

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

Donna Jacobs  
Vice President Operations and Plant Manager

October 7, 2004

WO 04-0031

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

Reference: NRC letter dated January 28, 2004, from J. Donohew, NRC, to R. A. Muench, WCNOG

Subject: Docket No. 50-482: Revision to Technical Specification (TS) 5.3, "Unit Staff Qualifications," and Corrections to Various TSs

Gentlemen:

Pursuant to 10 CFR 50.90, Wolf Creek Nuclear Operating Corporation (WCNOG) hereby requests an amendment to Facility Operating License No. NPF-42 for the Wolf Creek Generating Station (WCGS).

This amendment application would revise Technical Specification (TS) 5.3, "Unit Staff Qualifications," to reinstate the qualification requirements for the Shift Manager and Control Room Supervisor positions that were inadvertently eliminated through the issuance of Amendment No. 150. Additionally, this section is revised to reference this application for the use of the National Academy for Nuclear Training guideline, ACAD 00-003, Revision 1, "Guidelines for Initial Training and Qualification of Licensed Operators." Various other TSs are being corrected based on a comparison review performed by the NRC as documented in the Reference and additional reviews performed by WCNOG personnel.


Attachments I through III provide the evaluation, markup of technical specification pages, and retyped technical specification pages, respectively, in support of this amendment request. Attachment IV contains a list of commitments.

This amendment application was reviewed by the Plant Safety Review Committee and the Nuclear Safety Review Committee. In accordance with 10 CFR 50.91, a copy of this amendment application, with attachments, is being provided to the designated Kansas State official.

A001

WCNOC requests approval of the proposed amendment by June 2005. The changes proposed are not required to address an immediate safety concern. It is anticipated that the license amendment, as approved, will be effective upon issuance, to be implemented within 90 days from the date of issuance. 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

Attachments: I - Evaluation  
II - Markup of Technical Specification pages  
III - Retyped Technical Specification pages  
IV - List of Commitments

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

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 7<sup>th</sup> day of Oct, 2004.



*Rhonda L. Gleue*  
Notary Public

Expiration Date May 11, 2006

## EVALUATION

### 1.0 DESCRIPTION

This amendment application would revise Technical Specification (TS) 5.3, "Unit Staff Qualifications," to reinstate the qualification requirements for the Shift Manager and Control Room Supervisor positions that were inadvertently eliminated through the issuance of Amendment No. 150. Technical Specification 5.3 is also revised to reference this application for the adoption of the National Academy for Nuclear Training guideline, ACAD 00-003, Revision 1, "Guidelines for Initial Training and Qualification of Licensed Operators." Various other TSs are being corrected based on a comparison review performed by the NRC (Reference 1) and additional reviews performed by Wolf Creek Nuclear Operating Corporation (WCNOC) personnel.

### 2.0 PROPOSED CHANGE

#### Unit Staff Qualifications

TS Section 5.3, "Unit Staff Qualifications," Specification 5.3.1 is revised to specify an exception that requires the Shift Manager and Control Room Supervisor positions to comply with the requirements of ANSI/ANS 3.1-1981, "Selection, Qualification and Training of Personnel for Nuclear Power Plants," in lieu of ANSI/ANS 3.1-1978. Specification 5.3.1.1 would be revised to add the following:

"The positions of Shift Manager and Control Room Supervisor shall meet or exceed the qualifications of ANSI/ANS 3.1-1981."

Additionally, Specification 5.3.1.1 is revised to reference this application for the adoption of the National Academy for Nuclear Training guideline, ACAD 00-003, Revision 1, "Guidelines for Initial Training and Qualification of Licensed Operators."

