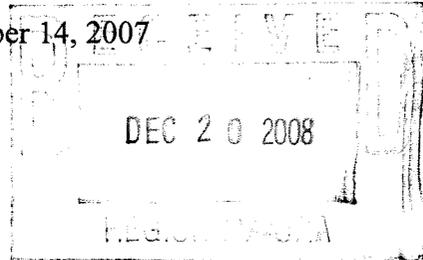


U.S. Department of Homeland Security  
Region VII  
9221 Ward Parkway, Suite 300  
Kansas City, MO 64114-3372



**FEMA**

December 14, 2007



Mr. Kevin J. Moles  
Manager, Regulatory Affairs  
Wolf Creek Nuclear Operating Corporation  
P.O. Box 411  
Burlington, KS 66839

Dear Mr. Moles:

Ref: Replacement of Wolf Creek Nuclear Operating Corporation (WCNOC) Siren System

This is in response to your letter submitted November 2, 2007, requesting approval of the replacement of WCNOC Siren System. FEMA Headquarters review of your WCNOC's siren upgrade proposal has been completed. Approval of the WCNOC siren replacement is granted, on condition of the three (3) future items listed in the enclosed letter from FEMA Headquarters, Daniel G. Wilcox, Acting Chief, of the Radiological Emergency Preparedness Branch, dated December 4, 2007.

If you have any questions please contact Sharron McDuffie at (816) 283-7052 or by email [sharron.mcduffie@dhs.gov](mailto:sharron.mcduffie@dhs.gov).

Sincerely,

*Ronald L. McCabe*

Ronald L. McCabe, RAC Chairman  
Chief, Technological Hazards Branch

Enclosure

cc: Daniel G. Wilcox, REP  
Kenneth L. Wierman, Jr., REP  
William Maier, NRC  
William M. Chornyak, KDEM  
Jennifer Clark, KDEM  
Frank Moussa, KDEM  
Swapan K. Saha, KDEM  
Tim East, WCNOC  
Jeanne Dagenette, WCNOC  
Sheriff Randy Rogers, Acting EMC, Coffey County



**FEMA**

MEMORANDUM FOR: Ronald L. McCabe  
Regional Assistance Committee Chair  
FEMA Region VII

DEC 4 2007

FROM:   
Daniel G. Wilcox  
Acting Chief  
Radiological Emergency Preparedness Branch

SUBJECT: Replacement of Wolf Creek Nuclear Operating Corporation  
(WCNOC) Siren System

This is in response to a letter submitted by Mr. Kevin J. Moles, Manager, Regulatory Affairs for WCNOC, dated November 2, 2007, requesting approval of the replacement of the WCNOC siren system. FEMA Headquarters review of WCNOC's siren upgrade proposal has been completed. WCNOC is proposing a one-for-one replacement of sirens in the basic locations for eleven (11) existing mechanical sirens with eleven (11) new state-of-the-art sirens. This upgrade will result in an increase in the level of sound coverage compared to the current FEMA-approved siren system.

Based on our review of the WCNOC proposal we conclude that the proposed upgrade to the WCNOC Alert and Notification System (ANS) is in compliance with FEMA's ANS guidance contained in NUREG-0654 and FEMA-REP-10. Therefore, approval of the WCNOC siren replacement is granted, conditional on the following three (3) future items:

- 1) WCNOC must perform an acoustical test following installation of the new sirens. This is to demonstrate that the ANS will work as designed. The acoustical test protocol should be submitted to FEMA Region VII in a timely manner prior to such testing for its approval. This is to ensure that the testing method, if followed, will provide sufficient data to demonstrate proof-of-design to FEMA's satisfaction. At your discretion you or a member of your staff may request to be present when the WCNOC conducts the acoustical test.

- 2) The new radio-system upgrade with repeater functionality must be tested for performance and reliability. In addition, a Failure Mode and Effects Analysis (FMEA) of the complete ANS should be performed by WCNOC.
- 3) The WCNOC final design report should contain, among other things, the acoustical test results, the FMEA and new system maintenance and testing procedures. This report should be submitted to FEMA for review and approval. The proposed new sirens have different features (related to their ability to operate on battery, integral sensors and different part configurations) that require different testing and maintenance strategies than those used for the present sirens. The new system's maintenance and testing procedures should be reviewed to make sure that the ANS will continue to operate in accordance with its design objectives over the long term. Obviously, this review will occur after the new sirens and radio control system are installed.

Reviewing the final design report will allow FEMA the opportunity to independently determine that the new systems testing and maintenance procedures are effective and in compliance with FEMA policy and guidance.

If you have any questions regarding this matter, please feel free to contact Mr. Russ Gates at (703) 605-1518.

NPD-THD-RP/Chron  
NPD-THD-RP/Russ Gates  
NPD-THD-RP/Region VII  
NPD-THD-RP/WCNOC