

WOLF CREEK NUCLEAR OPERATING CORPORATION

Donna Jacobs
Vice President Operations and Plant Manager

APR 13 2004

WO 04-0013

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

- Reference:
- 1) Letter WO 03-0009 dated April 30, 2003, from B. T. McKinney, WCNOC, to USNRC
 - 2) Letter dated September 25, 2003, from J. Donohew, USNRC, to R. Muench, WCNOC
 - 3) Letter WO 03-0062 dated December 18, 2003, from B. T. McKinney, WCNOC, to USNRC

Subject: Docket No. 50-482: Supporting Information for the Revision to Technical Specifications 3.8.1, "AC Sources – Operating," and 3.8.4, "DC Sources – Operating"

Gentlemen:

Reference 1 transmitted an application for amendment to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The license amendment request proposed changes to Technical Specifications (TS) 3.8.1, "AC Sources – Operating," and TS 3.8.4, "DC Sources – Operating," to allow surveillance testing of the emergency diesel generators (DGs) during MODES in which it is currently prohibited and to incorporate changes based on Industry/Technical Specification Task Force (TSTF) Standard Technical Specification change TSTF-283, Revision 3.

Wolf Creek Nuclear Operating Corporation's (WCNOC) application for amendment, along with similar applications from AmerenUE, Arizona Public Service Company, and Pacific Gas and Electric Company, is currently under review by the NRC staff. Reference 2 transmitted a request for additional information regarding the proposed TS changes with Reference 3 providing WCNOC's response.

Subsequently, on February 4, 2004, two additional questions related to the testing of the DGs in MODES 1 and 2 with the DG connected to the offsite power supply were provided by electronic mail from the NRC Project Manager. Responses to those questions were provided electronically on February 25, 2004 and identified that the information requested was previously provided by References 1 and 3. In further discussions with the NRC Project Manager, it was requested by the Electrical Engineering Section to provide in the TS Bases, administrative controls related to the testing of the DGs in MODES 1 and 2 with the DG connected to the offsite power supply.

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Based on these discussions, WCNOC is providing in the Enclosure additional changes to the TS Bases for Surveillance Requirement (SR) 3.8.1.14 to include administrative controls. The enclosed additional TS Bases changes are provided (for information only) to assist the staff in its review of the proposed changes. As discussed in Reference 1, revision to the TS Bases will be implemented pursuant to the TS Bases Control Program, TS 5.5.14, upon implementation of the license amendment. Specifically, the information to be added to the TS Bases will state:

“Administrative controls for performing this SR in MODES 1 or 2, with the DG connected to an offsite circuit, ensure or require that:

- a. Weather conditions are conducive for performing this SR.
- b. The offsite power supply and switchyard conditions are conducive for performing this SR, which includes ensuring that switchyard access is restricted and no elective maintenance within the switchyard is performed.
- c. No equipment or systems assumed to be available for supporting the performance of the SR are removed from service.”

Reference 1 proposed changes to the Notes in SR 3.8.4.7 and SR 3.8.4.8. The proposed changes to the Notes provide the flexibility for a partial performance of the surveillance to reestablish OPERABILITY following corrective maintenance. The inclusion of the changes in Reference 1 to the Notes is consistent with NRC approval of TSTF-283. In Reference 3, WCNOC indicated that the changes to SR 3.8.4.7 and SR 3.8.4.8 should be processed separately based on the potential additional time to resolve the concerns both generically and for WCNOC. After further review, WCNOC has decided to withdraw the proposed changes to SR 3.8.4.7 and SR 3.8.4.8. WCNOC will consider pursuing additional changes depending on the generic resolution of the concerns associated with the changes to SR 3.8.4.7 and SR 3.8.4.8.

The supplemental information provided in this letter does not impact the conclusions of the No Significant Hazards Consideration provided in Reference 1.

There are no commitments associated with this submittal. Please contact me at (620) 364-4246 or Mr. Kevin Moles at (620) 364-4126 for any questions you may have regarding this application.