#### Corrections

- Page 3.2-1. The Completion Time for Required Action A.4 which states: "Prior to increasing THERMAL POWER above the limit of Required Actions A.1" is revised to " ..... of Required Action A.1". (Item 4 in Table attached to Reference 1)
- Page 5.0-3. The Section heading and number which states "Responsibility 5.1" is revised to "Organization 5.2". (Item 10 in Table attached to Reference 1)
- Page 5.0-3. In item d. of Specification 5.5.2, the reference to Senior Reactor Operator is revised to Senior Reactor Operators and the reference to Reactor Operator is revised to Reactor Operators. (Item 11 in Table attached to Reference 1)
- Pages 5.0-7, 5.0-11, 5.0-18, and 5.0-27. The "(continued)" after the Section number and title is deleted consistent with the guidance of NEI 01-03, "Writer's Guide for the Improved Standard Technical Specifications," Section 2.6.2. (Item 12 in Table attached to Reference 1)

- Page 5.0-32. In item a. of Specification 5.7.1, "are" at the end of the first sentence is revised to "area".

### **3.0 BACKGROUND**

#### Unit Staff Qualifications

Amendment No. 150 (Reference 2) revised TS 5.3.1.1, "Unit Staff Qualifications," to state new education and experience eligibility requirements for operator license applicants. Specifically, TS 5.3.1.1 indicates that the education and experience eligibility requirements shall be those previously reviewed and approved by the NRC, specifically those referenced in letter dated September 19, 2002 (WO 02-0051). As stated in WCNOG letter dated September 19, 2002 (Reference 3), the new requirements are outlined by the National Academy for Nuclear Training in ACAD 00-003 (Reference 6), "Guidelines for Initial Training and Qualification of Licensed Operators," which were issued in January 2000. Subsequent to the issuance of Amendment No. 150, WCNOG personnel determined that the revised wording inadvertently eliminated some ANSI/ANS 3.1, 1981 qualification requirements for the Shift Manager and Control Room Supervisor positions.

Additionally, ACAD 00-003, Revision 1, was issued in April 2004. Revision 1 of this document provides additional guidance and clarification for reactor operator equivalent military reactor experience.

#### Corrections

By an NRC internal memorandum dated September 17, 2003, NRC Project Managers were instructed to perform a comparison of the NRC License Authority File of Operating License No. NPF-42 and the WCNOG controlled copy of the Operating License. The review included the following appendices to the license: Appendix A (Technical Specifications), Appendix B (Environmental Protection Plan), Appendix C (Antitrust Conditions), and Appendix D (Additional Conditions). By letter dated January 28, 2004 (Reference 1), the NRC provided the results of its review and identified several errors requiring correction through an amendment to the license. Additional reviews were performed by WCNOG personnel that resulted in one additional correction.

### **4.0 TECHNICAL ANALYSIS**

#### Unit Staff Qualifications

On January 18, 2001, the NRC published NRC Regulatory Issue Summary (RIS) 2001-01, "Eligibility of Operator License Applicants," (Reference 7), to familiarize licensees with the NRC's current guidelines for the qualification and training of reactor operator and senior operator license applicants. RIS 2001-01 acknowledged that 10 CFR 55.31(a)(4) allows the NRC to accept an application for an operator's license if the facility licensee certifies that the applicant has successfully completed a Commission-approved training program that is based on a systems approach to training. RIS 2001-01 stated in part that the National Academy for Nuclear Training guidelines for education and experience (those in effect in 1987 or those issued in January 2000) outline acceptable methods for implementing the Commission's regulations for the qualification and training of reactor operator and senior operator license applicants. The RIS further states:

"When a facility licensee's licensed operator training program description or licensing basis documents contain education and experience requirements that are more restrictive than either Revision 3 of RG 1.8 or the current NANT guidelines, the most restrictive requirements will continue to apply pending the initiation of action by the licensee to amend these requirements; any required TS changes would be considered administrative in nature."

On September 22, 2001 (Reference 4), as supplemented by letters dated June 27, 2002 (Reference 5) and September 19, 2002 (Reference 3), WCNOG submitted a license amendment request to revise TS 5.3.1 to specify an exception that requires license operators to comply with the requirements of the National Academy for Nuclear Training guidelines. Specifically the TSs were revised from:

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 with the following exceptions:

5.3.1.1 License Operators and Senior Operators shall meet or exceed the qualifications of ANSI/ANS 3.1-1981 as endorsed by Regulatory Guide 1.8, Revision 2, and 10 CFR Part 55.

to state:

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 with the following exceptions:

5.3.1.1 The education and experience eligibility requirements for operator license applicants, and changes thereto, shall be those previously approved by the NRC, specifically those referenced in letter dated September 19, 2002 (WO 02-0051).

