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June 1, 1981

OCAN068101

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Arkansas Nuclear One - Units 1 & 2
Docket Nos. 50-368 and 50-313
License Nos. NPF-6 and DPR-51
Response to Generic Letter 81-10
Emergency Operations Facility
(File: 1510.4)

Gentlemen:

In response to generic letter 81-10 the following information is provided as our June 1, 1981 response.

The primary Technical Support Center (TSC) for ANO will be located in the third floor conference room of the existing Administration Building. An interim TSC is now in use on the fourth floor of this building until the primary TSC is available. The Administration building is adjacent to the Turbine Building and is less than one minute's walking distance from the control room. The only security checkpoint required to be cleared between the primary TSC and the control room is the entrance to the control room itself. The primary TSC does not meet the habitability requirement of NUREG 0696. Therefore, a secondary TSC was constructed 2/3 of a mile from the reactor buildings. The secondary TSC, located in the Emergency Offsite Facility (EOF), was designed to the same radiological habitability requirements as the control room and will be equipped with the same instruments as the primary TSC. The following information is provided to specifically address each of your conceptual design description topics:

1) Task function of the individuals required to report to the TSC and EOF upon activation and for each emergency class.

When conditions arise which warrant emergency actions the initial response is handled by the normal operating staff on duty lead by the Shift Operations Supervisor. Once the Duty Emergency Coordinator (a rotating position filled by plant management personnel) arrives he assumes command from the Shift Operation Supervisor of

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the Initial Response Organization and the Shift Operations Supervisor is then freed to oversee reactor operation. The Duty Emergency Coordinator assumes responsibility for the overall emergency response until relieved by the Recovery Manager and the Emergency Response Organization.

The TSC is manned for an emergency action level of Site Emergency and above. The below listed key Emergency Response Organization personnel report to the TSC when it is required to be manned. The task function of these individuals are given with their title.

Recovery Manager	-	Responsible for decisions regarding emergency operations of the plant. In the absence of the Incident Response Director (IRD) and his alternates, (duties to be described later) the Recovery Manager assumes the duties of the IRD.
Operations Manager		Responsible for assisting the Recovery Manager in planning and directing corrective or recovery actions pertaining to plant operations.
Maintenance Manager	-	Responsible for assisting the Recovery Manager in planning and directing corrective or recovery actions pertaining to plant maintenance.
Health Physics & Chemistry Supervisor	-	Responsible for coordinating health physics and chemistry activities. These activities include onsite and offsite radiological monitoring, dose assessment calculations, magnitude of radiological release calculations, primary side chemistry control and sampling, and secondary side chemistry control and sampling.
Nuclear & Engineering Support Superintendent	-	Responsible for providing advice on plant design and coordinating engineering activities in the areas of analysis, design modifications and system response.
Nuclear Support Supervisor	-	Responsible for coordinating activities related to nuclear engineering and reactor physics.

The following key Emergency Response Organization personnel will report to the EOF when directed by the IRD. The task function of these individuals is shown beside their title.

Incident Response Director	-	Responsible to AP&L corporate management for overall direction of the response to the incident. As such, he is responsible for assuring the continuity of resources required for continuous operations of the Emergency Response Organization for a protracted period. The IRD is the primary authority for the Company and shall approve public information releases prepared by AP&L.
Two Assistants to the IRD	-	Responsible for preparing and distributing periodic progress reports to the Emergency Response Organization. Responsible for coordinating responses to requests for information from outside groups.
Technical Support Manager	-	Responsible for providing any needed additional technical support.
Dose Assessment Supervisor	-	Shall upon arrival assume responsibility from the Health Physics and Chemistry Superintendent for magnitude of radiological release and dose assessment to offsite individuals.
Offsite Monitoring Supervisor	-	Shall upon arrival assume responsibilities from the Health Physics and Chemistry Superintendent for directing offsite radiological monitoring activities.

Further details on the Emergency Response Organization and each individual's functions can be found in the ANO Emergency Plan and the Emergency Plan Implementing Procedures submitted to the NRC in our letter of January 2, 1981, and February 27, 1981, respectively.

2) Descriptions of TSC instrumentation, instrument quality, instrument accuracy and reliability.

The TSCs, both the primary located in the ANO Administrative building and the secondary located in the EOF, are planned to be equipped with the following instruments:

a) Three black and white Conrac 9" CRTs each driven from data aquisition computer. One CRT will display alarms, the second will be interactive and the third will be used to display requested information. These CRTs will [illegible] tion

as the "TSC Display".

b) A line printer driven by the data aquisition computer. This will serve to provide hard copies of requested information.

c) A color graphic CRT which duplicates the display of the control rooms' Safety Parameter Display System (SPDS).

d) A color graphic CRT for offsite radiological dose assessment.

The Conrac CRTs to be used for the TSC display are the same models which are presently used in the control room and for the security system. There is no reliability data available for the TSC equipment; however, based on past performance, with similar equipment, we feel this equipment will meet the reliability goals set forth in NUREG 0696.

3) Descriptions of TSC power supply systems, power supply quality, reliability and availability, and consequences of power supply interruption.

Both the primary and secondary TSC's primary power supply will be backed by emergency generators. In the event of loss of normal power there will be a momentary power supply interruption until the emergency generators come on-line. The phone communications systems for both TSCs will be battery backed to minimize interruption. The data aquisition computer for the TSCs will also be battery backed thus minimizing loss of any stored data.

The TSCs display equipment will not function during a power supply interruption; however, when power is restored the equipment will resume operation immediately.

4) Descriptions of the design of the TSC data display systems, plant records and data available and records management systems.

The computer display system for the TSCs was described in response to item 2 above.

ANO is presently in the process of incorporating a new records management system for use at ANO and at the corporate office utilizing a large data processing computer. This computer will have the capability to locate records by referencing key words like the document title, date, letter number, etc.. The system will have satellite terminals throughout the Administration building and in the new EOF. Plant records are presently being microfilmed and catalogued for this systems use. Both the primary and secondary TSCs will have access to the records management system.

The primary TSC located on the third floor of the Administration Building will have immediate access to plant as-built drawings. Aperture cards of plant drawings will also be available to the primary TSC. The secondary TSC will have most of the as-built plant drawings and will also have aperture cards and readers available.

5) Descriptions of the data transmission system to be installed between the TSC and control room.

The Emergency Response Facilities data system will provide data acquisition, data storage and data processing for both the primary and secondary TSCs functional displays and the SPDS graphics displays for both ANO-1 & ANO-2. This system will consist of redundant SEL 32/77 computers. Redundant CPUs were selected to improve the availability and reliability of the data system. The SEL 32/77 has not been seismically qualified, however, similar computers are used extensively throughout the nuclear industry and the military and have proven to be extremely reliable even under adverse conditions.

The data transmission system to the TSCs from the data system computer will be via a fiber optical transmission system. The fiber optics allow rapid data transmissions with little distortion. This total data system will insure that real time data will be available to the individuals in both TSCs.

6) Description of data to be provided to the EOF.

The secondary TSC is located inside of the EOF. Therefore, all information going to the TSCs will be available at the EOF.

Should you have any further questions on the Emergency Response Facilities, please contact us.

Very truly yours,

David C. Trimble

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Manager, Licensing

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