

April 29, 2016

MEMORANDUM TO: Joseph D. Anderson, Branch Chief  
Operating Reactor Licensing and Outreach Branch  
Division of Preparedness and Response  
Office of Nuclear Security and Incidence Response

FROM: Michael B. Norris, Team Leader */ra/*  
Operating Reactor Licensing and Outreach Branch  
Division of Preparedness and Response  
Office of Nuclear Security and Incidence Response

SUBJECT: RESPONSE TO PUBLIC COMMENTS ON DRAFT REGULATORY  
ISSUE SUMMARY 2016-XX, "LICENSE AMENDMENT  
REQUESTS FOR CHANGES TO EMERGENCY RESPONSE  
ORGANIZATION STAFFING AND AUGMENTATION"

A notice of opportunity for public comment on this Regulatory Issue Summary (RIS) was published in the *Federal Register* (FR) (81 FR 13849) on March 15, 2016, for a 30-day comment period. Three organizations provided submissions, which were considered before issuance of this RIS in final form. Specific comments were received in the submissions from Nuclear Energy Institute (NEI) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16106A106), and Energy Compliance Consultants, LLC (ADAMS Accession No. ML16106A302). The Exelon Generation Company, LLC submission did not provide additional comments, but rather stated Exelon's support for the comments submitted by NEI on behalf of the industry (ADAMS Accession No. ML16117A088). Enclosed are the staff responses to all public comments.

Enclosure:  
As stated

CONTACT: Jonathan A. Fiske, NSIR/DPR/IRIB  
301-287-9228

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**ADAMS ACCESSION No.: ML16124A001**

\*concurrence via email

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<b>DATE</b>	04/27/16	05/09/16	05/27/16	04/29/16

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**RESPONSE TO PUBLIC COMMENTS ON  
U.S. NUCLEAR REGULATORY COMMISSION  
DRAFT REGULATORY ISSUE SUMMARY 2016-XX  
“LICENSE AMENDMENT REQUESTS FOR CHANGES TO EMERGENCY RESPONSE  
ORGANIZATION STAFFING AND AUGMENTATION”**

Comments on the subject draft regulatory issue summary are available electronically at the U.S. Nuclear Regulatory Commission’s (NRC’s) electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into the Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents. Comments were received from the following individuals or groups:

<b>Letter No.</b>	<b>ADAMS Accession No.</b>	<b>Commenter Affiliation</b>	<b>Commenter Name</b>
1	ML16106A106	Nuclear Energy Institute (NEI)	David Young
2	ML16106A302	Energy Compliance Consultants, LLC (ECC)	Monica Ray
3	ML16117A088	Exelon Generation Company, LLC (Exelon)	Davis Helker

This document lists each public comment and provides a response to each one. For each comment, the NRC has either repeated the comment as written by the commenter, or summarized the comment for conciseness and clarity. Each comment is referred to in the form [XXX]-[YYY]-[ZZZ], where: [XXX] represents the Commenter Affiliation from the above table, [YYY] represents the Letter No. from the above table, and [ZZZ] represents the sequential comment number from that commenter.

**Comments**

*NEI-001-001: Page 4, first paragraph under “Summary of Issue,” third sentence, delete the hyphen after “NEI-10-05.” Should read “NEI 10-05.”*

**NRC Response:** The NRC agrees with the comment. The hyphen is not part of the title, and should not be present. Changes were made to the document as a result of this comment. Specifically, the referenced hyphen has been deleted.

*NEI-001-002: Page 5, first paragraph under “Notification and Communication,” second sentence, “[f]or example, the 30-minute responder may be eliminated if an extra on-shift position*

Enclosure

*is identified to fill this role.” The paragraph already states that, “[t]hese on-shift positions should not be assigned other tasks that may prevent the timely performance of their assigned notification or communication functions as specified in the emergency plan.” This is the operative requirement from 10 CFR 50 [Title 10 of the Code of Federal Regulations (10 CFR) Part 50], Appendix E, Section IV.A.9; therefore, recommend deleting the unnecessary and potentially confusing term, “extra.” This comment also applies to the fourth sentence of the same paragraph.*

NRC Response: The NRC agrees with the comment. The term “extra” is not necessary and could potentially be confusing. Changes to the document were made as a result of this comment. Specifically, the referenced term “extra” has been removed, and the fourth sentence was revised to better clarify the staff’s intent.