Amendment No. 150, dated November 26, 2002, approved the proposed changes to TS 5.3.1. Subsequent to the issuance of Amendment No. 150, WCNOG personnel determined that the revised wording resulted in the inadvertent elimination of the ANSI/ANS 3.1-1981 requirements for supervisors requiring an NRC license (i.e., Shift Manager and Control Supervisor). As such, WCNOG is proposing to add a sentence to TS 5.3.1.1 indicating that the qualification requirements of ANSI/ANS 3.1-1981 apply to the Shift Manager and Control Room Supervisor positions. This proposed change will reinstate the requirements for these positions that existed in the TSs prior to issuance of Amendment No. 150.

Additionally, in April 2004, the National Academy for Nuclear Training issued Revision 1 to ACAD 00-003, "Guidelines for Initial Training and Qualification of Licensed Operators." Revision 1 of ACAD 00-003 provides additional guidance and clarification for reactor operator equivalent military reactor experience. Specifically, Figure 2.2, "Senior Reactor Operator Eligibility (RO Upgrade or Direct SRO)," was revised to change "Power Plant Watch Engineer" to "Propulsion Plant Watch Officer." Revision 1 to ACAD 00-003 was initiated based on Draft Revision 9 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Section D.2.a(2) of examination standard ES-202, "Preparing and Reviewing Operator License Applications." WCNOG requests the NRC approve the methods described in Revision 1 to ACAD 00-003 for meeting the education and experience eligibility requirements at the Wolf Creek Generating Station.

License operator qualifications and training can have an indirect impact on accidents previously evaluated. However, the NRC considered this impact during the rulemaking process, and by promulgation of the revised 10 CFR 55 rule, determined that this impact remains acceptable when licensees have an accredited licensed operator training program which is based on a systems approach to training. The NRC has concluded in Reference 7 that the standards and guidelines applied by the National Academy for Nuclear Training in their training accreditation program are equivalent to those put forth or endorsed by the NRC. Therefore, maintaining an accredited, systems based licensed operator training program is equivalent to maintaining an NRC approved licensed operator training program which conforms with applicable NRC Regulatory Guides or NRC endorsed industry standards.

### Corrections

The proposed change involves corrections to the Technical Specifications that are either associated with the issuance of the Improved Technical Specifications (Amendment No. 123) or subsequent amendments. As such, the changes are considered administrative changes and do not modify, add, delete, or relocate any technical requirements of the Technical Specifications.

## **5.0 REGULATORY ANALYSIS**

### **5.1 No Significant Hazards Consideration**

This amendment application would revise Technical Specification (TS) 5.3, "Unit Staff Qualifications," to reinstate the qualification requirements for the Shift Manager and Control Room Supervisor positions that were inadvertently eliminated through the issuance of Amendment No. 150. Technical Specification 5.3 is also revised to reference this application for the adoption of the National Academy for Nuclear Training guideline, ACAD 00-003, Revision 1, "Guidelines for Initial Training and Qualification of Licensed Operators." Various other TSs are being corrected based on a comparison review performed by the NRC (Reference 1) and additional reviews performed by Wolf Creek Nuclear Operating Corporation (WCNOC) personnel. WCNOC has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

- (1) Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?**

Response: No

### Unit Staff Qualifications

The proposed change is an administrative change to reinstate the qualification requirements for specific control room positions that were inadvertently eliminated through the issuance of Amendment No. 150 and utilize Revision 1 to ACAD 00-003, "Guidelines for Initial Training and Qualification of Licensed Operators." The proposed change does not directly impact accidents previously evaluated. WCNOC's licensed operator training program is accredited by the National Academy for Nuclear Training and is based on a systems approach to training consistent with the requirements of 10 CFR 55. Although licensed operator qualifications and training may have an indirect impact on accidents previously evaluated, the NRC considered this impact during the rulemaking process, and by promulgation of the revised 10 CFR 55 rule,

concluded that this impact remains acceptable as long as the licensed operator training program is certified to be accredited and is based on a systems approach to training.

