

TEXAS UTILITIES SERVICES INC.  
2001 BRYAN TOWER · DALLAS, TEXAS 75201

Log # TXX-3389  
File # 10013

August 24, 1981

Mr. S. B. Burwell  
Licensing Project Manager  
U. S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555



SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION  
EMERGENCY PLAN DISCREPANCIES

REF: LETTER OF JULY 23, 1981 TO MR. R. J. GARY  
FROM MR. R. L. TEDESCO

Dear Mr. Burwell:

Attached is the TUGCO response to the reference letter concerning discrepancies in the CPSES Emergency Plan. Portions of the attached responses require revisions to the Emergency Plan. This material will be incorporated in a plan revision later this year. Please call if you have any questions or if further clarification is necessary.

Sincerely,

H. C. Schmidt

JPS:tlb

cc: J. C. Kuykendall - w/o attachment  
R. A. Jones - w/o attachment  
B. T. Lancaster - w/attachment  
J. D. Edwards - w/o attachment

Boo!  
s  
1/1

A. Assignment of Responsibility (Organizational Control)

- Q Identify all the local and private sector organizations (including utilities) that are intended to be part of the overall response organizations for the Emergency Planning Zones (10-mile and 50-mile EPZ). (A-1)

Response: The local organizations within the 10 mile EPZ involved in emergency response activities concerning CPSES include:

Hood County Sheriff's Office  
Granbury Volunteer Fire Department  
Hood General Hospital  
Hood General Hospital Ambulance Service  
Somervell County Sheriff's Office  
Glen Rose/Somervell County Volunteer Fire Department  
and Rescue-Ambulance Service  
Hood County/Granbury/Lipan/Tolar Government Officials  
Somervell County/Glen Rose Government Officials

The private group within the 10 mi. EPZ is:

Squaw Creek Park, Inc.

Between 10 and 50 miles, the 50 mile EPZ, there are no local (county) organizations directly involved in Emergency Planning and response to incidents around CPSES. The State of Texas is responsible for this area.

- Q Identify the agency or agencies having jurisdiction over access control of the Squaw Creek Reservoir within the 10-mile EPZ. (A-1)  
If a letter of agreement has not been established with the agency or agencies, provide one.

Response: Squaw Creek Park, Inc., is responsible for access control to the S.C. Reservoir. An agreement letter will be arranged to determine the details of S.C.P., Inc.'s response and will be provided prior to the NRC/FEMA exercise. See the attachment of the proposed Plan amendment concerning S.C.P., Inc., (Attachment 1).

Q Provide agreement letters for local agencies and other support organizations that are described in the Plan as providing emergency response support. The following is a list of these organizations with the Plan section referenced in parenthesis:

1. Marks English Hospital (4.3.1.4)
2. Granbury Ambulance Service (4.3.1.3)

Response: The Marks English Hospital, Glen Rose, Texas, does not provide radiological emergency services, and therefore, is not considered part of the response organization. This hospital is listed in the CPSES E-plan solely to inform personnel that is available for general medical services. An agreement letter is not required because no special services are expected, implied or offered.

The backup hospital required by NUREG-0654 L-1 is located at the University of Pennsylvania and associated with the Radiation Management Corporation.

The Cranbury Ambulance Service will be amended to the Hood General Hospital Ambulance Service and a letter of Agreement is located in Appendix H of the Emergency Plan.

Q The existing agreement letters are general in nature and do not identify the mutually acceptable criteria for their implementation (A.3). The letters do not adequately delineate the authority, responsibilities and limits of actions (B-9). The following agreement letters, contained in Appendix H to the Plan, should be upgraded in this respect:

1. Hood General Hospital
2. Granbury Volunteer Fire Department
3. Hood County Sheriff's Department
4. Somervell County Sheriff's Department
5. Glen Rose, Somervell County Volunteer Fire, Rescue & Ambulance Service

Response: The existing agreement letters have identified weaknesses. The letters will be upgraded prior to the official NRC/FEMA exercise.

Q The Plan, Figure 4.1, does not illustrate the interrelationship of all those State and local agencies identified in Section 4.3 as support organizations. Revise Figure 4.1 to provide this information. (A.1.c)

Response: Attached is a copy of Figure 4.1 as it may be amended in the next revision of the Plan (Attachment 2).

Q While the Plan generally addressed the Recovery Organization, the individual, specified by title, who will be responsible for assuring continuity of resources (technical, administrative and material) has not been identified. Provide this information. (A.4)

Response: The Recovery Manager will be responsible for the continuity of resources.

#### B. Onsite Emergency Organization

Q Section 4.2.1.1 of the Plan identifies the Emergency Coordinator (Manager, Nuclear Operations) as the individual with responsibility for continued evaluation and coordination of all activities related to an emergency. Section 7.1.1.1 states that the Recovery Manager (senior utility official onsite who is familiar with the station and its condition) may change the class of emergency whenever such action is warranted. The relationship between the Emergency Coordinator and the Recovery Manager must be clarified. The individual who shall have the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations to offsite authorities must be unambiguously identified in the Plan. (B.2)

Response: The responsibilities of the Emergency Coordinator and the Recovery Manager are essentially the same; however, the Recovery Manager can exercise his authority only after the Recovery Organization takes over for the Emergency Organization. This transition is discussed in Section 7.0 "Recovery" of the CPSES E-Plan.

Q Section 4.2.1.1 of the Plan identifies a line of succession, up to the Manager, Nuclear Operations, for the position of Emergency Coordinator. Identify the specific conditions for higher level utility officials assuming this function. (B.3)

Response: The TUGCo Emergency Organization as proposed in the plan has sufficient managerial depth to ensure efficient operation of the Emergency Organization throughout all conceivable accident conditions.

Q Specify that the responsibility of the Emergency Coordinator to decide to notify offsite authorities may not be delegated. (B.4)

Response: The Plan will be amended to reflect this requirement.

Q The Plan describes the responsibilities of the key members of the onsite emergency organization; however, the plant's normal and augmented shift organization does not agree with Table B-1 of NUREG-0654, Revision 1, with regard to Senior HP Expertise, Radiation Monitoring Technicians, and Communications personnel capability within 30 minutes. Provide shift staffing and augmentation which conform to Table B-1. (B-5)

Response: Due to the CPSES location away from populated areas and variations in topography, the 30 minute response time may not be possible under all conditions; therefore, exception is taken to this requirement.

