



Clay C. Warren  
Vice President Operations Support

**DEC 8 2000**

CO 00-0058

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

Subject: Docket No. 50-482: Revision to Technical Specification 5.5.14, "Technical Specifications (TS) Bases Control Program"

Gentlemen:

Wolf Creek Nuclear Operating Corporation (WCNOC) herewith transmits an application for amendment to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station (WCGS).

This amendment application would revise Administrative Controls Technical Specifications (TS) 5.5.14b and 5.5.14b.2 to incorporate the changes made to 10 CFR 50.59. The proposed changes would replace the word "involve" with "require" in TS 5.5.14b and revise TS 5.5.14b.2 to state: "a change to the USAR or Bases that requires NRC approval pursuant to 10 CFR 50.59." The changes are consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-364, Revision 0, as amended by Westinghouse Owners Group (WOG) editorial change WOG-ED-24.

WCNOC is submitting this license amendment application in conjunction with the industry consortium of five plants as a result of a mutual agreement known as Strategic Teaming and Resource Sharing (STARS). The STARS group consists of the five plants operated by TXU Electric, AmerenUE, Wolf Creek Nuclear Operating Corporation, Pacific Gas and Electric, and STP Nuclear Operating Company. AmerenUE is the lead utility for the license amendment request (LAR) and the other members of the STARS group can also be expected to submit plant-specific LARs similar to this one. These additional LARs will be submitted in parallel with Ameren UEs application, in order to reduce the amount of NRC resources required to evaluate and approve the applications.

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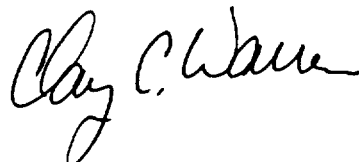
The WCNOG Plant Safety Review Committee and the Nuclear Safety Review Committee have reviewed this amendment application. Attachments I through VII provide the required affidavit, description of proposed license changes and assessment, existing marked-up TS page, revised TS page, proposed USAR changes and the STARS joint License Amendment Request (LAR) comparison table. Attachment V USAR markups are provided for information only. The STARS joint LAR comparison table identifies differences from the lead plant submittal.

WCNOG requests approval of the proposed license amendment by February 28, 2001, with the amendment being implemented within 60 days of issuance of the license amendment. The requested approval date coincides with the expected implementation date for the final rule associated with 10 CFR 50.59.

It has been determined that this amendment application does not involve a significant hazard consideration as determined per 10 CFR 50.92. Pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the issuance of this amendment.

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Kansas State Official. If you should have any questions regarding this submittal, please contact me at (316) 364-4048, or Mr. Tony Harris at (316) 364-4038.

Very truly yours,



Clay C. Warren

CCW/rlr

Attachments:    I    -    Affidavit  
                     II    -    Description and Assessment  
                     III   -    Markup of Technical Specification page  
                     IV   -    Retyped Technical Specification page  
                     V    -    Proposed USAR Changes (for information only)  
                     VI   -    STARS Joint LAR Comparison Table  
                     VII   -    List of Commitments

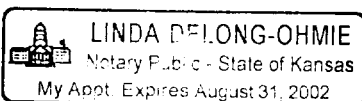
cc:    V. L. Cooper (KDHE), w/a  
         J. N. Donohew (NRC), w/a  
         W. D. Johnson (NRC), w/a  
         E. W. Merschoff (NRC), w/a  
         Senior Resident Inspector (NRC), w/a

STATE OF KANSAS    )  
                          ) SS  
COUNTY OF COFFEY   )

Clay C. Warren, of lawful age, being first duly sworn upon oath says that he is Vice President Operations Support 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 Clay C. Warren  
Clay C. Warren  
Vice President Operations Support

SUBSCRIBED and sworn to before me this 8 day of Dec., 2000.



Linda DeLong-Ohmie  
Notary Public

Expiration Date Aug. 31, 2002

**ATTACHMENT II**  
**DESCRIPTION AND ASSESSMENT**

## **DESCRIPTION AND ASSESSMENT**

### **1.0 INTRODUCTION**

1.1 This proposed License Amendment Request (LAR) is a request pursuant to 10 CFR 50.90 to revise Technical Specification (TS) 5.5.14b and TS 5.5.14b.2, "Technical Specifications (TS) Bases Control Program," for WCGS.

1.2 Updated Safety Analysis Report (USAR) Section

The changes to the USAR that are currently anticipated as a result of this LAR are provided in Attachment V.

### **2.0 DESCRIPTION**

The proposed License Amendment would revise Administrative Controls TS 5.5.14b and 5.5.14b.2 to incorporate the changes made to 10 CFR 50.59 as published in the Federal Register (Reference 1). The proposed changes would replace the word "involve" with "require" in TS 5.5.14b and revise TS 5.5.14b.2 to state: "a change to the USAR or Bases that requires NRC approval pursuant to 10 CFR 50.59."

### **3.0 BACKGROUND**

10 CFR 50.59 establishes the conditions under which licensees may make changes to the facility or procedures and conduct tests or experiments without prior NRC approval.

