UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
OFFICE OF NEW REACTORS
WASHINGTON, DC 20555-0001

Month XX, 201X

NRC DRAFT REGULATORY ISSUE SUMMARY 201X-XX
LICENSE AMENDMENT REQUESTS FOR CHANGES TO EMERGENCY RESPONSE ORGANIZATION STAFFING AND AUGMENTATION

ADDRESSEES

All holders of an operating license or construction permit for a nuclear power reactor under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities."

All holders of a power reactor early site permit or combined license under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants."

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform Addresses (hereinafter referred to as "licensees") of the application of guidance documents to support license amendment requests (LARs) that change augmenting emergency response organization (ERO) arrival times. This RIS is based on a number of recent LAR submittals that did not properly justify proposed ERO changes. Specifically, the NRC has identified the need to clarify the application of the Nuclear Energy Institute (NEI) document NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," dated June 23, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111751698). In addition to the clarification this RIS provides, the RIS will assist licensees by providing examples of the scope and detail of information that should be provided in the LARs to facilitate the NRC review. This RIS requires no action or written response on the part of a licensee.

BACKGROUND INFORMATION

All nuclear power reactor licensee emergency plans have an on-shift staff complement for coping with emergencies with a predetermined level and timing of staff augmentation in key functional areas.

The on-site emergency response plan regulations in 10 CFR 50.47(b)(2) require, in part, that on-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, and timely augmentation of response capabilities is available.

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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," dated November 30, 1980 (ADAMS Accession No. ML040420012)[1], referred to as "NUREG-0654," offers guidance on how to assess emergency response staffing needs. Relevant portions of NUREG-0654 are detailed below:

- Section I.D. states, in part, "No single specific accident sequence should be isolated as the one for which to plan because each accident could have different consequences, both in nature and degree. Further, the range of possible selection for a planning basis is very large, starting with a zero point of requiring no planning at all because significant off-site radiological accident consequences are unlikely to occur, to planning for the worst possible accident, regardless of its extremely low likelihood."

- In addition, Section II.B.5. states, in part, "Each licensee shall specify the positions or title and major tasks to be performed by the persons to be assigned to the functional areas of emergency activity. For emergency situations, specific assignments shall be made for all shifts and for plant staff members, both on-site and away from the site. These assignments shall cover the emergency functions in Table B-1 entitled, 'Minimum Staffing Requirements for Nuclear Power Plant Emergencies.' The minimum on-shift staffing levels shall be as indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1."

In 2011, the NRC amended 10 CFR Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," that, in part, added Section IV.A.9, which requires "nuclear power reactor licensees [to provide by December 24, 2012] a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan." As noted in the Statements of Consideration for this change (76 Federal Register 72560, November 23, 2011):

> The NRC expects the analysis to identify all the tasks that must be performed by available staff during an evolution such as response to an emergency. These licensees need to define the events that will be used in the detailed staffing analysis, such as postulated design basis accidents and the DBT [design basis threat], for which there must be emergency planning. The analysis must identify all tasks that must be completed for each analyzed event, and the responders responsible for the performance of those tasks. Licensees must then ensure that there is sufficient on-shift staff to perform all necessary tasks until augmentation staff arrives to provide assistance.

NEI developed NEI 10-05 to establish a standard method for analyzing on-shift staffing as required by Section IV.A.9 to Appendix E of 10 CFR Part 50. The NRC endorsed the on-shift staffing method of NEI 10-05 in Section IV.C of the interim staff guidance (ISG), NSIR/DPR-ISG-01, "Interim Staff Guidance—Emergency Planning for Nuclear Power Plants,"

[1] Regulatory Guide 1.101, "Emergency Response Planning and Preparedness for Nuclear Power Reactors," Revision 2, endorses 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", to be an acceptable method for complying with the requirements in Appendix E to 10 CFR Part 50 and the planning standards in 10 CFR 50.47(b).

dated November 2011 (ADAMS Accession No. ML113010523) by stating: "The NRC has reviewed NEI 10-05 and found it to be an acceptable methodology for this purpose." The NRC's endorsement of NEI 10-05 is limited to the method for developing an on-shift staffing analysis (the context in which it appears in the ISG) and does not extend to any other application of NEI 10-05.