Very truly yours,


Donna Jacobs

DJ/rlg
Enclosure

cc: V. L. Cooper (KDHE), w/e
J. N. Donohew (NRC), w/e
D. N. Graves (NRC), w/e
B. S. Mallett (NRC), w/e
Senior Resident Inspector (NRC), w/e

STATE OF KANSAS)
) SS
COUNTY OF COFFEY)

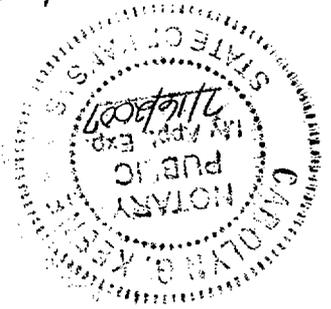
Donna Jacobs, of lawful age, being first duly sworn upon oath says that she is Vice President Operations and Plant Manager of Wolf Creek Nuclear Operating Corporation; that she has read the foregoing document and knows the contents thereof; that she has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of her knowledge, information and belief.

By *Donna Jacobs*
Donna Jacobs
Vice President Operations and Plant Manager

SUBSCRIBED and sworn to before me this 13 day of April, 2004.

Carolyn D. Keene
Notary Public

Expiration Date July 16, 2007



Enclosure to WO 04-0013

BASES

**SURVEILLANCE
REQUIREMENTS**

SR 3.8.1.13 (continued)

The 18 month Frequency is based on engineering judgment, taking into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

The SR is modified by a Note. The reason for the Note is that performing the Surveillance would remove a required DG from service.

SR 3.8.1.14

Regulatory Guide 1.9, Rev. 3, (Ref. 3), requires demonstration once per 18 months that the DGs can start and run continuously at full load capability for an interval of not less than 24 hours, ≥ 2 hours of which is at a load equivalent to 110% of the continuous duty rating and the remainder of the time at a load equivalent to the continuous duty rating of the DG (Refer to discussion of Note 3 below). The DG starts for this Surveillance can be performed either from standby or hot conditions. The provisions for prelubricating and warmup, discussed in SR 3.8.1.2, and for gradual loading, discussed in SR 3.8.1.3, are applicable to this SR.

In order to ensure that the DG is tested under load conditions that are as close to design conditions as possible, testing must be performed using a power factor of ≥ 0.8 and ≤ 0.9 at a voltage of 4160 +160 -420 volts and a frequency of 60 ± 1.2 Hz. This power factor is chosen to be representative of the actual design basis inductive loading that the DG would experience. The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

TS Bases Insert 6 (new) →

The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.9, Rev. 3 (Ref. 3), taking into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.

This Surveillance is modified by ^{two} ~~three~~ Notes. Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients outside the power factor range will not invalidate the test. The reason for Note 2 is that during operation with the reactor critical, performance of this Surveillance

TS Bases Insert 6 (new)

Administrative controls for performing this SR in MODES 1 or 2, with the DG connected to an offsite circuit, ensure or require that:

- a. Weather conditions are conducive for performing this SR.
- b. The offsite power supply and switchyard conditions are conducive for performing this SR, which includes ensuring that switchyard access is restricted and no elective maintenance within the switchyard is performed.
- c. No equipment or systems assumed to be available for supporting the performance of the SR are removed from service.

No additional changes to this page.
Provided for context/continuity.

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.8.1.14 (continued)

~~could cause perturbations to the electrical distribution systems that could challenge continued steady state operation and, as a result, unit safety systems. Note 3 permits the elimination of the 2-hour overload test, provided that the combined emergency loads on a DG do not exceed its continuous duty rating.~~

(2)

SR 3.8.1.15

This Surveillance demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal Surveillances, and achieve the required voltage and frequency within 12 seconds. The 12 second time is derived from the requirements of the accident analysis to respond to a design basis large break LOCA. The 18 month Frequency is consistent with the recommendations of Regulatory Guide 1.9, Rev. 3 (Ref. 3).

This SR is modified by two Notes. Note 1 ensures that the test is performed with the diesel sufficiently hot. The load band is provided to avoid routine overloading of the DG. Routine overloads may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY. The requirement that the diesel has operated for at least 2 hours at full load conditions prior to performance of this Surveillance is based on manufacturer recommendations for achieving hot conditions. Momentary transients due to changing bus loads do not invalidate this test. Note 2 allows all DG starts to be preceded by an engine prelube period to minimize wear and tear on the diesel during testing.

SR 3.8.1.16

As required by Regulatory Guide 1.9, Rev. 3 (Ref. 3), this Surveillance ensures that the manual synchronization and automatic load transfer from the DG to the offsite source can be made and the DG can be returned to ready to load status when offsite power is restored. It also ensures that the autostart logic is reset to allow the DG to reload if a subsequent loss of offsite power occurs. The DG is considered to be in ready to load status when the DG is at rated speed and voltage, the output breaker is open and can receive a close signal on bus undervoltage, and the load sequence timers are reset.