In 1999, the NRC revised its regulation (Reference 1) for controlling changes, tests and experiments performed by nuclear plant licensees. The changes were prompted by the need to resolve differences in interpretations of the rule's requirements by the industry and the NRC that came into clear focus in 1996. The rule change had two principal objectives, both aimed at restoring much needed regulatory stability to this regulation:

- Establish clear definitions to promote common understanding of the rule's requirements, and
- Clarify the criteria for determining when changes, tests, and experiments require prior NRC approval.

The changes approved by the Commission in 1999 made 10 CFR 50.59 more focused and efficient by:

- Providing greater flexibility to licensees, primarily by allowing changes that have minimal safety impact to be made without NRC approval, and
- Clarifying the threshold for "screening out" changes that do not require full evaluation under 10 CFR 50.59, primarily by adoption of key definitions and codifying the screening process.

Proposed changes, tests, and experiments that satisfy the definitions and one or more of the criteria in the rule must be reviewed and approved by the NRC before implementation.

The current TS Bases Control Program required by TS 5.5.14 allows licensees to make changes to the Bases without NRC approval provided the change does not involve "a change to the USAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59." With the revisions to 10 CFR 50.59, the term "unreviewed safety question" was eliminated. Therefore, the TS should be revised to be consistent with the revision to 10 CFR 50.59. The proposed change is described below and is consistent with NRC approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-364, Revision 0 as amended by Westinghouse Owners Group (WOG) editorial change WOG-ED-24, (Reference 2).

#### **4.0 TECHNICAL ANALYSIS**

The proposed changes to TS 5.5.14 are made as a result of the NRC revising its regulation, 10 CFR 50.59, concerning the authority for licensees of production or utilization facilities, such as nuclear reactors, and independent spent fuel storage facilities, and for certificate holders for spent fuel storage casks, to make changes to the facility or procedures, or to conduct tests or experiments, without prior NRC approval. The final rule clarifies the specific types of changes, tests, and experiments conducted at a licensed facility or by a certificate holder that require evaluation, and revises the criteria that licensees and certificate holders must use to determine when NRC approval is needed before such changes, tests, or experiments can be implemented. The revised regulation eliminates the term "unreviewed safety question," adds definitions for terms that have been subject to differing interpretations, and reorganizes the language of the regulation for clarity.

The proposed changes to TS 5.5.14 to incorporate the NRC approved TSTF-364, Revision 0 as amended by WOG-ED-24 do not have any impact on USAR accident analyses. This change is administrative in nature based on the revision of 10 CFR 50.59.

#### **5.0 REGULATORY ANALYSIS**

##### **5.1 No Significant Hazards Determination**

WCNOC has evaluated whether or not a significant hazards consideration is involved with the proposed changes by focusing on the three standards set forth in 10 CFR 50.92(c) as discussed below:

1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed changes replace the word "involve" with "require" and deletes reference to the term "unreviewed safety question" consistent with 10 CFR 50.59. The above changes are consistent with the revision to 10 CFR 50.59. Consequently, the probability of an accident previously evaluated is not increased. Changes to the Technical Specification (TS) Bases are still evaluated in accordance with 10 CFR 50.59. As a result, the consequences of any accident previously evaluated are not affected.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes do not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing plant operation. These changes are considered administrative changes and do not modify, add, delete, or relocate any technical requirements in the TS.

Therefore, the proposed changes do not create a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed changes will not reduce the margin of safety because they have no effect on any safety analyses assumptions. Changes to the TS Bases that result in meeting the criteria in paragraph (c)(2) of 10 CFR 50.59 will still require NRC approval. The proposed changes to TS 5.5.14 are considered administrative in nature based on the revision to 10 CFR 50.59.

Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

Based on the above evaluations, WCNOG concludes that the activities associated with the above described changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92 and accordingly, a finding by the NRC of no significant hazards consideration is justified.

## **5.2 Regulatory Safety Analysis**

### Applicable Regulatory Requirements/Criteria

The regulatory basis for TS 5.5.14 is to ensure a program exist for processing changes to the TS Bases. These changes may or may not require NRC approval when evaluated in accordance with the requirements of 10 CFR 50.59.

10 CFR 50.36(a) requires that the TS have a summary statement of the bases or reasons for such specifications, but shall not become part of the TS. Thus, the Bases are required per this regulation but are not a part of the TS.

10 CFR 50.36(c)(5) requires that the TS include a category called "Administrative Control," that contains the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

### Analysis

The regulatory requirements/criteria continue to be met. Changes to the TS Bases will still be regulated by 10 CFR 50.59.

### Conclusion

The proposed LAR is in compliance with 10 CFR 50.36(a), 10 CFR 50.36(c)(5), and 10 CFR 50.59.

## **6.0 ENVIRONMENTAL EVALUATION**

WCNOC has determined that the proposed amendment is a revision to an administrative procedure as described in 10 CFR 51.22(c)(10). Accordingly, the proposed amendment meet eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

## **7.0 REFERENCES**

1. Federal Register, Vol. 64, No. 191, pg. 53582, "Changes, Tests, and Experiments."
2. Industry/TSTF Standard Technical Specification Change Traveler TSTF-364, "Revision to TS Bases Control Program to Incorporate Changes to 10 CFR 50.59," Rev 0, as amended by WOG ED-24.



