

Non-Concurrence Process Record for NCP-2013-005

The U.S. Nuclear Regulatory Commission (NRC) strives to establish and maintain an environment that encourages all employees to promptly raise concerns and differing views without fear of reprisal and to promote methods for raising concerns that will enhance a strong safety culture and support the agency's mission.

Individuals are expected to discuss their views and concerns with their immediate supervisors on a regular, ongoing basis. If informal discussions do not resolve concerns, individuals have various mechanisms for expressing and having their concerns and differing views heard and considered by management.

Management Directive MD 10.158, "NRC Non-Concurrence Process," describes the Non-Concurrence Process (NCP). <http://pbadupws.nrc.gov/docs/ML0706/ML070660506.pdf>

The NCP allows employees to document their differing views and concerns early in the decision-making process, have them responded to, and attach them to proposed documents moving through the management approval chain.

NRC Form 757, Non-Concurrence Process is used to document the process.

Section A of the form includes the personal opinions, views, and concerns of an NRC employee.

Section B of the form includes the personal opinions and views of the NRC employee's immediate supervisor.

Section C of the form includes the agency's evaluation of the concerns and the agency's final position and outcome.

NOTE: Content in Sections A and B reflects personal opinions and views and does not represent official factual representation of the issues, nor official rationale for the agency decision. Section C includes the agency's official position on the facts, issues, and rationale for the final decision.

The agency's official position (i.e., the document that was the subject of the non-concurrence) is included in ADAMS Accession Number ML13101A337.

This record has been reviewed prior to public availability.

NON-CONCURRENCE PROCESS

NCP TRACKING NUMBER
NCP-2013-005

SECTION A - TO BE COMPLETED BY NON-CONCURRING INDIVIDUAL

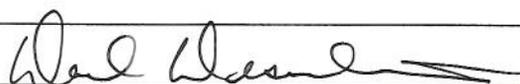
TITLE OF SUBJECT DOCUMENT Regulatory Basis to Address Nuclear Regulatory Commission Near-Term Task Force Recommendation 8		ADAMS ACCESSION NO. ML13101A324
DOCUMENT SIGNER Lawrence Kokajko		SIGNER PHONE NO. 415-1282
TITLE Dir. Division of Policy and Rulemaking	ORGANIZATION NRR/DPR	
NAME OF NON-CONCURRING INDIVIDUAL(S) David Desaulniers		PHONE NO. (301) 415-5918
TITLE Sr. Technical Advisor for Human Factors	ORGANIZATION NRO/DCIP	

DOCUMENT AUTHOR
 DOCUMENT CONTRIBUTOR
 DOCUMENT REVIEWER
 ON CONCURRENCE

REASONS FOR NON-CONCURRENCE AND PROPOSED ALTERNATIVES

Whereas I support the intent and general scope of the proposed rule making addressed by the regulatory basis document, the basis as currently written has several deficiencies that may compromise approval of the proposed rule making activity or the effectiveness of the rule making, should the Commission proceed with this action. These deficiencies include the following:

- Section 4.1 describes the issue of procedure integration and appropriately notes "That it is important to distinguish, for the purposes of this Regulatory Basis, the fundamental difference between procedures and guidelines." Although the document describes the difference it does not articulate why the difference is important to this proposed rule making. Among the reasons why the differences are important are the potential challenges to ensuring reliable human performance (such as effective transitions between documents) when integrating procedures where each step is "prescribed to be performed as written" with guidelines that provide "the latitude to respond as necessary." Additional and associated considerations may include the applicability of current agency requirements and enforcement/review guidance to the integrated, perhaps hybrid, procedures and guidelines. The regulatory basis does not address these regulatory and human factors issues, including, for example, expectations for industry application of human factors design and development methods to the integration of the procedures, including validation of the effectiveness and usability of the integrated procedures. Validation efforts would seem particularly relevant given the potential changes in command and control structure that would result from the proposed requirements described in Section 4.3. As a result, it is unclear as to whether the agency's regulatory framework, as augmented by the proposed rule making, would be adequate to achieve the objectives of this proposed rule making.
- Section 4.2 describes proposed requirements for SAMGs and additional supporting guidance and states that the NRC will not require individual licensees to submit their proposed procedures but rather "will have the option to perform reviews of the industry owners groups' revised SAMG technical guidelines and to perform follow-on inspections to determine the effectiveness of the overall accident mitigation strategies." The regulatory basis document does not address why the agency would limit its reviews to the generic technical guidelines and not require and review associated guidance (e.g., a writer's guide) for the translation of the technical guidelines into guidance appropriate for site decision makers and implementers. Such guidance could provide a basis for the "inspection of the procedures and guidelines" described later in this section and would provide some level of assurance of quality and standardization should the NRC's inspection activities be limited in scope.
- Section 4.3 describes the proposed requirements for command and control so as to ensure that licensee emergency response command and control structures are capable of responding to multi-unit severe accidents and large scale events. This section describes the current variability in command and control structures among the different reactor technologies and asserts that "the decision-making authority position should be standardized throughout the industry to allow Federal, state, and local organization to

SIGNATURE 		<input checked="" type="checkbox"/> CONTINUED IN SECTION D
		DATE 5-7-13

SEE SECTION E FOR IMPLEMENTATION GUIDANCE

NON-CONCURRENCE PROCESS

NCP TRACKING NUMBER
NCP-2013-005

TITLE OF SUBJECT DOCUMENT

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ADAMS ACCESSION NO.
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SECTION D: CONTINUATION PAGE

CONTINUATION OF SECTION

A

B

C

align their emergency response organizations according to the standard approach." Such a proposal would appear on face value to have considerable merit, however, the regulatory basis does not describe the basis for the current differences among the reactor technologies in their decision making structures and therefore it is not possible to weigh the apparent benefits of the proposed requirement against any unintended adverse impacts of a standardized decision making authority.

4. Section 4.5 describes a proposed requirement for exercises which would provide a performance-based means for evaluating procedures, command and control, and training. The draft regulatory basis asserts that "Several aspects of a licensee's response to a severe accident condition would require a full-scale drill or exercise to evaluate. These aspects include: command and control capability; coordination with Federal, state, and local agencies; deployment of assets; field equipment set-up and operation; effective simulation of environmental and radiological field conditions; and real-time resource allocation." Whereas it is agreed that a full-scale exercise provides the opportunity to identify performance challenges that may only be revealed when observing the integrated performance of all elements of the emergency response, such a position should not be used as a basis for dismissing the value of part-task simulations or similar methods, as would appear to be the case in this regulatory basis. Specifically, there appears to be no consideration of evaluating licensee severe accident mitigation capability through other means and on a periodic basis short of the proposed full-scale exercises. The absence of such an option is of particular concern given the that the rule language specifies an 8-year periodicity for full scale exercises (see Appendix C: Preliminary Proposed Rule Language, 10 CFR 50 - Domestic Licensing of Production and Utilization Facilities). The regulatory basis does not address why such a periodicity would be adequate to support timely identification of degradation in licensee performance in the absence of more frequent partial assessments of licensee performance in severe accident mitigation.

In addition to the above concerns with the draft regulatory basis, review of the proposed rule language in Appendix C: Preliminary Proposed Rule Language, resulted in identification of the following concerns:

