KGE THE ELECTRIC COMPANY KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER
VICE PRESIDENT - NUCLEAR

March 24, 1982

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

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US NUCLEAR REGULATORY COMMISSION
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KMLNRC 82-179
Re: Docket No. STN 50-482
Subj: Additional Information

Dear Mr. Denton:

In discussions with Mr. Jon Hopkins, NRC Project Manager for the Wolf Creek Application, potentially open issues in the NRC's Safety Evaluation Report (SER) have been identified. The purpose of this letter is to provide information that should close two of the issues and to update a Wolf Creek Environmental Report Table.

Attached are revised FSAR materials concerning:

1. The identification of safety-related structures, systems and components controlled by the Wolf Creek Quality Assurance Program (Question 260.49WC).

2. Wave runup flood protection at the ESWS Pumphouse (FSAR Section 2.4.10).

This information will be formally incorporated into the Wolf Creek Generating Station, Unit No. 1, Final Safety Analysis Report in Revision 9.

Also attached are updated annual liquid effluent releases resulting from the use of mixed bed resin in the recycle evaporator condensate demineralizer (ER(OLS) Section 3.5). This information will be formally incorporated into the Wolf Creek Generating Station, Unit No. 1, Environmental Report (Operating License Stage) in Revision 4.

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S/1

This information is hereby incorporated into the Wolf Creek Generating Station, Unit No. 1, Operating License Application.

Yours very truly,

Glenn L Koester

GLK:bb
Attach

cc: Mr. J.B. Hopkins (2)
Division of Project Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Thomas Vandel
Resident NRC Inspector
P.O. Box 311
Burlington, Kansas 66839

OATH OF AFFIRMATION

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

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

KANSAS GAS AND ELECTRIC COMPANY

ATTEST:

W B Walker

W.B. Walker, Secretary

By Glenn L Koester
Glenn L. Koester
Vice President - Nuclear

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

BE IT REMEMBERED that on this 24th day of March, 1982, before me, Evelyn L. Fry, a Notary, personally appeared Glenn L. Koester, Vice President - Nuclear 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 date and year above written.

EVELYN L. FRY NOTARY PUBLIC STATE OF KS

Evelyn L. Fry
Evelyn L. Fry, Notary

My Commission expires on August 15, 1984.

Q260.49WC (continued)

4) the commitment to evaluate extensive site grading modifications

the site drainage system including grading, culverts and channels is not considered safety-related.

To ensure that drainage away from Category I structures is considered during major modifications to the site, SNUPPS FSAR Table 3.2-1 will be revised to add the Wolf Creek site drainage system with the following footnote:

(14) The site drainage system consists of many components including roof drains, site storm drains, culverts and ditches for which no credit is taken in component roof loading or site flooding analyses. However, major modifications to Category I building roofs and the plant railroad spur, roads and graded surfaces, which are in Zones 1 and 2 of FSAR Addendum Figure 2.4-3, will be evaluated to ensure that such modifications will not result in flooding of Category I structures.

TABLE 3.2-1 (Sheet 22)

	System/Component(13)	Seismic Category I (1)	Quality Group Classification (2)	ANS Safety Class (3)	Quality Assurance (4)	Principal Construction Codes and Standards (5)	Location (6)	Remarks
8.0	CIVIL/ARCHITECTURAL							
8.1	Structures and Buildings							
	Reactor building	Y	NA	2	Y-B	BC-TOP-5 III MC AISC		
	Refueling pool and other internal RB structures	Y	NA	NA	Y-B	ACI-318-71 AISC	C	
	Control building	Y	NA	NA	Y-B	ACI 318-71 AISC		
	Auxiliary building	Y	NA	NA	Y-B	ACI 318-71 AISC		
	Fuel building	Y	NA	NA	Y-B	ACI 318-71 AISC		
	Spent fuel pool	Y	NA	NA	Y-B	ACI 318-71		
	Radwaste building	D	NA	NA	N	ACI 318-71 AISC		
	Solid radwaste storage warehouse	N	NA	NA	N	NA		
	Turbine building	N	NA	NA	N	ACI 318-71 AISC UBC-1973		
	Essential service water system pumphouse	Y	NA	NA	Y-B	ACI 318-71 AISC	O	
	Essential service water system electrical duct banks and manholes	Y	NA	NA	Y-B	ACI 318-71		
	Essential service water system valve house (Wolf Creek only)	Y	NA	NA	Y-B	ACI 318-71 AISC	O	
	Moveable tornado missile barriers	Y	NA	NA	Y-B	ACI 318-71 AISC	O/T	
	Wolf Creek Site Drainage (14)	N	NA	NA	N	NA	O	

