

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

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Report No: 50-327/96-15, 50-328/96-15

Licensee: Tennessee Valley Authority

Facility: Sequoyah Nuclear Plant

Location: 2600 Igou Ferry
Soddy-Daisy TN 37379

Dates: November 4-8, 1996

Inspectors: W. Sartor, Exercise Team Leader
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Approved by: K. Barr, Chief, Plant Support Branch
Division of Reactor Safety

EXECUTIVE SUMMARY

Sequoyah Nuclear Plant NRC Inspection Reports 50-327, 328/96-15

This routine, announced inspection involved the observation and evaluation of the biennial emergency preparedness exercise. The exercise was held in conjunction with emergency response demonstrations by the State of Tennessee and several local governments on November 6, 1996. This report summarized the observations of the four members of the NRC inspection team as they observed selected portions of the licensee's response in key emergency response facilities during the exercise.

Control Room Simulator

- The Shift Manager assumed the responsibilities as the Site Emergency Director following his declaring the Alert. The shift properly implemented their emergency procedures.

Technical Support Center (TSC)

- Good command and control by the Site Emergency Director in the TSC with his staff was apparent as they effectively mitigated the simulated accident.

Operational Support Center (OSC)

- The OSC Manager was effective in managing resources as directed by the TSC.

Central Emergency Control Center (CECC)

- The CECC Director was effective in coordinating licensee activities related to the emergency and providing information to Federal, State and local authorities responding to the radiological emergency.

Joint Information Center

- This facility was effectively managed to provide timely and correct information to the media.

Report Details

Summary of Exercise Events

This biennial emergency preparedness exercise included full participation by the State of Tennessee and Local Government emergency agencies. The exercise, which was evaluated by the NRC inspection team, was held from 8:30 a.m. to 2:02 p.m. on November 6, 1996. Player critiques were conducted by the licensee players in the Emergency Response Facilities following termination of the exercise. The NRC exit meeting was conducted on November 8, 1996.

VI. Plant Support

P4. Staff Knowledge and Performance in EP

P4.1 Exercise Scenario

a. Inspection Scope (82302)

The inspectors reviewed the exercise scenario to determine whether provisions had been made to test the integrated capability and a major portion of the basic elements existing within the licensee's plan.

b. Observations and Findings

The scenario was challenging and progressed from an Alert to a Site Area Emergency and then to a General Emergency. The scenario fully exercised the onsite and offsite emergency organizations of the licensee and provided sufficient information to the State and local government agencies for their full participation in the exercise.

c. Conclusion

The scenario developed for this exercise was effective in testing the integrated emergency response capability.

P4.2 Onsite Emergency Organization

a. Inspection Scope (82301)

The inspectors observed the functioning of the onsite emergency organization to determine whether the responsibilities for emergency response were defined and whether adequate staffing was available to respond to the simulated emergency.

b. Observations and Findings

The inspectors noted that the responsibilities for emergency response were clearly defined. The Shift Manager assumed the responsibilities of the Site Emergency Director (SED) and other personnel assumed pre-established emergency responsibilities. The SED declared the Alert emergency declaration and approved the notification message to the Operations Duty Specialist. Following the classification of the Alert,

the SED also directed the call-out of the emergency response organization to staff the Emergency Response Facilities (ERFs). Sufficient trained personnel then promptly responded to staff and then activate the ERFs.

c. Conclusion

The initial on-duty Simulator staff and augmented call-out staff were sufficient to respond and perform defined emergency responsibilities.

P4.3 Emergency Classification System

a. Inspection Scope (82301)

The inspectors observed selected emergency response personnel to verify that a standard emergency classification and action level scheme was in use by the licensee.

b. Observation and Findings

The licensee's Emergency Plan and Implementing Procedures provided an emergency classification system. The Simulator staff used it effectively to classify the off-normal conditions as an Alert based on a reactor coolant system leak exceeding the capacity of one charging pump. At 10:18 a.m., the SED upgraded the emergency classification to a Site Area Emergency based on the loss of the second fission product barrier. At 11:53 a.m., the SED declared a General Emergency based on the loss of the third fission product barrier.

c. Conclusion

The licensee's Emergency Action Level Table was effectively used by the SED to properly classify the off-normal conditions.