1. Proposed 10 CFR 50.120(b)2(x) would add "Technical Support Center personnel responsible for implementation of severe accident mitigation strategies developed in accordance with §50.54(ii)(1)" to the list of personnel whose training and qualification must be established in accordance with a systems approach to training. The regulatory basis does not provide a rationale for why this requirement would be limited to Technical Support Center personnel. Other personnel, including those in emergency operations facilities may have responsibilities for severe accident mitigation. It is recommended that this proposed requirement be revised to more broadly encompass personnel responsible for severe accident mitigation by striking the words "Technical Support Center."
2. Proposed 10 CFR 50.120(b)2(x) specifically limits the proposed training requirement to individuals "responsible for implementation of severe accident mitigation strategies." By contrast, proposed 10 CFR 50.54 (ii)(1) requires "an integrated strategy for beyond design-basis event response and severe accident mitigation." As such, it would appear that the training requirement under proposed 10 CFR 50.120 would encompass a more limited scope of strategies than the scope of procedures under proposed 10 CFR 50.54, which in addition to severe accident mitigation would include beyond design-basis event response. The draft regulatory basis provides no rationale for why the scope of emergency response activities would differ for these two requirements. In addition, it is uncertain what the exact difference would be as the regulatory basis does not define the scope of procedures listed under proposed 10 CFR 50.54 (ii)(1) that would fall under "severe accident mitigation," and hence be within the scope of training required by proposed 10 CFR 50.120(b)2(x). As a consequence it is not possible to accurately assess the adequacy of the scope of training required by proposed 10 CFR 50.120(b)2(x).

Given that I believe that the identified areas of deficiency or lack of clarity in the regulatory basis and associated proposed rule language may compromise the approval and effectiveness of the proposed rule making, I request to register a non-concurrence with a recommendation that the above identified concerns be addressed before proceeding with the proposed rule making action.

SEE SECTION E FOR IMPLEMENTATION GUIDANCE

NON-CONCURRENCE PROCESS

NCP TRACKING NUMBER
NCP

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ADAMS ACCESSION NO.
ML13101A324

SECTION B - TO BE COMPLETED BY NON-CONCURRING INDIVIDUAL'S SUPERVISOR

NAME

Laura A. Dudes

TITLE

Director

PHONE NO.

415-3287

ORGANIZATION

Division of Construction Inspection and Operational Programs, Office of New Reactors

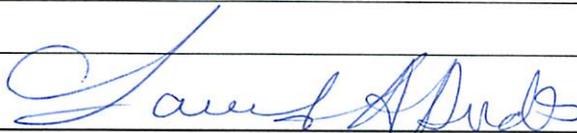
COMMENTS FOR THE NCP REVIEWER TO CONSIDER

I support the thoughtful insights outlined in section A of this NCP

I recommend considering the comments and issues identified Section A of this non-concurrence and incorporating them in the Agency's Regulatory Basis for NTTF Recommendation 8.

CONTINUED IN SECTION D

SIGNATURE



DATE

6/3/23

SEE SECTION E FOR IMPLEMENTATION GUIDANCE

NON-CONCURRENCE PROCESS

NCP TRACKING NUMBER
NCP-2013-005

TITLE OF SUBJECT DOCUMENT

Regulatory Basis to Address Nuclear Regulatory Commission Near-Term Task Force Recommendation 8

ADAMS ACCESSION NO.
ML13101A324

SECTION C - TO BE COMPLETED BY DOCUMENT SPONSOR

NAME

Ho NIEH

TITLE

DIRECTOR, NRR/DIRS

PHONE NO

301 415 1004

ORGANIZATION

NRR

SUMMARY OF ISSUES

SEE ATTACHED

ACTIONS TAKEN TO ADDRESS NON-CONCURRENCE

SEE ATTACHED

SIGNATURE-DOCUMENT SPONSOR



TITLE

DIRECTOR, NRR/DIRS

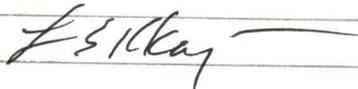
ORGANIZATION

NRR

DATE

08/28/2013

SIGNATURE-NCP REVIEWER



TITLE

Director, NRR/DPR

ORGANIZATION

NRR

DATE

30 Sept 2013

NCP OUTCOME

Non-Concurring Individual.



CONCURS

NON-CONCURS

WITHDRAWS NON-CONCURRENCE (i.e., discontinues process)

AVAILABILITY OF NCP FORM

Non-Concurring Individual.