Criteria to be Considered for the On-Shift Staffing Analysis

In addition to the endorsement of NEI 10-05 as one acceptable method for developing an on-shift staffing analysis, NSIR/DPR-ISG-01 establishes criteria for the series of specific accident scenarios that must be considered in the development of the on-shift staffing analysis. The specific accident scenarios identified in NSIR/DPR-ISG-01 are:

- postulated design-basis accidents (DBAs) (Condition IV events) presented in the final safety analysis report as updated, and which would result in an emergency declaration;

  NOTE: At least one DBA should result in the declaration of a general emergency and radiological doses to the public that exceed the U.S. Environmental Protection Agency's Protective Action Guides and necessitate licensee protective action recommendations. This analysis should be done even if no DBA defined in the licensing basis results in this emergency classification and dose levels.

- station DBT;

- response actions for an "aircraft probable threat" in accordance with 10 CFR 50.54(hh)(1), and as discussed in Regulatory Guide (RG) 1.214, "Response Strategies for Potential Aircraft Threats"; and

- control room fire leading to evacuation and remote shutdown, as referenced in Information Notice 95-48, "Results of Shift Staffing Study" (ADAMS Legacy No. 9510040181).

Contrary to the guidance provided in NEI 10-05 for the on-site staffing analysis, the planning basis for Table B-1 of NUREG-0654 is based on a wide spectrum of events. For the purposes of complying with the regulations of Section IV.A.9 to Appendix E of 10 CFR Part 50, scenarios have been identified in NSIR/DPR-ISG-01 to facilitate these evaluations for analyzing on-shift staffing to determine if collateral duties exist that would impact the ability for the on-shift personnel to perform emergency planning functions. It should be noted that these specific scenarios are only applicable for performance of an on-shift staffing analysis, and are not applicable for evaluating ERO augmentation.

Content of License Amendment Requests Related to On-Shift Staffing and ERO Augmentation

Licensees proposing a change to their emergency plans that reduces the licensee's capability to perform an emergency planning function in the event of an emergency must meet the requirements of 10 CFR 50.54(q)(iv)(4), which states:

> The changes to a licensee's emergency plan that reduce the effectiveness of the plan as defined in paragraph (q)(1)(iv) of this section may not be implemented without prior approval by the NRC. A licensee desiring to make such a change

> after February 21, 2012 shall submit an application for an amendment to its license. In addition to the filing requirements of §§ 50.90 and 50.91, the request must include all emergency plan pages affected by that change and must be accompanied by a forwarding letter identifying the change, the reason for the change, and the basis for concluding that the licensee's emergency plan, as revised, will continue to meet the requirements in appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b).

RG 1.219, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors," dated November 30, 2011 (ADAMS Accession No. ML102510626), offers guidance on how to evaluate proposed emergency plan changes submitted to the NRC with LARs. Regulatory Position 4 of RG 1.219 provides the individual emergency planning functions associated with the planning standards of 10 CFR 50.47(b) along with explanatory guidance. It offers and explains examples of changes that could require prior NRC approval, and those that would generally not require prior NRC approval. Changes to the ERO have the potential to affect its performance in the major functional areas and major tasks, and evaluations of the impact of such changes would necessarily involve other emergency planning functions.