P4.4 Notification Methods and Procedures

a. Inspection Scope (82301)

The inspectors observed the licensee's notification of State and local governmental organizations and emergency personnel to determine whether timely and substantive emergency information was provided in accordance with procedures.

b. Observations and Findings

The initial emergency notification to the State was made by the Operations Duty Specialist (ODS) in Chattanooga. The SED received a call back from the ODS that the State had been notified. The remainder of the notifications to include follow-up notification were made from the CECC.

c. Conclusion

The licensee demonstrated the ability to make initial and follow-up notifications to the State in a timely manner with essential information.

P4.5 Emergency Communications

a. Inspection Scope (82301)

The inspectors observed the flow of communications from and between the ERFs to determine whether provisions existed for the prompt transmission of emergency communications.

b. Observation and Findings

The inspectors observed that the communications between the utility and the State were effective for the prompt transmission of emergency information.

c. Conclusion

Provisions existed for the prompt communications among principal response organizations to emergency personnel, and they were effectively used during the exercise to provide timely information and coordinate emergency response.

P4.6 Public Education and Information

a. Inspection Scope (82301)

An inspector observed how information concerning the simulated emergency was made available to the public.

b. Observations and Findings

TVA established its Joint Information Center (JIC) at its Chattanooga Office Complex, 1101 Market St., Chattanooga, TN. From this location they provided timely and accurate information to reporters and to the public via periodic news releases.

c. Conclusions

The JIC and its staff were activated and organized in a manner that provided for the dissemination of timely and accurate information to the public.

P4.7 Emergency Facilities and Equipment

a. Inspection Scope (82301)

The inspectors observed the activation, staffing, and operation of selected Emergency Response Facilities to determine whether adequate emergency facilities and equipment were available and maintained to support an emergency response.

b. Observations and Findings

Control Room Simulator - An inspector observed that the on-shift designated crew in the Simulator acted promptly to initiate the emergency response. The facility and equipment supported the crew as they implemented their emergency procedures.

Technical Support Center - The TSC was promptly activated with assigned emergency response personnel. The facility layout provided for good communication between the SED and his primary staff. The SED and his staff interacted frequently as plant conditions were monitored and evaluated, emergency classifications upgraded when necessary, and accident assessment and mitigating activities were implemented. The TSC staff also identified and prioritized the repair activities for the Operational Support Center (OSC).

Operational Support Center - The OSC was promptly activated and provided an effective source of maintenance specialties for repair activities as directed by the TSC.

Central Emergency Control Center - The CECC was activated and functioned well as trained personnel worked effectively with the available equipment. Dose assessment personnel were proactive in making dose projections, and field team control exhibited good communications and positioning. The inspector noted that core damage assessment was calculated differently by the scenario developers vice the players during the exercise, but the differences were not significant enough to affect the protective action decision-making.

c. Conclusion

The ERFs were organized, equipped, and maintained in a manner that facilitated the emergency response.

P4.8 Protective Responses

a. Inspection Scope (82301)

The inspectors observed the protective actions implemented for onsite personnel and the protective action recommendations (PAR) provided by the licensee to the State.

b. Observations and Findings

Protective action recommendations made by the CECC Director were promptly and properly formulated and communicated to State authorities in a timely manner. On-site protective actions included the assembly and accountability of all personnel in the protected area, followed by the evacuation of non-essential personnel.

c. Conclusion

The licensee demonstrated the ability to implement protective measures for onsite personnel and to make the required PARs for the protection of the public.

P4.9 Exercise Critique

a. Inspection Scope (82301)

The inspectors observed the facility critiques immediately following the exercise and portions of the controller/evaluator organization critique process to determine whether weaknesses noted in the licensee's emergency response organization were formally presented to licensee management.

b. Observations and Findings

The inspectors observed that the exercise participants demonstrated good ownership and support of the emergency preparedness program with their involvement in the critique process. The controller/evaluator organization identified areas for further analysis to determine if improvements were needed. One area identified addressed better coordination with some of the data inputs by the controller organization. The findings were presented to management in a formal critique conducted on November 8, 1996.

c. Conclusion

The controller/evaluator organization did a good job of analyzing exercise performance.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection summary to members of licensee management at the conclusion of the inspection on November 8, 1996. No proprietary information is contained in this report.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