Q While Section 4.2.4 of the Plan gives a general description of the support provided by the corporate office, it does not adequately address the requirements of Criteria B.7.a and d. Provide this information. (B.7.a,d)

Response: The CPSES emergency organization exceeds the Table B.1 requirements by incorporating both public information personnel (for news media information releases) and logistics personnel. Consequently, specific information concerning the nonemergency roles of the personnel in the public information and purchasing departments from the corporate office are inappropriate, as these departments only support the onsite personnel.

C. Emergency Response Support and Resources

- Q Identify the specific licensee, state and local resources available to support the Federal response. (C.1.c)

Response: TUGCo presently plans to provide the NRC with the resources required per NUREG-0696 for the EOF and the TSC. Specific resources for other Federal agencies have not been identified and, therefore, may not be available.

- Q Commit to the dispatch of a company representative to the County Emergency Operations Centers (EOC). (C.2.b)

Response: Section 5.4 of the CPSES E-Plan meets the intent of NUREG-0654, item C.2.b, which states, "The licensee shall prepare for the dispatch..." The Plan will be amended to send a representative to the EOC if requested by the EOC Manager.

D. Emergency Classification System

- Q The initiating conditions for the Unusual Event classification, described in Table 6.2 of the Plan, should include example initiating condition 17 listed on page 1-6 of Appendix 1 to NUREG-0654, Revision 1. (D.1,2)

Response: Section 6.1 of the Emergency Plan only lists examples of initiating conditions for an emergency; therefore; this item will not be added to the E-Plan. It will appear in the procedure.

- Q The initiating conditions for the Site Emergency classification described in Table 6.6 of the Plan should include example initiating condition 9 listed on page 1-13 of Appendix 1 to NUREG-0654, Revision 1. Initiating condition 7 on page 48 of the Plan is less conservative than the example initiating condition 9 in Appendix 1 to NUREG-0654, Revision 1, and should be changed accordingly. (D.1,2)

Response: See previous response.

E. Notification Methods and Procedures

- Q Indicate that the means for verification of messages will be established. (E.1)

Response: The Communication and Notification Procedure will contain the methodology for message verification. This will be referenced in the Plan. (Section 5.7)

- Q Address the administrative and physical means, and the time required, for notifying and providing prompt instructions to the public within the plume exposure pathway EPZ. Indicate that an Early Warning System meeting the design objective of Appendix 3 of NUREG-0654, Revision 1, will be developed prior to power operation. (E.6)

Response: An Early Warning System meeting the design objectives of Appendix 3 of NUREG-0654, Revision 1, will be developed prior to power operation. The administrative and physical means for notifying the public will be finalized following the selection of the Early Warning System.

F. Emergency Communications

- Q Include, in the communication plans, organizational titles and alternates for both ends of the communication links. (F.1)

Response: This information will be provided in the Communications and Notification Procedure and referenced in Section 5.7 of the Plan.

- Q Describe the provisions for communications with all local governments within the 50-mile EPZ. (F.1.b)

Response: The Plan addresses maintaining communications with the local government officials within the ten mile EPZ and the state government officials within the fifty mile EPZ. Communication with the counties inside the fifty mile EPZ is the responsibility of the state government officials. This information will be amended to the Plan.

- Q Include provisions for communications by the licensee with NRC headquarters and the NRC Regional EOC, the EOF and radiological monitoring team assembly areas. (F.1.f)

Response: The Plan is being amended to reflect these communication requests. Figure 5.1 is also being altered (a copy is attached, Attachment 3). EOF communications scheme will be in accordance with NUREG-0696.

- Q Describe a coordinated communication link for fixed and mobile medical support facilities. (F.2)

Response: Under evaluation.

#### G. Public Education and Information

- Q Commit to a coordinated dissemination of information to the public which includes the criteria specified in G.1.a thru d. Provide a draft of this material for review. (G.1)

Response: Under evaluated -- this will be developed and submitted before the joint exercise.

- Q Describe a public information program that addresses criteria G.2 with regard to the transient population. (G.2)

Response: Same as above.

- Q Establish arrangements for timely exchange of information among designated spokespersons. (G.4.b)

Response: Same as above.

Note: Possible solutions - Conference call system or single point of information dissemination.

#### H. Emergency Facilities and Equipment

- Q Describe a Technical Support Center (TSC) and an Operations Center (OSC) that conform to NUREG-0696. (H.1)

Response: This information will be provided in the TUGCo response to NRC Generic letter 81-10.

Q Describe an EOF that conforms to NUREG-0696. (H.2)

Response: Same as above.

Q There is no discussion in the plan of the time required to staff the TSC and EOF. Criterion H.4 of NUREG-0654, Revision 1 requires timely staffing. Provide this information.

Response: The Plan, sections 5.1 (TSC) and 5.3 (EOF), is being amended to require a 60 minute response time for staffing and activating each facility.

Q Describe the onsite hydrologic or seismic monitors that are used by the Emergency Coordinator to initiate emergency measures. (6.5.a)

Response: Seismic instrumentation is described in Section 3.7B.4 of the FSAR.

Q Describe the radiation monitoring systems that are to be used by the Emergency Coordinator to initiate emergency measures. (H.5.b)

Response: Reference sections 11.5 and 12.3.4 of the FSAR for process radiation monitors and for the other monitoring systems, such as the area radiation monitoring system (ARMS).

Q Provide a description of the process monitors used to initiate emergency conditions. (H.5.c) Note: See reviewer's comments on criteria I.2 below.

Response: Section 7.0 of the FSAR gives details of the instrumentation used to monitor the various functions associated with reactor operations.

Q Provide a description of the fire detection system used to initiate emergency measures. (H.5.d)

Response: Details of the fire detection system are listed in the FSAR, Section 9.5.1.

- Q Describe the provisions used to acquire data from or for emergency access to offsite monitoring and analysis equipment with regard to meteorological, hydrologic and seismic monitors. (H.6.a)

Response: The National Weather Service will be contacted to acquire meteorological data and projected forecasts. Based on sections 2.4 and 2.5 of the FSAR and the ER which discuss the low probability for a significant seismic or hydrological event to occur within the CPSES area, we conclude that the requirement for access to offsite monitoring equipment for these events has no basis and is unnecessary.