**ATTACHMENT III**  
**MARKUP OF TECHNICAL SPECIFICATION PAGE**

## 5.5 Programs and Manuals

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### 5.5.13 Diesel Fuel Oil Testing Program (continued)

- a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:
  - 1. an API gravity or an absolute specific gravity within limits,
  - 2. a flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and
  - 3. water and sediment content within the limits for ASTM 2D fuel oil;
- b. Other properties for ASTM 2D fuel oil are analyzed within 31 days following sampling and addition to storage tanks; and
- c. Total particulate concentration of the fuel oil is  $\leq 10$  mg/l when tested every 31 days in accordance with ASTM D-2276, Method A.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Program test frequencies.

### 5.5.14 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not ~~involve~~ either of the following:

require

- 1. a change in the TS incorporated in the license; or
- 2. a change to the USAR or Bases that ~~involves an unreviewed~~ ~~safety question as defined in~~ 10 CFR 50.59.

requires NRC approval pursuant to

- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.

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(continued)

**ATTACHMENT IV**  
**RETYPE TECHNICAL SPECIFICATION PAGE**

## 5.5 Programs and Manuals

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### 5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

The program shall include:

- a. The limits for concentrations of hydrogen and oxygen in the Waste Gas Holdup System and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);
- b. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than the amount that would result in a whole body exposure of  $\geq 0.5$  rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents; and
- c. A surveillance program to ensure that the quantity of radioactivity contained in the following outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table 2, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.
  - a. Reactor Makeup Water Storage Tank
  - b. Refueling Water Storage Tank
  - c. Condensate Storage Tank, and
  - d. Outside Temporary tanks, excluding demineralizer vessels and the liner being used to solidify radioactive waste.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

### 5.5.13 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable ASTM Standards. The purpose of the program is to establish the following:

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## 5.5 Programs and Manuals

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### 5.5.13 Diesel Fuel Oil Testing Program (continued)

- a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:
  - 1. an API gravity or an absolute specific gravity within limits,
  - 2. a flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and
  - 3. water and sediment content within the limits for ASTM 2D fuel oil;
- b. Other properties for ASTM 2D fuel oil are analyzed within 31 days following sampling and addition to storage tanks; and
- c. Total particulate concentration of the fuel oil is  $\leq 10$  mg/l when tested every 31 days in accordance with ASTM D-2276, Method A.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Diesel Fuel Oil Testing Program test frequencies.

### 5.5.14 Technical Specifications (TS) Bases Control Program

This program provides a means for processing changes to the Bases of these Technical Specifications.

- a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.
- b. Licensees may make changes to Bases without prior NRC approval provided the changes do not require either of the following:
  - 1. a change in the TS incorporated in the license; or
  - 2. a change to the USAR or Bases that requires NRC approval pursuant to 10 CFR 50.59.
- c. The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the USAR.

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(continued)

**ATTACHMENT V**  
**PROPOSED USAR CHANGES**

As described in Section 4.3.2.2.6, the peak linear power resulting from overpower transients/operator errors (assuming a maximum overpower of 118 percent) is limited such that the centerline fuel melt kW/ft limit is never exceeded. The centerline temperature kW/ft must be below the UO<sub>2</sub> melt temperature over the lifetime of the rod, including allowances for uncertainties. The fuel temperature design basis is discussed in Section 4.4.1.2 and results in a maximum allowable calculated centerline temperature of 4,700°F. The centerline temperature at the peak linear power resulting from overpower transients/operator errors (assuming a maximum overpower of 118 percent) is below that required to produce melting.

#### 4.4.2.12 Revised Thermal Design Procedure (RTDP)

WCGS utilizes the Revised Thermal Design Procedure (RTDP), Reference 91, to determine a design limit DNBR value used as a basis in thermal-hydraulic analyses. With the RTDP methodology, uncertainties in plant operating parameters, nuclear and thermal parameters, fuel fabrication parameters, computer codes, and DNB correlation predictions are considered statistically to obtain DNB uncertainty factors. Based on the DNB uncertainty factors, RTDP design limit DNBR values are determined such that there is at least a 95 percent probability at a 95 percent confidence level that DNB will not occur on the most limiting fuel rod during normal operation and operational transients and during transient conditions arising from faults of moderate frequency (Condition I and II events). Since the parameter uncertainties are considered in determining the RTDP design limit DNBR values, the plant safety analyses are performed using input parameters at their nominal values.

The RTDP design limit DNBR value for the WCGS is 1.76. The design limit DNBR is used as a basis for the technical specifications and for consideration of the applicability of unreviewed safety questions as defined in 10 CFR 50.59.

To maintain DNBR margin to offset DNBR penalties such as those due to rod bow, the safety analyses are performed to DNBR limits higher than the design limit DNBR value. The difference between the design limit DNBR and the safety analysis limit DNBR results in available DNBR margin. The net DNBR margin, after consideration of all applicable penalties, is available for operating and design flexibility.

