

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

Robert C. Hagan  
Vice President Nuclear Assurance

February 23, 1994

NA 94-0006

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Station P1-137  
Washington, D. C. 20555

Reference: Letter NA 92-0073 dated October 28, 1993 to USNRC from  
R. C. Hagan, WCNOG  
Subject: Docket No. 50-482: Revision to Technical Specification  
3.8.1.1 and 3.8.1.2

Gentlemen:

This letter transmits an application for amendment to Facility Operating License No. NPF-42 for Wolf Creek Generating Station (WCGS). This license amendment request proposes revising Technical Specification 3.8.1.1, AC Sources Operating, and 3.8.1.2, AC Sources Shutdown, to change the minimum volume of fuel oil specified for the emergency fuel oil day tanks.

In addition to the change described above, administrative changes are also requested for WCGS Technical Specification pages 3/4 1-10, 3/4 3-6 and Bases page B 3/4 1-1. These changes involve corrections to reflect changes previously approved in Amendment 61, but were inadvertently omitted from the application for amendment upon which Amendment 61 was generated. Also, index page XV is being revised to correct section titles and page numbers to reflect changes that were approved in Amendment 1, but were not included on the index page.

Attachment I provides a safety evaluation including a description of the proposed change. Attachment II provides a no significant hazards consideration determination and Attachment III provides an environmental impact determination. The specific change to the technical specifications proposed by this request, as well as the requested administrative changes, are provided in Attachment IV.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Kansas State Official. This proposed revision to the WCGS technical specifications will be fully implemented within 60 days of formal Nuclear Regulatory Commission approval.

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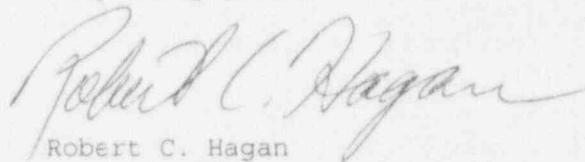
P.O. Box 411 / Burlington, KS 66839 / Phone: (316) 364-8831

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If you have any questions concerning this matter, please contact me at (316) 364-8831, extension 4583, or Mr. Kevin J. Moles, at extension 4565.

Very truly yours,



Robert C. Hagan  
Vice President  
Nuclear Assurance

RCH/jra

Attachments    I - Change Description and Safety Evaluation  
                  II - No Significant Hazards Consideration Determination  
                  III - Environmental Impact Determination  
                  IV - Proposed Technical Specification Change

cc: G. W. Allen (KDHE), w/a  
      J. L. Milhoan (NRC), w/a  
      G. A. Pick (NRC), w/a  
      W. D. Reckley (NRC), w/a  
      L. A. Yandell (NRC), w/a

STATE OF KANSAS     )  
                                  )   SS  
COUNTY OF COFFEY    )

Robert C. Hagan, of lawful age, being first duly sworn upon oath says that he is Vice President Nuclear Assurance of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the content thereof; that he has executed that 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 his knowledge, information and belief.



By Robert C. Hagan  
Robert C. Hagan  
Vice President  
Nuclear Assurance

SUBSCRIBED and sworn to before me this 23<sup>rd</sup> day of February, 1994.

Sandra E. Elliott  
Notary Public

Expiration Date 5/14/95

ATTACHMENT I

CHANGE DESCRIPTION AND SAFETY EVALUATION

## Change Description and Safety Evaluation

### Proposed Change

This license amendment request proposes to revise Technical Specifications 3.8.1.1 (AC Sources Operating) and 3.8.1.2 (AC Sources Shutdown). This revision changes the minimum required storage volume of the emergency fuel oil day tanks from 390 gallons to 510 gallons. This change is the result of inconsistencies in the calculations and Technical Specification Bases for the Callaway (Union Electric) day tank capacities, found during the performance of a self-initiated Electrical Distribution System Functional Assessment (EDSFA). Following review of the Callaway EDSFA and conversations with Union Electric and Bechtel engineering personnel, Wolf Creek Nuclear Operating Corporation (WCNOC) engineering personnel determined that this change to the day tank volume is also applicable to the Wolf Creek Generating Station (WCGS).