- Q Describe the offsite radiological monitoring system provided to meet, as a minimum, the NRT Radiological Assessment Branch Technical Position for the Environmental Radiological Monitoring Program. (H.6.b)

Response: The Pre-Operational Radiological Monitoring Program as discussed in the Radiological Effluent Technical Specifications, includes 16 TLD's at the perimeter (1 in each sector), 16 TLD's at the 4-5 mile radius (1 in each sector) and 11 other selected locations, two of which are control stations.

In addition, there are 9 airborne monitoring stations for collecting particulate and radioiodine samples located in and around the plant perimeter to conform to the Branch Technical Position requirements.

- Q Appendix J to the Plan which contains a general list of emergency equipment, states that at a later date, specific quantities and types of equipment will be selected and the appendix revised. Provide a revised list of emergency equipment in Appendix J. (H.7)

Response: Appendix J contains a listing of emergency equipment. As specific equipment types, i.e., PIC 6-A by EIC or E-520 by EIC, have not been selected, the Plan will continue to remain non-specific. The procedure EPP-209 "Surveillance of Emergency Kits" will contain specific information concerning the types of instruments, the minimum acceptable quantity of material and the locations of the kits.

Q Describe the meteorological instrumentation and procedures to conform to the criteria in Appendix 2 to NUREG-0654, Revision 1. (H.8)

Response: The meteorological system is described in the FSAR, section 2.3.3. The current system is being upgraded to meet the criteria in Appendix 2. Due to this modification, specific procedures are not available at this time.

Q Section 5.2 of the Plan should be amplified to include location of the OSC and capacity and supplies, including for example, respiratory protection, protective clothing, portable lighting, portable radiation monitoring equipment, and cameras for personnel present in the assembly area. (H.9)

Response: This information will be provided in the TUGCo response to the NRC Generic Letter 81-10. Equipment that will be stored in the OSC are listed in Appendix J of the Plan and will be specified and quantified in the procedure EPP-209 "Surveillance of Emergency Kits".

Q Provide a description of the backup instruments/equipment to replace those items which are removed from emergency kits for calibration or repair. (H.10)

Response: Specific equipment used by CPSES is listed in the FSAR section 12.5. Procedure EPP-209 "Surveillance of Emergency Kits" will describe the method and equipment to be used for replacing emergency equipment.

I. Accident Assessment

- Q Identify the emergency procedures that specify the kinds of instruments being used to identify off-normal conditions and their capabilities. (I.1) (Note: See review comments on criterial H.5, 6 and 7)

Response: The "Assessment of Emergency Action Levels", Procedure EPP-202, will list this equipment and the parameters or limits that define an action level in a table form by the situation encountered.

This is an example only - the values are not real.

---

elevated RCS activity	Failed fuel Monitor	Unusual Event >1000 cpm	Alert >1000 cpm	etc.
Conformation	RCS Sample	>1 uCi/Ml	>5 uCi/ml	

---

- Q Describe the onsite capability and resources that will be used for providing initial values and continuing assessment that meet the requirements of NUREG-0737 including instrumentation for detection of inadequate core cooling; high range effluent monitors; post accident sampling capability; and inplant iodine instrumentation. (I.2)

Response: Under evaluation.

- Q Identify the potential release paths and the methods and techniques for determining the source term of release of radioactive material. (I.3)

Response: The monitored potential release paths are listed in section 11.5 of the FSAR. Methodologies and techniques for determining the source term of the system is under evaluation.

Q Establish the relationship between effluent monitor readings and onsite and offsite exposures and contamination for various meteorological conditions. (I.4)

Response: The Digital Radiation Monitoring System (DRMS) (referenced in section 11.5 of the FSAR), is fed release data from all monitored release points in the plant. The meteorological tower also sends data to the DRMS. Via the software generated for this purpose, the DRMS computer will plot the release and calculate the offsite dose isopleths. If the DRMS is not available, the data from the individual monitors and meteorological data can be manipulated manually using the Emergency Assessment Kit by Dames and Moore to plot the plume.

Q The procedures used for assessing onsite and offsite exposures and contamination, in the event the computer (Digital Radiation Monitoring System) is malfunctioning, should be described in the Plan. Provide information covering the Accident Assessment Kit described in Section 6.3.3.1 of the Plan used to determine the release rate/projected doses if the RMS computer is inoperable. (I.4)

Response: Section 6.3.2 of the Plan discusses various alternatives to using the DRMS for dose assessment. Explicit procedures will appear in the Emergency Plan Manual as EPP-203 "Use of the Emergency Assessment Kit" and EPP-214 "Emergency Radiological Surveys". EPP-203 is explicit in its description and instruction of the Emergency Assessment Kit.

Q Describe a meteorological system that meets the criteria of Appendix 2 to NUREG-0654, Revision 1. (I.5)

Response: The meteorological system is being upgraded to meet those criteria. At such time as specific information is available, the FSAR and the Plan will be updated to describe the system.

Q The Plan does not specifically address the methodology for determining the release rate/projected doses if the instrumentation used for assessment are offscale or inoperable. Provide this information. (I.6)

Response: The Plan will be amended to the following: In the event the monitoring equipment fails or is offscale, the assessment actions will be based on source term data for the worst case accident. This information will be specifically provided in EPP-202 "Assessment of Emergency Action Levels".

Q Describe the provisions for rapid assessment of the actual or potential magnitude and locations of radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment and estimated deployment times. (I.8)

Response: EPP-202 "Assessment of Emergency Action Levels" provides for the rapid assessment of the emergency condition based on instrument readings.

Q Describe the capability to detect and measure radioiodine concentrations in air in the plume exposure pathway EPZ as low as  $10^{-7}$  microcuries per cubic centimeter under field conditions. (I.9)

Response: Equipment and procedure will be made available to the field monitoring teams for this purpose. Details are under evaluation.