WANTS NCP FORM PUBLIC

WANTS NCP FORM NON-PUBLIC

CONTINUED IN SECTION D

SEE SECTION E FOR IMPLEMENTATION GUIDANCE

NCP-2013-05 SECTION C – SUMMARY OF ISSUES

Issue 1 is related to section 4.1 of the regulatory basis document regarding integration of procedures and guidelines. Specifically, the regulatory basis does not explicitly describe the human factors and quality requirements that would be applied in developing and maintaining the integrated set of procedures and guidelines. For example, expectations regarding development and validation of the integrated procedures are not stated in the regulatory basis. The commenter suggests that an absence of details about regulatory requirements and review guidance for the integrated procedure sets could lead to (1) challenges during rulemaking due to inconsistent understanding among agency and industry stakeholders regarding the level of integration, validation, and quality of procedures to be required by the rulemaking and (2) challenges during enforcement if existing requirements and guidelines applicable to emergency operating procedures (e.g., 10 CFR 50, Appendix B and RG 1.33) are not amended to address extent to which they apply to all or part of the integrated procedure sets.

Issue 2 is related to section 4.2 of the regulatory basis requirement document regarding SAMGs and other supporting guidance, more specifically that it does not provide a sufficient basis for the proposed approach to NRC approval of these documents. The commenter suggests that limiting the regulatory basis description to cover review of generic technical guidelines (produced by the industry reactor type owners groups), as opposed to including a discussion of options to review writers guides or other materials used to translate the technical guidance into procedures/guidelines, provides little assurance that the generic technical guidelines will be effectively translated into procedures and guidelines that are usable by decision makers and implementers. This situation could present a challenge during subsequent inspections due to a lack of a clear regulatory requirement. Also, because it is not possible to fully recreate severe accident, extensive damage, and beyond design basis conditions during validation exercises of the integrated procedures, a more extensive NRC review during the development of these procedures and guidelines could provide additional assurance of the quality and usability of these and documents.

Issue 3 is related to section 4.3 of the regulatory basis document regarding the desire to establish a standardized command and control framework to support resource sharing and interactions with off-site entities. The commenter states that the current regulatory basis does not contain a detailed discussion of the current differences among reactor technologies and their decision making structures and an accompanying analysis of their relative merits is necessary in order to assess if standardization is indeed the best approach, taking into account any unintended consequences.

Issue 4 is related to section 4.5 of the regulatory basis document regarding drills and exercises. Specifically, the commenter suggests that there may be an over-reliance on full-scale exercises conducted on a fairly infrequent basis (8 years), without considering other means to conduct evaluations of capability on a more frequent basis that would better identify degradation in licensee performance.

Issue 5 is related to the preliminary rule language for 10CFR50.120(b)(2)(x) in Appendix C to the regulatory basis. Specifically, the language identifies “Technical Support Center personnel,”

NCP-2013-05 SECTION C – SUMMARY OF ISSUES

but should encompass a broader population of personnel having accident management responsibilities.

Issue 6 is also related to the proposed rule language for 10CFR50.120(b)(2)(x). By limiting proposed training requirements to “personnel responsible for implementation of severe accident mitigation strategies developed in accordance with 50.54(ii)(1),” it appears that the regulatory basis is narrowing the scope of training since the proposed rule language for 50.54(ii)(1) contains a broader set of procedures than those strictly required for severe accidents.

NCP-2013-05 SECTION C – ACTIONS TAKEN TO ADDRESS NON-CONCURRENCE

On July 16, 2013, I met with the non-concurring individual to understand the issues in the non-concurrence. During the meeting, I informed the non-concurring individual that after reading the non-concurrence, I agreed with some of the issues and disagreed with others. I offered to consider any modest changes to the regulatory basis that he would suggest in order to address their concerns. I also informed the non-concurring individual that I believed many of the issues could be addressed and discussed during the next stages of the rulemaking process and that I felt that many of the issues did not need to be resolved at such an early stage of the rulemaking process.