#### Corrections

The proposed change involves corrections to the Technical Specifications that are either associated with the issuance of the Improved Technical Specifications (Amendment No. 123) or subsequent amendments. The changes are considered administrative changes and do not modify, add, delete, or relocate any technical requirements of the Technical Specifications. As such, administrative changes do not effect initiators of analyzed events or assumed mitigation of accident or transient events.

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

**(2) Does the proposed change create the possibility of a new or different accident from any accident previously evaluated?**

Response: No

#### Unit Staff Qualifications

The proposed change is an administrative change to reinstate the current requirements of specific control room positions and allow the use of Revision 1 of ACAD 00-003 for initial training and qualification of licensed operators. WCNO's licensed operator training program is accredited by the National Academy for Nuclear Training and is based on a systems approach to training consistent with the requirements of 10 CFR 55. Although licensed operator qualifications and training may have an indirect impact on accidents previously evaluated, the NRC considered this impact during the rulemaking process, and by promulgation of the revised 10 CFR 55 rule, concluded that this impact remains acceptable as long as the licensed operator training program is certified to be accredited and is based on a systems approach to training.

#### Corrections

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in methods of governing normal plant operation. The proposed change will not impose any new or eliminate any old requirements.

Therefore, the proposed changes do not create the possibility of 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

#### Unit Staff Qualifications

The proposed change is an administrative change to reinstate the current requirements of specific control room positions and allow the use of Revision 1 of ACAD 00-003 for initial training and qualification of licensed operators. As noted previously, WCNO's licensed



operator training program is accredited and is based on a systems approach to training consistent with the requirements of 10 CFR 55. Licensed operator qualifications and training can have an indirect impact on the margin of safety. However, the NRC considered this impact during the rulemaking process, and by promulgation of the revised 10 CFR 55 rule, determined that this impact remains acceptable when licensees maintain a licensed operator training program that is accredited and based on a systems approach to training.

### Corrections

The proposed change will not reduce a margin of safety because they have no effect on any safety analysis assumptions. The change is administrative in nature.

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

Based on the above, WCNOG concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

### 5.2 Applicable Regulatory Requirements/Criteria

- 10 CFR 55.4 defines systems approach to training to mean a training program that includes the five elements:
  - (1) Systematic analysis of the jobs to be performed.
  - (2) Learning objectives derived from the analysis which describe desired performance after training.
  - (3) Training design and implementation based on learning objectives.
  - (4) Evaluation of trainee mastery of the objectives during training.
  - (5) Evaluation and revision of the training based on the performance of trained personnel in the job setting.

The WCNOG licensed operator training program is accredited by the National Academy for Nuclear Training and is based on a systems approach to training. The license operator qualifications and training program will continue to comply with the requirements of 10 CFR 55.

- 10 CFR 55.31(a)(4) specifies in part that the Commission may accept certification that the applicant has successfully completed a Commission-approved training program that is based on a systems approach to training and that uses a simulation facility acceptable to the Commission under 10 CFR 55.45(b). NRC Generic Letter 87-07 and NUREG-1262, indicated that the NRC would accept a licensee's licensed operator training program if it is accredited and based on a systems approach to training.