Q Describe the means for relating the various measured parameters to dose rates for key isotopes and gross radio activity measurements. Provide for estimating integrated dose from the projected and actual dose rates and for comparing these estimates with the protective action guides. (I.10)

Response: The DRMS computer will provide these estimates. Software in the computer will also allow for the determination of the integrated dose to the populace. A procedure will be available to manually calculate the integrated dose.

#### J. Protective Response

Q Provide information to conform to Criterion J.2 and Criterion J.3.

Each applicant shall make provisions for evacuation routes and transportation for onsite individuals to some suitable offsite location, including alternatives for inclement weather, high traffic density and specific radiological conditions.

Each Applicant shall provide the radiological monitoring of people evacuated from the site.

Response: Evacuation procedure will contain a map of the evacuation routes for site personnel. This map is being developed. All items listed will be discussed by the procedure. Monitoring requirements will be stipulated for site evacuees in procedures EPP-212 "Control of Site Access", EPP-204 "Station Evacuation" and EPP-205 "Site Evacuation".

Q Expand the description of the decontamination capability at the EOF assembly area. (J.4)

Response: The Decon facility near the EOF will have three showers and a "hot" sink, plus sufficient area to allow for personnel contamination monitoring and dressing. A personnel treatment room is available for the first aid treatment of contaminated, injured personnel.

All drains within this area are controlled. Under normal use, the building's normal sewage system handles the waste water. Under accident conditions the flow is diverted to an underground storage tank for sampling and later release or processing.

A diagram of this facility is attached (Attachment 4).

Q Discuss the capability for accounting for all onsite individuals within 30 minutes of the start of an emergency. (J.5)

Response: The mechanism for accounting for personnel beyond that which is discussed in the Plan is being evaluated.

Q Indicate the quantity and location of radio-protective drugs (KI) for emergency workers. (J.6.c)

Response: The Plan will be amended to show that a minimum of a five-day supply of Radio-Protective drugs for 200 station employees will be maintained at the site. The bulk storage facility will be the EOF with satellite caches in the emergency team response kits. A procedure will specify the criteria for administration and issuance of the radio-protective drug.

Q Address the recommendations proposed for protective measures to the public based on measured or calculated dose rates specified in Appendix 1 of the criteria. The recommendations should be based on projected doses in accordance with the EPA Manual of Protective Action Guides. (J.7)

Response: A procedure will be developed to evaluate projected doses and dose rates for the purpose of recommending protective actions to the offsite officials concerning the public and based on the EPA guidelines.

- Q The Plan refers to the Hood and Somervell Counties Emergency Operations Plans, Annex F, for the evacuation time estimates. The information presented is incomplete and should be revised in accordance with Appendix 4 of the criteria. A summary of the evacuation time estimates at least should be included in the Plan. (J.8)

Response: Appendix Q of the Plan will be amended to include the Evacuation Estimates located in the county plans. This information will include the assumptions made and the background data used to compute the evacuation times.

- Q Criterion J.10.a is not satisfied. Include maps showing evacuation routes, evacuation area, preselected radiological sampling and monitoring points, relocation centers in the host areas, and shelter areas; (identification of radiological sampling and monitoring points shall include the designators in Table J-1 or an equivalent uniform system described in the plan).

Response: The Emergency Plan procedure concerning evacuation will indicate the evacuation routes, evacuation areas and relocation center graphically. The preselected radiological sampling and monitoring points will be graphically presented in EPP-214 "Emergency Radiological Surveys".

- Q Criterion J.10.c is not satisfied. Include the means for notifying individuals on Squaw Creek Reservoir and describe the access control within the 10-mile EPZ.

Response: Refer to the attachment concerning Squaw Creek Reservoir (Attachment 1). Text equivalent to this will be amended to the Plan. Access to the plume exposure EPZ is under the control of the state and local emergency organizations. Their procedures allow for the timely quarantine of this area using traffic control measures at major arteries into the area.

- Q Address the bases for the choice of recommended protective actions for the plume exposure pathway during emergency conditions including the expected local protection afforded in residential units or other shelter for direct and inhalation exposure. (J.10.m)

Response: This is being evaluated.

K. Radiological Exposure Control

- Q Describe onsite exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides (EPA 520/1-75/001) for performing personnel decontamination; providing ambulance service; and providing medical treatment. (K.1.e,f,g)

Response: To comply with sections K.1.e, f, and g, the exposure guideline for station personnel will be to not exceed the 10 CFR 20 limits unless lifesaving or other emergency actions require the guidelines in section 6.6.1 of the Plan. This will be amended to the Plan.

- Q Describe the procedures to be worked out in advance for permitting onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities. (K.2)

Response: A procedure EPP-213 "Personnel Dosimetry for Emergency Conditions" has been identified. Specific limits for offsite emergency personnel and for onsite personnel as well as dosimetry requirements will be prescribed in this procedure.

- Q Clarify whether the capability exists for 24-hr-per-day determination of emergency worker's exposure. Section 6.5.1.3 addresses TLD's, but does not describe self-reading emergency-type dosimeters available to emergency workers. (K.3.d)

Response: Appendix J of the Plan lists self-reading pocket dosimeters as emergency equipment. The Plan will be amended to indicate the use of these devices.

- Q Describe provisions for ensuring that dosimeters are read at appropriate frequencies. (K.3.b)

Response: The use of pocket dosimeters will be in accordance with Radiation Protection Procedure HPA-111 "Personnel Exposure Control". The evaluation of dosimeters under emergency conditions will be defined in the procedure EPP-213 "Personnel Dosimetry for Emergency Conditions".

Q Specify the action level for determining the need for decontamination. (K.5.a)

Response: The action levels for decontamination will be in the procedure EPP-207 "Personnel Decontamination". All other decon activities are based on the Health Physics Procedure HPT-602 "Contamination Surveys".

Q Address the means for radioactive waste disposal during the recovery phase. (K.5.b)

Response: The "Personnel Decontamination" procedure EPP-207 will also prescribe methods of handling radioactive waste until this material can be added to the station rad waste processing system.

Q Describe the provisions for contamination control measures with regard to area access control, drinking water and food supplies and the criteria for permitting return of areas to normal use. (K.6.a,b,c)

Response: EPP-212 "Control of Site Access" will prescribe the conditions for the return of areas to normal use and the precautions about eating and drinking in the affected areas. This procedure will reference HPT-404 "Area and Equipment Decon", HPT-602 "Contamination Surveys", HPT-604 "Establishment of Zones, Posting and Labeling" and Sections 5, 6, and 7 of the General Health Physics Plan.