2.4.10 FLOODING PROTECTION REQUIREMENTS

The flood design considerations are discussed in Section 2.4.2.2. The plant buildings are not affected due to local intense precipitation at the plant site (Section 2.4.2.3). All the safety-related buildings have their floor elevations above the level obtained by superimposing the maximum wave runup on the PMF level in the cooling lake (Section 2.4.3).

The safety-related intake structure for the essential service water system is located at the edge of the cooling lake and is subjected to wave forces as well as high water. The maximum wave runup elevation at the structure is 1100.2 feet with a wave height of 5.0 feet, and a wave period (maximum) of 3.3 seconds. This wave runup elevation due to the maximum wave is based on a vertical wall with an effective fetch that would exist without baffle dike A. However, the intake structure for the essential service water system is designed to withstand a high water elevation of 1102.5 feet.

The only openings below elevation 1102.5 feet are the pressure doors and the pump structure forebay opening. The pressure doors are of marine type and are located at plant grade on the west wall of the intake structure. These doors are normally closed and under administrative control. The pump structure forebay normally contains water.

Therefore, the safety-related facilities are not affected by the PMF in the cooling lake or by the local intense precipitation at the plant site and no flood protection requirements are necessary.

2.4.11 LOW-WATER CONSIDERATIONS

2.4.11.1 Low Flow in Rivers and Streams

Low-flow data of the regional rivers and streams were analyzed statistically for the frequency distribution. The most severe drought of 1952-1957 was shown to have a recurrence interval of 50 years (Section 2.4.11.3). Monthly flows in Wolf Creek for this once-in-50-years drought of 5-year duration were synthesized and are presented in Table 2.4-22. The 5-year low flow to be expected in Wolf Creek is 1.6 cubic feet per second. The analysis was based on a method described in Chow (1964, pages 18-10 to 18-15).

Low flows in the Neosho River during the same drought period are given in Table 2.4-23. The 5-year duration low-flow rate was computed to be 147.5 cubic feet per second (Section 2.4.11.3).

2.4.11.2 Low Water Resulting from Surges, Seiches, or Tsunamis

Consideration of low water conditi ns resulting from surges, seiches, or tsunamis is not applicable to this site since there are no large bodies of water near the site, nor is the site near a coastal area.