Additionally, 10 CFR Part 50, Appendix E, Section IV.A.7, requires identification of, and a description of the assistance expected from appropriate State, local, and Federal agencies with responsibilities for coping with emergencies, including hostile action at the site. Therefore, changes in ERO on-shift or augmentation staffing levels and response times should be evaluated for their impact on the State and local response organization's ability to effectively implement their Federal Emergency Management Agency (FEMA)-approved radiological emergency preparedness (REP) plans, specifically in regard to licensee interface and coordination with State and local response organizations. *[NOTE: In order to facilitate the NRC review of the licensee's plan change per 10 CFR 50.54(s)(3), any change to the licensee's emergency plan that impacts or has the potential to impact State and local REP plans will be provided by the NRC to FEMA for review to verify that continued reasonable assurance exists that State and local emergency plans can be implemented. As such, an adequate evaluation and documentation of coordination with off-site response organization should be provided as part of the licensee's submittal.]*

SUMMARY OF ISSUE

NRC staff has recently received multiple LARs that seek to change ERO staffing commitments by extending the augmentation time for certain positions, or eliminating the staffing for positions entirely. In each case, the change has been justified primarily by referencing the on-shift staffing analysis developed in accordance with NEI 10-05, or a similar analysis using different accident scenarios. These LARs indicate a misunderstanding on how NEI-10-05 and the associated staffing analysis can be used effectively in the justification of proposed staffing changes. Additionally, NRC staff seeks to clarify what constitutes adequate justification for a proposed change, and how the NRC will evaluate submitted LARs for staffing changes.

The guidance in NEI 10-05 focuses on the capabilities of the on-shift staff, specifically to identify collateral duties that could interfere with the performance of on-shift emergency preparedness (EP) functions/capabilities. NEI 10-05 does not consider the capabilities offered by the augmenting ERO staff to relieve and support on-shift staffing for the purposes of providing justification for extension of ERO response times. An on-shift staffing review using NEI 10-05 should ensure sufficient on-shift staff exists to perform all necessary EP functions and

capabilities until augmenting ERO staff arrives, in accordance with the site's emergency plan commitments.

The guidance in NEI 10-05, Section 2.14, "Changes to ERO Response Times", may be used to identify if there is an on-shift position that has the necessary training to perform a major task as described in NUREG-0654, Table B-1, but is not currently credited for performing EP functions and capabilities that are assigned to an augmenting responder. This would allow the assignment of an augmented major task to that on-shift position, thereby maintaining the capability to perform the major task of the emergency plan while eliminating the need for an augmented responder to perform the tasks. The reassignment of these tasks to the on-shift position would need to be reflected in the emergency plan. However, an evaluation performed using only the guidance of NEI 10-05 does not satisfy the requirement to identify and evaluate changes to ERO augmentation timing or ERO augmentation staffing that reduces the capability to perform an emergency planning function. LARs that seek approval for changes to on-shift staffing and the augmenting ERO (e.g., staffing levels, response timing) should identify each change, and evaluate them individually following the guidance from RG 1.219.

All operating reactor licensees have an NRC-approved emergency plan that includes site-specific on-shift staffing and ERO augmentation time requirements. In addition to a site-specific evaluation, the NRC uses the minimum staffing guidance in Table B-1 of NUREG-0654 to evaluate LARs dealing with proposed changes to on-shift or augmented ERO staffing. However, it is recognized that an alternate staffing approach may be acceptable provided that initial facility accident response in key functional areas is maintained at all times, and there is timely augmentation of response capabilities. In support of a proposed LAR, a licensee should supply sufficient information to allow the NRC to conclude independently that a proposed alternate staffing approach supports timely and effective performance of the "Major Functional Areas" and "Major Tasks" listed in Table B-1 of NUREG-0654.

The NRC has extensive experience with the review of proposed changes to on-shift and augmented ERO staffing. This experience has allowed the staff to develop a consistent review and approval process for LARs related to ERO staffing changes. The following examples highlight some specific considerations that NRC staff makes when reviewing shift staffing change requests for augmented ERO positions as provided in NUREG-0654, Table B-1. The first example will outline considerations of an LAR for an extension of a 30-minute ERO augmentation time to 60 minutes. The second example will outline the considerations of an LAR for an extension of a 60-minute ERO augmentation time to 90 minutes.