Q Describe the capability for decontamination of relocated onsite personnel with regard to expected radioactive contamination of the skin following an accident. (K.7)

Response: A diagram of the decon facility that is located near the EOF is attached (Attachment 4). Procedure EPP-207 "Personnel Decontamination" will outline the methods for external skin decontamination and the precautions to be taken in the event of internal contamination.

L. Medical and Public Health Support

- Q Section 4.3.1.4 of the Plan does not indicate that the backup hospital, Marks English Hospital, has the capability for evaluation and treatment of contaminated, injured individuals. Provide this information. (L.1)

Response: Marks English Hospital is not the backup hospital for Hood General; the hospital at the University of Pennsylvania is the backup facility for radiological treatment. The Marks English Hospital is in the Plan, to illustrate its availability for the treatment of routine, non-radiological injuries. The Plan will be amended to reflect this clarification.

- Q The Medical Assistance Plans for both hospitals should be established and appended to the Plan. (L.1)

Response: NUREG-0654 L.1 does not reference a Medical Assistance Plan. The letter of agreement, once revised, will outline the responsibilities and functions of the hospital.

- Q The ambulance emergency equipment described in Section 6.6.3 of the Plan should include road maps to both hospitals. (L.4)

Response: TUGCo will recommend that their emergency equipment include road maps which indicate primary and alternate routes to Hood General Hospital.

M. Recovery and Reentry Planning and Postaccident Operations

- Q Explicitly specify the means for informing members of the response organization that a recovery organization is to be initiated, and identify any changes in the organizational structure that may occur. (M.3)

Response: EPP-219 "Emergency Organizational and Facility Activation" will specify the procedure to make the transition from Emergency Operations to Recovery.

- Q Indicate that a method for periodically estimating total population exposure is established. Procedures to determine total man-rem exposure based on calculated releases or actual environmental measurements should be developed. (M.4)

Response: The digital Radiation Monitoring System (Reference section 11.5 of the FSAR) computer will have the software to estimate the total population exposure based on calculations which use real time meteorological and effluent data. A procedure to manually estimate this exposure will be available. Environment sample data can also be fed to the computer or manipulated manually to provide equivalent estimates.

N. Exercises and Drills

- Q Section 8.2.2 of the Plan, "Exercises", should include the specific criteria pertaining to exercises, as currently found in Section 8.2.3 regarding drills. (N.1)

Response: Section 8.2.2 of the Plan will be amended to reference section 8.2.3 and the criteria located therein. These will also be in EPP-217 "Annual Exercise Procedure" and EPP-218 "Drill Procedures".

- Q Describe communication drills that test communications with Federal emergency response organizations and States within the ingestion pathway on a quarterly basis, and that test communications with field assessment teams annually. (N.2.a)

Response: Section 8.2.3.1 "Communication Drill" of the Plan will be amended to state the required Federal response drill. This will also be in EPP-218 "Drill Procedure".

- Q Describe Health Physics drills that will be conducted semi-annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment. The State drills need not be at each site. (N.2.e)

Response: EPP-218 "Drill Procedure" will include the indicated examples and Section 8.2.3.4 of the Plan will be amended to reflect these examples.

Q Indicate that management controls shall be established to ensure that corrective actions identified during the exercise critique are implemented. (N.5)

Response: This control over the Plan is delineated in EPP-102 "Review, Update and Control of the Emergency Plan".

0. Radiological Emergency Response Training

Q Address emergency plan/procedures training for all those individuals identified in Figure 4.3 as part of the CPSES Emergency Organization. (0.1)

Response: As emergency facilities and equipment are selected and developed, specialized personnel training will be developed to indoctrinate the emergency staff in the operation, activation and use of the facilities and equipment.

Q Address emergency training for offsite utility employees who are part of the support capability. (0.1.a)

Response: Same as above.

Q The Plan's training program does not include practical drills which include on-the-spot correction of erroneous performance. (0.2)

Response: The training procedures will involve the use of "Hands On" training as well as classroom training and drills. This will be reflected in the plan.

Q Describe First Aid Training to include courses equivalent to the Red Cross multi-media course. (0.3)

Response: The Plan will be amended to reflect that the required First Aid Training will be equivalent to the Red Cross Multi-Media course.

Q Describe in the training program, initial emergency training and re-training for personnel responsible for accident assessment, police and security personnel, local support services personnel (including Civil Defense/Emergency Service), licensee's headquarters support personnel and personnel responsible for transmission of emergency information and instructions. (0.4.b, d, g, i and j)

Response: See response to "0.1" above.

P. Responsibility for the Planning Efforts: Development, Periodic Review and Distribution of Emergency Plans

Q Specify the training for individuals responsible for the planning effort. (P.1)

Response: Formal training courses, such as the FEMA "Radiological Accident Assessment" course or the Oak Ridge course will be utilized training for the Emergency Planning Coordinator. Also, participation in seminars, workshops and other utility emergency exercises will provide other sources of education. This will be amended to the Plan.

Q Section 8.1 of the Plan should be expanded to completely describe the authority and responsibilities of the Emergency Planning Coordinator, including those aspects of coordination and interface with other agency plans and procedures. (P.2.3.)

Response: The Plan will be amended to reflect the following:

The Emergency Planning Coordinator has the authority and responsibility to coordinate the planning effort with all supporting agencies.

Responsibilities include:

Development, review and revision of the Plan and implementing procedures.

Reviews and recommendations concerning Emergency Plan related training.

Planning and coordinating exercises and drills.

Q Commit to forwarding the emergency plans and procedures and approved changes to all organization and appropriate individuals with responsibility for implementation of the Plan. (P.5)

Response: The Plan will be amended to commit to this requirement. EPP-102 "Review, Update and Control of the Emergency Plan" is the vehicle for distributing the Plan and procedures as well as revisions.

Q Appendix K to the Plan contains a list, by title, of Emergency Plan Implementing Procedures. However, the list does not include the section of the Plan to be implemented by each procedure. Provide this information. (P.7)

Response: This will be amended in the Plan. A copy has been attached (Attachment 5).