The WCNOG license operator training program is accredited and is based on a systems approach to training. The licensed operator qualifications and training program will continue to comply with the requirements of 10 CFR 55.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 ENVIRONMENTAL CONSIDERATION

WCNOC has evaluated the proposed amendment for environmental considerations. The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 7.0 REFERENCES

1. NRC letter dated January 28, 2004, "Wolf Creek Generating Station – Review of Licensee's Copy of the Facility Operating License (TAC NO. MC0986)," from J. Donohew, NRC, to R. A. Muench, WCNOC.
2. NRC letter dated November 26, 2002, "Wolf Creek Generating Station – Issuance of Amendment Re: Unit Staff Qualifications (TAC NO. MB3017)," from J. Donohew, NRC, to O. L. Maynard, WCNOC.
3. WCNOC letter WO 02-0051, dated September 19, 2002, "Modification to Application for Amendment to Revise Technical Specification 5.3, "Unit Staff Qualifications", " from B. T. McKinney, WCNOC, to USNRC.
4. WCNOC letter WO 01-0038, dated September 27, 2001, "Revision to Technical Specification 5.3, "Unit Staff Qualifications", " from B. T. McKinney, WCNOC, to USNRC.
5. WCNOC letter WO 02-0032, dated June 27, 2002, "Modification to Application for Amendment to Revise Technical Specification 5.3, "Unit Staff Qualifications", " from B. T. McKinney, WCNOC, to USNRC.
6. National Academy for Nuclear Training, ACAD 00-003, Revision 1, "Guidelines for Initial Training and Qualification of Licensed Operators," April 2004.
7. Regulatory Issue Summary 2001-01, "Eligibility of Operator License Applicants," January 18, 2001.

**ATTACHMENT II  
MARKUP OF TECHNICAL SPECIFICATION PAGES**

3.2 POWER DISTRIBUTION LIMITS

3.2.1 Heat Flux Hot Channel Factor (F<sub>Q</sub>(Z)) (F<sub>Q</sub> Methodology)

LCO 3.2.1 F<sub>Q</sub>(Z), as approximated by F<sub>Q</sub><sup>C</sup>(Z) and F<sub>Q</sub><sup>W</sup>(Z), shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. F <sub>Q</sub> <sup>C</sup> (Z) not within limit.	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% F <sub>Q</sub> <sup>C</sup> (Z) exceeds limit.	15 minutes after each F <sub>Q</sub> <sup>C</sup> (Z) determination
	<u>AND</u>	
	A.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% F <sub>Q</sub> <sup>C</sup> (Z) exceeds limit.	72 hours after each F <sub>Q</sub> <sup>C</sup> (Z) determination
	<u>AND</u>	
	A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% F <sub>Q</sub> <sup>C</sup> (Z) exceeds limit.	72 hours after each F <sub>Q</sub> <sup>C</sup> (Z) determination
<u>AND</u>		
A.4 Perform SR 3.2.1.1.	Prior to increasing THERMAL POWER above the limit of Required Action A.1 <i>ce</i>	

(continued)



5.2 Organization

---

5.2.2 Unit Staff (continued)

shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

- c. An individual from the Health Physics Group qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

- d. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety related functions (e.g., licensed Senior Reactor Operator (SROs), licensed Reactor Operator (ROs), health physics technicians, nuclear station operators, and key maintenance personnel).

(S)

(S)

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime. Any deviation from the above guidelines shall be authorized in advance by the plant manager or the plant manager's designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

- e. The Superintendent Operations or operations manager shall hold an SRO license.
- f. An individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This position shall be manned in MODES 1, 2, 3 or 4, unless the Shift Manager or the individual with a Senior Operator License meets the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

---

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 with the following exceptions:

5.3.1.1 The education and experience eligibility requirements for operator license applicants, and changes thereto, shall be those previously reviewed and approved by the NRC, specifically those referenced in letter dated September 19, 2002 (WO 02-0051).

October 7, 2004 (WO 04-0031).

5.3.1.2 The Radiation Protection Manager shall be a supervisor with line responsibility for operational health physics who meets or exceeds the qualifications of Regulatory Guide 1.8, September 1975 for a Radiation Protection Manager. The Radiation Protection Manager will be designated by the plant manager.

5.3.1.3 The position of operations manager shall hold or have previously held a senior reactor operator license for a similar unit (PWR).

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed reactor operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

---

The positions of Shift Manager and Control Room Supervisor shall meet or exceed the qualifications of ANSI/ANS 3.1-1981.