The Standard Thermal Design Procedure (STDP) is used for those analyses where RTDP is not applicable. In the STDP method, the parameters used in the analysis are treated in a conservative way from a DNBR standpoint. The parameter uncertainties are applied directly to the plant safety analysis input values to give the lowest minimum DNBR. The DNBR limit for STDP is the appropriate DNB correlation limit after consideration of applicable penalties is made.

in evaluations completed  
in accordance with 10 CFR 50.59.

Procedures are reviewed by Qualified Reviewers designated by the PSRC Chairman. The Qualified Reviewer ensures all reviews are completed and reviews are documented as directed by administrative procedures. The Responsible Manager for the document will sign to approve the document for use.

Procedures which are classified as Administrative Control procedures are reviewed and approved by the Plant Safety Review Committee (PSRC) and the plant manager. All Administrative Control Procedures are reviewed and the reviews documented by qualified personnel. All Administrative Control Procedures are reviewed by a Qualified Reviewer, the Responsible Manager, the Plant Safety Review Committee (PSRC), and by the plant manager. Reviews of Administrative Control Procedures are documented on the Document Revision Request form.

Temporary Changes to procedures which do not change the intent or generate an unreviewed safety question of the original or subsequent approved procedure, may be made. <sup>Evaluation per 10CFR 50.59</sup> Prior to use, temporary changes are to be approved by two cognizant members of the WCNO staff knowledgeable in the areas affected by the document. At least one of these shall be a member of WCNO supervision. For temporary changes to operating procedures, at least one of these members must hold a senior reactor operator (SRO) license.

All temporary changes to procedures are subsequently reviewed by a Qualified Reviewer and the Responsible Manager within 14 days after approval for use.

#### 13.5.1.3 Procedures

The Vice President Plant Operations and Plant Manager develops and implements station administrative procedures that provide a clear understanding of operating philosophy and management policies. As stated in 13.5.1.2, administrative procedures were implemented that provide methods for preparation, review and approval of all other station procedures including permanent procedures, temporary procedures or any procedures that might be of a transient or self-cancelling nature.

Administrative procedures are developed that provide operations shift supervisors and shift crews with a clear understanding of how they are to conduct plant operations. Included are procedures that specifically describe who may manipulate the controls of the reactor and who may operate any apparatus or mechanism that might affect the reactivity of the reactor.

Procedures have been implemented specifying shift manning requirements which are in accordance with the Technical Specifications. The responsibilities and authorities of the supervising licensed personnel are delineated.



Procedures were written early in plant life for maintenance of safety-related equipment expected to require recurring maintenance. When failure of safety-related equipment occurs, the cause is evaluated; however, since the probability of failure is usually unknown and the time and mode of failure are usually unpredictable, procedures are not generally written for repair of most equipment prior to failure. As experience is gained in operation of the plant, routine maintenance is altered to improve equipment performance and repair procedures are written and improved as required.

A preventive maintenance schedule has been developed which describes the frequency and type of maintenance to be performed. A preliminary schedule was developed early in plant life and is refined and changed as experience with the equipment is gained.

Maintenance is scheduled so as not to jeopardize the safety of the reactor. Scheduling considers the possible safety consequences of concurrent or sequential maintenance, testing, or operating activities. Equipment required to be operable for the mode in which the reactor exists is available, and maintenance is performed in a manner such that the license limits are not violated.

do not require a license amendment

one evaluation per 10 CFR 50.59

as required by

Proposed design/configuration changes to safety-related equipment that include ~~Unreviewed Safety Question Determinations (USQDs)~~, will be reviewed by the PSRC to verify that the changes ~~does not constitute an unreviewed safety question as defined in~~ 10 CFR Part 50.59. Off-the-shelf components are used only when the proper quality assurance documents are available or when the required quality assurance can be obtained by inspection and testing prior to being placed in service. Modifications to safety-related equipment are designed and performed in accordance with applicable codes, standards, bases, design requirements, materials specifications and inspection requirements.

#### 13.5.2.2.2 Health Physics Procedures

Detailed written and approved procedures are used by the WCGS personnel to ensure that occupational radiation exposure is maintained as low as reasonably achievable (ALARA). It is the responsibility of the Manager Chemistry/Radiation Protection, under the direction of the Vice President Plant Operations and Plant Manager to prepare and maintain the station Health Physics procedures. Careful administrative control of the use of these procedures ensures that a sound health physics philosophy, consistent with maintaining radiation exposures ALARA becomes an integral part of station operation and maintenance. Health Physics procedures were developed for activities such as those listed in Table 13.5-5.

#### 13.5.2.2.3 Emergency Preparedness Procedures

See Section 13.3 for a discussion of Emergency Preparedness Procedures.

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The quorum of the PSRC necessary for the performance of the PSRC responsibility and authority provisions shall consist of the Chairman or his designated alternate and four members including alternates.

