



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

January 29, 2018

Mr. Adam C. Heflin
President, Chief Executive Officer,
and Chief Nuclear Officer
Wolf Creek Nuclear Operating Corporation
Post Office Box 411
Burlington, KS 66839

**SUBJECT: WOLF CREEK GENERATING STATION, UNIT 1 – SUPPLEMENTAL
INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING
ACTION RE: LICENSE AMENDMENT REQUEST FOR REVISION TO THE
EMERGENCY PLAN (EPID L-2017-LLA-0430)**

Dear Mr. Heflin:

By letter dated December 19, 2017 (Agencywide Documents Access and Management System Accession No. ML17363A134), Wolf Creek Nuclear Operating Corporation (the licensee) submitted a license amendment request (LAR) for changes to the Radiological Emergency Response Plan for Wolf Creek Generating Station, Unit 1. The proposed LAR would (1) revise the standardize response times for the technical support center, operations support center, and emergency operations facility to a 90 minute activation time; (2) replace the current full-time licensed medical practitioner position with first aid responders; (3) reduce the number of required emergency response organization positions; and (4) remove reference to performing dose assessment using containment pressure indication. The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this LAR. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

Consistent with Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR), an amendment to the license (including the technical specifications) must fully describe the changes requested, and following as far as applicable, the form prescribed for original applications. Section 50.34 of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

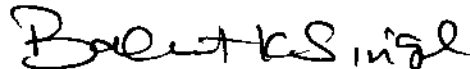
The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment request in terms of regulatory requirements and the protection of public health and safety and the environment.

In order to make the application complete, the NRC staff requests that the licensee supplement the application to address the information requested in the enclosure by February 13, 2018. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the staff's detailed technical review by separate correspondence.

The information requested and associated timeframe in this letter were discussed with Mr. William Muilenburg of your staff on January 25, 2018.

If you have any questions, please contact me at 301-415-3016 or via e-mail at Balwant.Singal@nrc.gov.

Sincerely,



Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosure
Supplemental Information Needed

cc: Listserv

SUPPLEMENTAL INFORMATION NEEDED
RELATED TO LICENSE AMENDMENT REQUEST FOR CHANGES TO THE
RADIOLOGICAL EMERGENCY RESPONSE PLAN FOR
WOLF CREEK GENERATING STATION
WOLF CREEK NUCLEAR OPERATING CORPORATION
DOCKET NO. 50-482

By application dated December 19, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17363A134), Wolf Creek Nuclear Operating Corporation (the licensee) submitted a license amendment request (LAR) for changes to the Radiological Emergency Response Plan (RERP) for the Wolf Creek Generating Station, Unit 1 (WCGS) for the U.S. Nuclear Regulatory Commission (NRC) review and prior approval pursuant to Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed changes would: (1) revise the standardize response times for the technical support center (TSC), operations support center (OSC), and emergency operations facility to a 90 minute activation time; (2) replace the current full-time licensed medical practitioner position with first aid responders; (3) reduce the number of required emergency response organization (ERO) positions; and (4) remove reference to performing dose assessment using containment pressure indication.

The NRC staff has reviewed the licensee's submittal and determined that supplemental information is required to enable the NRC staff to make an independent assessment regarding its technical review.

Background Information

The NRC issued Regulatory Issue Summary (RIS) 2016-10, "License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation," dated August 5, 2016 (ADAMS Accession No. ML16124A002), to inform licensees of the application of guidance documents to support license amendment requests to change augmenting ERO staffing and response times. Specifically, RIS 2016-10 clarified the application of the Nuclear Energy Institute (NEI) document NEI 10-05, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," dated June 2011 (ADAMS Accession No. ML111751698), in justifying proposed changes to ERO staffing and response times.

Regulatory Issue Summary 2016-10 states in part,

The 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, the NRC staff seeks to clarify what

Enclosure

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-0654¹, 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. Following the guidance from RG [Regulatory Guide] 1.219², 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.

Attachment 1, "Evaluation of Proposed Changes," Section 3.0, "Technical Evaluation," of the letter dated December 19, 2017, states in part,

The OSSA [On-Shift Staffing Analysis] was performed using a standardized 90 minute response time for augmenting ERO. The response time used for the OSSA reflected the maximum number of minutes elapsed between emergency declaration and the augmented ERO position holder arriving at a location necessary to relieve an on-shift position of the emergency response task. No emergency response tasks requiring the augmented ERO were identified prior to 90 minutes following emergency declaration. The OSSA indicates that on-shift personnel can satisfactorily implement all EP functions as required by regulation without augmented ERO personnel for at least 90 minutes following an emergency declaration.

¹ NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Plans and Preparedness in Support of Nuclear Power Plants," November 1980 (ADAMS Accession No. ML040420012).

² RG 1.219, Revision 1, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors," dated July 2016, (ADAMS Accession No. ML16061A104).

