

NON-CONCURRENCE PROCESS COVER PAGE

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.

Employees are expected to discuss their views and concerns with their immediate supervisors on a regular, ongoing basis. If informal discussions do not resolve concerns, employees 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://nrcweb.nrc.gov:8600/policy/directives/catalog/md10.158.pdf>.

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

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 a non-concurring NRC employee.

Section B of the form includes the personal opinions and views of the non-concurring 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.

At the end of the process, the non-concurring employee(s):

- ☐ Concurred
- ☒ Continued to non-concur
- ☐ Agreed with some of the changes to the subject document, but continued to non-concur
- ☐ Requested that the process be discontinued
 - ☐ The non-concurring employee(s) requested that the record be non-public.
 - ☐ The non-concurring employee(s) requested that the record be public.
- ☐ This record is non-public and for official use only.
- ☒ This record has been reviewed and approved for public dissemination.



NON-CONCURRENCE PROCESS

NCP-2016-003
RNF 2/26/2016

SECTION A - TO BE COMPLETED BY NON-CONCURRING EMPLOYEE

TITLE OF SUBJECT DOCUMENT IMC 0308, Attachment 3, "Basis for the Significance Determination Process"		ADAMS ACCESSION NO. ML15268A268
DOCUMENT SIGNER Scott Morris		SIGNER TELEPHONE NO. (301) 415-1004

TITLE Director, Division of Inspection and Regional Support	ORGANIZATION NRR/DIRS
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NAME OF NON-CONCURRING EMPLOYEE(S) Stephen Vaughn	TELEPHONE NUMBER (301) 415-3640
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TITLE Reliability and Risk Analyst	ORGANIZATION NMSS/FCSE/PORS
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☐ DOCUMENT AUTHOR ☒ DOCUMENT CONTRIBUTOR ☐ DOCUMENT REVIEWER ☐ ON CONCURRENCE

NON-CONCURRING EMPLOYEE'S SUPERVISOR
Margie Kotzalas

TITLE Chief, Programmatic Oversight and Regional Support	ORGANIZATION NMSS/FCSE/PORS
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☒ I WOULD LIKE MY NON-CONCURRENCE CONSIDERED AND WOULD LIKE A WRITTEN EVALUATION IN SECTION B AND C.

☐ I WOULD LIKE MY NON-CONCURRENCE CONSIDERED, BUT A WRITTEN EVALUATION IN SECTIONS B AND C IS NOT NECESSARY.

WHEN THE PROCESS IS COMPLETE, I WOULD LIKE THE NCP FORM: ☒ PUBLIC ☐ NON-PUBLIC

REASONS FOR THE NON-CONCURRENCE, POTENTIAL IMPACT ON MISSION, AND THE PROPOSED ALTERNATIVES
(use continuation pages or attach Word document)

In my professional opinion the proposed revision to IMC 0308, Attachment 3, "Significance Determination Process Basis Document" does not fully and effectively resolve key technical and policy issues and does not adhere to the Principle of Good Regulation of CLARITY.

The proposed revision to IMC 0308, Attachment 3 does not clearly communicate and justify some key technical and policy aspects that form the basis of the Significance Determination Process (SDP). The Agency position communicated in this proposed draft will not be readily understood and will not be easily applied. More specifically:

1. The proposed revision to IMC 0308, Attachment 3, Section 8.2 does not accurately describe the relationship between incremental conditional core damage probability (iCCDP) and delta core damage frequency (CDF). In the second paragraph the description of iCCDP appears to describe a mathematical process but it is difficult for the reader to follow the mathematical logic when provided with a narrative.

2. The third paragraph of Section 8.2 provides an option of setting an initiating event frequency to 1.0 event per year or a probability of 1.0 in the given year. However, the proposed revision fails to describe how the use of a frequency or probability approach would produce equivalent outcomes. Furthermore, the focus on the 24-hour mission time after the initiating event adds confusion because the same mission time of 24-hours is used for the majority of the mitigating systems/components, which were the focus of the approach outlined in the second paragraph. As a result, this adds another element of confusion between the relationship between the different, yet similar, approaches in the second and third paragraphs of Section 8.2.