*NEI-001-003: Page 6, first paragraph under “Off-site Dose Assessment,” first sentence, “[t]o adequately support the proposed extension of the one 30-minute responder, licensees should identify an extra on-shift position as capable of initially filling the 30-minute responder’s role of ‘off-site dose assessment.’” The paragraph already states that, “NRC staff will review whether this position is assigned other tasks that may prevent the timely performance of its assigned off-site dose assessment functions as specified in the emergency plan.” This is the operative requirement from 10 CFR 50, Appendix E, Section IV.A.9; therefore, recommend deleting the unnecessary and potentially confusing term, “extra.”*

NRC Response: The NRC agrees with the comment. The term “extra” is not necessary and could potentially be confusing. Changes to the document were made as a result of this comment. Specifically, the referenced term “extra” has been removed, and the fourth sentence was revised to better clarify the staff’s intent.

*NEI-001-004: Page 6, first paragraph under “Off-site Surveys / On-site (out-of-plant) / In-Plant Surveys,” last sentence. To improve clarity, suggest rewording this sentence to read, “[a]dditionally, the change basis should describe supportive features that promote timely and effective performance of off-site dose projections (e.g., an automated computer program), and reliance upon installed and calibrated plant effluent monitors that would be available under accident conditions.”*

NRC Response: The NRC agrees with the comment. The sentence should be reworded for clarity. Changes to the document were made as a result of this comment. Specifically, the recommended wording was incorporated.

*NEI-001-005: Page 7, first paragraph under “Technical Support,” fourth sentence. To improve clarity, suggest rewording this sentence to read, “[t]he licensee should also show that augmenting staff with core/thermal hydraulics expertise will be available within an appropriate time frame.”*

NRC Response: The NRC agrees with the comment. The sentence should be reworded for clarity. Changes to the document were made as a result of this comment. Specifically, the recommended wording was incorporated.

*NEI-001-006: Page 9, first paragraph under “Chemistry/Radio-chemistry,” second sentence. To improve clarity, suggest rewording this sentence to read, “[t]o adequately support an extension of this responder beyond 60 minutes, the licensee should demonstrate that no chemistry-related task is required to be performed within 90 minutes of an emergency declaration (i.e., a task that is necessary for implementation of emergency operating procedures or operation of safety-related equipment), or that all such tasks can be performed by the on-shift chemistry technician with no collateral duty concerns.”*

NRC Response: The NRC agrees with the comment. The sentence should be reworded for clarity. Changes to the document were made as a result of this comment. Specifically, the recommended wording was incorporated.

*NEI-001-007: Page 10, first paragraph under “Technical Support.” To improve clarity, suggest rewording this paragraph to read, “[p]er the guidance of NUREG-0654 [NUREG-0654/FEMA-REP-1, Revision 1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants”] Table B-1, “Electrical” and “Mechanical” expertise should be provided by two 60-minute responders under the “Technical Support” major task. To adequately justify an extension of these responders, the licensee should show that on-shift positions are capable of filling these roles during the 90-minute period after an emergency declaration. This will require a review of site procedures to identify the technical support tasks requiring electrical and mechanical expertise that must be performed within the first 90 minutes of an emergency. The licensee should then show that there are on-shift positions with the necessary expertise to perform the identified technical support functions, and that such performance will not prevent the timely performance of their other assigned functions as specified in the emergency plan. The justification should identify procedure, training and information technology advances made since the implementation of NUREG-0654 that facilitate technical support assessments by on-shift personnel or obviate the need for such assessments within 90 minutes of an emergency declaration. Additionally, the change justification should address the ability of on-shift positions to perform troubleshooting activities without interfering with their primary emergency response duties (e.g., on-shift electrical or mechanical maintenance personnel with supervisory personnel to provide oversight).”*

NRC Response: The NRC agrees with the comment. The sentence should be reworded for clarity. Changes to the document were made as a result of this comment. Specifically, the recommended wording was incorporated.

*NEI-001-008: Page 6, “Off-site Surveys / On-site (out-of-plant) / In-Plant Surveys,” and pages 7 & 8, “Radiation Protection.” These two sections state, on page 6 – “[t]o adequately support an extension in the response time for the two 30-minute responders for on-site (out-of-plant) and in-plant surveys to 60 minutes, the licensee should show that the on-shift HP [Health Physics]*

*staffing includes one HP technician per unit for a multi-unit site or a minimum of two HP technicians on shift for a single unit site.” On pages 7 & 8 – “[t]o adequately support an extension in response timing of the two radiation protection 30-minute responders, the licensee should show that the on-shift HP staffing includes one HP technician per unit for a multi-unit site or a minimum of two HP technicians for a single unit site on shift.” For clarity, text should be added to one or both locations to indicate that these references are to the same HP technicians and are not additive (i.e., the expectation is not for a total of 2 HP technicians per unit for a multi-unit site or 4 HP technicians for a single unit site).*

NRC Response: The NRC agrees with the comment. Additional clarification should be provided. Changes to the document were made as a result of this comment. Specifically, the requested clarification was provided.