B. Adney, Site Vice President
R. Driscoll, Site Training Manager
T. Flippo, Site Support Manager
J. Herron, Plant Manager
R. Kitts, Corporate Emergency Preparedness Manager
M. Lorek, Mechanical Engineering Manager
R. Rausch, Maintenance/Modifications Manager
J. Rupert, Engineering and Services Support Manager
J. Setliffe, Site Security Manager
R. Shell, Licensing and Industry Affairs Manager

INSPECTION PROCEDURES USED

- IP 82301: Evaluation of Exercises for Power Reactors
- IP 82302: Review of Exercise Objective and Scenarios for Power Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF ACRONYMS USED

CECC	Central Emergency Control Center
EAL	Emergency Action Level
EP	Emergency Preparedness
ERF	Emergency Response Facility
FEMA	Federal Emergency Management Agency
OSC	Operational Support Center
SCR	Simulator Control Room
SED	Site Emergency Director
TSC	Technical Support Center

Attachment (8 Pages):
Goals and Objectives, and Scenario Narrative Summary

SEQUOYAH NUCLEAR PLANT(SQN) 1996 EMERGENCY PLAN EXERCISE

The 1996 SQN Radiological Emergency Plan Exercise will be a full scale exercise consisting of full participation by TVA and full participation by the State and Local Government emergency agencies.

EXERCISE GOALS

TVA's goals for the SQN 1996 exercise are as follows:

1. Allow plant and offsite personnel to demonstrate and test the capabilities of the emergency response organization to protect the health and safety of plant personnel and the general public in accordance with the Nuclear Power - Radiological Emergency Plan (NP-REP), Site Emergency Plan Implementing Procedures (EPIPs), and the Central Emergency Control Center (CECC) EPIPs.
2. Provide an interactive exercise to ensure proficiency of onsite and offsite emergency response capabilities.
3. Provide training for emergency response personnel.
4. Identify emergency response capabilities that are in need of improvement or revision.
5. Provide an interactive exercise to allow the State responders to demonstrate their proficiency in emergency response capabilities.

EXERCISE OBJECTIVES

A. Control Room/Simulator

1. Demonstrate ability of the Shift Operations Supervisor to recognize conditions, classify emergencies, make required notifications in a timely manner, and assume the initial responsibilities of the Site Emergency director.
2. Demonstrate ability of the Shift Operations Supervisor to maintain effective command and control of control room activities, prevent interference with classification analysis, dispatch and track response teams as needed prior to Technical Support Center activation, and periodically inform the control room staff of the status of the emergency situation.
3. Demonstrate ability of the control room staff to make timely determination of the cause of the incident, perform mitigating actions, keep onsite personnel informed of the emergency situation through periodic PA announcements prior to Technical Support Center activation, and a precise and clear transfer of responsibilities from the Control Room Staff to the Technical Support Center Staff.
4. Demonstrate ability of the control room staff to use proper procedures, maintain an accurate chronological account of events, and defer problems that cannot be quickly resolved to the Technical Support Center for resolution.
5. Demonstrate ability of the control room staff to continuously evaluate information, redefine/confirm conditions and event classifications, establish an effective flow of information between the Control Room, Technical Support Center, Operations Support Center, Central Emergency Control Center, and NRC.

B. Technical Support Center (TSC)

1. Demonstrate ability to perform a precise and clear transfer of responsibilities from the control room staff to the TSC staff and assume the primary responsibilities of the Central Emergency Control Center (CECC) prior to CECC activation.
2. Demonstrate the Site Emergency Director's (SED) ability to provide effective direction, command and control, to manage activities in a manner to prevent interference with classification, analysis, or mitigation of an event and to perform periodic briefings for TSC/OSC staff and personnel.
3. Demonstrate ability of the TSC staff to use proper procedures, solve problems related to incident identification and mitigation, and maintain an accurate account of events through chronological log keeping.
4. Demonstrate the TSC's ability to determine the appropriate sampling and monitoring required to support accident mitigation, perform timely assessments of onsite radiological conditions, and formulate, coordinate, implement, and track on site protective actions.
5. Demonstrate the TSC's ability to maintain effective communication between the Operations Support Center (OSC), Control Room, CECC, NRC, and between various groups within the TSC.
6. Demonstrate ability of the TSC to continuously evaluate available information, redefine/confirm plant conditions and event classifications.
7. Demonstrate the Site Vice President's proficiency serving as a corporate interface for the SED.
8. Demonstrate effective direction of site security throughout the exercise.