Considerations of the Review Process for Proposed Extensions of NUREG-0654, Table B-1 30-Minute ERO Augmentation Times to 60 Minutes

Notification and Communication

To adequately support the proposed elimination or extension of the one 30-minute responder, licensees should show that equivalent capability is provided by on-shift staff to fill the responder's responsibility to notify licensee, State, local and Federal personnel, and maintain communication. For example, the 30-minute responder may be eliminated if an extra on-shift position is identified to fill this role. These 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. Alternatively, a licensee could demonstrate that installed communications technologies eliminate the need for an extra on-shift responder. NRC

staff will consider whether the change basis adequately establishes that communication technologies employed by the proposed on-shift staff supports timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Off-site Dose Assessment

To 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." 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. Alternatively, a licensee could demonstrate that installed automated systems or information technologies eliminate the need for an added on-shift responder. NRC staff will consider whether the change basis adequately establishes how automated systems or information technologies employed by the proposed on-shift staff supports timely, effective, and reliable dose assessment. Additionally, the automated systems or information technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Off-site Surveys / On-site (out-of-plant) / In-Plant Surveys

Table B-1 of NUREG-0654 assigns the major tasks of off-site, on-site (out-of-plant), and in-plant surveys to "health physics (HP) technicians," with one technician on shift to perform in-plant surveys, and four more technicians available within 30 minutes. To 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 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. A licensee could show that other on-shift positons have the training and qualifications needed to perform on-site surveys, and demonstrate that the survey results supplied by these positions would be sufficient to support initial emergency response actions until augmented by additional HP technicians. To adequately support an extension in the response time for the two 30-minute responders for off-site surveys, the licensee should show that on-shift methods can generate off-site dose projections. Additionally, NRC staff will consider whether the justification details features that promote timely and effective performance (e.g., an automated computer program), and reliance upon installed and calibrated plant effluent monitors that would be available under accident conditions.

Licensees may consider alternative approaches for staffing this functional area by training non-HP personnel to perform these tasks. The guidance provided in ANSI/ANS-3.8.5-1992, "Criteria for Emergency Radiological Field Monitoring, Sampling, and Analysis," provides criteria for emergency radiological field monitoring for training personnel assigned to perform radiological surveys. Training should be provided on the nature of the radiological hazards and associated effects that the survey team members are likely to encounter. Periodic retraining, as well as participation in drills and exercises also should be specified as part of the training program. Job-specific training, both theoretical and hands-on, should be provided for all personnel assigned to radiological monitoring responsibilities. The training should include all phases of their emergency duties and the equipment that they may be required to operate to perform these duties. Task qualified personnel assigned to these survey teams should follow

the direction of a fully qualified HP personnel, as discussed in NUREG/CR-5569, "The Health Physics Positions [HPPOS] Data Base," Revision 1 (ADAMS Accession No. ML093220108), HPPOS-238, "Health Physics Position on Task Qualification of HP Technicians."[2]

Technical Support

To adequately support an extension of the one 30-minute technical support responder, the licensee should show that an on-shift position is identified as capable of initially filling the 30-minute responder's role of "core/thermal hydraulics." Typically, this position will be the shift technical advisor. The licensee should show that this position has the necessary expertise with "core/thermal hydraulics," and possesses the ability to offer adequate functional oversight to assess core conditions. The licensee should show that the request adds support for core/thermal hydraulics expertise within an appropriate time frame. NRC staff will review whether the justification identifies procedure and information technology advances since the implementation of NUREG-0654 such as improvements that allow using a symptom-based emergency operating procedure network, and computerized or automated systems for the acquisition and display of parameters used to evaluate core conditions.