The PSRC shall be responsible for:

- an evaluation per 10CFR 50.59;
- a. Review of: (1) Administrative Control Procedures and changes thereto, and (2) procedures and changes thereto required by Technical Specification 5.4.1 and requiring a ~~10 CFR 50.59 safety evaluation.~~
  - b. Review of all proposed changes, tests and experiments which may ~~involve an unreviewed safety question as defined in Section 50.59, 10 CFR~~ require a licence amendment as required by 10CFR 50.59;
  - c. Review of all proposed changes to Technical Specifications or the Operating License;
  - d. Review of all ~~safety~~ evaluations performed under the provision of Section 50.59(a)(1), 10 CFR, for changes, tests and experiments;
  - (c) e. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Plant Manager, and to the Nuclear Safety Review Committee (NSRC);
  - f. Review of all reportable events;
  - g. Review of reports of operating abnormalities, deviations from expected performance of plant equipment and of unanticipated deficiencies in the design or operation of structures, systems or components that affect nuclear safety;
  - h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Chairman, NSRC;
  - i. Review of changes to the Process Control Program, the Offsite Dose Calculation Manual, and the Radwaste Treatment Systems;
  - j. Review of any accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations, and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Plant Manager and to the Nuclear Safety Review Committee; and
  - k. Review of the Fire Protection Program and shall submit recommended changes to the Nuclear Safety Review Committee.

The PSRC shall:

- a. Recommend in writing to the Plant Manager approval or disapproval of items considered under Section 17.2.1.4, a through d. and k. above,

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require a license  
amendment per 10 CFR 50.59

d., and

- b. Render determinations in writing with regard to whether or not each item considered under Section 17.2.1.4, b. ~~through~~ e. above constitutes an unreviewed safety question, and
- c. Provide written notification within 24 hours to the President and Chief Executive Officer and the Nuclear Safety Review Committee of disagreement between the PSRC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements pursuant to Technical Specification 5.1.1.

The PSRC shall maintain written minutes of each PSRC meeting that, at a minimum, document the results of all PSRC activities performed under the responsibility provisions of this section. Copies shall be provided to the Plant Manager and the Nuclear Safety Review Committee.

#### NUCLEAR SAFETY REVIEW COMMITTEE (NSRC)

The NSRC shall function to provide independent review and audit of designated activities in the areas of:

- a. Nuclear power plant operations,
- b. Nuclear engineering,
- c. Chemistry and radiochemistry,
- d. Metallurgy,
- e. Instrumentation and control,
- f. Radiological safety,
- g. Mechanical and electrical engineering, and
- h. Quality assurance practices.

The NSRC shall report to and advise the President and Chief Executive Officer on those areas of responsibility specified in a. through i. below and Section 17.2.18.5.

The NSRC shall be composed of at least eight designated members, including the Chairman. Members of the NSRC may be from within the WCNOC organization or from outside organizations. The NSRC shall have sufficient expertise to adequately provide an independent review and audit of designated activities in the areas listed in a. through h. above. Additional members may be appointed by the Chairman. The NSRC members shall meet or exceed the requirements of ANSI/ANS 3.1, 1981.

All alternate members shall be appointed in writing by the NSRC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in NSRC activities at any one time.

Consultants shall be utilized as determined by the NSRC Chairman to provide expert advice to the NSRC.

The NSRC shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per 6 months thereafter.

#### 17.2.3.7 Design/Configuration Changes

Changes to plant design may be necessary to correct operational deficiencies, incorporate improvements, or to comply with new regulatory requirements. Design changes are defined as changes to the technical requirements which are needed to perform an item's design basis. NOTE: The substitution of non-safety related parts or components (hardware) into safety related components or systems except those parts or components that have been downgraded by parts classification program, shall be considered a design change. Configuration changes are defined as: 1) changes to design documentation that correct discrepancies in order to conform to approved plant design. 2) changes that result in the installation of an item, not identical to the original item, but which meet the technical requirements of the item's design basis and applicable interface(s). An engineering evaluation assures that these changes are consistent with design basis and interface requirements specified in existing design documents. The configuration change "process" satisfies ANSI N45.2.11 requirements. Design changes and configuration changes are reviewed by cognizant organizations through the design/configuration change process.

Procedures specify requirements for the review and approval of design/configuration changes by the organizations that performed the original design, if appropriate. Design activities may be delegated to others provided they have access to background and technical information. Design/configuration changes are communicated to appropriate plant personnel when such changes may affect the performance of their duties.

Temporary Modifications, interim and short-term changes to the approved station design, are controlled in accordance with approved procedures.

#### 17.2.3.8 Design Review Committees

the need for a license amendment via an evaluation per 10CFR 50.59.

