



KANSAS GAS AND ELECTRIC COMPANY

GLENN L. KOESTER
VICE PRESIDENT - NUCLEAR

April 8, 1983

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

KMLNRC 83-041

Re: Docket No. STN 50-482

Ref: 1) Letter KMLNRC 83-002 dated 1/12/83 from
GLKoester, KG&E, to HRDenton, NRC
2) Letter dated 12/6/82 from BJYoungblood,
NRC, to GLKoester, KG&E

Subj: Additional Information for the Review of the
Wolf Creek Emergency Plan

Dear Mr. Denton:

The Reference 1) letter transmitted responses to NRC questions concerning the Wolf Creek Generating Station Emergency Plan contained in the Reference 2) letter. Provided herewith are revised responses to some of the questions answered in Reference 1). These revised responses are a result of our March 23, 1983 meeting with your staff.

Also included is information about the Wolf Creek backup EOF. This information was provided verbally at the March 23, 1983 meeting. Emergency staffing according to the criteria of NUREG-0737, Supplement 1, was also discussed at the meeting. The Wolf Creek provisions for augmenting of the plant staff in response to emergency situations will be provided to the NRC by April 29, 1983.

This information will be formally incorporated into the Wolf Creek Generating Station, Unit No. 1, Final Safety Analysis Report. This information is hereby incorporated into the Wolf Creek Generating Station, Unit No. 1, Operating License Application.

Yours very truly,

Glenn L. Koester X005

GLK:bb

Attach

cc: JHolonich (2)

HRoberds/SSchum

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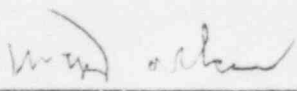
OATH OF AFFIRMATION

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

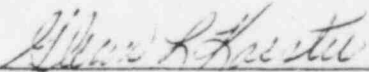
I, Glenn L. Koester, of lawful age, being duly sworn upon oath, do depose, state and affirm that I am Vice President - Nuclear of Kansas Gas and Electric Company, Wichita, Kansas, that I have signed the foregoing letter of transmittal, know the contents thereof, and that all statements contained therein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

KANSAS GAS AND ELECTRIC COMPANY

ATTEST:



W.B. Walker, Secretary

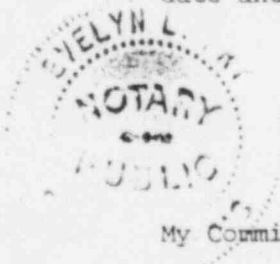
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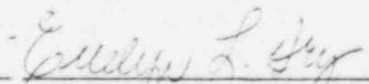
Glenn L. Koester
Vice President - Nuclear

STATE OF KANSAS)
) SS:
COUNTY OF SEDGWICK)

BE IT REMEMBERED that on this 8th day of April, 1983, 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

My Commission expires on August 15, 1984.

Additional state and county facilities are provided and described in the State and County Plans to augment the facilities of the licensee.

Q.C.4 Onsite laboratories are identified; however, information about their capabilities is not specified. Also, offsite (support) laboratories and their capabilities are not adequately discussed (C.3).

R.C.4 Onsite laboratories consist of a radiochem (hot) lab, radwaste lab, and turbine building chemistry lab located in the powerblock. A bioassay lab, chemistry lab and an environmental counting lab are located onsite. The laboratories and analytical equipment meet state certification requirements for NPDES water quality analysis and are capable of processing a wide range of samples including highly radioactive contaminated samples via the self-contained post-accident sampling system and low level environmental samples via high efficiency intrinsic detectors. Analytical equipment available for use during an emergency consists of six Intrinsic Germanium Detectors, two Liquid Scintillation Counters, two Proportional Counters, two Multi-Channel Analyzers (stand alone-110 Vac), two Multi-Channel Analyzers connected to a computer, and two portable Multi-Channel Analyzers (battery operated). This equipment is in addition to portable radiation monitoring equipment used to support normal plant operation and that provided in the Emergency Kits. Further information on onsite lab equipment can be found in Section 12.5 of the FSAR.

In addition to the onsite laboratories, an environmental laboratory exists offsite at the EOF for the processing of routine and emergency field samples. The State of Kansas Bureau of Radiation Control maintains complete laboratory facilities in Topeka, Kansas which are available to further augment the processing of emergency samples should it be necessary. This laboratory contains a Geli detector, TLD, Gas Flow Counters, etc. The equipment is typical for the State support of radiological and environmental programs. The degree of the equipment is adequate for the State to obtain an agreement State Status with the NRC.

WCGS laboratories are available 24 hours per day. State laboratories are available upon request.

Q.C.5 Some letters of agreement are not present for contractors, utilities, etc. With regard to the letters contained, neither the text of the plan nor the letters contain sufficient detail about the kind of assistance or capabilities to be provided (C.4).