C. Operations Support Center (OSC)

1. Demonstrate ability of the OSC Manager, through effective command and control, to coordinate and initiate activities in a timely manner, maintain effective communications between various groups within the OSC, and use of proper procedures in the coordination and initiation of activities.
2. Demonstrate ability of the OSC staff to properly plan required tasks, promptly dispatch response teams, track response teams, and maintain communication with the response teams.
3. Demonstrate ability of the OSC response teams to quickly and effectively enter the plant, make necessary repairs or inspections, and perform an adequate de-brief upon returning to the OSC.
4. Demonstrate ability of the OSC staff to maintain accurate status board information, maintain an accurate account of equipment, plant, and response team status through accurate chronological logs, and effective transfer of information between the OSC, TSC, RADCON laboratory, and Chemistry laboratory.
5. Demonstrate ability of the RADCON personnel to use proper procedures and follow good RADCON and ALARA practices to effectively support accident mitigation efforts, ensure adequate worker protection, and perform effective inplant and site boundary surveys during radiological emergencies.
6. Demonstrate ability of the OSC to track changing radiological conditions through survey results and/or inplant monitors, control internal and external exposures and personnel contamination of onsite emergency workers, and incorporate the information into personnel protective actions and exposure tracking.

D. Central Emergency Control Center

1. Demonstrate ability of the Operations Duty Specialist to make initial notifications to State agencies in a timely manner.
2. Demonstrate ability to perform precise and clear transfer of responsibilities from the TSC staff to the CECC staff.
3. Demonstrate ability of the CECC Director to maintain effective command and control within the CECC and establish and maintain effective communication between various groups within the CECC.
4. Demonstrate ability of the CECC to perform, update, coordinate offsite activities with the STATE and provide protective action recommendations in a timely manner.
5. Demonstrate ability to effectively transfer radiological survey information from the field, keep the field teams informed of emergency conditions, and adequately monitor and control the exposure levels of offsite personnel.
6. Demonstrate ability of the CECC staff to maintain detailed chronological logs of plant status, ongoing activities, external TVA correspondence, corrective actions taken, protective action recommendations and to continuously evaluate available information and redefine/confirm the conditions and event classifications.
7. Demonstrate ability of the CECC staff to effectively call upon and obtain TVA corporate, vendor, or other outside support resources as appropriate or needed (technical, logistics, financial, federal, industrial, etc.).
8. Demonstrate ability of the CECC staff to establish and maintain effective communication between the various emergency centers (Control Room, TSC, RMCC, State/Local EOC) and NRC responders in the CECC.
9. Demonstrate ability of the CECC staff to analyze current plant conditions, identify projected trends, determine the potential consequences, and maintain CECC status board information accurate.
10. Demonstrate ability to establish and maintain adequate security access control for the CECC.
11. Demonstrate proficiency of the CECC staff with emergency procedures, equipment, and methods.

E. EXERCISE SPECIFIC

1. Demonstrate ability of the exercise controllers to perform their function without prompting, coaching, or otherwise interfering with the performance of exercise players.
2. Demonstrate that personnel participating in the exercise were not pre-positioned prior to commencement.
3. Conduct of the exercise players demonstrated that they did not have prior knowledge of scenario details or initiation time.
4. The scenario should demonstrate technical accuracy, anticipation of significant player actions, and be sufficiently difficult to exercise capabilities of the emergency plan.
5. Demonstrate ability to conduct post exercise critiques.
6. Demonstrate adequacy of control room and emergency centers facilities, resources, equipment, and communication systems to support emergency operations.

7. Demonstrate ability to alert and mobilize personnel for emergency response centers and activate the emergency centers in a timely manner.
8. Demonstrate ability to conduct habitability surveys for the TSC, OSC, control room, and all assembly areas.
9. Demonstrate ability to maintain effective communication between the Technical Support Center, Operations Support Center, Central Emergency Control Center, Control Room / Simulator, and NRC.
10. Demonstrate ability to coordinate plans for termination of the emergency and recovery operation.

