad statement with references and more detail on specific correlations should be included.
- 25. Appendix D-3, Pg. 46, 2nd paragraph states "...and larger scale validation tests are planned." Who is planning to conduct these tests?

F. SEVERITY FACTORS

- **Statement**: The application of severity factor within the change control process is inconsistent with accepted Probabilistic Risk Assessment (PRA) practices. The use of severity factors should be considered only in the combined analysis to avoid screening out potentially significant fire scenarios (i.e., low frequency/high consequence events).
- 1. Page D-65: Severity factors should be not be applied on an ad-hoc basis. The use of fire severity factors should be considered only in a fire risk assessment after the initial risk assessment to avoid screening out potentially significant fire scenarios. Cautions should be discussed regarding the dependence between fire severity factors, fire modeling input, assumptions, and fire detection and suppression analysis. The detailed discussion of severity factors should be deleted in favor of a simple acknowledgment that concepts of fire severity are an appropriate consideration with details left to fire PRA guidance documents.

G. DEFENSE-IN-DEPTH & SAFETY MARGIN

- Statement: NFPA 805 does not provide specific guidance as to what constitutes an acceptable level of defense-in-depth (DID) and/or safety margin. NFPA 805, Chapter 1 states that DID shall be achieved when an adequate balance of each DID element is provided. Regulatory Guide 1.174 provides risk-acceptance guidelines as discussed in sections of the implementation guide. The guide should continue to use NRC guidance when providing DID and safety margin considerations.
- Section 8.3.6.2, page 77-78, "Defense-in-Depth and Safety Margins." The safety margin and defense-in-depth discussions in this section should more fully address the potential risk implications of the Limiting Fire Scenarios (LFS) damage states. A LFS may lead to more challenging scenarios. For example, fire damage to certain power cables may lead to loss of all Service Water for one or both units in a multi-unit site. The staff recommends that risk implications of LFS damage states be discussed in the guidance document for change evaluation.

H. STRUCTURE AND CLARITY OF THE GUIDE

- **Statement**: The guide should be written in a linear progression that follows the steps outlined in NFPA Chapters 2 and 4 flow charts in a logical progression from the existing licensing basis to the endpoint of a revised NFPA 805 licensing basis. The discussion on use of NFPA 805 methods and approaches outside of NFPA 805 adoption (i.e., under 50.48(c)) should not be intermingled with implementing guidance for adoption of NFPA 805 under the rule.
- 1. The implementing guide should maintain clear and accurate association with NFPA 805. In stepping through the guide, it is difficult to determine the corresponding provisions of NFPA 805 that are being addressed by the specific paragraph or section of the guide. Both the guide and NFPA 805 contain flow charts of the processes that should be the foundation of the guide. The guidance should expand upon the steps described in the charts in a logical progression from the existing licensing basis to the endpoint of a revised NFPA 805 licensing.
- 2. The discussion on use of NFPA 805 analytical methods and approaches outside of NFPA 805 adoption (i.e., under 50.48(c)) should not be intermingled with implementing guidance for adoption of NFPA 805 under the rule (e.g., see section 4.7 of the guide). There should be no confusion on the use of valid analytical methods regardless of the prior establishment of "acceptability" of the methods. NFPA 805-related technical approaches used outside of the NFPA 805 process in a fire protection license or regulatory process (50.59, GL 86-10 evaluation, exemptions, amendments, corrective action evaluations, etc.) is at the discretion of the licensee but may be subject to review by the NRC.
- 3. Section 4.5 (1) The phrase "the NRC has simplified the transition process" is unclear because the amendment process isn't altered. (2) The phrase "does not require substantive analysis" is misleading and should be clarified because the rule and NFPA 805 require "substantive analysis" and documentation in order to adopt NFPA 805.
- 4. Section 4.2.3: In or around the third paragraph of Section 4.2.3 it may be appropriate to quote 10 CFR 50.3 in its entirety, since this regulation pertains directly to the discussion.
- 5. Section 4.7: The NFPA 805 appendices will have no regulatory standing as analytical tools under NFPA 805. The staff recommends that the generalizations about the appendices should be written with this in mind.
- 6. Section 6.4.3: The use of the undefined term "sanity check" in the second sentence of the second paragraph of section 6.4.3 confuses the discussion of monitoring programs and should be revised. The third sentence of the second paragraph should be reworded to begin "The scope of the review addresses the adequacy of ... "
- 7. Section 8.3: The eighth paragraph of section 8.3 states that a change evaluation (NFPA 805 Section 2.4.4) is not needed if a proposed change complies with the deterministic requirements of NFPA 805 Section 4.2.3; Section 8.3.1 the third bullet associated with Figure 8.3-1 it appears that the establishment of a deterministic success path would not

result in the need for a plant change evaluation..; the italicized example in section 8.3.2 describes a change involving appeal to the fact that the new shutdown system considered meets the deterministic approach (of NFPA 805) and as a result of this, the example concludes that "the application of the deterministic criteria is deemed to satisfy the performance criteria and no further analysis is required." However, a review of Figure 2.2 of NFPA 805 shows a requirement to perform a risk-informed change evaluation. Therefore, the guide should be revised to be consistent with the requirements of NFPA 805.

- 8. Section 8.3.4, page 59, "Initial Assessment." The statement, "The goal of the initial assessment is to structure either the fire modeling analysis OR the risk assessment such that the need for the other is eliminated by the bounding treatment of results," appears to contradict the basic principles of a risk-informed process. Fire modeling analysis results are an important complementary input to a fire risk assessment. Otherwise, low likelihood high consequence fire scenarios would be screened out (or eliminated) from the change evaluation process.
- 9. Section 8.3.5.2.2, page 71, "Fire Scenario Quantification." As discussed in bullet 1, the guidance for selecting the fire frequency value for fire scenario quantification, whether it is "....the value used in the fire IPEEE [Individual Plant Examinations External Events], or an updated value using the latest industry data....," needs further clarification. It is consistent with fire PRA practice to choose fire frequency values for identified fire sources based on plant-specific experience data, rather than fire frequency values based on generic industry data, unless the generic data provide higher frequency estimates.
- 10. The staff believes that NFPA 805 recognizes just two top-level approaches; namely compliance with either the deterministic criteria or the Performance-Based (PB) approach. Even though NFPA 805 distinguishes between PB and Risk-Informed (RI) methods, the RI approach is a tool used to support the PB approach and is not a standalone alternative to the deterministic or PB alternative approaches.
- 11. Terminology used throughout the document should be consistent. The current mixture of references to "existing" "current" "CLB" "risk informed performance based" "revised," "new" etc. licensing bases reduces the clarity of the document and makes certain sections difficult to interpret precisely. Need to clearly establish terminology that concisely and consistently identifies a fire protection license basis that incorporates compliance with NFPA 805.
- 12. The document should be written from the perspective of providing industry guidance for use by licensees and should not establish requirements, commitments, or expectations for the NRC.
- 13. Throughout the document, positions should be stated without justifying them in terms of what the NRC has said or thinks. For example, the phrases "the NRC views" and "the NRC has stated" in Section 1.2 are unnecessary and inappropriate. For example, section 3.0 second paragraph, third sentence is inappropriate direction; section 4.3.2 first paragraph, last sentence is inappropriate; section 4.6 beginning 'The NRC will...' is inappropriate.