Independent of the responsibilities of the design organization, the requirements of the Plant Safety Review Committee (PSRC) and the Nuclear Safety Review Committee (NSRC) are satisfied. Proposed design/configuration changes are screened to determine ~~if an unreviewed safety question exists via an Unreviewed Safety Question Determination (USQD)~~. Design/configuration changes which could involve ~~an unreviewed safety question~~ or include ~~a USQD~~ require review and concurrence by the Plant Safety Review Committee (PSRC) prior to implementation. The PSRC reviews design documents as necessary to identify ~~unreviewed safety questions~~. These changes also require a review and concurrence by the Nuclear Safety Review Committee (NSRC). The NSRC reviews appropriate material to verify that changes ~~do not in fact, involve an unreviewed safety question~~. When design is performed by an outside organization, Engineering performs or coordinates a review for operability, maintainability, inspectability, SAR commitment compatibility, and design requirements imposed by plant equipment. In addition, Engineering identifies and controls design interfaces and coordinates the design process between internal divisions and the outside organization(s).

a license amendment

the need for a license amendment

do not require a license amendment as required by 10CFR 50.59.

an evaluation per 10CFR 50.59

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a license amendment as required  
by 10 CFR 50.59.

When required, safety analyses which consider the effect of the design as described in the design documents may be performed by the Operating Agent. These analyses provide the basis for the PSRC reviews which are performed to determine that design/configuration changes do not involve ~~an unfettered safety question~~. Approved safety analyses or names of outside organizations performing the analyses are submitted to the PSRC. The safety analyses for design changes involving the substitution of hardware that has not been evaluated per the parts classification program, assure that the changes are consistent with and do not alter the design basis requirements specified in existing design documents. The engineering approval of design documents and safety analyses prepared by outside organizations is performed by the outside organization unless otherwise specified.

The PSRC reviews design/configuration changes that propose a change in Technical Specifications. Proposed changes to Technical Specifications are also forwarded to the NSRC for review and approval prior to submittal to NRC pursuant to 10 CFR 50.

an evaluation per 10 CFR 50.59

Design/configuration changes (with ~~40800~~ or a proposed Technical Specification change) and test procedures are reviewed by the PSRC prior to implementation. Records are maintained which reflect current design, including safety analyses, ~~18005~~ design change installation procedures, material identification documents, procurement documents, special process documents, equipment and installation specifications, and as-built drawings.

evaluation per 10 CFR 50.59

#### 17.2.4 PROCUREMENT DOCUMENT CONTROL

##### 17.2.4.1 Scope

Procurement document control applies to documents employed to procure safety-related materials, parts, components, and services required to modify, maintain, repair, test, inspect, or operate the WCGS. The Operating Agent controls procurement documents by written procedures which establish requirements and assign responsibility for measures to assure that applicable regulatory requirements, design bases, and other requirements necessary to assure quality are included in documents employed for the procurement of safety-related materials, parts, components, and services.

##### 17.2.4.2 Procurement Responsibility

Responsibility for procurement does not reside in a single group, but is a joint effort of the Operating Agent's plant staff and the Purchasing & Material Services organizations. These and other applicable organizations have responsibility for technical content, quality requirements, and commercial provisions.

#### 17.2.5.3 Contractor Controls

Procurement documents require outside organizations to have appropriate instructions, procedures, specifications, and drawings to meet the requirements of the Operating Quality Program.

#### 17.2.5.4 Operations Documents

The WCGS staff and other responsible departments provide written procedures and drawings as required for the operating phase. These procedures prescribe the Operating Agent's activities which affect the function of safety-related structures, systems, and components.

#### 17.2.5.5 Review and Approval

The approval, issue, and control of the various implementing procedures, manuals, and policies are as described in Sections 17.2.2 and 17.2.6.

Proposed procedure revisions which involve a change in the Technical Specifications or a license amendment ~~an unreviewed safety question~~ are referred to the Nuclear Safety Review Committee by the PSRC following its review.

Table 17.2-2 lists those types of activities under the control of the plant and other Operating Agent procedures. Procedures prepared for the procedures manual and administrative procedures are processed through the qualified review process, as dictated in plant procedures, ensuring compliance with Operating Quality Program requirements. Additionally, Inspection procedures are reviewed by quality Control personnel for compliance with Operating Quality Program requirements.

Each procedure of Technical Specification 5.4.1, and changes thereto, and any other procedure or procedure change that the Plant Manager determines to affect nuclear safety, shall be reviewed and approved as described below, prior to implementation.

- a. Each procedure, or change thereto, shall be reviewed by a Qualified Reviewer who is knowledgeable in the functional area affected, but is not the individual who prepared the procedure or procedure change. All required cross-disciplinary reviews of new procedures, procedure revisions, or change thereto, shall be completed prior to approval.
- b. Procedures other than Administrative Control Procedures shall be approved by the responsible Manager or his designee as specified in Administrative Control Procedures. The Plant Manager shall approve Administrative Control Procedures. The Manager responsible for the Security Plan shall approve the Security Plan and implementing procedures. The Manager responsible for Emergency Planning shall approve the Radiological Emergency Response Plan and implementing procedures.