Also requested are administrative changes to WCGS Technical Specification pages 3/4 1-10, 3/4 3-6 and Bases page B 3/4 1-1. Amendment 61 to the WCGS Technical Specifications deleted Specification 3/4.1.1.2, Shutdown Margin - Mode 5, and revised the value for Shutdown Margin from 1.0 percent delta k/k to 1.3 percent delta k/k. However, changes to the pages listed above were inadvertently omitted from the reference. This requested change will correct the value for Shutdown Margin in the Action Statement on Page 3/4 1-10 to 1.3 percent delta k/k. It will also delete references to Specification 3.1.1.2 on pages 3/4 3-6 and Bases page B 3/4 1-1. In addition, Amendment 1 deleted a figure from Bases Section B 3/4.2 but index page XV was not revised to reflect this change. The required corrections to index page XV are included in this request.

### Background/System Description

The emergency fuel oil day tanks are the suction sources for the engine driven fuel oil pumps on the Emergency Diesel Generators. The day tanks are sized to supply a minimum of one hour's worth of fuel for the Emergency Diesel Generators with the diesels running at their continuous rating plus a 10 percent margin (see ANSI N195-1976, "Fuel Oil Systems for Standby Diesel-Generators"). We believe this is equivalent to the NUREG-1431, "Standard Technical Specifications Westinghouse Plants," bases which is full load plus 10 percent for the level surveillance value. The transfer pumps located in the Emergency Diesel Generator (EDG) fuel oil storage tanks start on low level and stop on high level via level transmitters installed on the day tanks. The current pump start/stop setpoints ensure that the day tanks normally contain more than 510 gallons of fuel oil. A plant modification has been initiated that will allow the transfer pumps to run continuously if the Emergency Diesel Generators are running. Thus the day tank fuel oil level (510 gallons versus 390 gallons) is not an issue for long-term diesel operability.

Bechtel calculation M-JE-321 calculated the minimum storage volume required for the day tanks. In this calculation, the specific gravity used for the fuel oil was 28 degrees API. However, Technical Specification 4.8.1.1.2d.1a allows a range of 27 to 39 degrees API. If a fuel oil specific gravity of 39 degrees API were used in lieu of 28 degrees, the density would be less, thus requiring a larger minimum volume to attain the required running time for the Emergency Diesel Generators. This calculational error affects the required minimum volume in the day tanks only, and does not require a change to the EDG Fuel Oil Storage Tank minimum volume.

WCNOC's Addenda to Bechtel calculation M-JE-321 has determined that the minimum volume required for the day tanks should be increased to 510 gallons to allow for the possibility that 39 degrees API specific gravity fuel oil may be used and to correspond to latest Technical Specification guidance. This minimum required volume is an increase of 120 gallons over the current technical specification requirement and adds conservatism to the day tank's functionality. As stated above, the fuel oil transfer pumps' start/stop setpoints are currently set to maintain the minimum volume in the day tanks above 510 gallons.

### Evaluation

The proposed change to Technical Specifications 3/4.8.1.1 and 3/4.8.1.2 does not involve an unreviewed safety question because operation of the WCGS with this change would not:

1. Increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report. This change does not affect the operability requirements of the Emergency Diesel Generators or the ability of the fuel oil system to perform its intended safety function. The increased minimum volume in the day tank was calculated using methods specified in ANSI N195-1976, which is endorsed in Regulatory Guide 1.137, "Fuel Oil Systems for Standby Diesel Generators."
2. Create a possibility for an accident or malfunction of a different type than previously evaluated in the safety analysis report. There is no new type of accident or malfunction being created and the method and manner of plant operation remains unchanged. The change corrects the minimum required day tank storage volume using the most conservative parameters for calculating this volume.
3. Reduce the margin of safety as defined in the bases for any Technical Specification. This is based on the fact that no plant design changes are involved and the minimum required day tank storage volume is consistent with the requirements of ANSI N195-1976 and Regulatory Guide 1.137.

The changes requested to WCGS Technical Specification pages 3/4 1-10, 3/4 3-6 and Bases page B 3/4 1-1 are administrative in nature and are being made to reflect changes that were approved in Amendment 61 to the WCGS Technical Specifications, but were inadvertently omitted from the Reference. Similarly, index page XV is being corrected to reflect changes made in Amendment 1 that were not reflected on index page XV at that time. No new changes are being requested for these pages.

Based on the above discussions and the no significant hazards consideration determination presented in Attachment II, the proposed change does not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report; or create the possibility for an accident or a malfunction of a different type than any previously evaluated in the safety analysis report; or reduce the margin of safety as defined in the basis for any technical specification. Therefore, the proposed change does not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard.