Repair and Corrective Actions

Table B-1 of NUREG-0654 specifies that the major tasks of "Repair and Corrective Actions," are performed by two on-shift personnel and "may be provided by shift personnel assigned other functions." The "position title or expertise" for these on-shift positions are mechanical maintenance and electrical maintenance. In addition, Table B-1 guidance specifies the addition of one electrical maintenance and one instrumentation and control technician within 30 minutes. To adequately support the elimination or extension of the two 30-minute responders, the licensee should show that on-shift positions are identified as capable of filling these roles. The justification for this staffing change should establish that the scope of repair and corrective actions performed by on-shift personnel would typically be limited to actions that promptly restore a non-functional component or system to functional status (e.g., resetting a relay or logic manipulation) or place a component or system in a desired configuration such as opening a valve or closing a breaker. The licensee should describe the training and qualifications provided to the assigned positions that would allow them to perform these actions. NRC staff will consider whether the licensee has identified any site-specific tasks that these personnel need to perform to ensure expected execution of emergency operating procedures or operation of plant safety equipment (e.g., support for operation of emergency core cooling system equipment). The justification basis should clearly state that expected repair and corrective actions would not include activities requiring work planning or implementation of lockout or tag-out controls to complete. The NRC staff will also review that the request indicates that there will not be any conflict between the added collateral duties and other assigned emergency response functions.

Radiation Protection

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, dosimetry, and HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Guidance in Table B-1 of NUREG-0654 identifies two augmented responders at 30 minutes for the major task of "Radiation Protection." To

[2] http://www.nrc.gov/about-nrc/radiation/protects-you/hppos/hppos238.html

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. Additionally, the licensee should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities such as HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting. The licensee could show that the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes that would be available under accident conditions. Supporting tools and processes that may be considered include portal monitors, self-alarming dosimeters, and automated access control system for the radiologically controlled area (RCA) that maintain active radiation work permits which are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirements).

Personnel assigned to perform this function should be fully qualified HP technicians as described in ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants."[3] Personnel who are typically trained to a level of "meter qualified" to perform basic HP duties are not trained or do not have the necessary experience to perform complex HP duties, as discussed in HPPOS-0238, that would be necessary in a radiological emergency. For example:

- Typically the training does not include providing HP coverage for other personnel.
- Radiation protection is not normally incorporated into normal job duties.
- Radiological conditions during an emergency may be unknown or rapidly changing.

The following Emergency Plan functions would constitute in-plant protective actions which would require a fully qualified HP technician:

- Provide guidance for personnel protection to assist in minimizing personnel exposure.
- Provide guidance for exposure authorizations, dose guidelines, and post-exposure assessments.
- Provide job coverage for in-plant repair and corrective actions, and operations support, under changing radiological conditions.
- Provide guidance for emergency decontamination of personnel, equipment, and facilities.
- Provide guidance for personnel contamination control and respiratory protection.

Considerations of the Review Process for Proposed Extensions of NUREG-0654, Table B-1 60-Minute ERO Augmentation Times to 90 Minutes

Notification and Communication

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responders

[3] RG 1.8, "Qualification and Training of Personnel for Nuclear Power Plants," Revision 3, dated May 2000 (ADAMS Accession No. ML003706932) endorses ANSI/ANS-3.1-1993.

role to "Notify licensee, State, local and Federal personnel, and maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Emergency Operations Facility Director

Per the guidance in NUREG-0654 Table B-1, an augmented senior manager should fulfill the Emergency Operations Facility (EOF) Director major task at 60 minutes. A licensee requesting a change in staff augmentation requirements that would have the lead EOF manager unavailable to assume command and control within 60 minutes of the initial emergency declaration should show that the on-shift staff includes enough qualified supervision such that one supervisor will assume the emergency director role. The licensee should show that the on-shift supervisor performing the EOF manager actions will not have any additional duties (e.g., each unit under the direction of a unit supervisor, a shift manager providing oversight of the plant response, and a designated emergency director responsible for emergency plan implementation).

Off-site Surveys / On-site (out-of-plant) / In-Plant Surveys

Per the guidance of NUREG-0654 Table B-1, there should be four augmented responders at 60 minutes—two for off-site surveys, one for on-site surveys, and one for in-plant surveys. To 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. The licensee should demonstrate that two HP technicians, in excess of the number evaluated previously for extending the 30-minute responders, are available for in-plant protective actions for the other maintenance personnel that need to be added to the on-shift staffing to compensate for the extension in augmentation time for the major task of repair and corrective actions, and to perform surveys to assess any off-site release of radioactive materials.

