KANSAS GAS AND ELECTRIC COMPANY



GLENN L KOESTER VICE PRESIDENT NUCLEAR

August 7, 1984

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

> KMLNRC 84-135 Re: Docket No. 50-482 Subj: Shift Technical Advisors

Dear Mr. Denton:

Kansas Gas and Electric Company (KG&E) met with members of your staff on August 1, 1984, to discuss resolution of Wolf Creek Generating Station Safety Evaluation Report open item I.A.1.1 concerning KG&E's Shift Technical Advisor (STA) Program. As described in the Wolf Creek Final Safety Analysis Report, KG&E intends to upgrade the qualifications of the Shift Supervisors and Senior Reactor Operators (SROs) such that each shift will have at least one licensed operator with combined SRO/STA training rather than having a separate STA role in the control room. The academic qualifications necessary for the combined SRO/STA function were the main focus of the August 1, 1984, meeting.

As discussed in the meeting, KG&E commits to the following to close out KG&E SER open item I.A.1.1:

- KG&E commits to provide academic training for SROs to complete the technical portion of a Baccalaureate degree accreditation by a recognized academic agency and offered by a degree granting institution authorized by the Kansas Board of Regents. The technical courses required for the degree are defined as all math, physical science, technology and nuclear related subject matter courses. Specifically excluded are courses in the humanities, English, communications, physical education, military science, social science and other traditional liberal arts courses.
- 2. The schedule for completion of this program will be submitted to the NRC after the Kansas Board of Regents has made a decision on the proposed Bachelor of Science in Engineering Technology degree program identified in the attached letter from Kansas State University to KG&E. As noted in Kansas State's letter,

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there are several steps required to obtain approval of such a program. Full approval is expected in early 1985.

All Wolf Creek Shift Supervisors and Senior Reactor Operators have already completed the 64 credit hour program shown in Table 1. This program was a joint teaching effort of Emporia State University and Kansas State University, and these hours are directly applicable to an existing B.S. in Engineering Technology Program and are planned to apply to the new Engineering Technology degree program.

An additional 18 credit hours of academic training was provided by the Wolf Creek Training Division as part of Operator and STA training programs. These courses, shown in Table 2, are being evaluated for credit recommendation by the American Council of Education (ACE). ACE approval is expected in the fall of 1984. Once ACE accreditation is obtained, further evaluation of these courses will be conducted by the degree granting organization. The academic training may satisfy requirements of the organization's Engineering Technology degree program. KG&E believes that 18 hours credit toward the degree will be granted.

This letter is hereby incorporated into the Wolf Creek Generating Station, Unit No. 1 Operating License Application. The Wolf Creek FSAR will be revised in the next revision to reflect these commitments.

Yours very truly,

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Glenn L. Koester Vice President - Nuclear

GLK:bb Attach

xc:PO'Connor, w/a JTCollins, w/a HBundy, w/a

#### 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:

E.D. Prothro, Assistant Secretary

Glenn L. Koester Vice President - Nuclear

STATE OF KANSAS ) ) SS: COUNTY OF SEDGWICK )

BE IT REMEMBERED that on this 7th day of August, 1984 , 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

Commission expires on August 15, 1984

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#### College of Engineering

Office of the Dean Durland Hall Manhattan, Kansas 66506 913-532-5590 MAY 2 5 1984

ATTACHMENT TO KMLNRC 84-135 August 7, 1984

May 24, 1984

Mr. Glenn Koester Kansas Gas and Electric Company Box 208 Wichita, KS 67201

RE: Status report on Educational Program at Wolf Creek

Dear Mr. Koester:

At the request of Kansas Gas and Electric (KG&E) representatives, the faculty of the College of Engineering at Kansas State University (KSU) have provided an educational program of 64 university credit hours (completed summer, 1983), which more than meets the education recommended by the Institute of Nuclear Power Operations (INPO) for the Shift Technical Advisor (STA) program. The ultimate goal for the use of these credits was that they be applicable towards the requirements of a KSU Engineering Technology B.S. degree program.

