



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

February 12, 2009

Mr. Rick A. Muench
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
Post Office Box 411
Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION - CLOSEOUT LETTER RELATED TO
SUBMERGED SAFETY-RELATED MEDIUM VOLTAGE POWER CABLES (TAC
NO. MD7339)

Dear Mr. Muench:

During the Nuclear Regulatory Commission (NRC) Region IV inspection for license renewal in the fall of 2007, it was discovered that safety-related cables were submerged under water in an underground manhole at the Wolf Creek Generating Station (WCGS). These cables are 4160V medium-voltage cables connecting the power block with the emergency service water system and located in manholes below ground water. These are High Temperature Kerite (HTK) insulated cables and the plant Condition Detail Report (CDR) # 2007-003567, dated November 16, 2007, evaluated the operability of these cables at WCGS.

In reviewing CDR # 2007-003567 and other documentation, which were provided to NRC by Wolf Creek Nuclear Operating Corporation (WCNOC), the NRC staff concluded that WCNOC had not demonstrated the qualification of the subject safety-related cables under submerged conditions for long periods of time. The NRC staff requested, in its letter dated September 3, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082410119), that WCNOC address the NRC staff's concerns in writing and provide the documentation identified in the evaluation that was enclosed with the letter.

WCOC submitted its response in a letter dated October 30, 2008 (ADAMS Accession No. ML083120428). In its response, WCNOC committed to (1) periodically inspect and dewater manholes containing safety-related medium-voltage cables, and (2) evaluate this experience to adjust the inspection/dewatering frequency or implement modifications to prevent long-term submergence of these cables. These regulatory commitments were submitted in the attachment to the letter and will be managed by the WCNOC commitment management system.

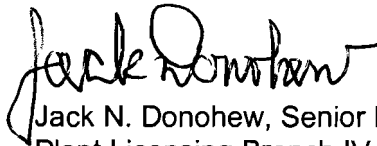
In the October 30, 2008, letter, WCNOC further stated that it has commenced dewatering the manholes, but it did not provide a date for completing the dewatering of manholes below the safety-related cables and the frequency to conduct inspections of these cables. WCNOC stated that no estimated completion date could be given because of the potential for adverse conditions that may limit its progress dewatering the manholes. WCNOC also stated that, after the initial dewatering of manholes, the inspection frequency will be adjusted based on the plant experience determined from the dewatering, and the completion date and corrective actions would be documented in the plant corrective action program. WCNOC concluded that its commitments addressed the NRC staff's concerns in the NRC letter dated September 3, 2008, letter and, therefore, specific responses to the staff's concerns and the submittal of additional documentation were not necessary. WCNOC also stated that currently there is no "valid test"

(i.e., industry-accepted test) to measure aging of these cables. WCNOG explained that these cables are subjected to insulation resistance tests, and the test results over the past 9 years have been acceptable and do not show an adverse trend.

Since receiving the letter dated October 30, 2008, the NRC staff, including Region IV, had a conference call with WCNOG on January 29, 2009, to understand the status of the WCNOG's commitment to dewater the manholes, evaluate the experience obtained from dewatering the manholes, and develop a frequency to periodically inspect the manholes to prevent submergence of the safety-related medium power voltage cables in these manholes. During the call, WCNOG explained that there are 10 manholes with safety-related medium power voltage cables below the water level. All ten manholes have been opened once and the water pumped out below the cables. Eight of the ten manholes have been pumped again and the remaining two will be opened and checked again within the next 2 to 4 weeks. WCNOG stated that they expect to have sufficient data to develop a frequency of periodic surveillance on the manholes by April 2009. Also, because of the lack of an industry-accepted test for these cables to determine the effect of long-term submerged of these cable, WCNOG also stated that it is continuing to work with the industry to develop such a test that would be found acceptable by NRC and, as part of this effort, WCNOG will be participating in an industry-wide meeting on such testing in March 2009.

We have reviewed your letter dated October 30, 2008, and considered the information provided during the conference call held on January 29, 2009. Since the WCNOG commitments in its October 30, 2008, letter address our immediate concerns about the safety-related Kerite cables located in manholes below ground water, WCNOG does not need to answer the questions and provide the requested documentation in our September 3, 2008, letter. However, we will continue to track this issue at WCGS in our follow-on to Generic Letter (GL) 2007-01, "Inaccessible Or Underground Power Cable Failures That Disable Accident Mitigation Systems Or Cause Plant Transients," dated February 7, 2007. The NRC closeout letter for WCGS for GL 2007-17 is dated October 28, 2008 (ADAMS Accession No. ML082940596). It is NRC's position that if safety-related equipment, such as these cables, have been exposed to conditions for which they are not designed or qualified for, then the licensee for the nuclear facility should demonstrate through suitable testing or analysis that the equipment is operable and capable of performing its safety function. If in this effort we decide that additional information is needed from WCNOG, we will contact you. This closes out the subject TAC No. MD7339.

Sincerely,



Jack N. Donohew, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-482

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Memo to VGaddy, BC, Branch B, Region IV: ADAMS Accession No. ML090330707 (Non-public)

ADAMS Accession No. ML083150403 *See previous concurrence

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DE/EEEB/BC	NRR/LPL4/BC	NRR/LPLR/PM
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DATE	2/4/09	11/10/08	2/5/09	2/12/09	2/12/09

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