5.5 Programs and Manuals (continued)

---

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include appropriate portions of Containment Spray, Safety Injection, Chemical and Volume Control, Residual Heat Removal, and Nuclear Sampling System (Post Accident Sampling System only (until such time as a modification eliminates the PASS penetration as a potential leakage path)). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Not Used.

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

---

(continued)

5.5 Programs and Manuals (continued)

---

5.5.9 Steam Generator (SG) Tube Surveillance Program

Steam generator tube integrity shall be demonstrated by performance of the following augmented inservice inspection program.

The provisions of SR 3.0.2 are applicable to the SG Tube Surveillance Program test frequencies.

- a. Steam Generator Sample Selection and Inspection - Steam generator tube integrity shall be determined during shutdown by selecting and inspecting at least the minimum number of steam generators specified in Table 5.5.9-1.
- b. Steam Generator Tube Sample Selection and Inspection - The steam generator tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.9-2. The inservice inspection of steam generator tubes shall be performed at the frequencies specified in Specification 5.5.9.c and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.9.d. The tubes selected for each inservice inspection shall include at least 3% of the total number of tubes in all steam generators; the tubes selected for these inspections shall be selected on a random basis except:
  1. Where experience in similar plants with similar water chemistry indicates critical areas to be inspected, then at least 50% of the tubes inspected shall be from these critical areas;
  2. The first sample of tubes selected for each inservice inspection (subsequent to the preservice inspection) of each steam generator shall include:
    - a) All nonplugged tubes that previously had detectable wall penetrations (greater than 20%),
    - b) Tubes in those areas where experience has indicated potential problems, and
    - c) A tube inspection (pursuant to Specification 5.5.9.d.1.h) shall be performed on each selected tube. If any selected tube does not permit the passage of the eddy current probe for a tube inspection, this shall be recorded and an

(continued)



5.5 Programs and Manuals (continued)

---

5.5.10 Secondary Water Chemistry Program

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation. The program shall include:

- a. Identification of a sampling schedule for the critical variables and control points for these variables;
- b. Identification of the procedures used to measure the values of the critical variables;
- c. Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;
- d. Procedures for the recording and management of data;
- e. Procedures defining corrective actions for all off control point chemistry conditions; and
- f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2, and in accordance with the guidance specified below.

- a. Demonstrate for each of the ESF systems that an in-place test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass < 1% when tested in accordance with Regulatory Guide 1.52, Revision 2 at the system flowrate specified below  $\pm 10\%$ .

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation System-Filtration	2000 cfm
Control Room Emergency Ventilation System-Pressurization	750 cfm
Auxiliary/Fuel Building Emergency Exhaust	6500 cfm

(continued)

---

5.6 Reporting Requirements (continued)

---

5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.6.4 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

5.6.5 CORE OPERATING LIMITS REPORT (COLR)

- a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:
1. Specification 3.1.3: Moderator Temperature Coefficient (MTC),
  2. Specification 3.1.5: Shutdown Bank Insertion Limits,
  3. Specification 3.1.6: Control Bank Insertion Limits,
  4. Specification 3.2.3: Axial Flux Difference,
  5. Specification 3.2.1: Heat Flux Hot Channel Factor,  $F_Q(Z)$ ,
  6. Specification 3.2.2: Nuclear Enthalpy Rise Hot Channel Factor ( $F_{\Delta H}^N$ ),
  7. Specification 3.9.1: Boron Concentration,
  8. SHUTDOWN MARGIN for Specification 3.1.1 and 3.1.4, 3.1.5, 3.1.6, and 3.1.8,
  9. Specification 3.3.1: Overtemperature  $\Delta T$  and Overpower  $\Delta T$  Trip Setpoints,

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

### 5.7 High Radiation Area

---

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

#### 5.7.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation:

- a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
- b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
- c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.
- d. Each individual or group entering such an area shall possess:
  - 1. A radiation monitoring device that continuously displays radiation dose rates in the area; or
  - 2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
  - 3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or
  - 4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