In support of this LAR, an updated OSSA (Reference 9)³ was performed in August 2017 to validate that changes to tasks/functions described in this LAR did not impact the ability of the on-shift staff to respond to an emergency for 90 minutes without augmented support.

REQUEST FOR SUPPLEMENTAL INFORMATION (RSI)

RSI-WCGS-1

Attachment 1 of the letter dated December 19, 2017 (page 6 of 23), "Functional Area: Attachment D, Notification/Communication," states, in part:

Attachment D currently requires 2 on-shift personnel and 3 augmented responders within 60 minutes. The proposed revision would change the 3 augmented responders to 2 responders within 90 minutes.

As a result of the original OSSA, Revision 13 of the RERP added dedicated communicators to the on-shift complement. Based on Revision 1 of the OSSA, the ENS/OSC [Emergency Notification System/Off-Site Communicator] positions are being combined.

However, there is no discussion/justification for why the original OSSA required two communicators on shift, nor is there any discussion/justification as to why two communicators are no longer required other than a reference to the OSSA.

Please provide justification for why the original OSSA required two communicators on shift and justification as to why two communicators are no longer required. The justification should clearly provide how the communicator has the capability to perform notifications to offsite response organizations, as well as the communications with the NRC.

RSI-WCGS-2

Attachment 1 of the letter dated December 19, 2017 (page 7 of 23), "Functional Area: Attachment D, Radiological Accident Assessment & Support of Operational Accident Assessment"

- a. "Offsite Surveys, Onsite (Out-of-Plant) and In-Plant Surveys," category states, in part:

The proposed change would extend the augmentation time to 90 minutes and reduce the number of augmenting RP [Radiation Protection] personnel to 6.

However, there is no specific justification provided for the reduction in staffing from 8 to 6 RP personnel.

Please provide justification for the reduction in staffing from 8 to 6 RP personnel for this functional area.

³ Wolf Creek On-Shift Staff Analysis Report, December 2017.

- b. "Offsite Surveys, Onsite (Out-of-Plant) and In-Plant Surveys," category states, in part:

Off-site surveys are not needed during the initial stages of an event because expected release pathways are monitored release points.

However, there is no specific justification provided for how off-site surveys would be performed in the event of an unmonitored release or to validate dose assessment.

Please provide justification for how off-site surveys would be performed in the event of an unmonitored release or to validate dose assessment.

RSI-WCGS-3

Attachment 1 (page 9 of 23) of the letter dated December 19, 2017, "Functional Area: Attachment D, Plant System Engineering, Repair & Mitigative Actions"

- a. In regards to the NUREG-0654 Major Task of Technical Support, the text states, in part:

RERP, Attachment D currently requires 3 augmenting engineers within 60 minutes reporting to the TSC/OSC for technical support. The proposed change maintains 3 engineers reporting to the TSC/OSC, but extends their augmentation time to 90 minutes.

Evaluation of the on-shift activities in accordance with 10 CFR [Part] 50, Appendix E.IV.A.9 showed that on-shift operations personnel were able to complete required tasks without conflicts. Extending the response time for engineers does not adversely impact the Technical Support major task.

However, there is no specific justification provided for extension in augmentation for the mechanical and electrical engineers.

Please provide justification for extension in augmentation times for the mechanical and electrical engineers.

- b. In regards to NUREG-0654 Major Task:: Repair and Corrective Action, the text states in part:

The WCGS on-shift Nuclear Station Operators have the training and expertise to perform this level of minor maintenance actions as directed by the Control Room Supervisor and are available to satisfy any minor troubleshooting and repair activities that might be needed.

However, it is not described as to whether the on-shift Nuclear Station Operators would have the equivalent training or qualifications to perform maintenance repair activities as the 60 minute augmenting maintenance personnel.

Please provide justification for extension in augmentation times for the mechanical and electrical maintenance personnel, specifically how maintenance repair activities would be able to be performed for the extension in augmentation timing.

RSI-WCGS-4

Attachment 1 (page 10 of 23) of the letter dated December 19, 2017. "Functional Area: Attachment D, Protective Actions (In-Plant)," states, in part:

The current RERP, Attachment D lists 4 augmenting HP [Health Physics] personnel reporting to the TSC/OSC within 60 minutes. The proposed change extends augmentation time to 90 minutes and reduces the number of RP augmenting responders to 2. Together with the RP personnel responding in the Radiological Accident Assessment & Support of Operational Accident Assessment functional area, the proposed change reduces the total number of augmenting RP personnel from 12 to 8.

However, there is no real evaluation provided that describes what RERP function each of the 12 RP personnel perform and how the reduction to 8 is acceptable.

Please provide an evaluation that describes what RERP function each of the 12 augmenting RP personnel perform and how the reduction to 8 is acceptable.

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EMERGENCY PLAN (EPID L-2017-LLA-0430) DATED JANUARY 29, 2018**

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MNorris, NSIR/DPR/RLB

ADAMS Accession No.: ML18024B432*** Via e-mail**

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