Q The description of audits in Section 8.1 of the Plan does not include management controls for evaluation and correction of review findings. Provide this information. (P.8)

Response: The annual audit required by EPP-102 "Review, Update and Control of the Emergency Plan" will provide the mechanism for management controls for evaluation and correction of review findings. The Plan will be amended to reference the procedure.

Q Address the updating of telephone numbers in EPIP's at least quarterly. (P.10)

Response: Both the Plan and EPP-102 "Review, Update and Control of the Emergency Plan" will reflect this requirement.

Q. Additional Comments

Q In addition to the Emergency Plan Procedures (EPP) that have been established and identified in Appendix K to the Plan, procedures (to be established as required by Technical Specifications) should be provided to implement the following areas of the Plan. Reference to NUREG-0654, Rev. 1 is given in parenthesis.

1. Identification of alternate counting facilities and methods for obtaining assistance in sample evaluation. (E.3.4; H.6,c)

Response: EPP-214 "Emergency Radiological Surveys" will discuss this recommendation.

2. Dissemination of information to the public within the EPZ annually and verification of availability. (G.1,2)

Response: Procedural requirements being evaluated.

3. Coordination of press releases with news media. Provision for an annual program to acquaint news media with the emergency plans. (G.4,5)

Response: See response to 2 above.

4. Emergency communication tests and telephone number verification. (F.1,3)

Response: EPP-201 "Emergency Communications and Notification" will outline the testing and verification requirements.

5. Staffing and activation of EOF and TSC, including equipment, supplies and instruments. (H.1,2,4)

Response: Procedures EPP-219 "Emergency Organization and Facility Activation" and EPP-209 "Surveillance of Emergency Kits" deal with these requirements.

6. Seismic monitoring (Including interpretations). (H.5.a)

Response: EPP-202 "Assessment of Emergency Action Levels" will discuss seismic monitoring.

7. Field monitoring of radioiodines. (I.9)

Response: EPP-214 "Emergency Radiological Surveys" will discuss the field assessment of radioiodine concentrations.

8. The dispatching of, the functional activities of, and the reporting procedures of offsite monitoring and environmental sampling teams. (I.7,8)

Response: EPP-214 "Emergency Radiological Surveys" or new procedure for the response of offsite non-station emergency personnel.

9. Alternate sources of meteorological data and the methods for obtaining that data. (H.7; I.5)

Response: Procedures EPP-203 "Use of the Emergency Assessment Kit" and EPP-201 "Emergency Communication and Notification" will list the local National Weather Service number and contact.

10. Methods for relating measured parameters in the environment to dose rates for key isotopes and gross radioactivity measurements, and for estimating integrated dose from the projected and actual dose rates for comparing these estimates with the protective action guides. (I.10)

Response: EPP-206 "Radiological Monitoring of Evacuees" and EPP-202 "Assessment of Emergency Action Levels" will contain these methodologies.

11. Onsite contamination control. (K.6)

Response: HPT-602 "Contamination Survey" and EPP-212 "Control of Site Access" will address this requirement.

12. Emergency exposure guidelines, identity, of individuals(s) who may authorize exposure in excess of 10 CFR 20 limits. (K.1,2)

Response: EPP-213 "Personnel Dosimetry for Emergency Conditions" will indicate this responsibility.

13. Notification and activation of offsite medical emergency response organization.

Response: EPP-210 "Transportation of Injured, Contaminated Personnel" will contain this information.

14. Criteria for relaxing protective measures instituted, considering actual and potential conditions. (M.1)

Response: EPP-202 "Assessment of Emergency Action Levels" will contain this information.

15. Periodic estimates of population exposures. (M.4)

Response: EPP-202 "Assessment of Emergency Action Levels" and EPP-214 "Emergency Radiological Surveys" will contain the methodology to determine these estimates.

16. Training and retraining for emergency response personnel. (O.1,4,5)

Response: A procedure is under development to deal with this requirement.

17. Independent audit, including management controls for evaluation, correction and documentation. (P.9)

Response: EPP-102 "Review, Update and Control of the Emergency Plan" contains this information.