NEI-001-009: *Page 9, “Off-site Surveys / On-site (out-of-plant) / In-Plant Surveys,” and page 10, “Radiation Protection.” These two sections state, on page 9 – “[t]o adequately support an extension of these responders to 90 minutes, the licensee should show that the on-shift HP staffing includes a minimum of four HP technicians.” On page 10, “[t]o adequately support an extension in response timing of the two radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians.” For clarity, text should be added to one or both locations to indicate that these references are to the same HP technicians and are not additive (i.e., the expectation is not for a total of 8 HP technicians). Also, both examples should make clear that these 4 HP technicians encompass, and are not in addition to, the 2 HP technicians discussed in the 30-minute to 60-minute section (i.e., the expectation is not for a total of 6 HP technicians).*

NRC Response: The NRC agrees with the comment. Additional clarification should be provided. Changes to the document were made as a result of this comment. Specifically, the requested clarification was provided.

NEI-001-010: *This RIS should make clear that the functions/tasks associated with the implementation of mitigating strategies for Beyond Design Basis (BDB) events, those required by NRC Orders EA-12-049 [Mitigation Strategies Order] and EA-12-051 [Spent Fuel Pool Instrumentation Order], and addressed by guidance in NEI 12-01 [Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities] and 12-06 [Diverse and Flexible Coping Strategies (FLEX) Implementation Guide], should not be considered in ERO staffing change assessments unless such functions/task are described in the site emergency plan. The site staffing assessment performed to respond to NRC letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident, dated March 12, 2012, demonstrates the availability of sufficient staff to implement the emergency plan concurrently with BDB event response strategies and guidelines (i.e., those required to maintain or restore the functions of core cooling, containment, and spent fuel pool cooling). Performance and maintenance of this BDB event response staffing assessment are addressed in the new requirements of the proposed Mitigation of Beyond Design Basis Events (MBDBE) Rule (80 FR [Federal Register] 70609).*

NRC Response: The NRC agrees with the comment. Additional clarification should be provided. Changes to the document were made as a result of this comment. Specifically, the requested clarification was provided.

*ECC-002-001: Page 3, "Criteria to be Considered for the On-Shift Staffing Analysis." Recommend replacement of 'contrary' with 'unlike.' Use of the term 'contrary' could imply incongruence between NRC endorsed documents. Use of the term 'unlike' points to the differing purposes behind the documents without suggesting that documents might contradict one another.*

NRC Response: The NRC agrees with this comment. "Unlike" more appropriately conveys the NRC's intent. Changes to the document were made as a result of this comment. Specifically, the word "contrary" was changed to "unlike."

*ECC-002-002: Page 5, "Notification and Communication." Recommend addition of reference wording from NUREG-0654 Table B-1 to beginning of the section to add consistency throughout the document. Recommend removal of the word 'extra' as this term is undefined in relation to existing or SER [safety evaluation report] approved staffing for a site. Removal of this word does not alter meaning or intent. Reword to align tenses with previous reference to an on-shift position. Recommend removal of the word 'installed' as an unnecessary descriptor which could limit application of future communications technologies or the addition of 'or information technologies' as is used in the Offsite Dose Assessment section of this document so that advantage may be taken of future technical capabilities for support of on-shift emergency functions.*

NRC Response: The NRC agrees with the comment. Table B-1 should be included for consistency, and the other terms should be removed for clarity and intended flexibility. Changes to the document were made as a result of this comment. Specifically, referenced wording from "NUREG-0654, Table B-1" was incorporated, and the referenced uses of "extra" and "installed" were removed.

*ECC-002-003: Page 6, "Offsite Dose Assessment." Recommend addition of reference wording from NUREG-0654 Table B-1 to beginning of the section to add consistency throughout the document. Recommend adding the phrase 'elimination or' to the first sentence in order to maintain consistency in wording with the section on Notification and Communication and Repair and Corrective Actions. Recommend removal of the word 'extra' as this term is undefined in relation to existing or SER approved staffing for a site. Removal of this word does not alter meaning or intent.*

NRC Response: The NRC agrees with the comment. Table B-1 should be included for consistency, the addition of "elimination or" should be included for consistency, and "extra" should be included for clarity. Specifically, referenced wording from "NUREG-0654, Table B-1" was incorporated, the phrase "elimination or" was added to the first sentence, and the referenced use of "extra" was removed.