F. MEDICAL EMERGENCY RESPONSE TEAM

1. An incident Commander is promptly dispatched to the scene of the emergency where he/she demonstrates ability to establish a command post, setup communication with the main control room, and effectively interact with the Medical Emergency Response Team (MERT) leader.
2. The MERT demonstrates the ability to arrived on the emergency scene in a timely manner, assess medical injuries, identify hazards, and provide medical care.
3. The priority of medical and radiological concerns was properly established and contamination control measures were implemented for personnel and equipment during the treatment, transport, and following transport of contaminated or potentially contaminated injured personnel.
4. Security personnel demonstrate their ability to provide sufficient and effective control at the scene of the emergency.
5. Demonstrate ability to determine means of transportation for injured personnel and provide follow-up notification to receiving hospital upon site departure.
6. The agreement hospital demonstrates their ability to receive the injured person, assess radiological and medical conditions of the victim, and implement proper contamination control measures.
7. RADCON personnel demonstrates their ability to monitor MERT exposures and provided sufficient radiological information to the Incident Commander and / or MERT Leader.
8. The Incident Commander and MERT demonstrates ability to communicate and interact effectively.

G. ENVIRONMENTAL MONITORING

1. Demonstrate the ability of the Environmental Monitoring Teams to effectively utilize their procedures to perform dose rate surveys, collect and analyze radiological samples, and conduct other prescribed radiological activities.
2. Demonstrate the Environmental Monitoring Team's abilities to adhere to appropriate contamination control procedures in field conditions.
3. Demonstrate the adequacy of the Environmental Monitoring Vans to support emergency operations (monitoring equipment, supplies, communication equipment, etc.).
4. Demonstrate ability to timely and effectively activate and establish communication with environmental monitoring vans.
5. Demonstrate ability of the SITE to timely and effectively transfer control of the environmental monitoring vans.

6. Demonstrate ability to effectively dispatch and control Radiological/Environmental Monitoring Teams, coordinate with the State when applicable, and obtain, analyze, and utilize meteorological, onsite and offsite radiological conditions, and source term information to develop dose assessments in a timely manner.

H. PUBLIC INFORMATION / JOINT INFORMATION CENTER

1. Demonstrate the ability of the CECC Communications staff to coordinate information with non - TVA agencies.
2. Demonstrate the ability of the CECC Communications Staff to develop timely accurate news releases.
3. Demonstrate the ability of the CECC Information Manager to exercise effective command and control of the overall communications response.
4. Demonstrate the ability of the JIC to coordinate public news briefings with State and Federal agencies and provide timely information to the public during periodic JIC briefings.
5. Demonstrate the ability of media relations personnel in the JIC to answer telephone calls from the media professionally and accurately.
6. Demonstrate the ability of TVA's public information staff in the JIC to provide timely and accurate information to anyone calling the public information telephone number.
7. Demonstrate the ability to provide reasonable media access with minimal impact on emergency response activities.
8. Demonstrate the ability to provide information to the public that is accurate, presented at a meaningful technical level, and take corrective actions for inaccuracies.
9. Demonstrate the adequacy of the CECC communication staffs facilities, resources, equipment, and communications system to support emergency operations.

I. The following drills will be conducted during the exercise:

1. CECC/State Communication Drill
2. TSC/CECC Communication Drill
3. Plant RADCON Drill
4. Plant Radiological Monitoring Drill (Environs Monitoring)
5. Medical Emergency Drill
6. Chemistry Post Accident Sampling Drill

SEQUOYAH NUCLEAR PLANT (SQN) 1996 GRADED EXERCISE
SCENARIO NARRATIVE SUMMARY
CONFIDENTIAL
Rev. date: 10/28/96

INITIAL CONDITIONS:

U-1 at 100% power for the last 150 days. The core is at end of life.
Boron concentration is 14 ppm.
The Floor Drain Collector Tank(FDCT) is full.
The Auxiliary Waste Evaporator Feed(AWEF) Pumps and the Auxiliary Condensate Demin Waste Evaporator Feed(ACDWEF) Pump are out of service(O. O. S.) due to cavitation.
The Auxiliary Building Floor and Equipment Drain Sump(ABFEDS) pumps are aligned to the Tritiated Drain Collector Tank(TDCT) which half full.
RHR 1B-B Pump is O. O. S. for pump seal replacement.