(continued)

---

**ATTACHMENT III  
RETYPE TECHNICAL SPECIFICATION PAGES**

3.2 POWER DISTRIBUTION LIMITS

3.2.1 Heat Flux Hot Channel Factor (F<sub>Q</sub>(Z)) (F<sub>Q</sub> Methodology)

LCO 3.2.1 F<sub>Q</sub><sup>C</sup>(Z), as approximated by F<sub>Q</sub><sup>C</sup>(Z) and F<sub>Q</sub><sup>W</sup>(Z), shall be within the limits specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. F<sub>Q</sub><sup>C</sup>(Z) not within limit.</p>	<p>A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% F<sub>Q</sub><sup>C</sup>(Z) exceeds limit.</p>	<p>15 minutes after each F<sub>Q</sub><sup>C</sup>(Z) determination</p>
	<p><u>AND</u></p>	
	<p>A.2 Reduce Power Range Neutron Flux - High trip setpoints ≥ 1% for each 1% F<sub>Q</sub><sup>C</sup>(Z) exceeds limit.</p>	<p>72 hours after each F<sub>Q</sub><sup>C</sup>(Z) determination</p>
	<p><u>AND</u></p>	
	<p>A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% F<sub>Q</sub><sup>C</sup>(Z) exceeds limit.</p>	<p>72 hours after each F<sub>Q</sub><sup>C</sup>(Z) determination</p>
<p><u>AND</u></p>		
<p>A.4 Perform SR 3.2.1.1.</p>	<p>Prior to increasing THERMAL POWER above the limit of Required Action A.1</p>	

(continued)

## 5.2 Organization

---

### 5.2.2 Unit Staff (continued)

shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

- c. An individual from the Health Physics Group qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- d. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety related functions (e.g., licensed Senior Reactor Operators (SROs), licensed Reactor Operators (ROs), health physics technicians, nuclear station operators, and key maintenance personnel).

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime. Any deviation from the above guidelines shall be authorized in advance by the plant manager or the plant manager's designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

- e. The Superintendent Operations or operations manager shall hold an SRO license.
  - f. An individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This position shall be manned in MODES 1, 2, 3 or 4, unless the Shift Manager or the individual with a Senior Operator License meets the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.
-

## 5.0 ADMINISTRATIVE CONTROLS

### 5.3 Unit Staff Qualifications

---

- 5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 with the following exceptions:
- 5.3.1.1 The education and experience eligibility requirements for operator license applicants, and changes thereto, shall be those previously reviewed and approved by the NRC, specifically those referenced in letter dated August , 2004 (WO 04-0031). The positions of Shift Manager and Control Room Supervisor shall meet or exceed the qualifications of ANSI/ANS 3.1-1981.
  - 5.3.1.2 The Radiation Protection Manager shall be a supervisor with line responsibility for operational health physics who meets or exceeds the qualifications of Regulatory Guide 1.8, September 1975 for a Radiation Protection Manager. The Radiation Protection Manager will be designated by the plant manager.
  - 5.3.1.3 The position of operations manager shall hold or have previously held a senior reactor operator license for a similar unit (PWR).
- 5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed reactor operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).
-

5.5 Programs and Manuals

---

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include appropriate portions of Containment Spray, Safety Injection, Chemical and Volume Control, Residual Heat Removal, and Nuclear Sampling System (Post Accident Sampling System only (until such time as a modification eliminates the PASS penetration as a potential leakage path)). The program shall include the following:

- a. Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Not Used.

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

---

(continued)



## 5.5 Programs and Manuals

---

### 5.5.9 Steam Generator (SG) Tube Surveillance Program

Steam generator tube integrity shall be demonstrated by performance of the following augmented inservice inspection program.

The provisions of SR 3.0.2 are applicable to the SG Tube Surveillance Program test frequencies.

