



KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER
VICE PRESIDENT - NUCLEAR

May 1, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

KMLNRC 85-101
Re: Docket No. STN 50-482
Ref: KMLNRC 85-070 dated 03/01/85 from
GLKoester, KG&E, to HRDenton, NRC
Subj: Technical Specifications

Dear Mr. Denton:

Transmitted herewith are changes to the Wolf Creek Technical Specifications which should be included in the issuance of the Wolf Creek full power license. These changes include additional information on changes identified in the Reference as well as changes identified during discussions with the NRC prior to issuance of the five percent power license but not pursued at that time. KG&E requests incorporation of these changes into the Wolf Creek Technical Specifications for issuance with the Wolf Creek full power license.

Yours very truly,

for Glenn L. Koester
Vice President - Nuclear

GLK:bb
Attach
xc:PO'Connor (2), w/a
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REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.4.5.4 Acceptance Criteria

a. As used in this specification:

- 1) Imperfection means an exception to the dimensions, finish or contour of a tube from that required by fabrication drawings or specifications. Eddy-current testing indications below 20% of the nominal tube wall thickness, if detectable, may be considered as imperfections;
- 2) Degradation means a service-induced cracking, wastage, wear or general corrosion occurring on either inside or outside of a tube;
- 3) Degraded Tube means a tube containing imperfections greater than or equal to 20% of the nominal wall thickness caused by degradation;
- 4) % Degradation means the percentage of the tube wall thickness affected or removed by degradation;
- 5) Defect means an imperfection of such severity that it exceeds the plugging limit. A tube containing a defect is defective;
- 6) Plugging Limit means the imperfection depth at or beyond which the tube shall be removed from service and is equal to ~~40%~~ 48% of the nominal tube wall thickness;
- 7) Unserviceable describes the condition of a tube if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in Specification 4.4.5.3c., above;
- 8) Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg; and

Justification for Technical Specification 4.4.5.4a.6:

The Standard Technical Specifications for Westinghouse Pressurized Water Reactors (NUREG-0452, Rev.4) shows the tube plugging limit value as "(40)%*." The footnote for this value reads:

"*Value to be determined in accordance with the recommendations of Regulatory Guide 1.121, August, 1976."

The parenthesis indicated that the value is to be supplied by the applicant.

In December, 1982, KG&E and UE submitted, via SNUPPS (SLNRC 82-47, 12/03/82) documentation meeting the requirements of the Standard Technical Specifications, Rev.4 and supporting a tube plugging limit of 53%.

Subsequent to this submittal the NRC issued to the SNUPPS Utilities:

- Draft Callaway Technical Specification, 01/83
- Draft Wolf Creek Technical Specification, 01/83
- Pre Proof and Review copy of the Callaway Technical Specification, 10/83
- Proof and Review copy of Wolf Creek Technical Specification, 02/84

with each document having 53% for the tube plugging limit.

In December, 1983 the NRC transmitted comments concerning the use of a factor of safety of 2 rather than a safety factor of 3 required by Regulatory Guide 1.121. The SNUPPS utilities reevaluated the analysis (ref. SLNRC 84-0017, 02/02/84) and resubmitted a tube plugging limit of 48%. The new value was based on utilizing a safety factor of 3 as recommended by the NRC as well as NRC recommendations that conservative assumption of potential degradation modes for SNUPPS Model F steam generator tubes, including potential eddy current uncertainties, be used when calculating operational allowances to establish tube plugging limits.

While this submittal was being reviewed the Callaway Technical Specification, Final Draft was issued using 40% for the tube plugging limit.

PLANT SYSTEMS

BASES

SAFETY VALVES (Continued)

Y = Maximum relieving capacity of any one safety valve in
lbs/hour.

3/4.7.1.2 AUXILIARY FEEDWATER SYSTEM

The OPERABILITY of the Auxiliary Feedwater System ensures that the Reactor Coolant System can be cooled down to less than 350°F from normal operating conditions in the event of a total loss-of-offsite power.

Testing of each electric motor-driven auxiliary feedwater pump on a fixed orifice recirculation flow and ensuring a discharge pressure of greater than or equal to 1535 psig verifies the capability of each pump to deliver a total feedwater flow of 575 gpm at a pressure of 1221 psig to the entrance of the steam generators. The steam driven auxiliary feedwater pump is capable of delivering a total feedwater flow of 1145 gpm at a pressure of 1221 psig to the entrance of the steam generators. This capacity is sufficient to ensure that adequate feedwater flow is available to remove decay heat and reduce the Reactor Coolant System temperature to less than 350°F when the RHR System may be placed into operation.

3/4.7.1.3 CONDENSATE STORAGE TANK

The OPERABILITY of the condensate storage tank with the minimum water volume ensures that sufficient water is available to maintain the RCS at HOT STANDBY conditions for 4 hours with steam discharge to the atmosphere concurrent with total loss-of-offsite power and then a cooldown to 350°F at 50°F per hour. The contained water volume limit includes an allowance for water not usable because of tank discharge line location or other physical characteristics.

3/4.7.1.4 SPECIFIC ACTIVITY

The limitations on Secondary Coolant System specific activity ensure that the resultant offsite radiation dose will be limited to a small fraction of 10 CFR Part 100 dose guideline values in the event of a steam line rupture. This dose also includes the effects of a coincident 1 gpm reactor to secondary tube leak in the steam generator of the affected steam line. These values are consistent with the assumptions used in the safety analyses.

Justification for change in Tech. Spec. Bases Sec. 3/4.7.2:

The present wording implies that the pump flow measurement is taken at the entrance of the steam generator. Actual measurement is performed at the exit of the pump.