At five minutes (T=00:05) into the exercise a crack occurs on loop two of the Reactor Coolant System(RCS) causing a leak inside the U-1 Containment. This leak exceeds the capacity of one Centrifugal Charging Pump(CCP) in the normal alignment.

At fifteen minutes (T=00:15) into the exercise an ALERT should be declared based on loss of RCS barrier EAL 1.2.2(non isolatable RCS leak exceeding the capacity of one charging pump in the normal alignment).

At twenty-two minutes (T=00:22) into the exercise the Unit 1 reactor will trip and a SI signal will occur due to increased containment pressure caused by the RCS leak.

At one hour(T=01:00) into the exercise a medical emergency occurs when a person working on 1B RHR pump is injured and contaminated.

At one hour and thirty minutes(T=01:30) into the exercise the cracked RCS loop separates further resulting in a greater loss of coolant accident(LOCA) and a rapid depressurization of the RCS. This depressurization and thermal shock of thousands of gallons per minute of cold water (from the SI and cold leg accumulators) on the fuel rods results in about 40 percent clad failure. The accident radiation monitors inside containment begin to rise.

At one hour and forty-five minutes(T=01:45) into the exercise a SAE should be declared based on the loss of two fission product barriers. RCS barrier loss due to EAL 1.2.2 and now fuel clad barrier loss due to EAL 1.1.5(valid reading on containment accident monitors exceeding limits).

At two hours (T=02:00) into the exercise RHR 1A-A pump begins to vibrate excessively due to a deteriorating lower motor bearing.

At three hours(T=03:00) into the exercise RHR 1B-B pump is repaired. When started the RHR 1B-B pump will run for about 30 seconds when the 1B 6.9KV shutdown board trips on differential due to a phase-to-ground fault on the Shutdown Transformer 1B1-B. The fault on the 1B1-B transformer melts a hole in the transformer casing releasing some burned and vaporized Polychlorinated Biphenyls(PCBs) which set off one smoke detector in the room. Additional PCBs spray and flow out of the casing into the room.

At three hours and five minutes(T=03:05) into the exercise the vibration of the RHR 1A-A pump results in a leak of about 120 gpm when the weld for the flushing connection piping breaks at the junction with the 8 inch discharge piping leaving a hole about .85 inches in diameter on the discharge piping. The temperature of the leaking water from the RHR 1A-A system is about 185°F. The release path is from the 1A-A RHR system to the 1A-A RHR pump room air which is pulled into the U-1 pipe chase by the Auxiliary Building Gas Treatment system which is then exhausted to the environment after being filtered by charcoal and HEPA filters.

SEQUOYAH NUCLEAR PLANT (SQN) 1996 GRADED EXERCISE
SCENARIO NARRATIVE SUMMARY
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At three hours and ten minutes(T=03:10) into the exercise flooding alarm LS-40-29 is activated due to the rising water in RHR 1A-A pump room. Radiation monitors and ventilation exhaust monitors will begin to alarm.

At three hours and fifteen minutes(T=03:15) into the exercise a temperature sensor in RHR 1A-A pump room exceeds 136°F which causes annunciator window E-1 on panel XA-55-6D to alarm. Additionally, a GE should be declared based on loss of two barriers and potential loss of the third barrier. RCS barrier loss due to EAL 1.2.2, fuel clad barrier loss due to EAL 1.1.5 and now the potential loss of Containment due to EAL 1.3.4(Unexplained valid increase in area or ventilation rad monitors adjacent to containment with a LOCA in progress).

At three hours and forty minutes(T=03:40) into the exercise the water in the RHR 1A-A pump room reaches the top of the coffer dam and begins to build up between the door and the coffer dam. As the water builds up, the pressure on the door unseats it from the frame allowing water to leak out of the room onto elevation 653. Dose rates on elevation 653 begin to rise rapidly.

At three hours and forty-five minutes(T=03:45) into the exercise the first pump for the ABFEDS starts pumping water to the TDCT.

At four hours and twenty minutes(T=04:20) into the exercise the second pump for the ABFEDS starts pumping water to the TDCT.