3. As noted in Section 8.1, the SDP adopts the use of the CDF metric based on the guidance in Regulatory Guide 1.174. However, when the relationship between iCCDP and delta CDF is not technically justified and communicated effectively, it is not clear to stakeholders that the approved metric (i.e., CDF) is being used, and as such, has the potential to question adherence to policy. Overall, the lack of clarity in describing these SDP concepts will most likely result in continued confusion by stakeholders, both internal and external, and fail to meet the CLARITY principle. "See the Continuation Section for BACKGROUND information."

SIGNATURE

DATE

2/25/16

NON-CONCURRENCE PROCESS

NCP-2016-003

TITLE OF SUBJECT DOCUMENT

IMC 0308, Attachment 3, "Basis for the Significance Determination Process"

ADAMS ACCESSION NO.

ML15268A268

CONTINUATION OF SECTION



A



B



C



BACKGROUND -

From January 2013 until May 2015 I actively participated in meetings, both internal and public, that focused on a particular technical and policy concern with the implementation of the Significance Determination Process (SDP). The specific concern was associated with deficient licensee performance that resulted in the occurrence of an initiating event and the application of the core damage frequency (CDF) and conditional core damage probability (CCDP) consequence metrics. As the SDP program manager in DIRS/IPAB, I organized and led three public meetings dedicated to this specific topic on 2/26/2015 (ML15070A050), 11/20/2014 (ML14338A509), and 7/24/2014 (ML14219A390). During these public meetings several technical and policy concerns were discussed and stakeholders slowly began to reach alignment on some of the issues.

After the last public meeting that I led on 2/26/15 there were basically only two stakeholder concerns that were not aligned. The overarching goal for the staff was to revise IMC 0308, Attachment 3, "Significance Determination Process Basis Document" and RASP, Volume 1, Section 8 to bring both of those documents into alignment. By way of background, those two documents lost alignment when a revision to RASP, Volume 1 was issued in January 2013 and recommended the use of the CCDP metric (with no deviation from the baseline risk profile) as a model for characterizing the safety significance of initiating event occurrences resulting from deficient performance. As the SDP program lead, I began working, from early March until the end of May 2015, to revise IMC 0308, Attachment 3 based on stakeholder feedback from the previous public meetings. Since I moved from NRR to NMSS in early May 2015, I provided my draft revision to NRR/DIRS/IPAB and NRR/DRA/APHB for their review prior to the formal 30-day comment period. In August 2015 some staff in IPAB and APHB had concerns with my draft revision and from August through October 2015 we met and discussed our perspectives. The document went out for the official 30-day comment period in the fall of 2015 and IPAB and APHB incorporated the comments as appropriate.

I had, and continue to have, many reservations with the draft document and have shared them with APHB and IPAB staff in writing and in person. At a high-level I believe that the final product (i.e., the revision to IMC 0308, Attachment 3) is not an accurate reflection of the effort that has been expended, via public and internal meetings, over the past the past 3 years. As such, this revision will, in my professional opinion, continue to leave some key technical and policy issues unresolved.

NRC FORM 757 NRC MD 10.158 (07-2015)		U. S. NUCLEAR REGULATORY COMMISSION		NCP TRACKING NUMBER	
NON-CONCURRENCE PROCESS					
SECTION B - TO BE COMPLETED BY NON-CONCURRING EMPLOYEE'S SUPERVISOR					
TITLE OF SUBJECT DOCUMENT IMC 0308, Attachment 3, "Basis for the Significance Determination Process"				ADAMS ACCESSION NO. ML15268A268	
NAME Margie Kotzalas					
TITLE Branch Chief				TELEPHONE NUMBER (301) 415-7298	
ORGANIZATION NMSS/FCSE/PORSEB					
COMMENTS FOR THE NCP REVIEWER TO CONSIDER (use continuation pages or attach Word document) I have no comments.					
SIGNATURE /RA/				DATE	