R.C.5 Supplement CC provides a list identifying the organizations, facilities, etc. which have been selected to support an emergency response at WCGS. KG&E has signed INPO's "Fixed Facility Emergency Response Voluntary Assistance Agreement," dated January 15, 1981 and amended July 13, 1982. This agreement is by and among electric utilities which have the responsibility for the construction and operation of commercial nuclear power plants under a license issued by the U.S. Nuclear Regulatory Commission pursuant to Title 10 of the Code of Federal Regulations. In an emergency, KG&E may request assistance from any of the signatory companies. This assistance may be in the form of technical and/or administrative personnel, facilities or equipment resources. If volunteered, assistance will be rendered by the responding company(s) according to the agreement.

E. Notification Methods and Procedures

Q.E.1. Mutually agreeable bases for notification of response organizations consistent with the EAL scheme, as set forth in NUREG-0654 Appendix 1, should be presented in the plan (E.1).

R.E.1 Procedures for notification and verification of messages are provided in the EPIPs. As presently established, the DED is responsible for notification of local authorities in the event of an Unusual Event, Alert, Site Area or General Emergency. Notification message forms have been developed and are included in the EPIPs for all the above emergency classifications. The notification form contains information for verification of the message. The primary method of notification for local and state officials is through the Coffey County Sheriff's office which is manned on a 24-hour basis. Additionally, the DED notifies KG&E System Operations, who in turn notifies Corporate personnel, Wolf Creek Management Personnel and the NRC. Follow-up notification forms have also been developed and are included within the EPIPs.

Q.E.2 Additional detail (beyond a reference to a notification procedure) identifying the means for alerting, notifying, and mobilizing response personnel is needed (E.2).

R.E.2 See the response to Question E.1.

Q.E.3 The contents of initial emergency messages should include information about recommendations for protective measures (E.3).

R.E.3 The contents of each initial emergency message include information about recommendations for protective measures, class of emergency, whether a release is taking place, and if offsite assistance is required (ambulance, fire department or sheriff). The emergency message forms are included in the EPIPs.

For more information, see the response to Q.J.7.

Q.E.4 Additional detail (beyond a reference to an emergency procedure) identifying the kind of information contained in followup emergency messages is needed (E.4).

R.E.4 The contents of each follow-up emergency message includes information about, or have sufficient space for, recommendations for protective measures, class of emergency, support requests, meteorological conditions, dose projections/measurements, release

R.F.4 Mobile medical assistance is alerted and called to the plant by telephone or radio (via county sheriff office relay). Once the ambulance is released from the plant, a call is made to alert the recipient hospital. The plant can communicate with the Coffey County Ambulance Service vehicles via the County Sheriff's office while the ambulance is in Coffey County. The radio link between the County Sheriff's office and these ambulances does not reach outside of Coffey County.

The need and establishment of a field hospital is highly improbable; however, if this is necessary, portable radios from KG&E or the state will be distributed to provide communication to the EOF.

plan to enter radiologically contaminated or potentially contaminated areas.

The use of KI is described in the EPIPs. The procedure provides for FDA recommendations, general instruction and administration of KI along with the appropriate data forms and logs of usage.

Q.J.7 The plan should describe a mechanism for recommending protective actions based on plant conditions (i.e., core/containment conditions). These recommendations should take into consideration offsite circumstances that may influence the choice of the most effective protective action response (e.g., evacuation time of the construction personnel). Limiting protective actions to only the downwind direction should not be employed exclusively. Recommendations for evacuation for 2 miles around the site and 5 miles downwind under core melt conditions, as well as sheltering of persons within the plume EPZ for General Emergencies may be necessary at times. This mechanism should be reviewed by local authorities (J.10.m).

R.J.7 Coffey County has adapted the State of Kansas Protective Action Guides. The Emergency Plan Implementing Procedure (EPIP), "Radiological Controls - Protective Action Guidelines" contains these PAG guidelines as well as information from the plant necessary to support State or County assessment and formulation of PAGs.

It is KG&E's policy that when the EOF is manned by corporate personnel, the Duty Emergency Manager and the Manager-Radiological Assessment Resources will be responsible for making the protective action recommendations to the offsite authorities. Prior to the arrival of the above individuals, the Duty Emergency Director and Radiological Emergency Coordinator will have this responsibility.

Protective actions are made based upon event diagnosis as per our response to Question D.1. Recommendations for protective actions are made with consideration of offsite circumstances such as weather, discussions with state and local officials, etc. Recommendation to evacuate all or part of the 10 mile EPZ is made during a Site Area Emergency within sufficient time to evacuate those affected should an analysis of plant conditions indicate imminent and irrevocable loss of all three fission product barriers. Recommendation to evacuate similiar areas during a General Emergency is made if meteorological

and radiological information indicates there is sufficient time to remove persons, otherwise a shelter advisory is issued for the affected sectors.

The State and County Plans contain 13 announcement forms for disseminating information to the public. Protective action recommendations made to the County or State authorities will contain information needed to select and complete their forms. The response for a given situation is based on the State PAGs and the spectrum of possible protective action options available at that time, such as sheltering or respiratory protection, which is in the County or State's responsibility.

The EPIPs contain the guidance and direction necessary for the DED, and subsequently the DEM, to provide protective action recommendations based on initial dose projections, expected or anticipated changes in the release rate and field data collection and analysis.

