



KANSAS GAS AND ELECTRIC COMPANY

GLENN L KOESTER
VICE PRESIDENT - NUCLEAR

May 20, 1982

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

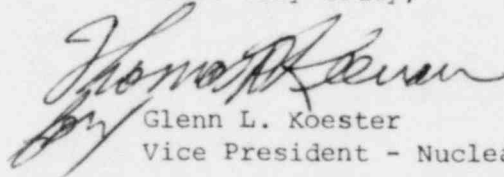
KMLNR 82-200
Re: Docket Number STN 50-482
Ref: NRC Letter dated 4/12/82 from BJYoungblood,
NRC, to GLKoester, KG&E
Subj: Response to Comments on Wolf Creek Draft
Environmental Statement (DES)

Dear Mr. Denton:

The Referenced letter transmitted copies of comments received by the Staff on NUREG-0878, the Draft Environmental Statement (DES) related to the Wolf Creek Generating Station, Unit No. 1, with a request that KG&E respond to those comments that we deem appropriate.

A response is being provided on certain comments made by the United States Department of the Interior, Kansas Fish and Game, and the Kansas Water Office. The responses to the United States Department of the Interior and the Kansas Fish and Game comments have been combined due to the similarity of concerns expressed by both Agencies and are provided in Attachment A. The response to the Kansas Water Office is provided in Attachment B.

Yours very truly,


Glenn L. Koester
Vice President - Nuclear

GLK:bb
Attach

cc: Mr. J.B. Hopkins (2)

Mr. Thomas Vandel

Mr. M. Messier
Environmental Review Coordinator
U.S. Nuclear Regulatory Commission
Air Rights III Bldg, Rm. 5006
4550 Montgomery Ave.
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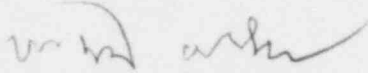
OATH OF AFFIRMATION

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)


I, Thomas D. Keenan, of lawfui age, being duly sworn upon oath, do depose, state and affirm that I am Director - Nuclear Opérations 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:



W.B. Walker, Secretary

By 

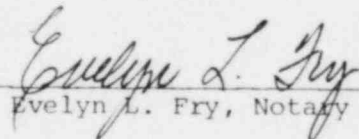
Thomas D. Keenan
Director - Nuclear Operations

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

BE IT REMEMBERED that on this 20th day of May, 1982, before me, Evelyn L. Fry, a Notary, personally appeared Thomas D. Keenan, Director - Nuclear Operations 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 20th day of May, 1982.





Evelyn L. Fry, Notary

My Commission expires on August 15, 1984.

ATTACHMENT "A"

RESPONSE TO UNITED STATES DEPARTMENT
OF THE INTERIOR (DOI) AND
KANSAS FISH AND GAME (KF&G) COMMENTS

REFERENCE:

DOI letter dated April 2, 1982 from Bruce Blanchard,
DOI to B. J. Youngblood, NRC.

KF&G letter dated February 25, 1982 from Bill Hanzlick,
KF&G to Director, Division of Licensing, NRC.

1. Impact of Water Withdrawals from John Redmond Reservoir
(JRR)

DOI: Letter Page 1, Water Quality; Specific Comments,
Page 1, Paragraphs 1 and 5, concerning 5.3.1.1.

KF&G: Page vi, Paragraph c; Page 5-2, Section 5.3.1.1,
Paragraph 1; and Page 5-12, Section 5.5.2.1, Para-
graph 3.

The applicant plans to continue to exercise its water rights acquired through Kansas Water Purchase Contract 76-2 and Kansas Water Application Numbers 14626 and 19882. The loss of available wildlife management tools through the temporary use of water storage contracted to the applicant is recognized. The applicant will strive to coordinate water withdrawals from JRR with any water fluctuation plan upon completion of lake fill.

The approval of a fluctuation plan on JRR is the responsibility of the Kansas Water Office. The Flint Hills National Wildlife Refuge (FHNWR) has an on-going policy of minimizing waterfowl usage on JRR while the KF&G desires to implement a plan which encourages waterfowl usage of the reservoir.

2. DOI: Water Quality.

KF&G: General Considerations, First Paragraph.

As Section 5.3.1.1 of the DES states, with or without the presence of WCGS previous water rights and water quality parameters must be satisfied first during a drought condition. Thus, the instream flow requirements measurements will not be necessary because the value of greatest importance (the conveyance of water to downstream points of diversion) is already being controlled by the Kansas Water Office and the Corps of Engineers.

3. DOI: Ecology

KF&G: Page xv, Paragraph 8 and Page 5-10, Section 5.5.1.1, Paragraph 3.

The applicant is continuing with lake and land management programs initiated in 1978 which enhance aquatic and terrestrial resources at WCGS. These programs follow management plans prepared by the applicant which include preservation of "natural" areas, restoration efforts, fishery and wildlife management techniques. The possible utilization of these resources for recreational and consumptive uses has been addressed in the feasibility study performed by the applicant (ER(OLS), Section 2.8).

4. DOI: Specific Comments, Page 1, Paragraph 2; concerning Section 5.3.1.1, Paragraph 1 and Section 5.5.1.1, Paragraph 2.

The applicant concurs with the conclusion of the staff (DES Section 5.5.1.1) that the potential for occurrence of epidemic conditions of pathogens is low and does not believe a contingency plan for DVE is warranted. There has never been an incident of DVE documented in Kansas or in any of the states contiguous with its borders.