- a. Steam Generator Sample Selection and Inspection - Steam generator tube integrity shall be determined during shutdown by selecting and inspecting at least the minimum number of steam generators specified in Table 5.5.9-1.
- b. Steam Generator Tube Sample Selection and Inspection - The steam generator tube minimum sample size, inspection result classification, and the corresponding action required shall be as specified in Table 5.5.9-2. The inservice inspection of steam generator tubes shall be performed at the frequencies specified in Specification 5.5.9.c and the inspected tubes shall be verified acceptable per the acceptance criteria of Specification 5.5.9.d. The tubes selected for each inservice inspection shall include at least 3% of the total number of tubes in all steam generators; the tubes selected for these inspections shall be selected on a random basis except:
  1. Where experience in similar plants with similar water chemistry indicates critical areas to be inspected, then at least 50% of the tubes inspected shall be from these critical areas;
  2. The first sample of tubes selected for each inservice inspection (subsequent to the preservice inspection) of each steam generator shall include:
    - a) All nonplugged tubes that previously had detectable wall penetrations (greater than 20%),
    - b) Tubes in those areas where experience has indicated potential problems, and
    - c) A tube inspection (pursuant to Specification 5.5.9.d.1.h) shall be performed on each selected tube. If any selected tube does not permit the passage of the eddy current probe for a tube inspection, this shall be recorded and an

---

(continued)

5.5 Programs and Manuals

---

5.5.10 Secondary Water Chemistry Program

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation. The program shall include:

- a. Identification of a sampling schedule for the critical variables and control points for these variables;
- b. Identification of the procedures used to measure the values of the critical variables;
- c. Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;
- d. Procedures for the recording and management of data;
- e. Procedures defining corrective actions for all off control point chemistry conditions; and
- f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.

5.5.11 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in Regulatory Guide 1.52, Revision 2, and in accordance with the guidance specified below.

- a. Demonstrate for each of the ESF systems that an in-place test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass < 1% when tested in accordance with Regulatory Guide 1.52, Revision 2 at the system flowrate specified below  $\pm 10\%$ .

ESF Ventilation System	Flowrate
Control Room Emergency Ventilation System-Filtration	2000 cfm
Control Room Emergency Ventilation System-Pressurization	750 cfm
Auxiliary/Fuel Building Emergency Exhaust	6500 cfm

(continued)

## 5.6 Reporting Requirements

---

### 5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous year shall be submitted prior to May 1 of each year in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

### 5.6.4 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

### 5.6.5 CORE OPERATING LIMITS REPORT (COLR)

- a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:
1. Specification 3.1.3: Moderator Temperature Coefficient (MTC),
  2. Specification 3.1.5: Shutdown Bank Insertion Limits,
  3. Specification 3.1.6: Control Bank Insertion Limits,
  4. Specification 3.2.3: Axial Flux Difference,
  5. Specification 3.2.1: Heat Flux Hot Channel Factor,  $F_Q(Z)$ ,
  6. Specification 3.2.2: Nuclear Enthalpy Rise Hot Channel Factor ( $F_{\Delta H}^N$ ),
  7. Specification 3.9.1: Boron Concentration,
  8. SHUTDOWN MARGIN for Specification 3.1.1 and 3.1.4, 3.1.5, 3.1.6, and 3.1.8,
  9. Specification 3.3.1: Overtemperature  $\Delta T$  and Overpower  $\Delta T$  Trip Setpoints,

(continued)

## 5.0 ADMINISTRATIVE CONTROLS

### 5.7 High Radiation Area

---

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

- 5.7.1 High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from any Surface Penetrated by the Radiation:
- a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.
  - b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.
  - c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.
  - d. Each individual or group entering such an area shall possess:
    1. A radiation monitoring device that continuously displays radiation dose rates in the area; or
    2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or
    3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or
    4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

(continued)

---

**LIST OF COMMITMENTS**

The following table identifies those actions committed to by WCNOG 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. Kevin Moles at (620) 364-4126.

<b>COMMITMENT</b>	<b>Due Date/Event</b>
The proposed changes to the WCGS Technical Specifications will be implemented within 90 days of NRC approval.	Within 90 days of NRC approval