Licensees may consider alternative approaches for staffing this functional area by training non-HP personnel to perform these survey tasks. See guidance provided above under "Considerations of the Review Process for Proposed Extensions of NUREG-0654, Table B-1 30-Minute ERO Augmentation Times to 60 Minutes."

Chemistry/Radio-chemistry

Per the guidance of NUREG-0654 Table B-1, there should be one augmented chemistry/radio-chemistry technician at 60 minutes. To adequately support an extension of this responder beyond 60 minutes, the licensee should demonstrate that no chemistry related tasks are required to be performed within 90 minutes of an emergency declaration (i.e., no tasks necessary to support implementation of emergency operating procedures or operation of safety-related equipment).

Technical Support

Per the guidance of NUREG-0654 Table B-1, electrical and mechanical expertise should be provided by two 60-minute responders under the "Technical Support" major task. NRC staff will review the request using evaluation criteria similar to the criteria used to evaluate an extension for the 30-minute responder in the position of "core/thermal hydraulics." The licensee should include a review of procedures to evaluate the need for engineering support in order to justify the extension in augmentation time for the positions of "electrical and mechanical engineering expertise." Additionally, the licensee's evaluation should include a review of the on-shift positions, and whether they are able to support troubleshooting activities for the extension in augmentation time (e.g., electrical or maintenance personnel on shift with supervisory personnel to provide oversight) without interfering with their primary emergency response duties.

Repair and Corrective Actions

Table B-1 of NUREG-0654 calls for the addition of one mechanical maintenance, one radiological waste operator, and an added electrical maintenance person within 60 minutes. To adequately support an extension of the response time for these responders, the licensee should demonstrate that the responsibilities of these positions can be covered with on-shift staff or earlier responders. Additionally, as part of the justification for an extension request, the licensee should show that a radiological waste operator is not needed for the period of time to 90 minutes.

Radiation Protection

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the guidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To 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. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any off-site releases of radioactive materials. Additionally, the licensee request should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities (e.g., HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting). NRC staff will consider whether the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes. The licensee should include supporting tools and processes that will be considered such as portal monitors, self-alarming dosimeters, and automated access control systems for the RCA that maintain active radiation work permits that are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirement). See guidance provided above under "Considerations of the Review Process for Proposed Extensions of NUREG-0654, Table B-1 30-Minute ERO Augmentation Times to 60 Minutes."

Evaluation of Impact on Off-site Radiological Emergency Preparedness (REP) Plans

Any change in ERO on-shift or augmentation staffing levels and response times should be evaluated for impact on the FEMA approved off-site REP plans. Changes potentially affecting off-site REP plans should be discussed with respective State and/or local emergency management officials. The licensee's LAR submittal should provide documentation of this assessment and concurrence of proposed change(s) potentially impacting off-site REP plans. The documentation will be forwarded by NRC staff to FEMA to verify continued adequacy of off-site plans and preparedness.

BACKFITTING AND ISSUE FINALITY DISCUSSION

This RIS provides licensees with guidance on the scope and detail of information that should be provided in license amendment applications concerning changes to emergency response organization staffing and arrival times. This guidance does not represent new or changed staff positions. In addition, this RIS does not require any action or written response on the part of any licensee. Accordingly, issuance of this RIS in final form would not represent backfitting as defined in 10 CFR Part 50.109(a)(1), or be inconsistent with any applicable issue finality provision in 10 CFR Part 52. Therefore, the NRC did not prepare a backfit analysis for this RIS or further address the issue finality criteria in Part 52.

FEDERAL REGISTER NOTIFICATION

[To be provided in final RIS]

CONGRESSIONAL REVIEW ACT

[To be provided in final RIS]

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not contain new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget (OMB), approval number 3150-0011.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a current valid OMB control number.

CONTACT

Please direct any questions about this matter to the technical contact listed below, or to the appropriate Office of Nuclear Reactor Regulation project manager.

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Note: NRC generic communications may be found on the NRC public Web site, http://www.nrc.gov, under NRC Library/Document Collections.

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