



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION IV
1600 E LAMAR BLVD
ARLINGTON, TX 76011-4511

October 15, 2014

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

**SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR WOLF CREEK
NUCLEAR OPERATING CORPORATION (TAC NO. MF4982,
NOED NO. 14-4-02)**

Dear Mr. Heflin:

By letter dated October 13, 2014, Wolf Creek Nuclear Operating Corporation (WCNOC) requested that the U.S. Nuclear Regulatory Commission (NRC) exercise discretion to not enforce compliance with the actions required in Wolf Creek Generating Station (WCGS) Technical Specification 3.8.1, "AC Sources – Operating," Required Action B.4.1. This letter documented information previously discussed between Mr. C. Reasoner and other members of your staff and the NRC, in a telephone conference on October 9, 2014, at approximately 8:00 a.m. (all time references below are in Central Daylight Time). The principal NRC staff members who participated in the October 9, 2014, telephone conference are listed in the enclosure to this letter. The NRC staff determined that the information in your letter requesting the enforcement discretion was consistent with your verbal request.

On October 6, 2014, at 1:26 p.m., emergency diesel generator (EDG) B was declared inoperable when it tripped during a 24-hour surveillance test. Operators identified a fire in a relay cabinet. The licensee declared an Alert, and quickly suppressed the fire. Operators entered Technical Specification 3.8.1, Condition B; Required Action B.4.1, which required the licensee to restore EDG B to operable status within 72 hours. If this action was not met within the stated time, Condition H then required the plant to be shut down and cooled down.

After completing the actions for fires, the licensee exited the Alert. When troubleshooting and repair efforts were completed, the licensee determined that the failed 24-hour surveillance would need to be completed as part of the post-maintenance testing. When the licensee recognized that the time needed to complete post-maintenance testing would exceed the time permitted by Technical Specification 3.8.1.1, Required Action B.4.1, WCNOC contacted the NRC to indicate their intent to request enforcement discretion.

During a teleconference on October 9, 2014, and as further elaborated in your October 13, 2014 letter, you indicated that the portion of post-maintenance test completed up to that time showed that the repairs to EDG B were successful, and that following the successful completion of the 24-hour surveillance test, the system could be restored to operable status. Based on the

expected completion time of this test, your staff requested an additional 8 hours beyond the time allowed by Technical Specification 3.8.1.1, Required Action B.4.1, to complete post-maintenance testing and restore the system to operable status in order to avoid an unnecessary plant transient that did not provide an overall safety benefit. Your staff stated that the most likely cause of the event was the failure of the power current transformers' power rectifier bridge. When this bridge failed, power from the power current transformers to the generator field was lost. As a result, the voltage regulator attempted to maintain the field current using only the power potential transformer. Since the power potential transformer is not rated to sustain full field current, the transformer was overloaded, causing it to overheat and catch fire. Troubleshooting also indicated that EDG B tripped on phase differential current, which was caused by the failures described above. WCNOG confirmed this probable cause by consulting an industry expert in generator excitation systems. A root cause evaluation, including hardware failure analyses, will be performed for this failure.

WCNOG performed a risk assessment assuming that EDG B was inoperable for an additional 8 hours beyond the time allowed by Technical Specification 3.8.1.1, Required Action B.4.1. This resulted in an incremental conditional core damage probability of $1.62\text{E-}9$, and an incremental conditional large early release probability of $4.57\text{E-}12$. Your staff also evaluated the risk contribution due to external events by performing a quantitative evaluation of seismic risk and a qualitative evaluation of fire risk. The results of your staff's risk evaluations were independently corroborated by NRC analysts. This risk was within levels for normal maintenance activities, and within the guidance contained in NRC Inspection Manual 0410, "Notices of Enforcement Discretion" (ML13071A487).

Your staff stated that you would implement compensatory risk management measures for the period of the proposed enforcement discretion. These additional compensatory risk management measures included: (1) prohibiting planned work in the switchyard; (2) protecting train A equipment, including prohibiting testing and maintenance; (3) briefing operators on risk-significant manual actions; (4) enhancing operator sensitivity to safety bus electrical power supply issues to recognize and respond to loss of offsite power and station blackout conditions.

Your staff stated that the proposed change did not involve a significant hazard based on the three standards set forth in 10 CFR 50.92(c), and did not involve adverse consequences to the environment such that the proposed change meets the categorical exclusion set forth in 10 CFR 51.22(c)(9). The WCNOG Plant Safety Review Committee reviewed and approved the NOED request on October 9, 2014, prior to the verbal request for an NOED. Because the request was a one-time extension of the required action time to complete post-maintenance testing, your staff stated that a follow-up license amendment request was not required.

Based on the NRC staff's evaluation of WCNOG's request, the staff has concluded that granting this NOED is consistent with the NRC's Enforcement Policy and staff guidance, and would have no adverse impact on public health and safety or the environment. Therefore, as communicated to you at 10:15 a.m. on October 9, 2014, the NRC exercised discretion to not enforce compliance with Technical Specification 3.8.1, Condition B, Required Action B.4.1, to restore EDG B to operable status within 72 hours of being declared inoperable. The NOED provided for an additional period of 8 hours, which expired at 9:26 p.m. on October 9, 2014. As discussed during the call, this discretion was only for completion of post-maintenance testing of EDG B, and would be terminated if there were indications that the post-maintenance testing would not be successful.

Your letter stated that EDG B was restored to operable status at 5:17 p.m. on October 9, 2014 after satisfactorily completing all post-maintenance testing, prior to expiration of this NOED.

In addition, as discussed on October 9, 2014, the NRC staff agreed with your determination that a follow-up Technical Specification amendment is not needed. The staff concluded that an amendment (either a temporary or permanent amendment) is not necessary because the request was a one-time extension of the required completion time to complete testing.

The NRC's decision to exercise enforcement discretion does not imply that this discretion is being exercised for any violation that may have led to the need for the NOED. In accordance with the NRC's Enforcement Policy, enforcement action will normally be taken for the root causes, to the extent violations were involved, that led to the noncompliance for which enforcement discretion was used.

Sincerely,

/RA/

Troy W. Pruett, Acting Director
Division of Reactor Projects

Docket: 50-482
License: NPF-42

Enclosure: List of Participants

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ADAMS: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> SUNSI Review Complete	Reviewer Initials: NFO	
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	<input type="checkbox"/> Non-publicly Available	<input type="checkbox"/> Sensitive	
C:RIV/DRP/B	SRA:RIV/DRS	C:RIV/ACES	
NOKeefe/dll	RDeese	VCampbell	
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10/15/14	10/15/14	10/15/14	
PM:NRR/DORL/LPL4	D:RIV/DRS	DD:NRR/DORL	DD:RIV/DRP
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T=Telephone

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Letter to Adam C. Heflin from Troy W. Pruett dated October 15, 2014

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION FOR WOLF CREEK NUCLEAR
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Electronic Distribution via Listserv for Wolf Creek Generating Station

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Enclosure