TABLE 3.5-2

ANNUAL EFFLUENT RELEASES (1)
LIQUID

Nuclide	Half-life (Days)	Coolant Concentrations Primary (Micro Ci/ml)	Coolant Concentrations Secondary (Micro Ci/ml)	Boron Rs (Curies)	Misc Wastes (Curies)	Secondary (Curies)	Turb Bldg (Curies)	Total LWS (Curies)	Adjusted Total (Ci/yr)	Detergent Wastes (Ci/yr)	Total (Ci/yr)
Corrosion and Activation Products											
Cr-51	2.78+001	1.90-003	4.07-008	.00000	.00000	.00000	.00000	.00000	.00009	.00000	.00009
Mn-54	3.03+002	3.10-004	9.02-009	.00000	.00000	.00000	.00000	.00000	.00002	.00010	.00012
Fe-55	9.50+002	1.60-003	3.61-008	.00000	.00000	.00000	.00000	.00000	.00009	.00000	.00009
Fe-59	4.50+001	1.00-003	2.71-008	.00000	.00000	.00000	.00000	.00000	.00005	.00000	.00005
Co-58	7.13+001	1.60-002	3.61-007	.00001	.00002	.00000	.00000	.00003	.00088	.00040	.00130
Co-60	1.92+003	2.00-003	4.06-008	.00000	.00000	.00000	.00000	.00000	.00011	.00087	.00098
Zr-95	6.50+001	.00	.00	.00000	.00000	.00000	.00000	.00000	.00000	.00014	.00014
Nb-95	3.50+001	.00	.00	.00000	.00000	.00000	.00000	.00000	.00000	.00020	.00020
Np-239	2.35+000	1.20-003	2.81-008	.00000	.00000	.00000	.00000	.00000	.00002	.00000	.00002
Fission Products											
Br-83	1.00-001	4.80-003	5.13-008	.00000	.00000	.00000	.00000	.00000	.00003	.00000	.00003
Rb-86	1.87+001	8.50-005	1.96-009	.00000	.00000	.00000	.00000	.00000	.00002	.00000	.00002
Sr-89	5.20+001	3.50-004	9.04-009	.00000	.00000	.00000	.00000	.00000	.00002	.00000	.00002
Mo-99	2.79+000	8.40-002	1.86-006	.00001	.00004	.00000	.00002	.00007	.00182	.00000	.00180
Tc-99m	2.50-001	4.80-002	1.74-006	.00001	.00004	.00000	.00002	.00006	.00173	.00000	.00170
Ru-103	3.96+001	4.50-005	9.04-010	.00000	.00000	.00000	.00000	.00000	.00000	.00001	.00002
Ru-106	3.67+002	1.00-005	1.80-010	.00000	.00000	.00000	.00000	.00000	.00000	.00024	.00024
Ag-110m	2.53+002	.00	.00	.00000	.00000	.00000	.00000	.00000	.00000	.00004	.00004
Te-127m	1.09+002	2.80-004	4.51-009	.00000	.00000	.00000	.00000	.00000	.00002	.00000	.00001
Te-127	3.92-001	8.50-004	1.62-008	.00000	.00000	.00000	.00000	.00000	.00002	.00000	.00002
Te-129m	3.40+001	1.40-003	2.71-008	.00000	.00000	.00000	.00000	.00000	.00007	.00000	.00007
Te-129	4.79-002	1.60-003	4.88-008	.00000	.00000	.00000	.00000	.00000	.00005	.00000	.00005
I-130	5.17-001	2.10-003	2.91-008	.00000	.00000	.00000	.00000	.00000	.00010	.00000	.00010
Te-131m	1.25+000	2.50-003	4.82-008	.00000	.00000	.00000	.00000	.00000	.00003	.00000	.00003
I-131	8.05+000	2.70-001	4.06-006	.00071	.00229	.00000	.00040	.00339	.09468	.00006	.09500
Te-132	3.25+000	2.70-002	4.63-007	.00000	.00001	.00000	.00000	.00002	.00061	.00000	.00061
I-132	9.58-002	1.00-001	1.42-006	.00000	.00003	.00000	.00003	.00006	.00174	.00000	.00170
I-133	8.75-001	3.80-001	5.50-006	.00003	.00058	.00000	.00045	.00106	.02961	.00000	.03000
Cs-134	7.49+002	2.50-002	5.75-007	.00021	.00003	.00000	.00001	.00024	.00680	.00130	.00810
I-135	2.79-001	1.90-001	2.51-006	.00000	.00005	.00000	.00013	.00019	.00524	.00000	.00520
Cs-136	1.30+001	1.30-002	2.99-007	.00006	.00001	.00000	.00000	.00007	.00209	.00000	.00210
Cs-137	1.10+004	1.80-002	4.16-007	.00015	.00002	.00000	.00000	.00018	.00495	.00240	.00730
Ba-137m	1.77-003	1.60-002	9.58-007	.00014	.00002	.00000	.00000	.00017	.00462	.00000	.00460
Ce-144	2.84+002	3.30-005	9.03-010	.00000	.00000	.00000	.00000	.00000	.00000	.00052	.00052
All Others		2.53-001	1.13-006	.00000	.00000	.00000	.00000	.00000	.00006	.00000	.00006
Total (Except Tritium)		1.46+000	2.17-005	.00133	.00317	.00000	.00107	.00557	.15557	.00629	.16000

Tritium Release 410 Curies Per Year

(1) Releases are based on assumptions given in Appendix 3A.