ATTACHMENT II

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

### **No Significant Hazards Consideration Determination**

This license amendment request proposes revising Technical Specification 3.8.1.1 and 3.8.1.2. This revision changes the minimum required storage volume of the emergency fuel oil day tanks from 390 gallons to 510 gallons. Also requested are administrative changes to WCGS Technical Specification pages 3/4 1-10, 3/4 3-6, Bases page B 3/4 1-1 and index page XV.

#### **Standard I - Involve a Significant Increase in the Probability of Consequences of an Accident Previously Evaluated**

The current minimum required volume of the day tanks as given in Technical Specifications 3.8.1.1 and 3.8.1.2 is based on fuel oil with a specific gravity value in the upper range of values allowed by the technical specifications. Calculations made using fuel oil with a specific gravity of 39 degrees API, which is the minimum allowed specific gravity, indicate a larger minimum required volume is needed in the day tanks. The increased minimum required volume provides additional conservatism for the day tanks to perform their intended safety function based on the possibility of using different specific gravity fuel oil. The proposed change will not prevent the Emergency Diesel Generator fuel oil system from performing its design basis function, nor require the system to be operated in a manner different than that for which it was designed. Therefore, the proposed change will not increase the probability or consequences of an accident previously evaluated.

#### **Standard II - Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated**

There is no new type of accident or malfunction being created and the method and manner of plant operation remains unchanged. The safety design bases in the Updated Safety Analysis Report (USAR) have not been altered, and current operating requirements of the Emergency Diesel Generators remain unchanged. Thus, this change does not create the possibility of a new or different kind of accident from any previously evaluated.

#### **Standard III - Involve a Significant Reduction in the Margin of Safety**

The basis for the existing emergency fuel oil day tank level requirements is to ensure that sufficient fuel oil is available to meet the operational requirements specified in ANSI N195-1976. This proposed change to the minimum required storage volume of the day tanks is based on revised calculations performed in accordance with ANSI N195-1976 using conservative data. This proposed change will not change the operation of the plant. Thus, the proposed change will continue to ensure the Emergency Diesel Generator operating requirements. There are no changes being made to the safety limits or safety system settings that would adversely impact plant safety. Therefore, the proposed change will not cause a reduction in the margin of safety.

The requested changes to WCGS Technical Specification pages 3/4 1-10, 3/4 3-6, Bases page B 3/4 1-1 and index page XV are administrative in nature, in that they correct inadvertent omissions that should have been included in previously approved amendments.



Based on the above discussions, it has been determined that the requested technical specification revision does not involve a significant increase in the probability or consequences of an accident or other adverse condition over previous evaluations; or create the possibility of a new or different kind of accident or condition over previous evaluations; or involve a significant reduction in the margin of safety. Therefore, the requested license amendment does not involve a significant hazards consideration.

ATTACHMENT III

ENVIRONMENTAL IMPACT DETERMINATION

### Environmental Impact Determination

This amendment request meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) as specified below:

- (i) **the amendment involves no significant hazards consideration**

As demonstrated in Attachment II, the proposed changes do not involve any significant hazards consideration.

- (ii) **there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite**

The proposed change does not involve a change to the facility or operating procedures which would cause an increase in the amounts of effluents or create new types of effluents. Increasing the Emergency Diesel Generator day tank minimum fuel storage volume would not adversely affect the operation of the Emergency Diesel Generators, and would not affect any system involved with the control of effluent releases.

- (iii) **there is no significant increase in individual or cumulative occupational radiation exposure**

Changing the emergency fuel oil day tank minimum fuel storage volume would not adversely affect the operation of the Emergency Diesel Generators, and would not affect any system that would affect occupational radiation exposure. The proposed change does not create additional exposure to personnel nor affect levels of radiation present. The proposed change will not result in any increase in individual or cumulative occupational radiation exposure.

The administrative changes described in the proposed change reflect changes that were made in previous amendments but were inadvertently omitted from the listed pages. Thus, the corrections reflect changes that were evaluated for previously approved amendments that were determined to have no environmental impact.

Based on the above, it is concluded that there will be no impact on the environment resulting from the proposed change and the requested administrative changes, and that the proposed change meets the criteria specified in 10 CFR 51.22 for a categorical exclusion from the requirements of 10 CFR 51.21 relative to requiring a specific environmental assessment by the Commission.