K. Radiological Exposure Control

Q.K.1 Clarification is needed in Section 3.3.1.3 concerning the individual ultimately responsible for personnel exposure control (K.2).

R.K.1 Section 3.3.1.3 will be clarified in the next Plan revision. The DED initially and later DEM upon his arrival is ultimately responsible for personnel exposure control.

Q.K.2 The plan should provide more information on how the onsite emergency radiation protection program will differ from the normal program (e.g., use of portable high range instruments, automatic use of respiratory protection during entries, emergency RWP's, etc.). In addition, risk reduction techniques such as briefings and practice runs should be discussed along with how the emergency radiation protection procedures will be implemented (K.2).

R.K.2 During an emergency, the normal radiation monitoring program is used for such things as normal air and liquid sampling and analysis, contamination surveys, decontamination of equipment, access control, etc. Situations arising that are not addressed by the normal radiation monitoring program are covered in the EIPs. Examples of these are source term assessment, dose projections, field data collection and compilation, use of radio-protective drugs, emergency contamination control and emergency exposure control. Emergency dosimeters are provided in the emergency kits, which include high range dosimeters. Personnel assigned to emergency teams receive briefings and instructions by a qualified person regarding exposure control. The Emergency Exposure Control EPIP provides the guidelines and restrictions for personnel emergency exposure control including post-exposure evaluation criteria. Emergency exposures are permitted by the DED only during an emergency and on a voluntary basis with restrictions placed on those who can volunteer and a requirement that the volunteer be briefed on the potential biological consequences prior to receiving the emergency exposure. All emergency exposure are documented and records retained.

Daily computer printouts will be posted and available for emergency personnel. Personnel are indoctrinated in General Employee Training and Emergency Plan Training to keep track of their exposure. This includes details about reading dosimeters. Individual radiation exposure limits are outlined in the EIPs as well as who can authorize changes to these limits.

During an emergency, the Radiological Emergency Team will cover emergency sampling and surveying analysis and evaluation of hazards. They will operate under EPIPs but in many cases will use standard operational procedures. Dry runs, drills, etc., will be used when possible to identify and eliminate or reduce risks from overexposures. The ALARA program will be used to evaluate the Emergency Team effort to ensure that it is in accordance with ALARA concepts.

Certain equipment not used during normal operation are used during an emergency. An example of this is the Post Accident Sampling System (PASS). This automatic, remote-controlled unit is designed to process gaseous and liquid samples after an accident with minimum personnel exposure. Samples are taken directly from the reactor coolant system and containment atmosphere. There is also a motorized, shielded sample cart for manually-obtained samples. Another system having emergency functions is the Radioactive Release Information System (RRIS). During an accident, the RRIS incorporates meteorological information with Radiation Monitoring System and multi-channel analyzer information for plume plotting and dose projections. EPIPs are also written for manual calculations if the RRIS is not functioning.

- Q.K.3 More detail concerning the methods of exposure control (to include the reading of self-reading dosimeters at appropriate frequencies) is needed (K.3).
- R.K.3 See response to Q.K.2.
- Q.K.4 The Plan does not contain action levels used in determining the need for decontaminating personnel (K.5.a). Contamination control for food supplies and drinking water is not discussed. The criteria for returning areas and equipment to normal use should be addressed (K.6).

The EOF's design life is equivalent to that of the plant and engineered such that a protection factor of 5 is provided to attenuate 0.7 Mev gamma radiation in those areas of the EOF in which dose assessments, communications and decision making take place. The EOF is sized to accommodate at least 35 persons (including nine from the NRC, one from the Federal Emergency Management Agency (FEMA)). The EOF is provided with a manually actuated, single-train, non-seismic Category I ventilation system, which incorporates a HEPA alternate system, and fixed radiation monitors, including a monitor for radioiodines (with a minimum detectable level of $1.0E-07$ Ci/cc) which alarm to alert EOF personnel to high levels.

EOF communications equipment is described in Section 4.2. Equipment provided to receive, store, process and display data needed in the EOF to analyze and exchange information on plant conditions is described in Section 4.3.1.

EOF personnel have ready access to plant records, procedures and emergency plans needed to exercise overall management of responses to emergencies at WCGS.

Typical EOF records may include:

- WCGS FSAR, ER and Technical Specifications;
- Plant operating and emergency procedures;
- Up-to-date records related to WCGS, state and Coffey County emergency response plans;
- Offsite population distribution data;
- Evacuation plans;
- Environs radiological monitoring records;
- System drawings, schematics, and diagrams.

Present plans allow for use of a backup Emergency Operating Center located at the Beto Inn, at the junction of Highway 75 and I-35, to insure continuity in dose projections and decision making functions should vacating of the nearsite facility be necessary.

In the event of a Site Area or General Emergency, the EOF will serve as a base of operations for site environmental surveillance, receipt and analysis of field monitoring data, technical and logistics support of the plant, and communications with supporting agencies. Appropriate security will be provided in accordance with established procedure.

A small press briefing area will be available to the KG&E Information Services Department and will accommodate up to 20 people. Any information released to the media will be at