Although these credits are applicable towards the requirements of an existing KSU program, "Environmental Engineering Technology" with a radiation protection emphasis, a more preferred program of study, "Nuclear Reactor Engineering Technology," was developed and approved by the faculty of the Departments of Engineering Technology and Nuclear Engineering. This new program will be presented during the fall to the College of Engineering faculty and the University Faculty Senate for approval. If approved, it will be presented immediately to the Kansas Board of Regents for their approval.

It is the opinion of the above mentioned engineering faculty that the new program will meet the educational recommendations of the Kansas Gas and Electric Company, the Nuclear Regulatory Commission (NRC), and the Institute of Nuclear Power Operations. It is also the opinion of the above faculty that the engineering technologist is the best suited for the "control operations" of a nuclear facility.

A study is presently being performed by KSU engineering faculty to determine how many credit hours of those taught by the Kansas Gas and Electric staff and recommended by the American Council of Education (ACE) that would be applicable to both the existing and the new proposed degree programs at KSU. Kansas Gas and Electric will obtain ACE approval for additional course credits by the Fall of 1984 and Mr. Glenn Koester Page 2 May 24, 1984

these will also be considered for validation. Kansas State University faculty will provide guidance to insure that they will be applicable towards the KSU degree program. Tentatively, mutually agreeable mechanisms have been established to assure the administration of the KSU - KG&E Educational program.

Staff of the College of Engineering are analyzing the records of the 26 students who have completed the STA program. A list of the courses remaining for the completion of the B.S. in Engineering Technology for each of these 26 students will be made available in the very near future.

Professor Simons, Professor Hightower, and other College of Engineering faculty are available to answer any questions about the program.

Kansas State University has had an excellent working relationship for many years with KG&E on several programs, and we believe the company has been sincere and anxious to satisfy the recommendations of the NRC and INPO to ensure competent operators and a safe and reliable operation of the Wolf Creek power facility.

Best personal regards.

Sincerely,

Dhued E. Rathlome

Donald E. Rathbone Dean

DER:mw

cc: Mr. Paul Turner Mr. Russ Russo R. E. Hightower J. C. Lindholm N. D. Eckhoff G. G. Simons

ATTACHMENT to KMINRC 84-135 August 7, 1984

# Table 1

### WOLF CREEK

# SHIFT TECHNICAL ADVISOR

### TRAINING PROGRAM

# KANSAS STATE UNIVERSITY

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HOURS

ET	410	Properties of Engineering Materials	2
ET	408	Materials of Nuclear Reactor Systems	2
ET	512	Mechanics of Fluids	3
ET	514	Energy Conversion Technology	3
ET	530	Electrical Circuit Technology	4
ET	583	Nuclear Reactor Technology I & II	6
ET	584	Radiation Detection & Monitoring	3
ET	585	Nuclear Reactor Thermal Technology	3
ET	586	Radiation Protection	2

TOTAL 28

### EMPORIA STATE UNIVERSITY

123	Chemistry I & LAB	4
126	Chemistry II & LAB	4
110	College Algebra	3
112	Trigonometry	2
315	Technical Calculus I	3
316	Technical Calculus II	3
317	Differential Equations	3
341	Descriptive Statistics	3
140	College Physics I & LAB	4
143	College Physics II & LAB	4
315	Applied Statics	3
	TOTAL	36
	126 110 112 315 316 317 341 140 143	<ul> <li>126 Chemistry II &amp; LAB</li> <li>110 College Algebra</li> <li>112 Trigonometry</li> <li>315 Technical Calculus I</li> <li>316 Technical Calculus II</li> <li>317 Differential Equations</li> <li>341 Descriptive Statistics</li> <li>140 College Physics I &amp; LAB</li> <li>143 College Physics II &amp; LAB</li> <li>315 Applied Statics</li> </ul>

Table 2

# WOLF CREEK

# SHIFT TECHNICAL ADVISOR

# TRAINING PROGRAM

# WOLF CREEK GENERATING STATION

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LRO	301	Reactor Theory I	3
LRO	303	Reactor Theory II	3
LRO	405	System Instrumentation & Control I	3
LRO	407	System Instrumentation & Control I & II	3
LRO	409	Instrumentation Lab Reactor	1
LRO	411	Instrumentation Lab Plant	1
LRO	513	Transient & Accident Analysis & Mitigating Core Damage	3
LRO	515	Transient & Accident Analysis & Mitigating Core Damage Lab	1
		TOTAL	18