WOLF CREEK

An evaluation per 10 CFR 50.59

- c. The responsible Manager, or his designee, shall ensure each review includes a determination of whether a procedure, or change thereto, requires ~~a 10 CFR 50.59 safety evaluation~~. If a procedure, or change thereto, requires ~~a 10 CFR 50.59 safety evaluation~~, the responsible Manager, or his designee, shall forward the procedure, or change thereto, with ~~the associated 10 CFR 50.59 safety evaluation~~ to the PSRC for review in accordance with Section 17.2.1.4. Pursuant to Section 50.59, 10 CFR, NRC approval of items ~~involving unreviewed safety questions~~ shall be obtained prior to approval for implementation. requiring a license amendment
- d. Qualified Reviewers shall meet the applicable qualifications of ANSI/ANS 3.1-1978. Personnel recommended to be Qualified Reviewers shall be reviewed by the PSRC and approved and documented by the PSRC Chairman. The responsible Manager shall ensure that a sufficient complement of Qualified Reviewers for their functional area is maintained in accordance with Administrative Control Procedures.
- e. Records documenting the activities performed per a. through d. above shall be maintained in accordance with Section 17.2.17.9.

Temporary changes to procedures specified by Technical Specification 5.4.1 may be made and implemented prior to obtaining the review and approval as specified above provided:

- a. The intent of the original procedure is not altered.
- b. Temporary changes shall, as a minimum, be approved by two cognizant members of the WCNOC staff knowledgeable in the areas affected by the procedure. At least one of these shall be a member of WCNOC supervision. Changes to operations procedures shall be approved by two cognizant members of WCNOC staff knowledgeable in the areas affected by the procedure. One will hold a senior reactor operator license on the unit.
- c. The change is documented, reviewed, and approved as specified above, within 14 days of implementation.

17.2.6 DOCUMENT CONTROL

17.2.6.1 Scope

Documents and their revisions which control activities affecting safety-related structures, systems, and components are prepared, reviewed by knowledgeable individuals, and approved by authorized personnel prior to release or issuing in accordance with written approved procedures.

Departments and organizations responsible for program implementing documents are required to provide and assure the necessary review and approval for instructions, procedures, specification, and drawings. Reviews and approvals assure that issued documents include proper quality and technical requirements, and are correct for intended use. Individuals or groups responsible for preparing, reviewing, and approving documents and revisions thereto are identified in written procedures.

#### 17.2.11.4 Test Results

Test results are documented, reviewed, and approved by qualified individuals or groups. Equipment found to be deficient is identified in accordance with Section 17.2.14. Surveillance test results which fail to meet the requirements and acceptance criteria are documented and reviewed in accordance with Technical Specifications. Deficiencies identified as nonconforming are reviewed in accordance with Section 17.2.15.

#### 17.2.11.5 Test Evaluations

Upon completion of system preoperational testing, the test results were submitted to the Joint Test Group (JTG) for its review and subsequent recommendation for approval. The JTG was dissolved upon completion of the Startup Test Program.

Surveillance Test results are reviewed by designated plant supervisory personnel.

*a license amendment*

The results of special tests and experiments as defined by 10CFR50.59 are reviewed by the PSRC. Proposed tests or experiments which involve an unreviewed safety question or change in the Technical Specifications are reviewed by the NSRC and approved by the NRC prior to performance of the test. The NSRC also reviews any test reports associated with such tests.

#### 17.2.11.6 Preoperational and Startup Tests

The Startup Manager was responsible for the administration and conduct of the preoperational testing program. The Plant Manager was responsible for the administration and conduct of the initial startup testing program and all post-plant-acceptance testing. Test procedures employed during the preoperational and the initial startup test programs were prepared and approved under the requirements of the Wolf Creek administrative procedures. Preoperational test procedures were reviewed by qualified personnel and the JTG, and approved by the Startup Manager. Initial startup test procedures and post-plant-acceptance test procedures were reviewed by qualified personnel and the PSRC, and approved by the Plant Manager.

#### 17.2.11.7 Systems Control

At turnover of systems or portions of systems to the plant staff, the Plant Manager was responsible for their operation. During the period prior to the initiation of startup testing, to the extent practicable, the plant technical and operating staff familiarized themselves with the facility operation and verified by trial use that operating and emergency procedures were adequate.

#### 17.2.11.8 Measuring and Test Equipment

Equipment and instrumentation used in test acceptance is controlled in accordance with Section 17.2.12.



procedural requirements which impact the quality of an item. Nonconforming activities which have not resulted in hardware nonconformances (i.e., programmatic or procedural deficiencies which do not impact the quality of an item), are corrected in accordance with Chapter 17.2.16, Corrective Action.

#### 17.2.15.2 Nonconformance Controls

Nonconformances are identified, documented, controlled, dispositioned and corrected in accordance with approved procedures. These measures provide for the notification of affected parties and controls to prevent the inadvertent use of nonconforming items.

Nonconformances are controlled by report documentation, tagging, marking, logging, or physical segregation. Nonconformances are documented on records which identify the nonconforming condition, record the disposition, and register the signature of an appropriate approval authority. Nonconformances are reworked, rejected, repaired, or accepted. Repaired and reworked items are reinspected/tested in accordance with applicable procedures to ensure that critical attributes possibly affected by the nonconforming condition remain acceptable. These procedures are based on original inspection and test requirements or approved alternatives. Reinspection results and operational data, gathered subsequent to repair or rework, are documented or referenced on nonconformance, test or inspection documentation.