Hydrogen Mixing Fans

- 1) Letter, SLNRC 85-8, from N.A. Petrick, SNUPPS to H.R. Denton, NRC, dated 02/19/85
- 2) Letter, KMLNRC 85-070, from G.L. Koester, KG&E, to H.R. Denton, NRC, dated 03/01/85
- 3) Letter, KMLNRC 85-071, from G.L. Koester, KG&E, to H.R. Denton, NRC, dated 03/04/85

Reference 1) transmitted justification for deletion of Technical Specification 3/4.6.4.3 Hydrogen Mixing Fans.

Reference 2) and 3) requested that the NRC review of the submittal for deletion of Technical Specification 3/4.6.4.3 be completed in time for the issuance of the unrestricted full power license for Wolf Creek.

This submittal is transmitted to restate KG&E's desire to have this issue resolved for incorporation into the unrestricted full power license for Wolf Creek.

ADMINISTRATIVE CONTROLS

FUNCTION (Continued)

- g. Mechanical and electrical engineering, and
- h. Quality assurance practices.

The NSRC shall report to and advise the Vice President-Nuclear on those areas of responsibility specified in Specifications 6.5.2.7 and 6.5.2.8.

COMPOSITION

6.5.2.2 The NSRC shall be composed of at least the following:

Chairman:	Manager Nuclear Services
Member:	Manager Nuclear Plant Engineering Director Engineering and TECHNICAL SERVICES.
Member:	Manager Quality Assurance (Home Office)
Member:	Director Nuclear Operations
Member:	Manager Licensing and Radiological Services
Member:	Vice President-Engineering
Member:	Manager Nuclear Safety

Additional members and Vice Chairman may be appointed by the Chairman.

ALTERNATES

6.5.2.3 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

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

MEETING FREQUENCY

6.5.2.5 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.

QUORUM

6.5.2.6 The quorum of the NSRC necessary for the performance of the NSRC review and audit functions of these Technical Specifications shall consist of the Chairman or his designated alternate and at least two-thirds of the NSRC members including alternates. No more than a minority of the quorum shall have line responsibility for operation of the Unit.

Justification for Technical Specification 6.5.2.2:

The Director Engineering and Technical Services is replacing the manager Nuclear Plant Engineering on the Nuclear Safety Review Committee.

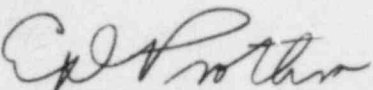
OATH OF AFFIRMATION

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

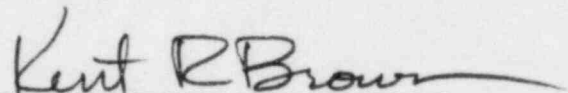
I, Kent R. Brown, of lawful age, being duly sworn upon oath, do depose, state and affirm that I am Group Vice President - Technical Services of Kansas Gas and Electric Company, Wichita, Kansas, that I have signed the foregoing letter of transmittal for Glenn L. Koester, Vice President - Nuclear of Kansas Gas and Electric Company, know the contents thereof, and that all statements contained therein are true.

KANSAS GAS AND ELECTRIC COMPANY

ATTEST:



E. D. Prothro, Assistant Secretary

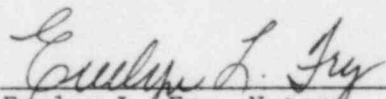
By 

Kent R. Brown
Group Vice President-Technical Services

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

BE IT REMEMBERED that on this 1st day of May, 1985, before me, Evelyn L. Fry, a Notary, personally appeared Kent R. Brown, Group Vice President - Technical Services of Kansas Gas and Electric Company, Wichita, Kansas, who is personally known to me and who executed the foregoing instrument, and he duly acknowledged the execution of the same for and on behalf of and as the act and deed of said Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the 1st day of May, 1985.



Evelyn L. Fry, Notary



My Commission expires on August 15, 1985.

POWER DISTRIBUTION LIMITS

3/4.2.3 RCS FLOW RATE AND NUCLEAR ENTHALPY RISE HOT CHANNEL FACTOR

LIMITING CONDITION FOR OPERATION

3.2.3 The combination of indicated Reactor Coolant System (RCS) total flow rate and R shall be maintained within the region of allowable operation shown on Figure 3.2-3 for four loop operation.

Where:

a. $R = \frac{F_{\Delta H}^N}{1.49 [1.0 + 0.2 (1.0 - P)]}$,

b. $P = \frac{\text{THERMAL POWER}}{\text{RATED THERMAL POWER}}$, and

c. $F_{\Delta H}^N$ = Measured values of $F_{\Delta H}^N$ obtained by using the movable incore detectors to obtain a power distribution map. The measured values of $F_{\Delta H}^N$ shall be used to calculate R since Figure 3.2-3 includes measurement uncertainties of 2.8% for flow and 4% for incore measurement of $F_{\Delta H}^N$.

APPLICABILITY: MODE 1.*

ACTION:

With the combination of RCS total flow rate and R outside the region of acceptable operation shown on Figure 3.2-3:

- a. Within 2 hours either:
 1. Restore the combination of RCS total flow rate and R to within the above limits, or
 2. Reduce THERMAL POWER to less than 50% of RATED THERMAL POWER and reduce the Power Range Neutron Flux - High Trip Setpoint to less than or equal to 55% of RATED THERMAL POWER within the next 4 hours.
- b. Within 24 hours of initially being outside the above limits, verify through incore flux mapping and RCS total flow rate comparison that the combination of R and RCS total flow rate are restored to within the above limits, or reduce THERMAL POWER to less than 5% of RATED THERMAL POWER within the next 2 hours; and

*Except for dropped rod test of RCCA or Bank Worth Measurement at Power (SU7-SFO9.2).