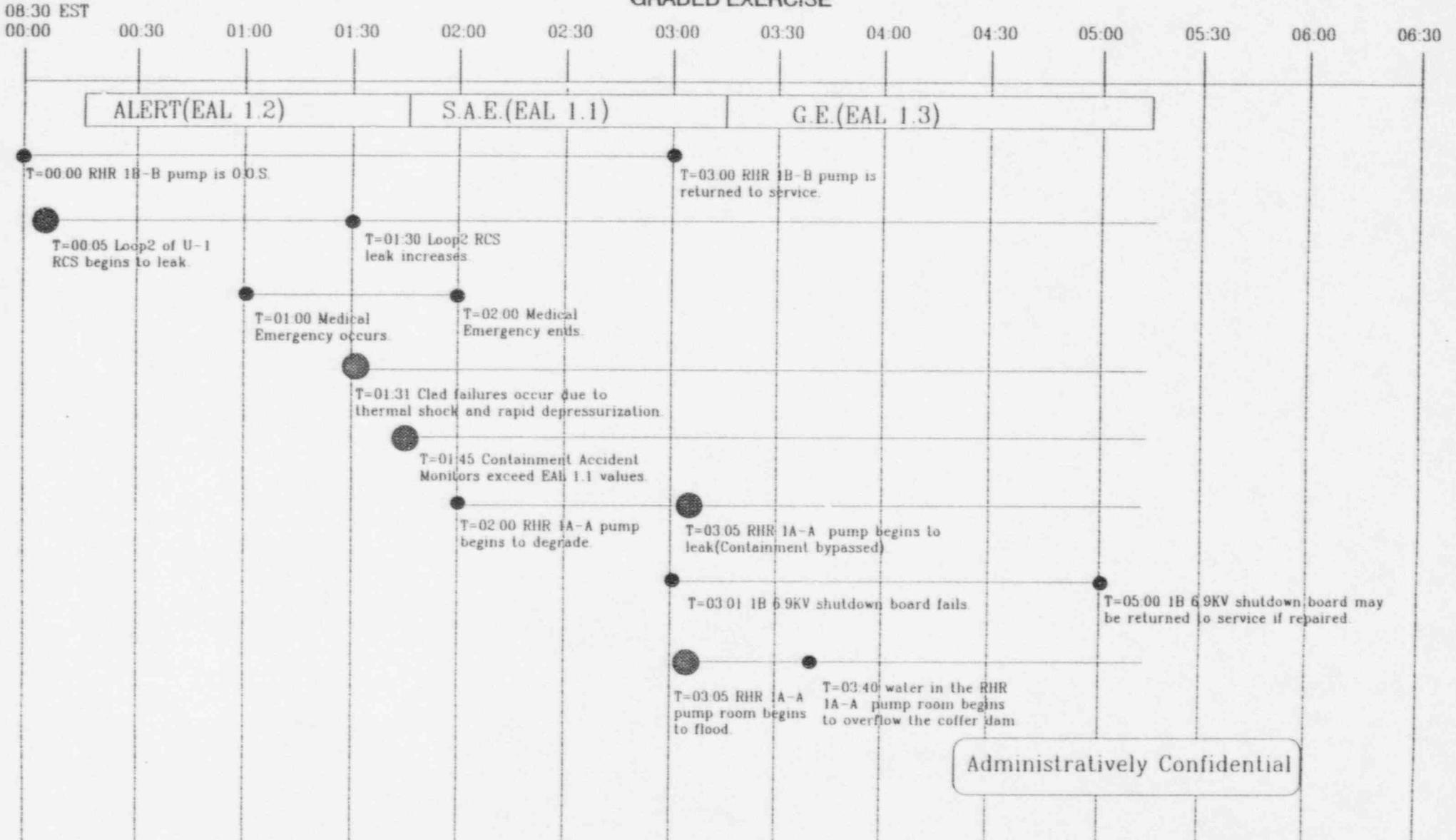
At five hours(T=05:00) into the exercise the 1B 6.9KV shutdown board may be repaired and returned to service.

At five hours and fifteen minutes(T=05:15) into the exercise the Exercise may be terminated after the RHR 1B-B pump is returned to service, the RHR 1A-A pump discharge leak is isolated, and the environmental monitoring objectives have been met.

SCENARIO TIMELINE

REV. DATE 8-05-96

SQN
EMERGENCY PREPAREDNESS
1996
GRADED EXERCISE



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