The design/configuration change process is used in the Nonconformance Program to carry out dispositions of "use-as-is" or "repair." This process ensures that all aspects of plant operation are considered in light of the fact that the dispositioned item is now not exactly per original design. These considerations include revision of applicable drawings, possible revisions to operation, test, maintenance and inspection procedures; training of affected personnel, changes to spare parts inventory; ~~unreviewed safety questions~~; and review of licensing documents.

evaluations per 10 CFR 50.54

Measures have been established to control the conditional release of nonconforming items from the warehouse, for which correction is pending and a technical evaluation by Engineering indicates that installation and/or testing will not adversely affect nor preclude identification and correction of the nonconformance. A conditional release to proceed with installation and/or with testing of a system or subsystem with outstanding nonconformances considers the nature of the nonconformance, its effect on installation and/or testing and the need for supplemental tests or inspections after correction of the nonconformance. Conditional release evaluations are documented and the conditional release is closed by Supplier/Material Quality when the nonconforming condition is resolved. Safety-related and special scope conditional releases are reviewed and approved by Engineering prior to implementation.

Nonconforming items required for Technical Specification Operability are only released for use through the design/configuration change process and, thus, cannot be conditionally released for operations.

WOLF CREEK

RESPONSE

The goal of the reload safety evaluation is to confirm the validity of the existing safety analysis. The existing safety analysis is defined as the reference safety analysis and is intended to be valid for all plant cycles. Thus safety analysis input parameter values are selected to bound the values expected in all subsequent cycles. This bounding analysis concept is the key to the Westinghouse reload safety analysis methodology. When all reload safety-related parameters for a given accident are bounded, the reference safety analysis is valid. On the other hand, when a reload parameter is not bounded, further evaluation is necessary. The purpose of this further evaluation is to confirm that the margin of safety defined in the basis for any technical specification is not reduced. This reload safety evaluation methodology is applied whenever the input parameter values for a reference safety analysis are available. In summary, Westinghouse reload safety evaluation methodology consists of:

1. A systematic evaluation to determine whether the reload parameters are bounded by the values used in the reference safety analysis.
2. A determination of the effects on the reference safety analysis when a reload parameter is not bounded to ensure that specified design bases are met. need for a license amendment

When the above process identifies either a potential unreviewed safety question or the need for a change in the plant Technical Specifications, the Operating Agent will make the appropriate notification to the NRC.

Q492.9           The staff has reviewed the applicants' response to the requirements of Item II.F.2 of NUREG-0737 and found that the applicants have not provided the documentation required by Item II.F.2. Therefore, the staff will require that the applicants provide the documentation required by Item II.F.2 of NUREG-0737.

RESPONSE

See revised Section 18.2.13.

Q492.10           Justify that the single upper head penetration meets the single failure requirement of NUREG-0737 and show that it does not negate the redundancy of the two instrument trains.

**ATTACHMENT VI**  
**STARS JOINT LAR COMPARISON TABLE**

**STARS JOINT LAR COMPARISON TABLE**

CHANGE DESCRIPTION	CALLAWAY (1)	COMANCHE PEAK	DIABLO CANYON	SOUTH TEXAS PROJECT	WOLF CREEK
INTRODUCTION		Includes proposed changes to TS 5.5.17.		STP will submit similar changes as part of a separate license amendment request to revise portions of Section 6.0 of the STP Technical Specifications.	
DESCRIPTION (add rows as necessary to describe TS changes)		Includes proposed changes to TS 5.5.17.			
BACKGROUND		Includes proposed changes to TS 5.5.17.			
TECHNICAL ANALYSIS		Includes proposed changes to TS 5.5.17.			
NO SIGNIFICANT HAZARDS DETERMINATION		Includes proposed changes to TS 5.5.17.			
REGULATORY SAFETY ANALYSIS		Includes proposed changes to TS 5.5.17.			
ENVIRONMENTAL EVALUATION					
REFERENCES					

(1) AmerenUE is the lead utility for this LAR. This table identifies differences from the lead utility application.

**SCHEDULAR TABLE (2)**

PROPOSED DATE	CALLAWAY	COMANCHE PEAK	DIABLO CANYON	SOUTH TEXAS PROJECT	WOLF CREEK
EXPECTED SUBMITTAL DATE	12/06/00	12/08/00	12/06/00	SEE NOTE BELOW	12/07/00
REQUESTED APPROVAL DATE	02/28/01	02/28/01	02/28/01	SEE NOTE BELOW	02/28/01
IMPLEMENTATION PERIOD	60 DAYS	60 DAYS	60 DAYS	SEE NOTE BELOW	60 DAYS

(2) This Table provides schedule only and is not considered a part of the LAR submittal.

NOTE: South Texas Project's submittal will be at a later date to be coordinated with their project manager.

**LIST OF COMMITMENTS**

The following table identifies those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Tony Harris, Manager Regulatory Affairs at Wolf Creek Generating Station, (316) 364-4038.

COMMITMENT	Due Date/Event
The amendment will be implemented within 60 days of issuance of the license amendment.	Within 60 days of issuance of the license amendment