Docket

Mr. Otto L. Maynard
President and Chief Executive Officer
Wolf Creek Nuclear Operating Corporation
Post Office Box 411
Burlington, KA 66839

October 28, 1999

SUBJECT: CORRECTION LETTER - ISSUANCE OF AMENDMENT REGARDING LOSS-OF-POWER 4 KV UNDERVOLTAGE TRIPS FOR WOLF CREEK GENERATING STATION (TAC NO. MA6052)

Dear Mr. Maynard:

On October 12, 1999, the Commission issued Amendment No. 128 to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station. The amendment increased the allowable values for engineered safety features actuation system (ESFAS) loss-of-power 4 kV undervoltage trips in Table 3.3-4 (functional units 8.a and 8.b) of the current Technical Specifications (TSs) and in surveillance requirement (SR) 3.3.5.3 of the improved TSs. The word "nominal" was also being added to describe the trip setpoint in SR 3.3.5.3 and in the Bases of the improved TSs. The improved TSs were issued in Amendment 123 dated March 31, 1999, but have not yet been implemented.

There was an error in the safety evaluation (SE) related to the amendment that was enclosed with our letter of October 12, 1999. On page 2 of the SE, there were three references to the emergency diesel generator (EDG) that should be deleted from the SE because they are not correct. The correct reference to the EDG is on the bottom of page 1 of the SE; that a EDG start signal will be generated. Enclosed is a corrected page 2 of the SE.

Sincerely,

ORIGINAL SIGNED BY:
Jack N. Donohew, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosure: Page 2 of Safety Evaluation

cc w/encl: See next page

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

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cc w/encl: See next page

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These protection circuits are described in Section 8.3.1.1.3 of the Updated Safety Analysis Report (USAR) for WCGS. Each circuit has more than one channel for redundancy in having the trip function.

The TSs list allowable values and trip setpoints for the loss-of-voltage and degraded voltage ESFAS protection circuits of the EDG start instrumentation. The licensee has proposed to increase the allowable values and to add the term "nominal" to the trip setpoint for these protection circuits.

Conformance to the TSs requires periodic surveillance tests of the trip setpoints of each channel of these protection circuits. The requirement for this surveillance, the type of surveillance test, and the frequency of the periodic tests are not being changed by the proposed amendment. If the as-found trip setpoint is within the allowable value and the calibration tolerance band, the circuit channel is considered operable and no further action is required. If the as-found trip is within the allowable value but outside the calibration band, the circuit channel is operable but the trip is recalibrated to the TS value. If the as-found trip setpoint is less than the allowable value, the circuit channel is inoperable and the action statement for limiting condition for operation in the TSs for the trip setpoint is entered and the appropriate actions must be taken.

2.0 EVALUATION

Increase Allowable Values

In its submittal, the licensee stated that during a review of the load flow and voltage drop calculation E-B-8 it was discovered that a revision to the calculation had resulted in a revised worst case 4.16 kV bus voltages during steady state loss-of-coolant accident (LOCA) conditions in the WCGS USAR accident analyses. A calculation was performed by the licensee to establish the correct allowable values and trip setpoints for the loss of voltage and degraded voltage protection circuits.

The licensee stated that the allowable value for the loss of voltage protection circuit was calculated taking into account instrument inaccuracies using the square root of the sum of the squares methodology. An allowable value of $\geq$82.5 volts was the result of the calculation. The trip setpoint remained the value in the TSs. The licensee stated that the instrument inaccuracies accounted for include potential transformer inaccuracies and relay error.

The degraded grid voltage trip setpoint is selected to ensure that no end use loads are adversely affected from sustained operation at a voltage below the setpoint. The trip setpoint remains the value in the TSs, but the allowable value was recalculated to be $\geq$ 105.9 volts. The licensee stated that the instrument inaccuracies accounted for include bistable setting accuracy, bistable drift, and potential transformer inaccuracies.

The revised allowable values for the loss of voltage and degraded voltage protection circuits are based on calculations for the worst case 4.16 kV bus voltage which are during steady state LOCA conditions for WCGS. Because these allowable values will ensure that the engineered safety feature 4.16 kV bus is available and stable during all plant conditions including the design basis accidents, the licensee-proposed changes to the allowable values to the current