NRC FORM 757 NRC MD 10.158 (07-2015)		U. S. NUCLEAR REGULATORY COMMISSION		NCP TRACKING NUMBER NCP-2016-003	
NON-CONCURRENCE PROCESS					
SECTION C - TO BE COMPLETED BY NCP COORDINATOR					
TITLE OF SUBJECT DOCUMENT IMC 0308, Attachment 3, "Basis for the Significance Determination Process"				ADAMS ACCESSION NO. ML15268A268	
NAME Zachary R. Hollcraft					
TITLE Reactor Oversight Engineer				TELEPHONE NUMBER (301) 415-3024	
ORGANIZATION NRR/DIRS/IPAB					
AGREED UPON SUMMARY OF ISSUES (use continuation pages or attach Word document) 1. It lacks the technical justification necessary in a basis document to demonstrate to stakeholders that iCCDP is equivalent to Δ CDF, resulting in possible confusion and some unresolved technical and policy issues. 2. It suggests the use of an initiating event frequency (IEF) of 1.0 when an initiating event occurs as a result of deficient performance; this guidance is more fitting for the RASP document, not the SDP technical basis document. 3. It does not consider the occurrence of an initiating event caused by deficient performance as a "degraded condition", the initial proposed version defined the phrase "degraded condition" to be applicable to all seven cornerstones and not limit it to just mitigating systems.					
EVALUATION OF NON-CONCURRENCE AND RATIONALE FOR DECISION (use continuation pages or attach Word document) See attached					
TYPED NAME OF NCP COORDINATOR Zachary Hollcraft			TITLE Reactor Engineer		
ORGANIZATION NRR/DIRS/IPAB					
SIGNATURE--NCP COORDINATOR 				DATE 4/25/16	
TYPED NAME OF NCP APPROVER Scott Morris			TITLE Director		
ORGANIZATION Division of Inspection and Regional Support					
SIGNATURE--NCP APPROVER 				DATE 5/10/16	

Section C

Evaluation of Nonconcurrence and Rational for Decision

The January 2013 update to the Risk Assessment Standardization Project (RASP) handbook incorporated the use of the conditional core damage probability (CCDP) metric into the calculation of the safety significance for findings involving the occurrence of an initiating event. The RASP handbook is an internal document used as a guideline by NRC risk analysts (e.g., Senior Risk Analysts when performing licensee performance deficiency significance determinations). This update was considered a significant change and created both technical and policy concerns with Inspection Manual Chapters (IMC) 0609, "Significance Determination Process" and 0308, "Reactor Oversight Process Basis Document," which are higher-tiered documents.

Multiple public and internal meetings were held to discuss this change and how to clarify the guidance in IMC 0308, Attachment 3; "Significance Determination Process Basis Document." Specifically, how to justify the use of the incremental conditional core damage probability (iCCDP) metric as essentially mathematically equivalent to delta core damage frequency (Δ CDF), and therefore still meeting the original intent of the significance determination process.

Throughout the development of the revision to IMC 0308 Att. 3, the staff worked with the non-concurring individual to adjudicate his comments; however consensus could not be reached on all of the individual's concerns. The staff's response to the three specific issues are summarized below.

1. The initial proposed revision to IMC 0308 Att. 3 included considerably more discussion on the relationship between iCCDP and Δ CDF; this discussion included graphs and equations to show their equivalency in both mitigating systems and initiating events examples. NRR staff disagrees with the inclusion of this additional discussion because that level of detail is not necessary in this technical basis document and could potentially create additional confusion. DIRS and DRA staff proposed a shorter final draft that more clearly and concisely communicates the policy without the need for lengthy discussion. The general consensus of the NRC staff that reviewed the final draft was that the shorter version clearly made the salient points.
2. Defining the initiating event frequency for a degraded condition as 1.0 event per year is a contentious issue that was left out of the initial draft of IMC 0308 Att. 3. However, NRR staff determined that there is no reason to exclude this high-level concept from the SDP assessment approach as described in IMC 0308 Att. 3. This is consistent with the goals of openness and clarity. For that reason, it was added in the final version.
3. The first paragraph of section 0308.05 defines "degraded condition" as being pertinent to all cornerstones. While section 0308.08.02 discusses degraded conditions and initiating events separately, the intent is not to divest the concept of a "degraded condition" from the Initiating Events cornerstone but to discuss the difference in how a degraded condition and an initiating event are modeled in a PRA.