*ECC-002-004: Page 6, “Off-site Surveys / On-site (out of plant) / In-Plant Surveys.” Delete paragraph associated with task qualification as identified in HPPOS. Per the NRC Website, “The Health Physics Positions (HPPOS) Database (NUREG/CR-5569, Rev. 1, 1994) is a compilation of NRC staff positions on a wide range of topics involving radiation protection (health physics). It consists of over 300 documents in the forms of letters, memoranda, and excerpts from technical reports. The HPPOS Database was developed by NRC Headquarters and Regional Offices to help ensure uniformity in inspections, enforcement, and licensing actions. Many of the positions in the HPPOS Database are outdated, but the NRC staff has decided to make the database available to the public because it contains much valuable information on health physics issues related to regulation. The positions should not be considered authoritative by themselves and should not be relied on for regulatory compliance.”*

NRC Response: The NRC disagrees with this comment. No changes were made to the document as a result of this comment. As used in this RIS, HPPOS-238, “Health Physics Position on Task Qualification of HP Technicians,” provides guidance, which remains current, on certain emergency planning tasks and job assignments that require in-depth knowledge and should only be performed by fully qualified, American National Standards Institute (ANSI) HP technicians.

*ECC-002-005: Page 6, “Technical Support.” Recommend addition of reference wording from NUREG-0654 Table B-1 to beginning of the section to add consistency throughout the document. Recommend adding the phrase ‘elimination or’ to the first sentence in order to maintain consistency in wording with the section on Notification and Communication and Repair and Corrective Actions. Add “30-” to sentence to address a missing reference.*

NRC Response: The NRC agrees with the comment. Table B-1 should be included for consistency, and the addition of “elimination or” should be included for consistency. Changes to the document were made as a result of this comment. Specifically, referenced wording from “NUREG-0654, Table B-1” was incorporated, the phrase “elimination or” was added to the first sentence. The “missing reference” is not missing in the RIS.

*ECC-002-006: Page 8, “Radiation Protection.” Delete sentence associated with task qualification as identified in HPPOS. HPPOS documents should be eliminated as they are an inappropriate reference. Per the NRC Website, “The Health Physics Positions (HPPOS) Database (NUREG/CR-5569, Rev. 1, 1994) is a compilation of NRC staff positions on a wide range of topics involving radiation protection (health physics). It consists of over 300 documents in the forms of letters, memoranda, and excerpts from technical reports. The HPPOS Database was developed by NRC Headquarters and Regional Offices to help ensure uniformity in inspections, enforcement, and licensing actions. Many of the positions in the HPPOS Database are outdated, but the NRC staff has decided to make the database available to the public because it contains much valuable information on health physics issues related to regulation. The positions should not be considered authoritative by themselves and should not be relied on for regulatory compliance.”*

NRC Response: The NRC disagrees with this comment. No changes were made to the document as a result of this comment. As used in this RIS, HPPOS-238 provides guidance,

which remains current, on certain emergency planning tasks and job assignments that require in-depth knowledge and should only be performed by fully qualified ANSI HP technicians.

*ECC-002-007: Page 8, "Notification and Communication." Recommend deletion of the reference to 'two' individuals. This will maintain consistency with wording in previous sections. Determination of the required number of individuals on-shift to perform the function while not being assigned other tasks that prevent timely performance of the assigned functions is completed by the site in accordance with 10 CFR 50 Appendix E IV.A.9.*

NRC Response: The NRC disagrees with this comment. No changes were made to the document as a result of this comment. The 'two' individuals are augmented positions, and as such, do not fall under the determination in accordance with 10 CFR 50 Appendix E IV.A.9. Those determinations are only for the on shift positions as discussed in the "Summary of Issue" section of the RIS.

*ECC-002-008: Page 9, "Emergency Operations Facility Director." Recommend deletion of EOF [emergency operations facility] from sentence. Sites have identified additional resources which are available for performance of lead activities in response to events. Removal of this word maintains that flexibility and does not alter meaning or intent of the paragraph.*

NRC Response: The NRC agrees with the comment that removal of the term "EOF" allows for the intended flexibility. Changes to the document were made as a result of this comment. Specifically, referenced use of the term "EOF" was removed.

*ECC-002-009: As part of the transmittal letter, ECC stated: "[a]s an overarching comment, we believe that this RIS identifies the need for the development of additional methodologies for analysis of augmented emergency organization response times. Establishing a technical basis, supported by appropriate analysis for augmentation times, was discussed during the NRC/Industry public meeting held on July 16, 2015, and was a topic raised in the industry comments related to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", Revision 2, in October 2015. EC2 [Energy Compliance Consultants, LLC] feels that the establishment of a technical basis supports the industry and regulators need for consistent application."*

NRC Response: The NRC does not currently agree with the comment. Developing an additional methodology for the analysis of augmented emergency organization response times may not be the best use of the NRC's resources at this time. Additional changes to minimum staffing, as outlined in Table B-1, are also being identified in Revision 2 of NUREG-0654. As such, the need for this methodology as part of future guidance development will be considered based on projected NRC priorities and resources, and input received from the industry.