Crop depredation by waterfowl using WCCL should be minor. The WCCL will have a relatively stable water level and, therefore, should only be attractive to waterfowl during the late winter months after other reservoirs develop ice cover. By this time all crops should be harvested. The applicant owns 3100 acres of cultivated land around the lake which probably will be the land most affected.

5. DOI: Specific Comments, Page 5-9, 5.5.1.1, Paragraph 2.

KF&G: Page 5-9, Section 5.5.1.1, Paragraph 1.

The buffer zone which has been established around WCCL consists of the area from normal operating pool to the maximum flood pool elevation. The zone consists of previously cultivated ground, tallgrass communities and limited riparian habitat. Management practices will be utilized in this zone to enhance its quality and benefit wildlife. These practices will include exclusion of cultivation, controlled burning, tree plantings and reseeding of prairie plants. These activities will develop or maintain this area in an unexploited state which will enhance wildlife usage and improve water quality through reduced erosion.

6. DOI: Specific Comments, Page 1, Paragraph 4; concerning Section 5.5.1.1, Paragraph 2 and Section 5.5.1.2.

Monitoring activities conducted by the applicant will identify bird impact on transmission lines should such an event occur. Following an investigation, appropriate mitigative action will be initiated to reduce bird mortality if necessary.

7. DOI: Specific Comments, Pages 5-14 and 5-15, Section 5.6.

KF&G: General Considerations, Paragraphs 2 through 5.

During drought conditions, there will be little or no blowdown to the Neosho River from the WCCL. In any event, the blowdown from WCCL will be required to meet State water quality criteria. Currently, these criteria require that the blowdown water not exceed 250 mg/l sulfate, 250 mg/l chloride, and 500 mg/l total dissolved solids. A zone of passage equal to three-quarters of the cross-sectional area of the Neosho River must be established during blowdown.

Also, the thermal output of the blowdown will not increase the ambient Neosho River water temperature by more than 5°F outside the mixing zone (ER(OLS), Section 5.1.2.3). Section 5.5.2.1 of the WCGS FES-CP explains the blowdown operation and impacts. In it, the NRC staff summarizes that it "...foresees no significant impact on the biota of the Neosho River due to blowdown temperatures..."

If blowdown did occur during low flow conditions, this action would at least maintain and probably enhance the riffle habitat below the confluence of Wolf Creek and the Neosho River for spawning Neosho madtoms rather than degrade the riffle. Additional water placed into the river during low flow would only serve to increase the habitat available in the riffle for spawning activities.

The "filling in of riffle areas and gravel interstices ..." through flocculation of heavy metals is very questionable. Although no specific heavy metals were identified in the comment, the applicant assumes that KF&G and the DOI are referring to corrosion products from the condenser tubing and piping (e.g., iron, nickel, and chromium). Other heavy metals such as lead and mercury exist at such low levels that the flocculation of these elements is improbable.

Of the three corrosion products, iron would be the one most likely to form an insoluble precipitate. The total iron concentration in the cooling lake during a drought condition (a worst case example) would be 4.37 mg/l (Table 4.2, WCGS-DES-OL). Ecological Analysts (EA), an environmental consultant contracted by KG&E, has performed water quality

analysis from three different locations on the Neosho River for several years. The highest total iron concentrations that EA has reported are 6.8 mg/l and 5.7 mg/l in April, 1979 and June, 1979, respectively. These concentrations are well above the expected levels in WCCL, and no deterioration of riffles has been observed. Additionally, Neosho madtoms have been collected from the riffles at these locations several times since 1979.

8. DOI: Paragraph 2 on Page 2 of Specific Comments; concerning Section 5.9.3.4.

KF&G: General Considerations, Paragraph 6.

Fish flesh is currently being sampled from the tailwaters of John Redmond Reservoir and from the WCCL as part of the applicant's on-going Radiological/Environmental Monitoring Program that was initiated in 1980.

9. KF&G: Page vii, Paragraph L.

River flow information is available from the Corps of Engineers and the Kansas Water Office.

10. DOI: NPDES Permit

The average flow rate of 1335 CFS is a conservative rate obtained from Neosho River data prior to JRR. An evaluation of average monthly flows after JRR was built shows that the median rates are between 900 and 1500 CFS, thus 1335 CFS is approximately equivalent to the median average monthly flow rate.

We expect to submit the application for our operating phase NPDES permit in June, 1982. The permit will be modified to allow for operational discharge when effluent analysis data is available.

ATTACHMENT "B"

RESPONSE TO KANSAS WATER OFFICE COMMENTS

Kansas Water Office Memorandum dated February 17, 1982 from Allyn O. Lockner, Director to Division of Budget.

Comment #3

The significance of September 7, 1963 was the flood control provided by JRR during its filling stage. No deliberate impoundment of water was commenced until September 1, 1964.

Comment #6

The comment is correct in that some pumping of water into the WCCL was started in May, 1980, but only with our auxiliary raw water pumps. The pumping rate from May to November was only about 1.5% of the rate achieved after the make-up pumps were utilized. Consequently, the applicants do not consider that pumping "officially" began until the make-up pumps began operating in November, 1980. The environmental impact from pumping was negligible until the make-up pumps were started.