On August 21, 2013, the non-concurring individual and the non-concurring individuals from NCP-2013-006 provided me with their suggested changes to the regulatory basis document. I have reviewed their suggested changes and have recommended some revisions to the regulatory basis document based on their insights to provide for improved clarity and context. However, I did not find it appropriate to adopt their suggested changes where major sections of the regulatory basis were re-written. My rationale for not accepting these major re-writes is two-fold. First, the regulatory basis document has undergone significant internal and external review, including the JLD Steering Committee, an ACRS subcommittee, and industry and public comments via meetings and also a Federal Register Notice. As such, I believe the regulatory basis document has been well-vetted and provides an appropriate basis to continue with the rulemaking process. Second, I maintain that many of the issues raised by the non-concurring individuals can be addressed and discussed during the next stages of the rulemaking process. Therefore, I have provided the NRR/DIRS/IOLB branch chief and the rulemaking project manager with the entire set of suggested changes from the non-concurring individuals of NCP-2013-005 and NCP-2013-006 so that the working group can review and consider their comments during the next stages of the rulemaking process.

I have provided a revised regulatory basis document for review that includes my recommended changes based on the issues raised by the non-concurring individuals. The following sections provide my detailed response to the specific issues raised in NCP-2013-005.

Issue 1: The non-concurring individual raises valid points regarding appropriate standards and requirements for procedural development aimed at ensuring the set of integrated procedures and guidelines would be properly validated to support the objectives of this rulemaking. However, I believe that these considerations should be made during the development of implementation guidance for the proposed rule rather than at this early stage. The regulatory basis merely highlights a potential vulnerability that may exist with the current set of accident management procedures and guidelines and sets a high level goal of ensuring they support a coherent and comprehensive response to extreme conditions. By highlighting this area, the regulatory basis is the foundation for development of an optimal approach to achieve this goal. It is not necessary that these requirements be established at this stage. Instead, as stated in the regulatory basis, it is appropriate to work with industry and public stakeholders in developing a guidance document accompanying the proposed rule identifying the high level attributes that should be met by the integrated set of procedures.

NCP-2013-05 SECTION C – ACTIONS TAKEN TO ADDRESS NON-CONCURRENCE

The human factors considerations, including validation methods, are certainly areas that would be factored in the development of implementation guidance that could be endorsed by the NRC. In addition, some work on procedure development, particularly in regard to the industry's "FLEX" approach, has begun in response to NRC orders and are backed by Interim Staff Guidance (ISG) accompanying the order. It is appropriate to factor lessons learned from implementation of these procedures into the integrated set of procedures addressed by NTTF Recommendation 8. I recommend adding the consideration of human factors to section 4.1 of the regulatory basis to highlight the importance of this area.

Issue 2: I do not agree with the views of the non-concurring individual on this issue. Rather, I believe that the approach delineated in the regulatory basis provides sufficient framework for establishment of procedure and guideline adequacy and is consistent with the intent of the NTTF report and Commission direction contained in the SRM for SECY-11-0137. The proposed approach is aligned with the regulatory approach taken in the development of EDMGs by the industry to satisfy the requirements of 10 CFR 50.54(hh)(2) in that it relies upon performance based inspection following implementation instead of advanced approval.