ATTACHMENT 1

PROPOSED REVISION TO THE EMERGENCY PLAN

4.3.1.5 Squaw Creek Park, Inc.

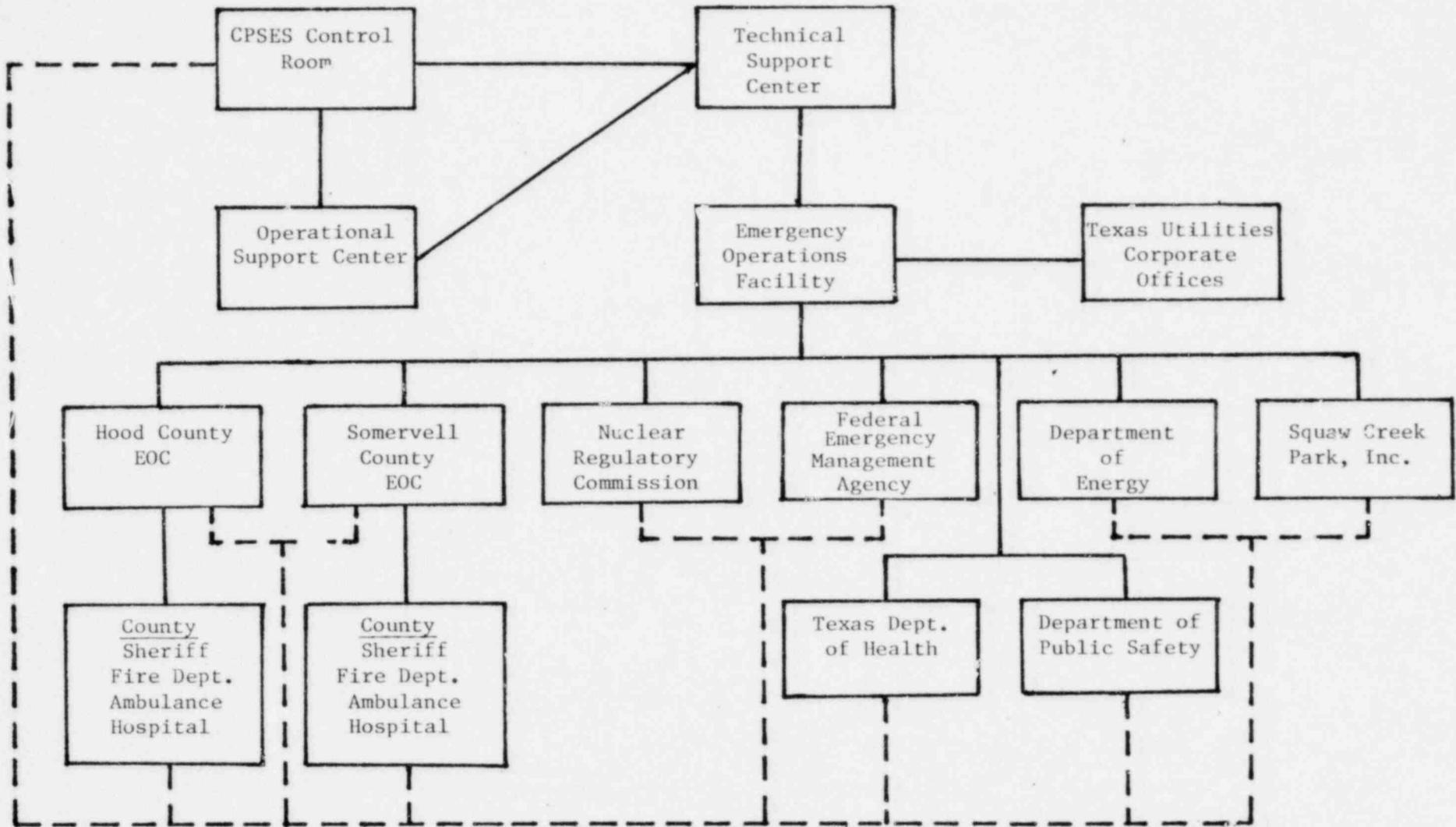
Squaw Creek Park, Inc., is constructing and will maintain a 470-acre park, Squaw Creek Park, north of the station. The park and the reservoir will have a single public access road from S.R. 144. A letter of agreement with Squaw Creek Park, Inc., will be obtained prior to the NRC/FEMA exercise.

6.5.2 Squaw Creek Park, Inc., is responsible for the safe evacuation of the reservoir and park area via the public access road. At the time a Site Area Emergency is declared, SCP, Inc., will be informed and they will evacuate the reservoir and park area using portable hailers to notify the public.

Prior to being allowed access to the park, the occupants of each vehicle will be presented with information concerning their actions and responsibilities if an evacuation is required. Evacuation is required at a lower class emergency to avoid the additional problems that would be encountered under General Emergency conditions. If they are evacuated under an actual General Emergency, then the General Emergency requirements will be in effect.

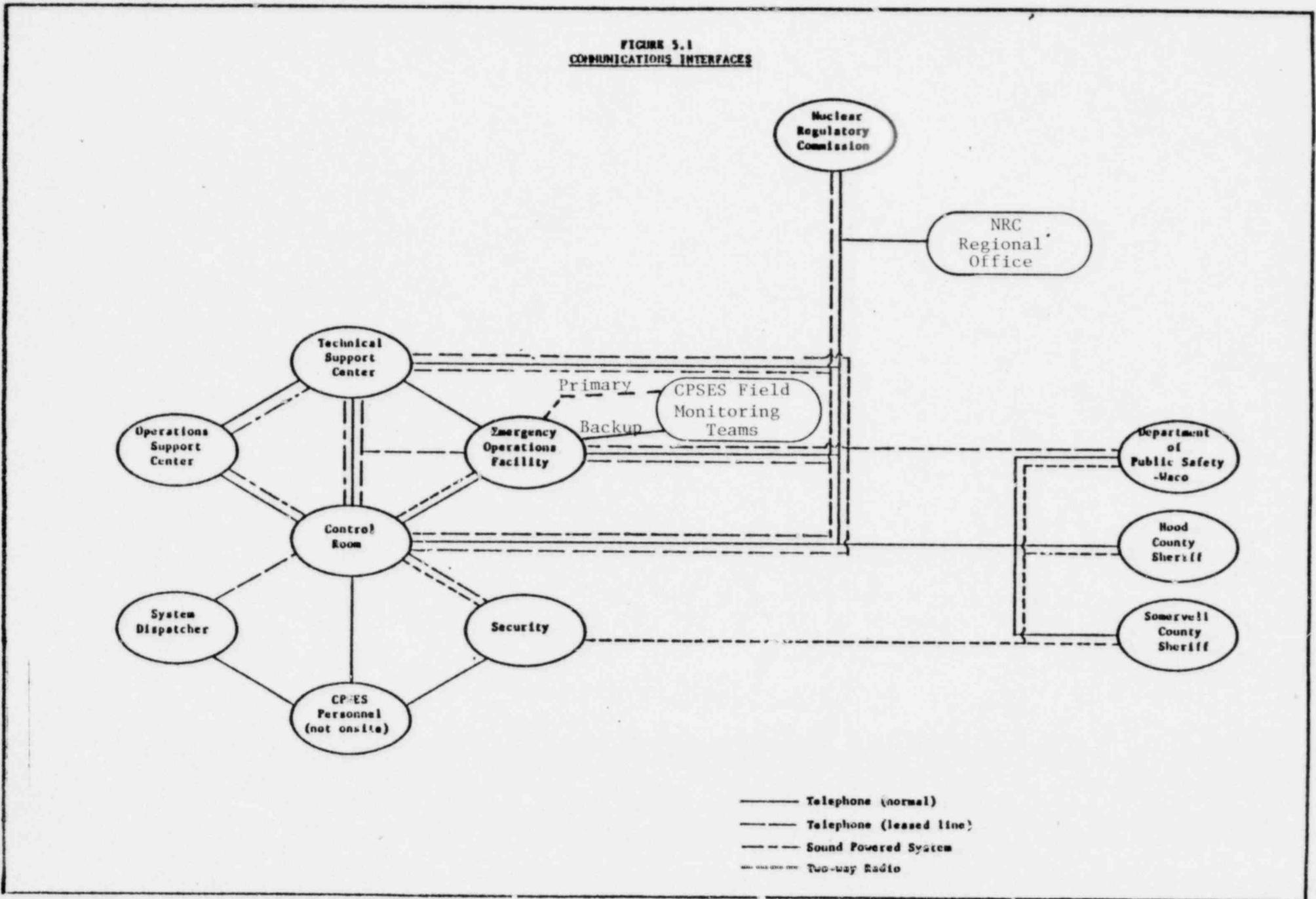
FIGURE 4.1

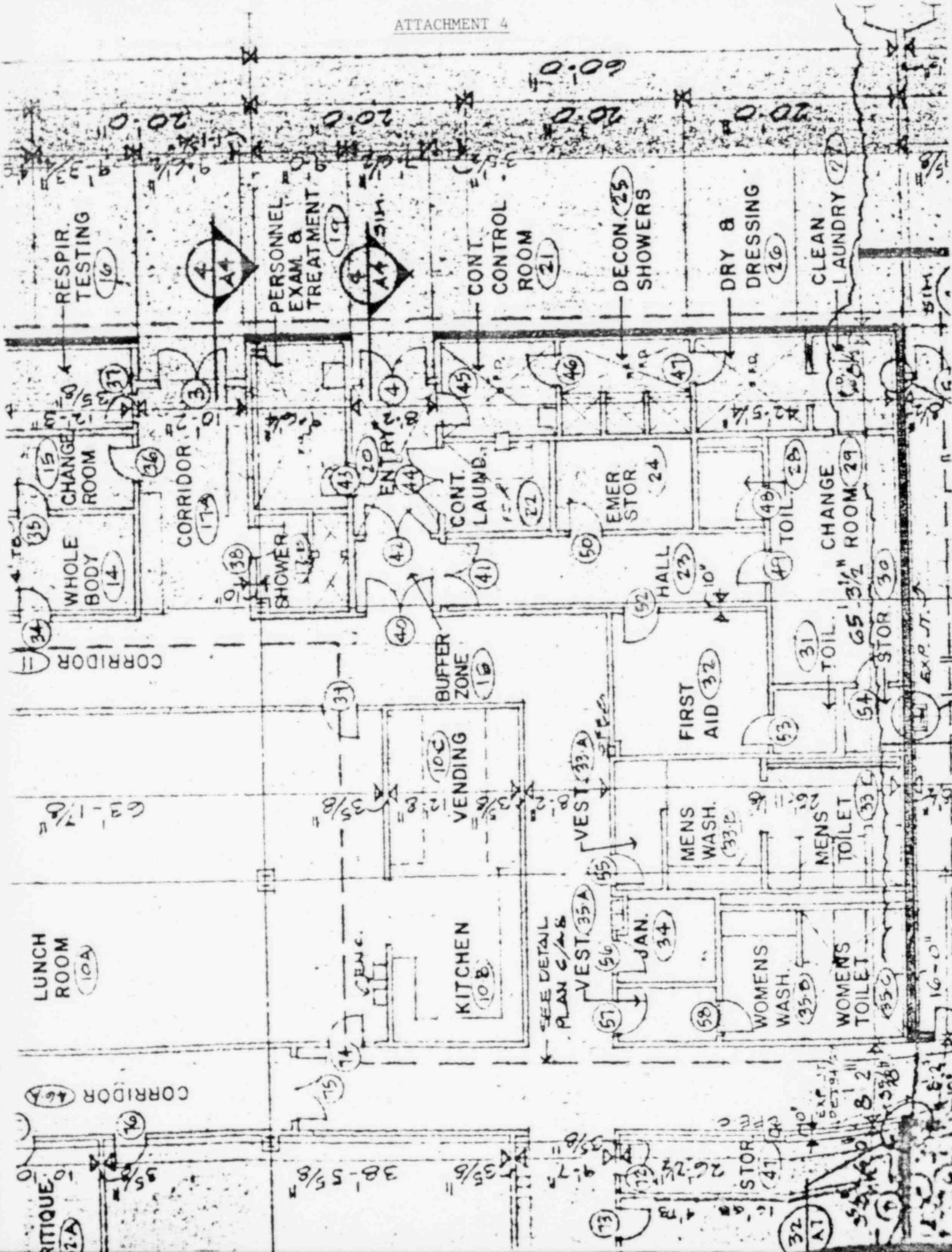
FUNCTIONAL INTERFACES



————— Normal Interface For Emergency Situations  
 - - - - - Temporary Interface Pending The Activation of the Emergency Response Facilities

FIGURE 5.1





ATTACHMENT 5

LIST OF EMERGENCY PLAN PROCEDURES

	<u>Emergency Plan Reference</u>
1. Preparation of Emergency Plan Procedures	8.1
2. Emergency Communication and Notification	5.8, 6.2
3. Assessment of Emergency Action Levels	6.1
4. Use of the Emergency Assessment Kit	6.3.3.1, 6.3.3.2
5. Station Evacuation	6.5.1.1
6. Site Evacuation	6.5.1.1
7. Radiological Monitoring of Evacuees	6.5.2
8. Personnel Decontamination	6.6.5
9. Personnel Accountability	6.5.1.2
10. Surveillance of Emergency Kits	5.6
11. Transporting of Contaminated Personnel	4.3.1.4
12. Notification of Off-Site Officials Pending Flood or Failure of the Squaw Creek Reservoir	N/A
13. Control of Site Access	6.5.1.4
14. Personnel Dosimetry for Emergency Conditions	6.5.3
15. Emergency Radiological Surveys	6.3.3.1, 6.3.3.2
16. Re-entry and Recovery	7.0
17. Review, Update and Control of the Emergency Plan	8.1
18. Annual Exercise Procedure	8.2.2
19. Drill Procedure	8.2.3
20. Emergency Organization and Facility Activation	5.0
21. Issuance of Thyroid Blocking Agents	6.5.1.6
22. Hazardous Waste Management Contingent Plan	4.2.1.1.h
23. Hazardous Waste Management Inspection Program	4.2.1.1.h
24. Hazardous Waste Management Preparedness & Spill Prevention Plan	4.2.1.1.h
25. Hazardous Waste Management General Analysis Plan	4.2.1.1.h
26. Hazardous Waste Management Training	4.2.1.1.h