It should be noted that the procedures covered by this rulemaking are already largely in existence (EOPs, SAMGs, EDMGs), or under development (FLEX guidelines in response to the SBO/mitigating strategies order under NTTF Recommendation 4). No information has emerged to suggest that the procedures are so lacking that they would require wholesale review by the NRC. The industry has a mature program with respect to development of operational procedures, so there is some level of confidence that capability exists to develop the strengthened and integrated procedures required by this rulemaking. By focusing on endorsement of implementing guidance delineating high level attributes of these procedures/guidelines (in contrast to a detailed review) the NRC staff and industry can better apply resources in other areas that may require more attention. Also, this approach is in line with the NTTF 8 recommendation that plant owners groups undertake procedure integration/strengthening activities rather than each licensee developing its own approach and that the NRC publish Regulatory Guides for endorsing acceptable approaches submitted by the industry. Any such Regulatory Guide would certainly consider elements such as procedure writer's guides, as the non-concurring individual suggests, in establishing high-level regulatory guidance. Development of this detailed guidance, however, is best left to the proposed rule phase of this rulemaking. Also, if during the development of the proposed rule and implementation guidance, it becomes clear that some degree of pre-approval by the NRC is necessary to ensure adequacy of the integrated set of procedures, this can be pursued. This regulatory basis only reflects the regulatory thinking at this current point in time, and specific details can be adjusted in the implementing guidance to ensure the regulatory gap identified in this basis is properly addressed. I do not recommend any changes be made to the regulatory basis as a result of the review of Issue #2.

Issue 3: I do not believe that a detailed discussion of the various approaches to command and control used at different reactor technology types is necessary at this point in the rulemaking process. Rather, these issues will be fully explored during development of implementing guidance in the proposed rule phase. The plant owners groups are formulating an optimal

NCP-2013-05 SECTION C – ACTIONS TAKEN TO ADDRESS NON-CONCURRENCE

approach to beyond design basis accidents with the eventual goal of supporting a standard industry approach. Part of that effort would examine any unintended consequences of shifting to a more unified approach. Additionally, work in progress to address the SBO and mitigating strategies orders will yield insights that can be used to inform the overall effort to establish an appropriate command and control structure. While I agree that the non-concurring individual's concerns should be addressed, I think the appropriate time to do so is during the proposed rule phase of rulemaking. Notwithstanding, I recommend adding the consideration of fleet-level decision making authorities to section 4.3 to further highlight the need to address varying NSSS designs when developing approaches to accident management.

Issue 4: I agree with the non-concurring individual regarding exercises and drills. During the concurrence period for the regulatory basis, comments were received from NSIR and a member of the JLD steering committee that expressed concern that too much emphasis was being placed on "full-scale" exercises as being the only method to fully ensure licensee capability. The document authors agreed with this concern and acknowledge that full-scale exercises, while effective, are not the only way to achieve and monitor proficiency. Originally, the emphasis on full-scale exercises was stressed to ensure that some degree of practical demonstration be conducted, in contrast to exclusive use of table top exercises/discussions. The authors recognize that while full-scale drills certainly would provide performance based, integrated, real-time insights, there are many opportunities to practice and evaluate individual aspects of on-site accident management in other settings (such as part task-simulations and walk-throughs). Accordingly, the regulatory basis language related to exercises in sections 4.5 and 6.2 has been revised to reflect these practices. Additionally, the periodicity is no longer specified in the regulatory basis, but will rather be established as part of the rule implementation guidance in a later phase of this rulemaking activity. I believe that the changes already made in response to this comment and those from NSIR and the JLD Steering Committee are sufficient to address Issue #4.

Issue 5: I agree that the preliminary rule language for 10 CFR 50.120(b)(2)(x) in Appendix C to the regulatory basis identifying "Technical Support Center personnel" could be construed as too narrow. A similar comment was received from NSIR during the concurrence process, and the specific reference to TSC personnel was struck from the preliminary rule language and elsewhere in the document. I believe that this change should address the non-concurring individual's concern. I believe that the changes already made in response to comments from NSIR are sufficient to address Issue #5. Also, I recommend adding a discussion to section 4.4 to highlight training needs for other licensee personnel that may have a role in accident management so this topic may be further developed during the proposed rule phase.

Issue 6: I agree that the preliminary rule language for 10 CFR 50.120(b)(2)(x) in Appendix C to the regulatory basis identifying "severe accident mitigation strategies" could be improved to state "beyond design basis and severe accident mitigation strategies." A similar change was made to the 10 CFR 50.54(ii)(1) preliminary language during the standard concurrence process. This change has already been made to the regulatory basis and should also be sufficient to address Issue #6.